

Rodger Kessler Ph.D. • Dale Stafford M.D., Editors

# Collaborative Medicine Case Studies

**Evidence in Practice**



Springer

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Rodger Kessler, Ph.D. • Dale Stafford, M.D.  
Editors

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ISBN: 978-0-387-76893-9      e-ISBN: 978-0-387-76894-6  
DOI: 10.1007/978-0-387-76894-6

Library of Congress Control Number: 2008920063

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Printed on acid-free paper

9 8 7 6 5 4 3 2 1

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*To my father for influencing me in ways that  
I understand and don't understand.*

*To my family for their influences.*

*To Danit, Essie, Amber, Soldie, Kadie and  
Solomon, you are, have been and always  
will be that which is cherished in my life.*

*Rodger Kessler*

*To my parents, for giving me their  
unconditional love  
and providing for my education.*

*To my wife, Mary Fran, for her love and  
support in all things.*

*Dale Stafford*

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# **Part I**

## **Background**

# Chapter 1

## Introduction

**Rodger Kessler and Dale Stafford**

This book is intended to foster thinking and dialogue about behavioral health clinicians providing psychological treatments as part of medical practice. Since medical sites evaluate and treat more mental health and substance abuse problems than the specialty behavioral health system and because many acute and chronic medical presentations have significant psychological components, on-site collaboration between medicine and behavioral health is a logical, feasible, and important evolution of medical care. The majority of this book is the presentation of medical cases in which psychological dimensions are important components of the problem, or cases that are primarily mental health diagnoses that were treated in primary care or specialty medical settings. The feature common to each of the cases is that they represent some form of collaborative treatment between medicine and behavioral health.

Conversations about the issues raised in this volume will hopefully be held by those who participate in providing health care, who do not often think and talk about these issues together. The intended audience is physicians, psychologists, behavioral health providers, health care administrators, health care financiers, and health care policy makers. Each has both a role and an impact on patient care and patient outcomes although each has a different perspective on achieving the goal. Because of new clinical advancements and administrative and cost pressures, the goals of medicine have shifted to achieving the right care for patients.

Right care has been defined as the set of clinical actions that have evidence-based probability of being effective in treating the medical and clinical problem with which a patient presents, that generates specified levels of outcome in specific dimensions of patient functioning. Such treatments would use the optimal clinical resources delivered in the fewest number of settings, in coordinated appropriate frequency, in a cost-effective fashion.<sup>1</sup>

We think that collaboration between medicine and behavioral health is an important dimension of right care. Currently we can comment on some aspects of right care as it relates to the need for collaborative medical-psychological approaches to the treatment of certain medical problems. Cowley et al.<sup>2</sup> have noted that somatic complaints are the predominant reason for seeking general medical care. In their review of records of all patient visits in four 1-month intervals, 48% of all symptoms were evaluated to be psychiatric or idiopathic.<sup>2</sup> In a 1-month chart review of patients

attending a primary care clinic, Cowley et al.<sup>2</sup> found that nearly half of presentations of physical problems were found to be idiopathic or psychiatric problems. Twenty-six percent of patients reported no improvement at follow-up.<sup>2</sup> The most frequent presentations included back pain, limb pain, headache, dyspnea, cough, upper respiratory infection, abdominal problems, chest pain, swelling, dermatologic complaints, dizziness, sleep complaints, and fatigue.<sup>2</sup>

Kroenke and Mangelsdorff<sup>3</sup> suggested that of the most frequently presented medical problems, the majority often have significant psychological components. Treatments of these psychological issues are necessary to assist the achievement of successful medical outcomes. Abdominal and chest pain have been identified as two of the most frequent chief complaints of patients in primary care. It is significant, then, that in up to 60% of those presenting with abdominal pain, and in approximately 80% of those with chest pain, a nonorganic diagnosis is made.<sup>4</sup> In England, it has been reported that 27% of primary care patients have reported problems with widespread pain, orofacial pain, irritable bowel syndrome, or chronic fatigue. Each of these is a problem with high reported rates of medical-psychological comorbidities.<sup>5</sup>

This book is important because it illustrates a response to these key issues in health care. Untreated, undertreated, or ineffective behavioral health treatment is a key driver of health care utilization and *medical* care costs. Collaborative care models are consistent with the contemporary focus on evidence-based practice and have a robust research literature to support their effectiveness. Integrating behavioral health services as part of medical care is consistent with contemporary ideas for the future of medical practice. This new model of primary care is endorsed by the American Academy of Family Medicine's Future of Family Medicine initiative and is seen in recommendations from the US Preventative Services Task Force. There is demonstrated clinical, economic, and administrative viability of collaborative care models. Such efforts parallel the process-reengineering efforts inherent in contemporary chronic medical disease management. These findings will be elaborated upon in the next chapter.

The salient point is that it is now clear that a certain amount of specific psychological intervention is often necessary in any effort to generate effective and high-quality medical treatments. The premise of each of the chapters in this book is that collaborative care generates more effective, efficient, patient-involved, and cost-sensitive health care, as a result of behavioral health practice being part of medical treatment.

This is *not* a book that will make the argument about the need for medical-behavioral health collaboration. This has been done well by others over the course of the last 20 years. Many of those authors are contributors to this volume. Blount, Cummings and O'Donohue, McDaniel and Doherty, Peek, Patterson, Strosahl and Robinson, James, and Gunn have all provided the conceptual and practical bases for the work described in this volume. Their books are compelling companions to this volume. As Katon and Unutzer<sup>6</sup> have suggested, it is time to move from the time of more research to the time of implementation of what is known. Each case study is an example of the authors' efforts to take the evidence generated from research and put it into practice.

This book is also not necessarily about what we traditionally think of patients with mental health or substance abuse diagnoses who need treatment for those disorders.

As Blount et al.<sup>7</sup> have suggested, collaboration is about responding to behavioral health need, but frequently not about behavioral health diagnosis. This book is a series of chapters focused on aspects of life in primary care. Each chapter includes presentation of cases in which collaborative care was used to effect changes in functioning of patients who presented themselves for medical treatment and whose physicians identified the need for collaborative care with behavioral health to best respond to patient need. As a body of work, the chapters represent a shift from what John Reeves has identified as a culture of referral to the culture of collaboration (see Chap. 19 by Reeves and Merrill). Traditionally a physician who perceives the need for behavioral intervention either suggests that the patient seek such assistance or presents the patient with a series of names and, perhaps, phone numbers, with a suggestion that the patient choose someone to call. Occasionally, if the physician has had good reports from patients about a particular provider, the physician might suggest a particular clinician. Such is the “culture of referral.”

In the cases in this volume there exists the assumption between physician and behavioral health clinician that there is a mutual relationship in the treatment of their patient. It is understood that there will be communication and coordination of care, often provided within the same physical site. There is not so much a referral for services as a request for participation in the mutual care of the patient. This is the “culture of collaboration.”

Peek observed that models of physicians and behavioral health clinicians working together take a number of forms (Table 1.1). He proposes a continuum of collaboration, beginning with minimal collaboration on different sites, up to completely integrated systems. Doherty et al.<sup>8</sup> have observed that where on this continuum a particular practice or set of collaborators fall depends on the complexity of the clinical presentation and the desired outcomes to be achieved. The greater the complexity of the case, the greater is the need for increased collaboration.

The relationship between the complexity of a patient problem and the levels of collaboration is present whether the presentations are primarily behavioral health or primarily medical. Stroshahl and Robinson observe in Chap. 8 that there are three types of patient presentation likely to be served in a collaborative model—primarily behavioral health, acute medical and/or psychological, and chronic medical issues. The cases in this volume present examples of a variety of models of collaboration in response all three clinical situations.

This book is certainly timely. It is probably apparent to the readers that what we have now does not work so well. In the larger health care system, the Institute of Medicine has called for a redesign of health care with a focus on six elements: safety; effectiveness; equity; timeliness; patient centeredness; and efficiency.<sup>9</sup> Both the conceptualizations offered for collaborative care and the examples presented in this volume address what has clearly been thus far an unanswered question: Can behavioral health have a role in the new health care system? The new model of family medicine proposes that primary mental health treatment is an element of the core services delivered in family medicine practices.<sup>10</sup>

Peek will propose that if there is to be an effective way for medical patients to receive appropriate services, then the Three Worlds of health care need to be aligned

so there is clinical, administrative, and financial sense to health care planning, development, financing, and delivery. Mental health services in medicine have long been considered an impenetrable black hole—with no way to understand how to access services, no idea of what the content is, with little or no communication from its providers. The cases presented in this volume attempt to make sense of, and respond to, the varied views in the Three Worlds and display an alternative to the black hole.

When the authors set out to compile this volume, they were confronted with asking friends and colleagues for help. Individuals who were associated with collaboration and integration were contacted and asked to contribute. In some cases, interesting people who had interesting perspectives on collaboration, but no prior relationship with the authors, agreed to prepare chapters. In other cases, clinicians whose writings had been admired were contacted out of the blue with the idea for the volume and a request to contribute. The response was shocking and gratifying. Of those who were asked, almost all agreed and ultimately contributed. We are sure that there are many others who could have contributed, but through the fortunes of life we did not know about. Our sincere thanks go to the contributors for their interest and efforts.

The task that was outlined was formidable. We asked people to write about their work, selecting a case and writing about its various aspects. In addition, where possible, we encouraged teams of psychologists, physicians, behavioral health providers, and other providers to not only collaboratively practice but also to collaboratively write and provide both medical and psychological perspectives. In addition, one of R.K.'s colleagues, Alexander Blount, proposed that the cases be written through the lens of the Three World view proposed by Peek. Peek suggests that all health care and certainly behavioral health care has a clinical, administrative, and financial view that all clinical activity is viewed through. Aligning the different views is seen as an important component of health care practice and health care decision making. He elaborates those ideas in Chap. 3 of this volume. We asked case study authors to discuss Three Worlds elements of their cases when possible. A note about cases—all authors eliminated any information in the case that would easily identify individual patients. In addition, patient characteristics were altered to further blind the cases.

This volume begins with a chapter reviewing the data that provide the foundation for collaborative care. There is then a section of cases illustrating the organizational challenges of collaboration. The first case in that section is the chapter by Peek focusing on the Three Worlds of health care. The next section is a series of cases that illustrate issues that arise in the day-to-day life of primary care. This is followed by a section on women's health and then a section on specialty medical care delivered to primary care patients. There is then a series of cases focused on chronic medical illness, psychiatric disorders in primary care and a last series of papers on pain.

The summary chapter by the editors outlines key ideas gleaned from the volume and summarizes observations about moving things forward. We hope that the efforts of the editors and all the contributing writers are helpful in assisting the movement of health care into a future characterized by collaborative, patient-centered care.

**Table 1.1** Peek stages of collaboration

Model	1	2	3	4	5
	Minimal collaboration	Basic collaboration from a distance	Basic collaboration on-site	Close collaboration in a partly integrated system	Close collaboration in a fully integrated system
Doherty, McDaniel, & Baird (1995)	<ul style="list-style-type: none"> <li>• Separate systems</li> <li>• Separate facilities</li> <li>• Communication is rare</li> <li>• Little appreciation of each other's culture; little influence sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Separate systems</li> <li>• Separate facilities</li> <li>• Periodic focused communication mostly by letter, occ phone.</li> <li>• View each other as outside resources</li> <li>• Little understanding of each other culture or sharing of influence</li> </ul>	<ul style="list-style-type: none"> <li>• Separate systems</li> <li>• Same facilities</li> <li>• Regular communic. - occasionally face-to-face</li> <li>• Some appreciation of each others roles and general sense of larger picture, but not in depth</li> <li>• Medical side usually has more influence</li> </ul>	<ul style="list-style-type: none"> <li>• Some shared systems</li> <li>• Same facilities</li> <li>• Face-to-face consultation, coordinated tx plans</li> <li>• Basic appreciation of each others role &amp; culture. Share biopsychosocial model.</li> <li>• Collab. routines difficult-time &amp; operations barriers</li> <li>• Influence sharing -- some tensions</li> </ul>	<ul style="list-style-type: none"> <li>• Shared systems &amp; facilities in seamless biopsychosocial web</li> <li>• Pls &amp; providers have same expectation of a team</li> <li>• Everyone committed to biopsychosocial; in-depth appreciation of roles &amp; culture</li> <li>• Collaborative routines are regular and smooth</li> <li>• Conscious influence sharing based on situation &amp; expertise</li> </ul>
handles adequately	Routine, w little biopsychosocial interplay & mgmt challenges	Moderate biopsychosocial interplay, e.g., diabetes & depression with mgmt of each going reasonably well	Moderate biopsychosocial interplay requiring some face-to-face interaction & coordination of tx. plans	Cases with significant biopsychosocial interplay & mgmt complications	Most difficult and complex biopsychosocial cases with challenging mgmt problems
handles inadequately	Cases refractory to tx or w significant biopsychosocial interplay	Significant biopsychosocial interplay esp when mgmt is not satisfactory to either MH or medical providers	Signif. biopsychosocial interplay esp those with ongoing & challenging mgmt problems	Complex w multiple providers & systems; esp with tension, competing agendas or triangulation	Team resources insufficient or breakdowns occur in the collaboration with larger service systems.
Seaburn, Lorenz, Gunn, Gawinski, Maiksch (1996)	Parallel delivery; Clear division of labor not flowing into each other significantly	Informal consultation: MH Professional helps physician deal with a clinical problem, but usually no contact with the patient	Formal consultation: MH professional has direct contact with pt. in typical relationship as a consulting specialist	Co-provision of care: Patient care is shared and the professionals may see the patient or family together	Collaborative networking: Provider team is extended to include family and other medical specialists, educators, community resources
Org. literature Strosahl, Peek & Heinrich, others	Traditional referral-between-specialties models	Co-location models	Co-location models	Organization integration or "primary care mental health" models	
MH provider might say --	"Nobody knows my name"	"I help your patients"	"I am your consultant"	"We are a team in the care of our patients"	"Together, we also teach others how to be a team in care of pts. and design of the care system"
Medical prov. Might say --	"Who are you"	"You help me as well as my patients;	"You help me as well as my patients"		

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## **Chapter 2**

# **Primary Care *Is* the De Facto Mental Health System**

**Rodger Kessler and Dale Stafford**

This chapter is a review of the research literature that suggests that primary care is the de facto behavioral health services and care system. It will summarize and reiterate the following points that have been made in the research literature for many years:

- Most patients with psychological problems are seen in nonpsychiatric medical settings
- Many medical presentations contain significant psychological comorbidity. Strosahl and Robinson point out in Chap. 8 that presentations that are for specific psychological or substance abuse issues are infrequent. More often, psychological issues are found to be part of acute medical issues, such as sleeping problems, headache or gastrointestinal problems, as well as complex chronic medical conditions such as diabetes, cardiac conditions or pain.
- The costs of untreated or inadequately treated behavioral problems include lack of medical improvement, decreased compliance with medical treatment and overserved and underserved patients.<sup>1</sup>
- There are multiple clinical, administrative and financial barriers to effective psychological care in medicine and medical settings.
- The most effective response to these issues is developing medical-psychological collaborative care models in primary care practices. There is ample reason to think that this will produce the holy grail of medicine—better care and higher levels of patient-centered involvement, resulting in better health status and reduced need and demand for medical resources.<sup>2</sup>

### **Patients with Behavioral Health Problems are Primarily Seen in Primary and Specialty Medical Care**

For over 25 years there has been a robust literature suggesting that when patients have psychological or behavioral problems they will turn almost exclusively to the primary care medical office, not to traditional mental health and substance abuse services for care;<sup>3</sup> hence the conclusion that primary care is the de facto mental health system.

Patients with psychological problems are most likely to receive medical services related to such problems solely in primary care medical settings.<sup>4-5</sup> It has been demonstrated that 43 to 60% of patients with psychological problems are solely treated in primary medicine, while 17 to 20% of patients with psychological problems are treated in the specialty mental health system.<sup>6-7</sup>

At any given time in primary care, there is a prevalence of psychiatric disorders of 21 to 26%.<sup>8-9</sup> For patients with chronic medical disorders the rates for hospitalized medical inpatients are triple the community rates of comorbidity.<sup>8</sup>

Depression, anxiety, panic, somatization and substance abuse are the most frequently encountered diagnostic presentations.<sup>10-11</sup> Eighty percent of people who come to primary care because of psychological and social distress present with physical symptoms.<sup>3, 12</sup> Most often there is no identifiable organic cause for the somatic complaints that are presented and half of patients presenting to a primary care office will be found to have no medical illness, while almost a third will present with multiple unexplainable symptoms.<sup>13-15</sup>

In these settings psychological and behavioral problems are often undetected,<sup>11, 16-17</sup> resulting in infrequent use of evidence-based treatments and suboptimal management.<sup>16, 18</sup> Treatment rates for the psychological diagnostic categories most frequently seen in primary care are generally poor.<sup>19</sup> Among medical inpatients, formal diagnosis is made in only 11% of cases, depression was accurately diagnosed in 14 to 50% of cases and alcohol-related disorders were accurately diagnosed only in 5 to 50% of cases.<sup>20</sup>

Pharmacology is the most common treatment intervention for psychological disorders. When pharmacologic treatment of behavioral disorders is initiated, less than half of all patients remain on the medication for a therapeutically indicated period of time.<sup>21-22</sup> Coyne et al.<sup>23</sup> note that with focused efforts to detect comorbidities, a quarter to a third of primary care patients will screen positive and 18 to 30% of those positively screened will meet the criteria for diagnosis. For those patients diagnosed with psychological or behavioral comorbidity, treatment initiation is very low.<sup>23-24</sup>

## Many Medical Presentations Have Psychological Dimensions

Psychological factors influence physiological functioning and in some situations appear to determine the course and utilization of medical care. Twenty percent to 50% of patients are not adherent to medical treatment recommendations.<sup>25</sup> Patients who are treated for mental health related problems use significantly more *medical* services than patients who are not so treated<sup>26</sup> and untreated psychological comorbidity is a predictor of decreased medication compliance.<sup>27</sup>

The problem is particularly severe for patients with chronic medical disorders. Over 20 years ago, the Medical Outcome Study noted medical-behavioral comorbidity in any chronic medical condition of 65%. In 2002, United Health Care, as part of the Goal Focused Treatment and Outcome Study, observed that 40% of the

1,859 patients treated for depression also displayed at least one chronic medical condition.<sup>28</sup> Recently, findings from the Star\*D (sequenced treatment of alternatives to relieve depression) suggest that in both cohorts of over 4,000 patients, total depressive comorbidity with medical illness was about 50%.<sup>29</sup>

Psychological distress increases with the number of medical comorbidities that are present.<sup>30</sup> When there is a psychological comorbidity along with a chronic medical condition, significantly more impaired functioning and worse health status are reported.<sup>31-33</sup> Heart disease, chronic lung disease, diabetes, cancer, chronic pain, sleep disorders, stroke and arthritis are the most frequently cited disorders associated with psychological comorbidity.<sup>33-37</sup> The World Health Organization's World Health Survey was recently completed by over 245,000 patients. The results suggested that depression causes the greatest decrement in health when compared with angina, arthritis, asthma or diabetes, and that the comorbid state of depression with any of the chronic diseases alone worsens health more than depression alone, or with any combination of the chronic diseases.<sup>38</sup>

Major depression is a risk factor for the development of cardiac disease in healthy patients and for adverse cardiac outcomes in patients with heart disease. Depression is present in 20% of outpatients with cardiac disease and a third of patients with congestive heart failure.<sup>39</sup> In patients with congestive heart failure, for example, there have been reports of comorbid depression rates from 11 to 25% in outpatients and from 35 to 70% in inpatients.<sup>40</sup> Depressed patients who have a myocardial infarction or a stroke have higher mortality rates.<sup>41-42</sup> Recently an analysis of 17 studies of cardiac disease depressive comorbidity found that depression after a cardiac event was associated with a threefold increase in cardiac mortality.<sup>43</sup> The risks for depressive cardiac comorbidity are twice as high for women under 60 years of age as they are for women older than 60.<sup>44</sup> In addition, there has been a recent finding that use of antidepressant medication in patients with heart failure was associated with increased likelihood of death or cardiovascular hospitalization, limiting pharmacologic treatment for depression as an option.<sup>45</sup> So for such patients, nonpharmacologic psychological treatments are that much more important.

Patients with chronic obstructive pulmonary disease (COPD) have a comorbidity with depression that is almost 45% and is associated with longer hospital stays, increased symptoms and poorer functioning.<sup>46</sup> There is a high prevalence of adults with arthritis and depression. When there is such a comorbidity, treatment compliance is worse, and there is poorer general health, greater disability and increased pain reports.<sup>47-48</sup> There have also been reports suggesting that the presence of depression comorbid with sleep-related breathing disorders.<sup>49</sup>

Considerable attention has been paid to psychological comorbidity with diabetes. Depression rates for patients with diabetes are twice as high as those for other primary care patients, with rates of 15 to 30% reported.<sup>37</sup> Because depression is associated with hyperlipidemia and heart failure, there is increased risk of cardiac events among patients with diabetes.<sup>37</sup> When there is behavioral comorbidity, there is a poorer illness course,<sup>50-51</sup> particularly if there are multiple diabetic complications.<sup>52</sup> The greater the level of measured depression, the worse the adherence to medical treatments.<sup>53</sup> Panic is frequently comorbid with diabetes, and when panic

disorder is present, there is also a high frequency of comorbidity with depression.<sup>54</sup> Older adults with history of depressive symptoms were more likely *to develop* diabetes, and the association is not fully explained by risk factors for diabetes.<sup>55</sup> Depressive comorbidity is associated with higher A1c levels,<sup>56</sup> and higher mortality.<sup>51, 57</sup> In addition, it appears that when women are diagnosed with type 2 diabetes, there is both a higher risk of their children developing diabetes<sup>58</sup> and a higher incidence of depression in their offspring.<sup>59</sup>

## **There Are Costs of Untreated or Inadequately Treated Psychological Problems**

It has long been established that patients with psychological comorbidities have more costly health care. This is only partially explained by their medical conditions.<sup>60-61</sup> The majority of these costs were for general medical services and medications, not behavioral health services.<sup>62</sup> There is a large amount of research that suggests patients with behavioral and medical comorbidities have 30 to 100% higher non-mental-health utilization of health care resources.<sup>61, 63</sup>

For example, in one investigation Simon et al.<sup>61</sup> found that the annual health costs of depressed patients are \$4,246 compared with \$2,371 for nondepressed patients. Controlling for morbidity, depressed patients utilize three times the amount of health care services, incur twice the medical costs, and make seven times the number of visits to the emergency room.<sup>61</sup> Depression associated with diabetes produces 50 to 75% increases in health care costs.<sup>64</sup> Untreated psychological conditions result in poorer physical health, less effective medical treatment and higher mortality rates. This is in addition to the increased utilization of services and increased costs of medical services already discussed.<sup>65-66</sup> In some samples, almost 20% of primary care patients have been assessed with an anxiety disorder.<sup>11</sup> When anxiety disorders are comorbid with asthma, there is triple the hospitalization rate.<sup>17</sup> Such findings suggest a patient population that is overserved and underserved.<sup>1</sup>

High utilizers of medical services have high frequencies of psychological distress.<sup>67</sup> Conversely, patients with a chronic medical illness who are high utilizers of medical services have a high prevalence of comorbid psychological disorders. Affective, somatization and anxiety disorders are the most frequent comorbid conditions.<sup>68</sup>

The prevalence of psychiatric disorders amongst high utilizers of medical services reveals rates of somatization disorder and anxiety disorders over 20% and panic disorder over 10%.<sup>68</sup> The top 10% of medical services utilizers account for 25% of all primary care visits, 52% of specialty visits, 40% of hospital days and 26% of all prescriptions written.<sup>67</sup> High utilizers of health care had 3 times as many office visits, diagnoses and medications; and had 8 times as many hospital admissions.<sup>69</sup> Katon et al.<sup>67</sup> have further observed that the top 10% of primary care patients use more services than the lowest 50%.

We are therefore left with a large patient population whose often unrecognized and untreated psychological comorbidities worsen health status and contribute to significantly greater utilization and cost of medical services.

## **There Are Multiple Clinical, Administrative and Financial Barriers to Effective Psychological Care in Medical Settings**

There are multiple clinical and systems barriers that limit effective psychological and behavioral care for those patients that need it.<sup>70</sup> It is still rare for psychologists and other behavioral health practitioners to practice within medical settings.<sup>71</sup> One barrier is the lack of appropriately trained, on-site behavioral health clinicians. When referrals are made to clinicians outside of the medical office, patients rarely follow through and participate in off-site treatment.<sup>24, 72-73</sup> Studies show 50 to 90% of referrals made to out-of-the-office mental health practitioners result in no appointment being made.<sup>74-75</sup>

Historically, it has been referral to specialty care off of the primary care site that has dealt with further evaluation and treatment of complex, chronic medical problems. Such a model has not been effective in dealing with psychological and psychiatric problems. It is also not the usual practice to have “specialty medical services” being provided as part of usual care. This has begun to change a bit. Within the last 15 years, the chronic care model has been the subject of substantial medical attention.<sup>76</sup> Such a model identifies that chronic medical problems require ongoing, often interdisciplinary care. It also suggests that since psychosocial issues often interfere with optimal patient participation and compliance with medical care, there is a need to adopt behavior change as a focus of care. Unfortunately, such efforts have not often included assessing and treating the underlying psychological issues that limit effective adaptation and coping. Without that attention, behavior change has proved elusive.<sup>77</sup> Even more recently, there has been a focus on applying the chronic disease model to depression. Unfortunately, the lack of focus on significant psychological involvement in the model reinforces mental health issues being carved out from other medical issues. This, then, limits the effectiveness of the intervention.

As any primary care physician trying to find psychological assistance for their patients knows too well, most psychological care has been carved out to managed care. Since managed care focuses on cost savings within given patient populations, it has focused on limiting access to and supply of services for short-term cost savings. There is no incentive to use behavioral health to assist in the reduction of the need and demand for medical services, even though untreated comorbidities are the demonstrable cost drivers. Managed care incursion into medicine adds to carve-out costs, so there is no motivation to assist patient behavioral health care in physicians’ practices. Neither is there motivation to develop procedures and funding streams to assist development of medical-behavioral collaboration.

This and other reasons have resulted in increased difficulty for physicians accessing already difficult to access psychological services and a natural reluctance

to take on yet another, time-consuming task. This is part of the reason why behavioral health services have consistently been identified by physicians as being more difficult to access than any other specialty.<sup>78-79</sup> Mental health referral had the lowest percentage of specialty referral in a survey of family physicians' referral decisions, with a rate of 4.2% of all referrals made in a sample of 2,534 referrals.<sup>80</sup> Over half of primary care physicians sampled reported problems arranging outpatient behavioral health care.<sup>78</sup>

On the behavioral health side, there has only been limited attention to working within nonpsychiatric medicine. Most psychologists and other providers are not on the staff of community and regional hospitals. They generally do not participate in the settings and tasks in which medical practitioners get to know each other and each other's practice, or work together planning the delivery of health care. Because psychologists and behavioral health practitioners have functioned as autonomous practitioners, there is a limited knowledge of how primary care operates, the skills necessary to function in that setting and what is expected of them.<sup>81-82</sup>

This situation is compounded by behavioral health practitioners having a limited embracing of the empirically supported treatments whose applications have been demonstrated as effective in medicine. Despite lengthy evidence supporting guideline-based care for behavioral disorders in primary care, such treatments remain the exception, rather than the rule.<sup>83</sup> The emerging culture of medicine includes a strong focus on evidence-based treatments. Until psychological and behavioral treatments address the importance of evidence-based support, there is a risk of their continuing to be viewed by primary care providers as a black hole, with no relation to medicine as practiced.<sup>84</sup> Also, many physicians are uneducated as to the types of available behavioral health practitioners, their skill sets and the types of psychological treatments appropriate for a particular patient and problem.

On the other hand, there is ample reason to think that the most effective response to these issues is improving collaborative medical-psychological care delivered within primary care practices. There is consistent evidence that supports the efficacy of evidence-based psychological interventions as part of the treatment of medical issues.<sup>12, 85-86</sup> Some studies have demonstrated the effectiveness of such interventions in the primary care office.<sup>65</sup> Collaborative care models have been demonstrated to be more effective than consult-liaison models of care<sup>87</sup> and have lowered costs while providing effective clinical outcomes.<sup>65, 88</sup>

Treating medical-psychological comorbidities has been the subject of a robust literature suggesting that specific behavioral health treatments are clinically, and potentially, cost-effective. Such psychological treatments of medical problems have demonstrated reduction of hospitalizations and rehospitalizations, physician visits, emergency room use, levels of pain, analgesic medication costs, disability claims, mortality and medical costs and enhanced quality of life.<sup>89-93</sup>

Kripilani et al.<sup>25</sup> reviewed 37 controlled trials evaluating medication compliance and clinical outcomes in patients with chronic medical conditions from 1967 to 2004. The findings suggested that adherence increased most consistently with behavioral interventions. Such interventions have generally focused on enhancing self-management and self-efficacy, reducing psychophysiological arousal, altering

behavior patterns, stress management and enhancing social support.<sup>91</sup> Chiles et al.<sup>94</sup> found most dramatic treatment effects to be behavioral medicine interventions that provided psychoeducational interventions that assisted coping.

Evidence-supported programs to effectively treat behavioral health issues in primary care have been consistently demonstrated.<sup>83, 95-96</sup> Recently, Gilbody et al.<sup>97</sup> reviewed 37 randomized studies of collaborative care for depression, including over 12,000 patients. The analysis suggested that depressive outcomes improved consistently, mostly owing to increased medication compliance. In 11 of the studies, gains were maintained up to 5 years. Availability of psychiatric supervision and increased level of training of behavioral health clinicians were also factors influencing better outcomes.

When depression is effectively treated there is a general decrease in use of medical services<sup>98,99</sup> This is also the case for the successful depression treatment of diabetic patients<sup>57</sup> resulting in health care cost reductions between \$379 and \$952 per patient over the course of 2 years.<sup>100</sup> Those who may benefit most from collaborative care of both diabetic and behavioral health comorbidities are those patients with multiple diabetic complications.<sup>57</sup>

Cognitive and behavioral interventions have been demonstrated to be effective in treating behavioral comorbidities that include physical symptoms.<sup>96, 101</sup> In addition, the inclusion of cognitive behavioral therapy (CBT) as part of diabetic care is associated with improved hemoglobin A1c levels.<sup>102</sup> When effective depression treatment is provided, COPD outcomes have improved.<sup>46</sup> CBT has also been effective in treating high medical expense somatization disorder.<sup>103</sup> Multidisciplinary assessment and intervention with frequent attendees at primary care clinics has demonstrated increased physician satisfaction and reduced the overall costs of medical care by almost 75% the year after the intervention.<sup>104</sup> Patients who have substance abuse who are treated within the primary care office with collaborative medical and behavioral health care have both improvement in the substance abuse disorder and show per-member reductions in medical costs of between \$431.12 and \$200.03.<sup>92</sup> Combined behavioral interventions for patients with alcohol dependence were demonstrated to have as good outcomes as that with naltrexone and better outcomes than that with acamprosate (Campral).<sup>105</sup>

Collaborative approaches involving both medical and behavioral practitioners have been generating more support.<sup>106-107</sup> Colocation of behavioral health has been shown to improve collaboration. In one survey of 162 primary care physicians, there was cotreatment in some form about 30% of the time.<sup>108</sup> Recent data show two beneficial outcomes from referring to psychological services within a primary care office. Appointments are kept at rates often over 90%,<sup>72</sup> much higher rates than have been previously reported. Secondly, there is better compliance with prescribed medication.<sup>109</sup>

Physicians appear to be ready to have active collaborative care relationships with behavioral health clinicians and in some cases prefer to have behavioral health services as part of their practice.<sup>71, 73, 110</sup> Williams et al.<sup>73</sup> have reported on a survey of primary care physicians showing that just over 60% of respondents would prefer to have behavioral health practitioners as part of their practice. If there is the opportunity for collaborative care, physicians select it as an intervention strategy more often than

other available referral options.<sup>111</sup> There also appears to be patient preference for treatment of behavioral health issues in a primary care setting.<sup>110</sup>

Despite such data, it is clear that the existence and effectiveness of empirically validated psychological treatments is a necessary, but insufficient element to move systems towards selecting collaborative models of care. A model must be supported in which such treatments are delivered within the primary care office

Casciani<sup>112</sup> suggests that there are differences that distinguish primary care behavioral health services from practice by traditional behavioral health clinicians. He suggests that in primary care behavioral health there is a diagnostic change to physical illness or injury, a primary focus on factors affecting health and illness recovery and a goal of improving health and collaboration with the medical team and family. Beyond the clinical issues, there are a specific set of skills and training necessary to effectively work together. These include working on the reengineering of clinical office processes, and changes in administrative, insurer and regulator activities. All of these are critical to success and require effort that takes time, and incurs costs.<sup>113</sup>

A collaborative care model addresses the issues presented earlier in the discussion of right treatments. Such a model uses evidence-based practice, implemented and coordinated to provide treatments by colocated medical and psychological practitioners. This results in better identification of patients who need collaborative care, easier referral, increased patient involvement and acceptance, and better communication between the behavioral health practitioner and the primary care physician. In the authors' own experience, such a model has been effective in family medicine, internal medicine, gynecology, obstetrics and neurology.

## Summary

Historically, there have been limitations in detection and treatment of psychological disorders in the medical setting, and referring out to the specialty treatment system has been ineffective. The consequences of nontreatment or inadequate treatment of such psychological disorders are ineffective medical and psychological treatments and inappropriate and unnecessary utilization of health care. This chapter suggests an alternative approach to current treatment models in which psychological and medical treatments are integrated within the medical office. Such an approach supports a right treatment model, in which there is a common focus on providing evidence-supported treatment with attention to timing, amount and types of service, promoting the best outcomes, in the most cost-efficient fashion.

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**Part II**  
**Organizing Collaborative Care**  
**in Medical Settings**

# Chapter 3

## Planning Care in the Clinical, Operational, and Financial Worlds

C.J. Peek

### Clinical, Operational, and Financial “Collaboration” and What It Looks Like on the Ground

#### *Two Kinds of Collaboration*

This casebook emphasizes cooperation between medical and mental health clinicians on behalf of persons who seek care in either medical or mental health settings. But this casebook also features another form of collaboration: the “cooperation” of clinical, operational, and financial perspectives and requirements as cases unfold with real people in real settings.

The reason for writing case studies in a way that features this latter form of “collaboration” is simple: Great clinical care takes place in healthcare organizations (from small to large) which require not only good clinical methods but also good operational capacities and sufficient financial viability. While taking a 20,000-ft view, a “law of nature” becomes apparent:

1. If care is clinically inappropriate it fails.
2. If care is not operationalized properly, it also fails.
3. If care does not make reasonable use of resources, the organization, its patients, or society eventually go bankrupt and thousands of patient–clinician relationships are disrupted.

For long-run success, healthcare organizations aspire to succeed clinically, operationally, and financially at a system level. And when zooming back to the ground-level view—at the level of particular cases—this principle also applies. Great outcomes for a particular patient take clinical quality, operational excellence, and good resource stewardship. Therefore, the cases in this book look at care from all three perspectives. Clinicians reading this book are part of harmonizing these perspectives—this is not something that is purely “someone else’s job.”

But it is no secret that harmonizing the clinical, operational, and financial aspects of healthcare and casework is challenging and is often full of organizational

and personal tension. This gets to the heart of the design of healthcare systems and to the working relationships among those in healthcare organizations.

The rest of this chapter unpacks the notion of a healthcare organization (and its clinical cases) as operating in three simultaneous worlds—the clinical world, the operational world, and the financial world—and provides a map for harmonizing these worlds and the people who inhabit them—with the goal of having your own cases well-harmonized in this way.

### *What Harmony Looks Like when You See It*

Before doing the analysis of “the three worlds,” how to diagnose problems, and set the stage for success, I will describe what the clinical, operational, and financial worlds look when harmonized—from the perspective of “Bob,” a hypothetical intelligent lay person walking around a clinic observing what he sees.

First of all, the clinic, especially this large one, seemed to Bob very hectic and complicated, with all kinds of things going on at a very fast pace. But as soon as he got used to that level of activity, Bob began to see that there were three sorts of interwoven things going on simultaneously:

1. Bob saw physicians and other healthcare people sitting down with patients and talking to them, helping, reassuring, treating illness and injury, and ameliorating their suffering. This looked like a uniquely human and interpersonal activity, guided at the root by science but executed, for the most part, through skillful and personalized human interactions using practices and personal skills encoded in a group of related healing professions that included physicians, nurses, mental health professionals, and technicians of various kinds.
2. Bob saw a complex logistical operation going on at the same time, involving phones, receptionists, messages, electronic medical records, reminder systems, scheduling, rooming, coding, billing, medical records, and dictation of notes and letters. He could tell that behind this were many other operational things—like computers, automated systems for refills, referrals, and connections to specialists. There was a consistent, patterned, and seemingly impersonal aspect to this, but he quickly realized that the same people he observed in personal interactions with each other and patients depended on these operational systems—and regarded them as their servants, not their masters.

The operational machine obviously ran in support of the human, clinical, heart of the clinic. Bob quickly recognized that solid and reassuring human interactions with patients depended heavily on well-oiled information and traffic-flow systems designed to blend in with the human interchanges they support. He saw systems lubricating the human interaction (the real “product” of this clinic) by making as invisible as possible the supporting infrastructure and “process flow-charts” for those prized human interactions. Bob noticed operations experts and managers working closely with clinicians in the background to keep this operation humming—and they obviously respected each other.



3. Finally, Bob saw a business staying in business. Careful physical, financial, and human resource management was going on. Charge tickets were filled out, bills were sent, money was collected, and patients were being helped with their insurance forms and problems. Resource outflow (time, materials, and money) was recorded. Numbers, spreadsheets, and graphs appeared. Meetings were focused as if they were as important to use consciously and wisely as actual dollars. When Bob looked closely, he saw that time and money management focused resources on the requirements for maintaining those prized human interactions with patients as well as fulfilling contractual obligations with payers and owners.

Business and financial methods were designed to squeeze out as much quality human interaction as possible given the realistic financial inputs. Everyone seemed to be interested in keeping the clinic in business—and this was treated as another way to be good to patients—not just to be good to physician pocket-books or bosses in a distant corporate building. Bob began to see that cornerstones of prized human interactions were clear *and shared* terms of partnership between the clinic and its patients—that included not only medical or “consumer” expectations but also mutual service and logistical expectations and an expectation to make good use of *everyone’s* time and money.

After Bob had seen these three simultaneous worlds in play together, he marveled how each of them had its own language, internal “logic,” standards, and experts. But instead of being overwhelmed by contradiction, Bob experienced a sudden simplification of the hectic complexity he apprehended when he first walked in. He remarked to himself that things only seem complex and contradictory when you do not distinguish the simultaneous and synergistic operation of three very different, but complementary “worlds” of the clinic. Each world is comprehensible on its own—and when taken together.

Bob was also struck with something else: Clinic leaders appeared to be conducting an “ensemble” of clinical, operational, and financial worlds, rather than letting them operate independently as competing “soloists.” That is, leaders knew that the demands of human interaction, operational systems, and money-management could become discordant and contradictory unless deliberately made synergistic and complementary. Every decision involved factoring in the clinical, and operational, and financial aspect. Every person in the clinic seemed to do this—as part of the culture, all the while letting the demands of those prized human interactions with patients lead the ensemble.

It was not long before Bob realized that he was witnessing a pretty sophisticated operation. He realized how much simpler (but cruder) it would be to let the clinic people do their thing, oblivious to operational and financial perspectives, let the operations people run their systems, more or less oblivious to the human and clinical implications, and let the finance people count beans, sell “products,” and enforce rules to keep the clinic afloat financially. They could have released the more difficult task of synergizing really different things and merely presided over a continuous three-way struggle.

But no—the entire clinic opted for the more sophisticated route. How could ordinary people carry this off? No one person could possibly know enough about

the whole thing to remain on top of the vast scientific and clinical base the whole operation is pledged to uphold, oversee and improve the logistical operation and focus all the resources well, maintain justice and good spirit in the clinic, and invent all the new tools and methods required to stay abreast of “our changing world.”

His curiosity piqued, Bob came back a second day looking for how leadership and management worked. This is a fascinating story—but for a healthcare management book, not our clinical casebook.

## **Commonplace Tensions Between the Clinical, Operational, and Financial Perspectives**

As observed by Bob and reported in the previous section, healthcare organizations are populated by very different people holding a variety of perspectives, interests, professions, and skills. The challenge is for this diverse assembly of healthcare professionals to integrate their work on behalf of patients so that they operate in the manner Bob observed. But people’s actual experiences working in healthcare are often laced with tension between clinical, administrative, and financial priorities. The goals of clinical care, clinical operations, and sound business practices are often seen as separate worlds that coexist in a fragile and uneasy peace, with occasional outbreaks that feel like the “war of the worlds.” This pattern is described well below, as paraphrased in sections from Patterson et al.,<sup>1</sup> Peek and Heinrich,<sup>2</sup> and Peek.<sup>3</sup>

Quality care and sound financial performance are sometimes positioned as opposing values held by opposing parties, as if improved quality automatically means higher cost, and that cost consciousness automatically means compromised quality. Most people have read about or experienced horror stories in which financial motives have compromised healthcare or runaway health costs have led families to financial ruin. Many people think healthcare has degenerated to “just a business” or that the “industrialization” of healthcare has become a threat to professional integrity and to quality care. Clinicians may ask themselves, “Do I have a place with integrity in this new world?” and patients may ask themselves, “Will my health plan come through for me and my family when the chips are down, or will my healthcare insurer try to save a buck at my expense?” At the same time, everyone knows healthcare costs too much and needs to be better organized. Care system leaders and policymakers may wonder, “How can we keep exploding costs and fragmentation from imploding our system?” Those are serious questions. Healthcare today, on national and local levels, is overflowing with tensions between the clinical and business perspectives. This tension can be destructive, bleeding away energy needed for patient care.

At the local level, this is often experienced as tension between people—individuals from different departments or professions all trying to do the right thing but misunderstanding or actually colliding with each other. When conflicts of this kind are allowed to simmer, they become chronic and can take a painful course in which people become increasingly defensive. For example, clinicians may experience numbers, accounting, operational, and systems talk as incomplete or not at the heart

of their own efforts and values. For example, how do clinicians like to have their efforts expressed by “productivity” numbers alone? Or, how would clinic systems managers like to be told by clinicians that operating procedures are rigid, bureaucratic, or a “barrier to the ineffable art of healing”? Or, how does the finance vice president or an insurance professional like to be told by clinicians that “bean counting is not the object when it comes to human health” or is relevant only when it comes to correctly computing clinician paychecks.

Then the arguments ensue: “I thought this was a healthcare place, not just a business”; “the rest of you just do not understand what it takes to run a care system”; “this may be a good idea, but no one will buy it?”; or “you clinicians are running this place out of business and have to pay much more attention to the cost of care if you expect to keep getting paid well.” Things may degenerate into mutual stereotypes, maneuvering, and struggle to keep the other person’s perspective and language from subordinating your own. Almost all healthcare professionals have similar stories to tell.

There are no simple answers for the difficult questions and tradeoffs in healthcare today. But much of the interpersonal and organizational tension that results from tackling these issues is unnecessary. Unnecessary tension results when the clinical, operational, and financial perspectives (and the people who champion them) are allowed to push each other around as if in a political struggle between adversarial parties. This is quite unrealistic and totally hopeless as an interpersonal or leadership model for healthcare management or clinical care. The key is to shift the mindset from politics to principles of good design.

## Conceptual Analysis of the “Three Worlds”

Bob encountered the multiple languages, “logic,” and standards of the clinical, operational, and financial worlds very well harmonized in the clinic he observed. In contrast, the previous section illustrated how tensions between people result when these worlds are allowed to conflict.

Fortunately, the language and logic of these worlds can be “mapped” in a way that leads to ground rules for preventing or addressing conflicts between clinical, operational, and financial perspectives and a mindset for planning the care of particular patients for best overall outcomes. This “map” is paraphrased in the following sections from Patterson et al.<sup>1</sup> and Peek.<sup>3</sup> These passages were in turn based on earlier work in Peek and Heinrich,<sup>2</sup> Putman,<sup>4</sup> and Peek.<sup>5</sup>

### *The Three-World View*

Healthcare organizations operate simultaneously in three worlds: clinical, operational, and financial. These are really dimensional views of the same underlying reality; like a front view, a side view, and a top view. These “worlds” of the organization

are related in the same way as different engineering drawings of the same object are related or as different eyewitness accounts of the same event are related. Taken together they represent the whole organization as viewed from key perspectives. No *one* of these views is the *real* view, anymore than any *one* of Bob's eyewitness accounts is what *really* happened (paraphrased from Putman<sup>4</sup>).

Analogy: An architect must draw a front view, a side view, and a top view of a house in sufficient detail if he or she expects builders to actually build it. Without any *one* of these drawings, the picture is incomplete and the builders cannot build it.

From a healthcare system designer's perspective, a very similar thing holds true for healthcare. In this case the front view, side view, and top view are the clinical, operational, and financial views. Without drawing all three views, there is no hope of building a successful healthcare organization. From a clinician's view—while planning care for a particular patient—these views are also needed. The question is not only “what care is called for?” but also “how will it be accomplished in this system?” and “does it make good use of available resources?”

The clinical, operational, and financial views are called “worlds” here because people trained in one discipline so often experience these as separate, disparate, or even “foreign” worlds whose population speaks different languages, asks different questions, seeks different outcomes, and employs different values and principles. This sense of the foreign easily begets tension, suspicion, and misunderstanding between people trained and working primarily in one of these worlds. This kind of tension between disparate worlds occurs in all kinds of organizations, not just in healthcare.<sup>4</sup>

The key to harmonizing disparate worlds is to display them in the same picture, just as an architect displays all three views of a building in one set of plans so one can look back and forth between the views as it is constructed. In this case, we are not showing actual care system “construction plans” (these are up to each care system to draw for itself). Instead, we show the language and logic of the three worlds in a way that highlights their differences and commonalities—and the translations between them. If clinicians plan their care of patients in a way that satisfies the demands of all three worlds as shown in Table 3.1, the plans have a chance to succeed. In this sense, the three-world view is a standard for drawing “buildable” care systems *and* implementable care plans for specific patients.

How to read Table 3.1: First, read down each “world” column, noticing that all three are organized by a common set of dimensions down the left side of the page. Note that each “world” reads down the column as a coherent, self-contained language and way of looking at things. Next, read across the rows, starting at the top—where the same underlying concepts appear in the three different languages. The correspondence becomes evident. This table is a map of the worlds and languages spoken in healthcare and when shared by a clinical team, clinic, or organization can be used to plan care, keep peace, and improve the healthcare system design.

Note that the term “quality and elegance” appears in Table 3.1 “clinical world” column, “standard” row. In this context, “elegance” refers to the ability to do something in fewer steps or in less roundabout ways than before. In mathematics or engineering, an “elegant” solution is one that gets the job done as well as or better than before, but with fewer steps, loose ends, or less awkwardness. In writing, it

**Table 3.1** The three simultaneous worlds of the healthcare organization

	<b>W O R L D S</b>		
	<b>Clinical</b>	<b>Operational</b>	<b>Financial</b>
<b>Basic questions</b>	What care is called for? Is it high quality?	What will it take to accomplish care? Is it well executed?	How will care best use resources? Is it a good value?
<b>Object</b> <small>(what you touch every day)</small>	Patients, populations and health	Systems	Numbers
<b>Process</b>	Clinical interactions	Operations	Accounting
<b>Outcome</b>	Achievement (of care and health goals)	Production	Bottom line
<b>Standard</b>	Quality and elegance	Efficiency and facility	Price and value
<b>Relationship</b>	Clinician Patient	Provider Customer	Vendor Buyer
<b>Relevant principles</b>	Principles of science, healing and medical ethics	Principles of process & system improvement; business ethics	Principles of business & financial return; business ethics

Updated from the original published in Peek and Heinrich<sup>2</sup> and Patterson et al. (2002),<sup>1</sup> and builds on ideas in Putman<sup>4</sup> and Peek<sup>5</sup>

means saying the same great thing in fewer, better-chosen words. Clinicians or health systems also value “elegance” in this sense as they learn to get the same quality job done in simpler and cleaner ways. In this way, “elegance” is an esthetic companion to “quality.” Note also that the term “efficiency and facility” appears in the “operational world” column in the same row for the same reason. The term “facility” here refers to “facile”—the ability to execute things readily and cleanly—while seeming effortless—with minimal awkwardness or loose ends. In this context, “facility” is the esthetic companion to “efficiency.”

### *Lessons Drawn from This Three-World Map*

1. Each “world” has its own internal “logic” and language. For example, the clinical world goal is *quality* and *elegance*. The operational world goal is *efficiency* and *facility*. The financial world goal is the right *price* and a good *value*.
2. You can translate from one world to another. For example, clinicians often react negatively to the term “productivity” because it is part of operational world language. But the corresponding term in the clinical world is “achievement.” Clinicians are happy to improve their *achievement* of health goals, even if they do not like being told to improve *productivity* or the *bottom line* as if the *only* reality. Achievement, production, and bottom line are from the *same* underlying reality—but expressed in three languages.

3. If an action fails to meet the requirements of one of the worlds, it will ultimately fail in all three. To be successful, all action and design has to satisfy the demands of all three worlds. If an action fails clinically, it fails. If it fails operationally, it fails in a different way. If it fails financially, it also fails.
4. Each person is hired for his or her expertise in *one* of the worlds; his or her “native language” or dominant perspective. But all staff, especially leaders, have to be able to shift “lens” from one world to another, using the logic and speaking the language of all three. It is not good enough to have only a clinical vision, a systems vision, or an insurance vision. Moreover, these clinical, operational, and financial views have to be drawn so they *harmonize* rather than *clash*.
5. Taking a three-world view prevents the dissipation of human and financial energy in explicit or submerged struggle over which world is real, or which world should subordinate the others (“war of the worlds”). A *three-world view* reduces waste and rework attributable to action that was well formed in one world, but failed to meet the demands of the others.
6. When the three “worlds” go out of balance, you have a big problem. If the clinical world is subordinated, things like poor quality or “bad managed care” result. If the financial world is submerged, then you go out of business: “No margin, no mission.” If the operational world is overshadowed, systems and operations are inadequate, people stumble over each other, and the system cannot deliver on its promises, leading to poor service, disappointment, and waste.
7. Taking a “three-world view” shifts the dialogue from power politics to *principles of good design*. Management teams, task forces, and committees can all be instructed to “take a three-world view.” Composition of such groups can be done to include or tap the range of expertise that makes groups capable of taking a three-world view. This can be a powerful ground rule for entire organizations as well as local clinics, clinician leaders, and clinician teams.

### ***Adding Medical Education to the Mix—a “Fourth World”***

Many of the case reports in this book are from academic medical centers where medical education is an important part of the mission. The Three-Worlds map needs to be extended when working in residency programs or other clinical sites for medical education. The same ideas are in play but with a fourth “world” of medical education added.

In this case *both* clinical and educational purposes require suitable operational and financial plans. For a residency or other medical education site to be successful, the demands of *all four* worlds must be met. Each action must simultaneously satisfy the demands of the clinical, educational, operational, and financial worlds. The language and logic of the four worlds of the residency clinic are shown in Table 3.2 because in training sites these four worlds must *all* be taken into account and made to harmonize rather than clash.

**Table 3.2** Medical education as a fourth world

	W O R L D S			
	Clinical	Educational	Operational	Financial
<b>Basic questions</b>	What care is called for? Is it high quality?	What education? Is it high quality?	What will it take to accomplish it? Is it well executed?	How will it best use resources? Is it a good value?
<b>Object</b> <small>(what you touch every day)</small>	Patients, populations and health	Learners at all stages and places	Systems	Numbers
<b>Process</b>	Clinical interactions	Educational interactions	Operations	Accounting
<b>Outcome</b>	Achievement (of care & health goals)	Achievement of curricular goals	Production	Bottom line
<b>Standard</b>	Quality and elegance	Real-world core competencies	Efficiency and facility	Price and value
<b>Relationship</b>	Clinician Patient	Mentor Learner	Provider Customer	Vendor Buyer
<b>Relevant principles</b>	Principles of science, healing & medical ethics	Adult & lifelong learning, ethics	Principles of process & system improvmt; business ethics	Principles of business & financial return; busin. ethics

A natural question might be: “Are there only four worlds in healthcare?” What about the arcane worlds of law or information technology? Are there not times when we need to take into account what matters to people from these and other very different disciplines—people who speak a different language, ask different questions, seek different outcomes, and are governed by different principles? The answer of course is “yes”—and there could be times when these perspectives, languages, or “world views” also need to be mapped out in supplementary form to the existing “three worlds” or “four worlds” that are described in this chapter. And when this is needed, please do so, using the pattern established in the “three-worlds” map. But for this casebook (and many other purposes) the present mapping is sufficient.

### What a Three-World View Looks Like when Applied to Clinical or System “Case Reports”

Much of the three-world analysis and mapping in this chapter so far has been focused at the clinic or organization level so that the overall concepts are clear. But these same lessons need to be applied to care of particular patients as well. Effective collaboration on cases between medical and mental health clinicians requires looking at care through operational and financial “lenses” as well as the clinical lens.

### ***Looking Through the Operational Lens While Planning Care***

Operational systems permit people to reach each other, talk with each other, read each other's notes, and perhaps sit with each other in teams or in front of patients. Scheduling paradigms may need to permit a given patient to be present with more than one clinician and permit a clinician to be with another clinician or team.

Moreover, whatever care plan is developed needs not only to be theoretically excellent, but also actually implementable in the surrounding systems. Great care plans can founder on insufficient operations. For example, delays in getting appointments, the proper team, documentation, specialty consultation, social services, or many other things can make an otherwise great care plan quite mediocre in actual practice. It is important for care teams to devise care plans that are *actually implementable* in the systems currently in place—and later link proposed system improvements to the kinds of improvements in care such cases show are needed. Good clinical outcomes depend on well-designed and reliable operational systems as well as good clinicians and care plans. This is true for individual patients and populations of patients. To show good results at either level requires operational as well as clinical excellence. Service outcomes are also legitimate outcomes.

### ***Looking Through the Financial Lens***

Clinicians need to ask how well the proposed treatments are covered by the patient's insurance, how sustainable the copays, time off work, or transportation costs will be, and to what extent other forms of financial help or counseling are available. If the patient cannot afford the care plan, "noncompliance" may result, which would be more a property of the care plan than of the patient.

Ask how the current design of healthcare insurance benefits, reimbursement systems, coding and billing rules, and how clinics and clinicians are paid will affect the implementability or sustainability of the care plan being proposed. For example, if telephonic, video, "e-care," or nonphysician "care management" is to be used, the financial models employed somehow need to accommodate it or at least work around it. If the financial model does not support the care plan well enough, then the care plan may not stay implemented for long.

In addition, the choice of care plan can affect the overall cost of care (to the patient as well as the health system). For example, better integration or coordination of care at the outset, better patient self-management, and reduction of redundant or unnecessary tests, prescriptions, and treatments can not only save time and reduce risk to the patient but can also save everyone money. Financial outcomes are also legitimate outcomes.



***Example—Operational and Financial Considerations Included in a Case Report of the Collaborative Care of a Hypothetical Primary Care Patient***

This 40-year-old man with chronic obstructive pulmonary disease and diabetes was identified as having overly frequent trips to the emergency room (ER) and primary care office—and at these times was unsure of when and how to engage the care system or manage his own conditions. Because the care of this patient was seen as team-based action (an ensemble rather than sequential or parallel soloists), the patient was taught enough about his condition to see that communication was necessary and that even the psychologist was working on the medical condition and team. Hence, the medical record contained all the notes (and requisite permissions if necessary). Of course, the transcriptionists collected the psychologist's notes along with the physician's notes and the chartroom included them as a matter of course. The psychologist wrote notes that fit well in the context of medical charts and was always clear and succinct about how her work was part of treatment for the medical condition.

In addition, the patient's life was made easier by being able to call a single number and schedule with the same receptionist for all appointments—leaving it to the clinic to sort out scheduling conflicts and in fact schedule so the patient could drive once to the clinic and in most cases see more than one provider. There was only one address and one parking lot to find. The patient was also told that the clinic could help with the workers' compensation issues by coalescing all the work into one set of papers that the patient could work with, rather than a different set for every provider.

Of course patient expectations were also set about what to expect from whom (appropriate scope of practice) and how each person on the team reinforces the work of the others without taking it over or confusing the picture. And in fact, all the providers actually worked this way. The clinic schedule allowed time for clinicians to talk with each other (usually briefly) about cases so that the teamwork could stay tight and any clinician could flag a developing problem. A nurse watched for problems by making calls when necessary, checking on experience with medications or other self-care suggested by the team. The scheduling system left flexibility for these purposes—hence making these things easy to do—so the teamwork could continue without heroic efforts.

Prior to entering this particular episode of care, the medical chart and claims databases released by the health plan with patient permission showed a pattern of many visits to several different providers, often for the same kinds of problems or interventions. Outpatient visits were approximately four per month, with an average of one ER visit every month. This was costly of course, and the patient was not particularly happy about telling the story over and over and was also not happy about the copayment bills he was accumulating. According to the patient, the employer was unhappy with absenteeism and difficulty covering the cost of the patient's highly skilled work during absences for physician visits.

One goal of the care was to focus the use of healthcare resources much more sharply than in the past. This is a desirable outcome from the health system goal of waste reduction—and something the patient was very enthusiastic about as a way to reduce personal expenses, many trips to physicians, feeling bad when scheduling more time off work, and the increasing sense of “going nowhere.” In the first month, the rate of outpatient utilization actually increased by 25% as the comprehensive evaluation took place and visits started. After 2 months, utilization dropped 40% compared with previous baselines and no ER visits took place. Inspection of the record and claims database showed that during the year following treatment, outpatient visits dropped by 75%, ER visits by 95%, and the patient assessed his absenteeism as “much, much less.” Utilization was only 15% higher than for the average patient of that age and gender, a reasonable level for a person with this condition. The patient also said the copay bills were “no big deal” anymore and he felt his care was much clearer as well as less expensive. He also said he is no longer “wandering in the wilderness while blowing my bank account” when it comes to managing his health condition.

In addition, arrangements were made by the clinic and most of the local health plans or payers to reimburse for health and behavior codes done by the psychologist. These codes allowed the mental health professional to do (and bill for) behavioral assessment and interventions for medical conditions without a mental illness present. This meant that DSM IV diagnostic codes were not required as a condition of reimbursement for services—something important for this clinic’s population of seriously medically ill patients who typically did not see themselves as having mental illness diagnoses. In addition to the benefits for this particular patient, the clinic benefited generally in the eyes of patients, payers, and the clinicians themselves. As a side-effect of all this, the clinic’s “pay for performance” numbers with chronic illnesses were very good.

## Pointers for Planning Care While Taking a Three-World View

The basic lesson in the previous section is that clinical action in particular cases—not just healthcare system design—eventually needs to satisfy the requirements of the clinical, operational, and financial worlds, including relevant principles belonging to each world. The following pointers are offered to those planning care on their own or with colleagues and teams:

1. *Accept that clinical, operational, and financial language all have a legitimate place in planning care.* Clinical talk is about high-quality clinical action with patients and families. Operational talk is about operations and systems needed to produce services with good service and efficiency. Financial talk is about resource stewardship, numbers, a positive bottom line, the right price, and a good value. *Expect to hear these languages (and do not try to make people use just your language).* Translate care planning issues from one world to another.

2. *Hold out for clinical action that meets the requirements of all three worlds.* You may have to do whatever you can today, but in the long run, your care plans have to satisfy the demands of all three worlds or you pay a heavy price. Continue dialogue until solutions that advance the goals of all three worlds are found. It is possible. Structure care planning meetings to address all three perspectives in some way.
3. *Learn about each other's worlds but do not expect anyone to be an expert in all three.* Each person is hired for his or her expertise in one of the worlds—his or her “native language,” but it is not too much to expect people to learn enough about the other worlds to appreciate the goals and methods and to treat them respectfully.
4. *Never allow one world to trump the others.* Honor all three perspectives on casework (clinical, operational, and financial). Give each due time and due process. This is realistic in a practical sense and effective in a human sense. Like a law of nature, taking a three-world view is not true “because we said so,” but because (like gravity) it exerts its influence whether you believe in it or not, and no matter who you are. No one is allowed to push any one of the worlds off the map.
5. *Use the three-world view as a “preflight checklist” to make sure the care plan will have a chance to actually fly upon launch.* When all is said, does your care plan work well enough in all these ways to be sustainable and not frustrating to patients and clinicians?

Now read the case studies with this map and these principles and pointers in mind. Consider it part of your own job to take a three-world view of your own cases and introduce this thinking into your own care team. And if you are in a position to do so, help your clinic, team, or organization learn how to use a three-world view to keep peace and make progress with the difficult balances and tradeoffs in health-care today.

**Acknowledgements** The metaphor and language of “multiple worlds” and how to reconcile or harmonize them among persons with different “native languages” has its origins in the discipline of Descriptive Psychology, developed by Peter G. Ossorio (University of Colorado). The author acknowledges the profound influence of this discipline and of Peter Ossorio on his work as health-care clinician, manager, and consultant. The Society for Descriptive Psychology was founded in 1978, holds an annual meeting, and publishes its work through Descriptive Psychology Press, Ann Arbor, MI, USA.

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## Chapter 4

# How I Learned About Integrated Care by Failing Miserably: The Deadly Sins of Integration

Rodger Kessler

The majority of patients with psychological, psychiatric and substance abuse disorders, receive treatment for these disorders in the primary and specialty medical offices rather than from specialty behavioral health providers.<sup>1-4</sup> Infrequently, problem presentations are straightforward psychological or substance abuse issues (see Chap. 8 by Strosahl and Robinson). Often, physical symptoms are presented, and only later are the underlying behavioral health issues identified.<sup>5</sup> In addition, many unresolving or chronic medical disorders have significant psychological dimensions that interfere with health status and effectiveness of medical treatment, but the psychological dimensions are often not satisfactorily assessed or treated.<sup>6-7</sup> This results in restricted access to best care, less effective medical and behavioral health care, and greater health care costs.<sup>8</sup>

In response to these dilemmas it has been proposed that if done well, including behavioral health providers as part of medical practices improves a number of different outcomes.<sup>9-10</sup> Such a strategy offers a number of advantages and opportunities. Blount<sup>9</sup> and Kathol et al.<sup>6</sup> have suggested that when collaborative care is part of medical practice there is more frequent identification and assessment of behavioral health problems. Also, such models offer new opportunities for assisting in the treatment of the psychological components of acute medical issues, such as new diagnosis of serious medical problems, anxiety about upcoming procedures or childbirth, amongst others. Behavioral interventions become available as part of chronic disease management for disorders such as diabetes, cardiac disease, gastrointestinal disorders, headaches, chronic pain, asthma and others described in this book<sup>11</sup> (see also Chap. 2 by Kessler and Stafford).

Despite evidence that the availability of behavioral interventions within medicine improves identification<sup>12</sup> and outcome<sup>13-14</sup>, such technology is infrequently used,<sup>15-16</sup> As we think about the broader administrative and financial issues within a Three Worlds framework, there is increasing support for provision of specific psychological treatments to specific groups of medical patients often improving *medical* management and outcomes and often being cost neutral or reducing the overall costs of health care.<sup>8, 17-18</sup>

The lack of generalized movement towards integrating behavioral health and medicine is further frustrating since physicians prefer to have behavioral health

services as part of their office practice<sup>19</sup> and patients are more willing to participate in psychological services when they are located as part of their medical treatment than they are to consider psychological treatment that is not on-site at the medical office<sup>20</sup> (see also Chap. 2 by Kessler and Stafford), thereby improving patient medical and psychological compliance.<sup>21</sup>

A typical rural health care system lacks any planned integration, and is funded in some unitary, noninnovative fashion. It is typically the case that the primary and specialty care medical systems are not organized to provide collaborative care on-site and have experienced barriers to providing collaborative treatment and management of patients despite the benefits and despite this openness to develop collaborative care as part of their practices.<sup>22</sup> This paper is a real-world attempt within the constraints of funding, experience and organization, to describe a project designed to initiate a more collaborative and integrated behavioral and medical care system.

On the behavioral health side of the world are a multitude of practitioners. A number of years ago the author reviewed the clinician participant roster of the major insurer in our area and there were more behavioral health providers on the panel than there were nonpsychiatric physicians! However, contact between primary care and behavioral health is limited. Behavioral health clinicians mostly practice in sites separate from those where physician practices are located. Behavioral health clinicians are often unaffiliated with local medical centers, or if affiliated, they are not very active. This may contribute to mental health referrals being the lowest share of specialty referrals,<sup>23</sup> although the pure number of practicing behavioral health clinicians suggests that there is a demand for their services.

Since physician knowledge of specialists is an important dimension of physician referral,<sup>23</sup> physicians without regular contact with behavioral health clinicians feel limited in referral options, feel that there are greater hurdles in obtaining effective mental health services, and often do not feel that obtaining effective referral options exist.<sup>24-25</sup> When they are presented with off-site referral options in their communities, often with a list generated by an insurance company rather than a strong personal endorsement, it is not surprising that patients more often do not comply with recommendations by their physicians for psychological and substance abuse treatment.<sup>19, 26</sup>

## **Every System Is Designed To Get Exactly What It Gets**

The author, a clinical psychologist, has been colocated in a family medicine practice for many years and has been active on the local medical center's medical staff. In addition, he serves as a member of the contracts committee of the Physician Hospital Organization, the mechanism for negotiating contracts with insurers. He has also been active in the state and local behavioral health communities, where he had advocated for collaborative medical psychological services for some time. Over the years two of the people he had most frequent conversations with were the executive director of the local community mental health center (CMHC) and the executive director of the medical center's Physician Practice Corporation (PPC).

The executive director of the CMHC had been a strong supporter of medical-behavioral health collaboration over the years and was interested in pursuing an integration project between the CMHC and the medical center's practices. The executive director of the PPC saw the idea as a good one but also had multiple concerns about how such an idea would translate into practice. Part of her concern is that current funding systems rewarded discrete, fragmented approaches with no incentive for a collaborative approach. The author was able to generate sufficient interest so that a series of meetings was held to consider a project to provide an organized system of behavioral health services located in medical practices on and around the campus of Central Vermont Medical Center, located in rural northern Vermont. The goal was to integrate both the physical and the psychological dimensions of health within primary care and specialty medical practices. The outcome of those meetings was agreement to convene a planning group to develop a project.

Planning was a time-consuming and resource-intensive task. The planning group consisted of representatives from the key stakeholders. This consisted of the county CMHC (Washington County Mental Health Services, WCMHS), the local medical center (Central Vermont Medical Center), the physician practice corporation (Central Vermont Physician Practice Corporation, CVPPC) and the author, as project director.

Meetings occurred, more or less, every 2 weeks. After meeting for over 2 years, there was agreement to recruit practices and clinicians for a project collocating behavioral health staff in medical practices and to begin to work with patients. Within the group, it was difficult to come to agreement on many issues, particularly those related to administrative responsibility, budget and medical site preparation. In order to get the project going, it was decided to move ahead and resolve issues as they arose.

Organizationally, CVPPC provided office space and limited scheduling support within the targeted practices and CVPPC assisted the project director in identifying practices for the project and facilitating meetings with practice physicians and staff. WCMHS provided funding for clinician salaries, start-up costs and the project director position. The project director's responsibilities included training and supervision of staff, consulting to project sites, developing, implementing, and evaluating the project.

The outpatient services director of the mental health agency served as codirector and provided administrative oversight of the project, negotiated contracts with behavioral health staff that were providing services in the practices and oversaw compliance with WCMHS policies and procedures. The mental health agency provided billing and collection services.

Recruitment for the clinical positions was done jointly by the project director and the mental health outpatient director. The outpatient director was a very experienced clinician who had a psychodynamic orientation, but who had never worked in a primary care setting. The project director has a clinical orientation that is cognitive behavioral and oriented to working in primary care. Clinicians selected in that process were then interviewed by the physicians in the medical practices.

## **Let Us Put a Clinician in an Office and See How It Works**

Recruiting clinicians for the project was hardly a simple task. There were multiple obstacles. We are a rural setting with a limited numbers of clinicians having free time to devote to a project, particularly since all positions were part-time, from six to 15 clinical hours per week. Payment was quite low because the funding mechanism was through a CMHC, and the positions were paid for on a fee-for-services-provided basis. There were disagreements between the project director and the mental health agency director about suitability of some candidates and a number of other issues.

Nevertheless, the clinical group that was recruited was energetic and interested in collaborative care. Only two of the six staff had specific training in health or medical psychology and only one had worked in a medical office prior to the project. All were received well by the medical practices. With more questions than answers about how the efforts were to work administratively we began seeing patients.

After clinical start-up, clinical staff participated in a 60h training program developed and presented by the author. There were three modules: psychology in medicine; evidence-based cognitive behavioral treatment of psychological disorders and comorbid medical disorders; and hypnosis and self-regulation. Staff also received 1 h per week of individual supervision and 2h of group supervision per month from the author, as well as regular administrative supervision from the outpatient director. Clinicians were required to participate in the training program, supervision and extensive training, but there was no payment for these activities.

## **We Just Do Clinical Practice and Can Ignore the Administrative and Financial Stuff**

Initially, six medical offices participated, including two family practices, two internal medicine practices, a neurology practice and an allergy practice. A seventh, an obstetrics and gynecology practice, was interested in participating, but its participation never got off the ground. The participation of the allergy practice was discontinued after the first 6 months because of the physician's practice style, and lack of patients.

Conceptually, clinicians were expected to respond clinically to the broad range of clinical issues that present in physician practices. Each clinician was asked to develop or refine a subspecialty in an area relevant to his or her practice that would also allow the genesis of a pool of specialists from which all practices could draw. Specialties proposed included asthma, headache, gastrointestinal disorders and cancer.

It became quickly apparent that it was more complicated than it seemed. Each medical practice agreed to participate by having a behavioral health clinician on-site



and available for the referral of appropriate cases. There was one 1-h meeting (and sometimes two 1 h meetings) between the project director, the on-site clinician and physicians, and office staff of each medical practice prior to clinicians appearing on-site. A group of selected papers from the literature was distributed to each physician to demonstrate the utility of the effort. There was minimal attention to policy and procedure, referral process, on-call issues, record placement and communication with referring physicians, the behavioral health specialist role, introduction to patients or a host of other issues. The availability of a clinician on-site was limited to 6–15 h per week because of a lack of available space. It was anticipated that over time clinicians, physicians and office staff would develop policies and procedures for referral, scheduling and policies to ensure confidentiality and that this would in turn lead to developing project-wide coordinated policies and procedures.

We planned to conduct an initial assessment of clinical and administrative attitudes and practices concerning psychological aspects of patient functioning and care, and a needs and process assessment in each site. This would ensure that the behavioral health issues and comorbid medical problems in each practice were addressed, and allow us to evaluate if physicians' practices and attitudes changed subsequent to the behavioral health clinicians' arrival. Because of the pressures to start the clinical aspects of the project, these were never accomplished. We also began to implement a screening procedure that would enhance identification of psychological and or substance abuse symptoms and referral for further assessment and diagnosis, but this was never fully implemented and soon was stopped.

### **If We Do Good Clinical Work, Organizational and Cost Issues Will Take Care of Themselves**

We expected that our clinical efforts would result in enhanced detection of behavioral health issues and response to the psychosocial dimensions of medicine; enhance medical and psychological outcomes; and reduce utilization of unnecessary procedures and medical services. For example, if behavioral health identification increases, and clinician skill and medical practice comfort with behavioral health clinicians advances, increases in volume of patient entry into treatment will occur. This is in fact what occurred. As increased medical satisfaction and patient use of services continues, we thought that it would not only lead to the need for more behavioral health care professionals' services but also more practice opportunities in which to provide services.

Many of these things began to occur. There were multiple examples of patients who called practices multiple times per week, stopping this behavior once psychological treatments were initiated. There were also multiple examples of patients who were reluctant to engage in medical treatments or who were downright noncompliant, changing these responses with copysychological treatment. In a meeting with office staff in one practice, there was a sense of relief in not having to worry about difficult patients because there was someone there who could provide such assistance.

We were sure that once the project matured we would demonstrate an impact on overall health care costs. We were aware that in order to accomplish this there needed to be fidelity to many issues, including training of behavioral health medical and office staff, treatments provided and administrative structures and activities. We were aware that this required attention to recruiting, financing and training models. Ultimately, though, we were not able to provide the attention needed to accomplish these tasks.

## **We Don't Need No Stinkin' Data**

We assumed that financial sustainability would be achieved with a sufficient number of sites and reasonable reimbursement rates from insurers who would recognize the value of the effort and compensate appropriately. Initial data from sites supported the feasibility of the volume projections, as well as a payer mix that potentially supported the projected income level. Project expenses were bare bones, and salaries and support staff were initially underfunded, with the assumption that new sources of income and higher per-unit reimbursements for a broader range of clinical services would occur once the project's potential was recognized. Analyses were made difficult by sporadic and incomplete financial reporting.

We had no available internal data collection system to track either behavioral health costs or medical costs necessary to demonstrate project effectiveness. It became clear that such data were needed to respond to additional financial support and space issues to ensure the viability of the project. These issues were put off until later, choosing instead to put efforts into placing clinicians into the offices and providing services.

## **What Happened?**

The project had a brief, exciting and problem-ridden existence. Everyone associated with the project worked hard on the project, both because of their belief in the project goals and to protect their organizational resources and agendas. Clinicians remained in the practices for around 3 years until the project formally ended in 2004. The executive director of the CMHC retired and although the new director was supportive of the project, the change naturally changed relationships and motivations. About 6 months after the start of the term of the new director of the CMHC, the contract of the project director was eliminated and the mental health director took over day-to-day operations. One collaborative practice, the neurology practice, remains from the initial group. The CMHC has since partnered with the PPC to install a clinician in a different medical practice in the community.

## **Behavioral Health Practice Is the Same Where Ever It Is Done**

The organizational model for the project assumed that since the CMHC had a long, successful record of providing mental health services in the community, that same success would be able to be replicated in medical practice sites. Bringing together different organizations meant bringing together different clinical and organizational cultures, with different operating policies and different procedures. The processes necessary to integrate these differences were not effectively planned for, nor were they ever overcome.

One-hour meetings with physicians and practice staff and passing around papers to be read was insufficient for practices to generate sufficient engagement and reengineering to support such a large practice innovation. Realistically, they were not involved in the planning of what happened and ultimately had varied interest and involvement, resulting in mixed acceptance of the project.

Clinicians practicing in the settings were essentially left on their own. Their sense of being part of the practice was varied and depended on the individual clinician's abilities and personalities. No consistent policies and procedures guided their efforts, and despite training and supervision, they received inadequate support. Clinicians were significantly underpaid, asked to donate time and creative effort, and became frustrated and sometimes resentful.

At the individual patient level, there were reports of strong patient satisfaction. Anecdotally, patients came into treatment with a mental health professional that would potentially not select to enter treatment. Many of the physicians expressed satisfaction with the treatment their patients received. However, there was the absence of a clear clinical model about what types of patients were best served, resulting in sometimes inappropriate referrals. Also, for many patients, the clinician association with a mental health center proved a barrier.

The project did not exist long enough or have sufficiently systematic implementation for its initial aims to be evaluated. It did demonstrate that the idea was a good one. There was increased clinical access for patients who used the services. Patients were seen and treated for behavioral health issues who potentially would not have received services if colocation had not occurred.

Retrospective review suggests that a group of people, from a number of organizations, had a good idea, and worked to make it happen. Behavioral health clinicians and physicians collaborated on patient care. We just did not plan the project so that it could succeed. We did not pay sufficient attention to the "deadly sins."

### **Summary: The Deadly Sins of Collaborative Care and Integration**

In hindsight, the initiative should not have gone forward in the form that was implemented. A number of conceptual and design issues were insufficiently addressed and the design ultimately predicted the outcome. Since that time, I have learned that

they are not unique to this project, but have occurred in others as well. They can be summarized as a set of deadly sins that probably should be considered by any clinician, administrator, financier or policy maker considering or planning medical-psychological collaboration:

- *Every system is designed to get exactly what it gets.* The attention or inattention to design elements is predictive of the outcomes of the project. One of the reasons systems get what they get is because they reinforce certain behaviors over others. Not being able to pay clinicians for planning, consultation and communication means that they probably will not happen. If specified square footage in an office can generate X thousand dollars of income for a physician but less than half X thousand dollars for a behavioral health clinician, it makes justifying using medical space for behavioral health that much more difficult. If physicians are to be involved, then they need to be involved. Placing an intervention in their office because it is a good idea, but an idea that they have not bought into, has been consistently shown to be a setup for failure,

Collaboration puts as much pressure on administrative staff in an office as it does on clinical or medical staff, but is often an afterthought. Internal administrative procedure works well if planned for, and poorly if not. If there is a need for greater identification then screening procedures need to be prospectively developed and implemented with all key staff members participating. As Dietrich et al.<sup>22</sup> have pointed out, changes in practice must be reengineered if they are to succeed. Otherwise, as Dan Quayle has observed, “If we do not succeed, we run the risk of failure.”

- *Let us put a behavioral health clinician in an office and see how it works.* It has been amply discussed that primary care mental health is distinct and different from the provision of behavioral health in other sites<sup>11, 27–28</sup> (see also Chap. 8 by Strosahl and Robinson). There has been an assumption that behavioral health practice is the same no matter where it is practiced, so if it has worked out in one type of practice setting it should work in another. The reality is that there is little similarity between primary care mental health practice and private or clinic practice.

Cynthia Schmidt, a psychologist in the project working in internal medicine, commented:

It is important to understand the differences in medical culture: the primacy of MD’s, the fast pace, the quick decisions, the interruptions. I was in a session with a patient when there was a knock on my door. They wanted me to see a patient who had significant evidence of cutting. I had my patient wait and saw the other patient. Traditional therapeutic models could not deal with the interruption and would not be able to immediately respond. Another distinction is, you need to pull a conceptualization together quickly, immediately after the first contact. Confidentiality is different, too. The docs wanted immediate feedback after referral and appreciated ongoing progress reports. Sometimes the conversations occurred somewhat openly, in the break room. The setting is often too fast paced to be nurturing or supportive. Anyone who has a sensitive personality could easily misinterpret these brief

data-focused conversations with no time for pleasantries or smiles (C. Schmidt, personal communication, 2007).

The notion that any behavioral health clinician will do and that they are already trained appears to be inaccurate. There are specific sets of training requisite for the practice of primary care psychology and behavioral health in medicine. Behavioral health clinicians cannot sit in an office providing psychotherapy and be successful. First, psychotherapy is often not the service that is needed. Second, a full psychotherapy practice limits availability to respond to acute needs. Third, many patients need behavioral health services as part of medical care and often do not have a mental health or substance abuse diagnosis.

The characteristics and training of primary care behavioral health clinicians are different. Hours of work are longer. Patient volume may be different. The amount of time spent with a patient is different. A psychoeducational orientation is critical. A sufficient knowledge of medical practice, pharmacology and medical procedures is necessary. Acceptance of the behavioral health clinician as an extender of physician treatment, with the physician ultimately maintaining responsibility for treatment, is requisite in this setting.

- *I will just send around a bunch of papers for them to read.* It may seem as if the ideas in this chapter and in this volume make so much sense that just handing your colleagues the book to read, especially this chapter, will automatically generate easy entry of a behavioral clinician into a primary care practice or that a physician handing the chapters to administrators to read will result in approval for freeing up space formally occupied by a surgeon and an open checkbook to recruit a behavioral health colleague. Further, surely if an enlightened administrator wants to move in this direction then sending the enlightening literature to the psychiatry director or the mental health director and the medical director of the primary care practice and then making a few follow-up calls will result in the rapid implementation of collaborative practice.

Unfortunately, probably it will not. Education and information are important, but are insufficient to generate change and influence medical practice.<sup>29</sup> It is clear at this point that detailed implementation and reengineering of processes in the target setting is critical. The idea of sending papers around is made more difficult by the volume of papers that we all want to read but have not found the time to!

- *Do not pay attention to organizational and financial issues because they will take care of themselves.* Implementation of collaborative care is more complicated than it seems. We have earlier observed that collaborative care is an organizational intervention and that attention or inattention to such issues will have a lot to do with the success of your effort. There are a myriad of elements, personalities, roles and administrative and financial structures that are integral to a primary care practice. The key issues in each of these areas need to be identified and responded to.

An example of this is the relatively straightforward idea of screening primary care patients for the presence of behavioral health symptoms or diagnosis, even if the patient is not coming to the practice for behavioral health reasons. Let us

assume at the moment that there is agreement on the technical (measures and method) issues of screening. There are still clinical, administrative and financial issues to be considered and resolved as they relate to people administrative impact and costs.

One of my first initiatives after becoming part of the primary care practice was to propose using the PRIME MD.<sup>30</sup> The PRIME MD was offered as a method for identifying primary care patients with comorbid medical and mental health diagnoses. One physician colleague responded that he was concerned that such information was an effort to pressure him to send me more referrals. After I noted that collection of the information would only take 5–10 min or so, another colleague, Lise Kowalski, asked if she understood that I was requesting that she spend half or more of the 15 min available for a patient visit collecting information that may or may not result a mental health diagnosis, asking questions that the patient was probably not there with a desire to answer, leaving little time for the reasons that generated the visit!

Yet later, front office staff wondered who was going to collect the data from the patient, score it and get the summary to the patient, given that they were overwhelmed with their present responsibility? Last, when asked to figure out the costs of such an effort, just multiplying the costs of physician time by the number of patients to be screened, without including other administrative cost, produced a very large cost. I had not considered any of those questions before they were raised. It put me back to the drawing board.

- *We don't need no stinkin' data.* Data collection and using data and evidence generated from data are cornerstones of contemporary medicine. Clinical care is influenced by data, and the organization and financing of health care is data-driven. Data-driven and evidence-based behavioral health has lagged well behind. It has been reported that generally businesses spend about 10% of their budget on information collection and analyses, health care less than 2% and behavioral health less than that. The recently promulgated health and behavior current procedural terminology codes<sup>31</sup> are a conceptual leap of acknowledgment that behavioral health is a dimension of medical care. Yet they have rarely been adopted outside of Medicare.

In the author's personal experience there are two frequent responses by insurers about why they are not adopting the codes. The first is a lack of use of data-based and evidence-based treatments by behavioral health. The second is the lack of data collection and data analyses to demonstrate that there is sufficient effectiveness of collaborative medical intervention to support financial and administrative policy change. Our project failed at that task. We had data collection identified as a critical aspect of the project. We had a research director. Still, those in charge pulled the funding. There was no support for discussion of fidelity of treatment, let alone a method to ensure it.

The single most important and most frequently overlooked aspect of collaborative models is a primary focus on data collection. This needs to include the ability to assure purchasers that there is fidelity to evidence-based treatments and a data

set that allows us to compare screening and change data with medical outcomes. This would then give us the ability to contrast the cost of medical and behavioral care data with clinical outcomes such that there is the opportunity to determine cost-effectiveness.

Kay Barrett, a psychologist practicing in a neurology practice within the project, observes that there were outcomes of the project beyond what we learned not to do. One practice continued to practice collaboratively even after the project ended. That practice has served as a springboard for other psychologists working collaboratively. The project raised consciousness in other parts of the system about the possibilities for accessing behavioral health care for patients who otherwise would be left to fend for themselves, such as patients with recent diagnoses of chronic illness and patients with gastrointestinal disorders. The project was part of a developmental evolutionary process which will continue.

We all want to provide comprehensive health care to our community. For too long a method has not existed to integrate psychological health into its appropriate role in the health care system. This project was an effort to enhance our system of health care but was not able to respond to the critical issues that need to be addressed to generate successful integration. It does suggest the need for other projects that can be guided by the lessons we have learned. Patients will then have access to the same levels of evidence-based professional behavioral health care that they expect from other aspects of medical care. Physicians will have access to levels of organized consultation and care that have not been previously available and which allow for medical treatments that have been described, but that are infrequently made available.

Finally such efforts give us the opportunity to attend to the broader Three Worlds perspectives by not only improving patient care, but also by improving it in an administratively sensible and cost-conscious, data-driven fashion.

**Acknowledgements** Thanks to Cynthia Schmidt and Kay Barrett for their assistance reviewing and commenting on this chapter. Cynthia Schmidt was Director of Research and a psychologist in internal medicine and Kay Barrett was and still is a psychologist in a neurology practice that was part of the project.

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## Chapter 5

# Tailoring Collaborative Care to Fit the Need: Two Contrasting Case Studies

Nicholas A. Cummings and William T. O'Donohue

As experience in full-fledged collaborative or integrated behavioral/primary care repeatedly teaches us, one size does not fit all. Practice patterns need to be realigned, budget issues must be resolved, and myriads of not-so-obvious impediments stemming from turf interests must be effectively addressed. Healthcare delivered for decades in a traditional manner has created a number of fiefdoms and silos, each headed by a cadre of chiefs, seniors, and adherents has resulted in an array of jurisdictional land mines, and stepping on one may wreck an otherwise well-intentioned collaborative program. Healthcare often takes place in bureaucracy and we know that bureaucrats are interested in maintaining or increasing their power and budgets. Integrated care can seem to threaten some of these individuals, particularly those in behavioral health specialty care (but sometimes in psychiatry too) as the transformations integrated care involves can seem threatening to those vested in the status quo. However, a deeper analysis would generally show that primary care and behavioral health professionals will be the “winners” in integrated care, while certain medical specialty care (e.g., emergency room, ER, cardiology) may be the financial “losers” as patients’ behavioral and medical problems are resolved in the integrated care setting. However, the real winners are the patients, who receive more efficient and effective care; and the payers (including the American taxpayer, who pays for over 50% of all medical care), who gain financial efficiencies through medical cost savings.<sup>1</sup>

The case studies below illustrate that an understanding of pathways to clinical presentations be understood in designing healthcare delivery systems. Freidman et al.<sup>2</sup> have suggested that there are five main behavioral health pathways to medical utilization:

1. *Information and decision support pathway.* Many individuals may not understand how to effectively self-manage a problem (such as depression, obesity, or asthma). In addition they may not understand how to effectively utilize the healthcare system. Teaching individuals to better manage their problems, to understand the nature of their actual problems better (panic vs. actual coronary problems), and to effectively utilize the system better (telephone call into primary care office speaking with nurse; vs. primary care visit, vs. urgent care visit, vs. ER visit) can result in more efficient and effective healthcare.

2. *Psychophysiological pathway.* Stress and its resultant heightened sympathetic arousal can exacerbate many physical conditions. Some stress is a normal part of life; and some episodes of life unfortunately involve significant increases in stress. Teaching individuals how to better manage stress can have huge impact on the development and maintenance of health problems and thus medical utilization.
3. *Behavior change pathway.* Many individuals lead problematic lifestyles that will cause them to feel unwell, create serious medical problems, or exacerbate existing conditions. Overeating, smoking, and underexercising are the chief culprits in this pathway. Unfortunately, these problems are on the rise (see, for example, O'Donohue et al.<sup>3</sup> for more information on the epidemic of childhood obesity). The targets in integrated care are then these lifestyle problems.
4. *Social support pathway.* Many individuals are either lonely or need another human to help them deal with their medical concerns. Social support such as empathy, validation, normalizing, and joint problem-solving can be critical to resolving patient presentations. This may be particularly true for socially isolated individuals. Psychotherapy groups can be a wonderful way to cost-effectively allow patients to gain significant increases in social support. One of our case studies below illustrates this. We believe that psychotherapy groups have been underutilized in both integrated care and behavioral health specialty care. Groups not only allow for social support but also can increase clinician productivity, allow high-incidence problems to be more effectively managed, and are excellent formats for psychoeducation, coping modeling, and other critical processes to occur.
5. *Undiagnosed mental disorder.* Many individuals use the primary care clinic as their de facto mental health system. They come to get their depression, anxiety, ADHD, or other problem diagnosed and treated. In addition, many mental health disorders have a physical component and it may be these physical concerns that result in the medical presentation. For example, individuals with panic disorder may present as having concerns about having a heart attack. Individuals with depression may present with concerns about fatigue, sleep problems, weight change, and stomach pain. Individuals with cluster B personality disorder may like the attention and drama associated with medical presentations. And individuals with subclinical problems such as stress may present with as nausea, dizziness, and headaches. In integrated care, the behavioral health specialist can then assess for the presence of these pathways and implement effective treatment. This is superior to missing these contributors (as is the risk without a behavioral health consultant in the medical setting); identifying these and referring to specialty care (with less than 20% showing up for the referral); or treating these with a much more limited range of options (only medication for depression rather than also considering psychotherapy or self-help options).
6. *Somatization pathway.* Cummings has defined somatization as the experiencing of stress and other negative emotions in physical ways. This is quite different from and should not be confused with the DSM-IV somatization disorder which involves a particular symptom complex and which needs functional impairment

in excess of what would normally be expected with the particular presentation. Men, for example, may somatize because complaining about stress, depression, or anxiety may be seen by them as a display of weakness. However, complaining about a headache or nausea which they hope may be caused by a “real” medical disorder is more acceptable to them. Understanding somatization and treating it as such as opposed to ordering endless tests to track down a medical condition that explains the symptoms is key to effective medical utilization.

In addition, two other significant movements are critical in healthcare service delivery design. The first is the movement to apply quality improvement principles and procedures to healthcare. Quality improvement has resulted in excellence, increased consumer satisfaction, lower prices, and numerous innovations in areas such as computers, retailing, and automobiles. However physical medicine has been slow in adopting these methods and behavioral health has been even slower. We recommend that all integrated care efforts take place in the context of a quality improvement process.<sup>4</sup>

Second, there is a movement toward consumer-driven healthcare. This involves both giving consumers choice regarding their benefit design and the resultant costs, but also listening to them and designing the delivery of healthcare in ways that they want. Integrated care has consistently received very high consumer satisfaction ratings.<sup>5-6</sup> Consumers seem to like one-stop shopping, increased access to behavioral health resources, and also the decreased stigma associated with delivery of behavioral health services in this manner.

These pathways are evident in two case studies involving very different problems and requiring different, innovative healthcare delivery structures.

## **A Teenage Clinic**

The 38 members of the department of pediatrics in a staff model HMO serving a large metropolitan and inner-city area found themselves overwhelmed with adolescent problems. These ranged from rebelliousness, pregnancies, STDs, substance abuse, gang membership, depression, suicidal ideation and behavior, dating and popularity struggles, and a host of mundane, everyday complaints that are typical of adolescence. The parents of adolescents present to the pediatrician the family disruptions and attempt to use the physician as a sympathetic intermediary in the conflicts. Impeding the doctor–adolescent patient relationship, however, is the almost ubiquitous reluctance of teenagers to confide in the physician in the presence of the parent. Rapport was better in appointments during which the parent did not accompany the teenage patient, but even then the lurking probability that the parent would demand to be informed of the outcome of the visit continued to be an inhibiting factor.

It was decided to form a teenage clinic for age 13–19 patients who would be eligible only if the parents agreed to respect the adolescent’s confidentiality, totally

relying on the pediatrician's trust and authority to contact the parent only if the situation was of the magnitude that warranted it. Within a year 83% of the teenagers enrolled in the HMO elected to take their pediatric care in the teenage clinic, and surprisingly of this population involving thousands, less than half a dozen parents refused to sign the confidentiality agreement. One of the attractions for parents was hearing from those who had already agreed to the teenage clinic there was a demonstrable reduction in family conflict. The allure to teenagers, along with the confidential aspects, was that this was a far more age-appropriate delivery system than the general pediatric clinic.

Because the overwhelming majority of teenagers who visited presented with psychological problems, it was decided at the outset to involve the department of psychiatry, from which a child psychiatrist, two child psychologists, and two social workers were assigned to participate part-time in the teenage clinic. Immediately the teenage clinic was a hit with the adolescent patients, but just as immediately it was problematic with the staff. Since the pediatricians still reported to the department of pediatrics and the behavioral care providers to the department of psychiatry, the respective chiefs of service required they be informed and approve every decision. The departments of psychiatry and pediatrics were in constant conflict regarding whose budget a prospective program would come out of. One department complained that the other did not meet its appropriate budgetary share. The conflicts often entangled the participants in never-ending arguments that because a service was medical or psychological it should come out of the other guy's budget. Hundreds of hours were spent in meetings, often well into the night, in attempts to reach a compromise. Nothing worked, and contentiousness only increased.

Finally the top management of the HMO interceded. Convinced of the efficacy of the teenage clinic concept, they restructured it as its own entity, separate from the departments of pediatrics and psychiatry. Staff no longer reported to the chiefs of pediatrics or psychiatry, but to the chief of the teenage clinic, who was a pediatrician. This new clinic was responsible for maintaining its own budget, adequately delivering its own services, and electing its own chief. The chiefs of pediatrics and psychiatry angrily protested; but the staff of the teenage clinic, both pediatricians and behavioral care providers, were delighted with their new autonomy. This was one of those instances in healthcare delivery when an enlightened top management must impose the innovation from the top down on a system bogged down by tradition. The chief pediatrician, seeing how well the new structure was operating, eventually stopped complaining, but the chief psychiatrist never stopped attempting to reclaim the former turf. A frequently voiced alarm was that psychologists and social workers could not adequately function when reporting to a medical chief who was not a psychiatrist. Time more than proved this contention was based on fallaciousness. To the relief of everyone, the contentious meetings that frequently stretched to midnight without resolving the issues disappeared.

The model took collaborative care to its ultimate, that of colocation of behavioral care providers in the pediatric health setting, with medical and behavioral practitioners serving side by side as primary care providers and as appropriately needed. The "hallway

handoff,” the pediatrician walking an adolescent patient a few feet to the office of a psychologist or social worker and remaining a few minutes until the behavioral care provider and the teenager had connected, was the mode, replacing the more typical but less effective referral procedure found in most healthcare systems. Teenagers, even more than adults, resist referral to a mental health professional, while the psychologists and social workers in the teenage clinic arrangement were accepted as part of pediatric healthcare rather than being considered as outside “shrinks.”

Outcome studies conducted 3 years following the restructuring of the teenage clinic revealed significant reductions in teenage pregnancies, STDs (especially those going untreated), substance abuse, school drop-out rates, suicide, depression, gang affiliation as rebellion against parental authority, and truancy. Most of the adolescents bonded with their teenage clinic providers and frequently called them off-hours for solace and advice. The ability to make their own appointments not only enhanced care, but all but eliminated missed appointments. In the traditional system it is common for a parent to arrive at the pediatrician’s office at the appointed time only to have the teenager who was to join them directly from school never show. Interestingly, the connectivity to the physician is seldom reflected in patient satisfaction surveys, as the teenager is prone to shrug that the provider upon which they have become dependent is just “okay.” On the other hand, patient surveys with the parents of these teenagers reveal overwhelming satisfaction. Parents cite reductions in intergenerational (family) conflict as well as teenage rebelliousness. They were grateful for the family conferences, called at the instigation of the practitioner responding to the wish of the patient, referring to them as most helpful. Demands by parents to inject themselves into the treatment seldom occurred and were always handled with the mutual satisfaction of the demanding parent and the practitioner, as well as the adolescent.

## **An Example of a Behavioral/Emergency Room Collaboration**

Because of the unavailability of psychiatrists to be immediately available to an ER for other than the most severe cases, the largest behavioral healthcare carve-out organization (managed behavioral healthcare organization, MBHO) at the time began requiring a behavioral care provider, typically a trained psychologist or a psychiatric nurse practitioner, to respond in the middle of the night, no matter how late the patient presented. Typically a psychiatrist on call will give telephone instructions that the patient be admitted and he/she will evaluate the patient in the morning. Experience demonstrates that not seeing the patient immediately results in a greater number of unnecessary psychiatric hospitalizations. When this innovative procedure was initiated by the MBHO the hospitals resisted, but the need to be reimbursed caused them to reconsider and allow the nonmedical behavioral care providers to conduct interviews in the ER at any time of the day or night. The arrangement worked well for over 7 years, resulting in a very large reduction in

psychiatric hospitalization, and was terminated only after the MBHOs evolved to their present status as essentially behavioral care payment intermediaries.

In time the behavioral care providers on ER call got to know the ER physicians well as they gained their respect. This resulted in serendipity, the provision of a previously unplanned intervention with asthmatic children who were brought wheezing in the middle of the night to the ER by their parents. In their frequent nocturnal responses to the ER, the psychologists observed that ER visits for childhood asthmatic attacks were relatively sparse during the week, very heavy on Friday and Saturday nights, and virtually nonexistent on Sunday nights. The same child and parents trended to be repeaters, and once new children entered the Friday/Saturday pattern, they, too, became repeat presenters to the ER. It has long been recognized that emotional stress and distress can serve as a trigger for an asthmatic attack, but the spacing of these attacks on principally Friday and Saturday nights was baffling. The psychologists, with the cooperation of the ER staff, whose own curiosity had now been aroused by the question, decided to play healthcare "detective." It is not unusual for critical healthcare discoveries to result from such curiosity, but to occur in mental healthcare is rather unique. While the ER staff medically attended to the asthmatic child, the psychologists interviewed the parent, or both parents as was usually the case. It took less than two weekends to arrive at the reason.

While everyone had been looking to the child to determine the triggers, the culprit turned out to be marital unhappiness. Parents who were not getting along were too busy during the week working and doing evening chores to confront their anger at each other. Once Friday night came around the unhappy husband and wife were now faced with an entire weekend in which they had to interact. The following sequence was typical. Once the children had been put to bed their unhappiness with each other erupted in arguments that tended to escalate in ferocity. Eventually the asthmatic child awakened, and the loud anger activated in the child the fear that the parents were heading for divorce as had happened with the parents of some of his or her friends in school. The distress triggered an asthmatic attack; the parents ceased fighting as they coalesced in their love for their offspring to rush the wheezing child to the ER. It would not take more than a few such episodes to condition the child in believing his or her asthmatic attacks would save the parents' marriage, inasmuch as they instantly brought the parents together for the sake of the child. The appropriate intervention was not altering an effective medical regimen, but to address through marital therapy the unhappiness of the parents. Not all couples accepted the offer of marriage counseling, and not all who did saved their marriages, but the overall result of providing marital therapy for the child's parents was astounding. The Saturday night asthmatic glut in the ER was reduced by over two thirds within 2 years. Furthermore, as new children entered the cycle, their overuse of the Friday and Saturday night ER was curtailed rapidly. Much to the relief of the overworked ER physicians, the number of children presenting with asthmatic attacks on Friday and Saturday nights became indistinguishable from the number routinely presenting on weeknights.

## Summary

These are two examples of unique and successful collaborative programs that to the authors' knowledge have never been replicated. Whereas the need is obvious, the solution is so offbeat that it escapes those planning collaborative care. But the emerging trend for trained behavioral health providers to more and more practice as a primary care profession is gaining momentum, and innovation is needed. As Albert Einstein was wont to say, much to the dismay of his critics who were uncomfortable with the direction in which he was expanding the science of physics, "Imagination is more important than knowledge."

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# **Chapter 6**

## **Managing Chronic Pain Through Collaborative Care: Two Patients, Two Programs, Two Dramatically Different Outcomes**

**Barbara B. Walker, Peter A. Brawer, Andrea C. Solomon, and Steven J. Seay**

Over 48 million Americans suffer from chronic pain each year,<sup>1</sup> resulting in estimated losses of \$70 billion to \$120 billion dollars annually.<sup>2</sup> Even more importantly, pain kills.<sup>3-4</sup> In a recent systematic review, Tang and Crane<sup>5</sup> found that the risk of death by suicide among chronic pain patients is double that of control subjects. The prevalence of suicidal ideation among chronic pain patients is 20%, and the lifetime prevalence of suicide attempts is between 5 and 14%.<sup>5</sup> A survey done by the American Pain Society found that only one in four people who experience chronic pain receive appropriate treatment, and that even when chronic pain is treated, treatment is often ineffective and/or underutilized.<sup>6</sup> These findings emphasize the importance of developing and implementing models for treating chronic pain that are clinically effective, efficient, and financially viable.

Because chronic pain has such a profound impact on all areas of an individual's life, those who treat patients with chronic pain must be able to integrate information across biological, psychological, and social domains. As such, it has become increasingly important to develop models of collaborative care that address the biopsychosocial needs of patients with chronic pain. In this chapter, we review empirical evidence demonstrating the clinical and cost-effectiveness of collaborative pain programs and present the case studies of two similar patients who were treated in two different chronic pain programs. We then discuss the differences in outcomes, analyze these outcomes within the broader context of Peek's Three World model,<sup>7</sup> and highlight some important lessons learned from working as behavioral health providers within multidisciplinary pain programs.

### **The Effectiveness of Collaborative Pain Programs**

Compared with standard care, multidisciplinary treatments for chronic pain result in greater improvements in quality of life, fewer missed workdays, and greater overall functional improvement.<sup>8-9</sup> Integrated medical and psychological interventions have also been shown to result in significant improvements in pain, coping, and social role function.<sup>10</sup> In a systematic review, Guzman et al.<sup>11</sup> found that patients



with chronic low-back pain who participated in an intensive multidisciplinary treatment program combined with functional restoration reported significantly less pain and improved functioning compared with patients who received usual inpatient or outpatient care (i.e., single modality medical or psychological treatment). Similarly, Cutler et al.<sup>12</sup> conducted a meta-analysis of 37 studies evaluating chronic pain treatments and found that nonsurgical methods, including multidisciplinary treatments, significantly increased patients' likelihood of returning to work. Another meta-analysis of 65 studies revealed that patients who received multidisciplinary treatments had greater functional improvement, reported greater reductions in pain, and made less use of medical services than patients who received no treatment or who received single-modality treatments.<sup>13</sup> These data provide strong support for the clinical effectiveness of multidisciplinary, collaborative pain treatment programs.

Although fewer systematic reviews have directly assessed the economic benefits of collaborative care models, some evidence suggests that multidisciplinary pain programs are also cost-effective. The meta-analysis of Flor et al.<sup>13</sup> revealed that patients treated in collaborative care programs are nearly twice as likely to return to work than are untreated and/or single-modality-treated patients, suggesting that such programs have the potential to result in substantial disability-related savings. Similarly, a recent review by Turk<sup>14</sup> suggests that multidisciplinary programs can result in a greater return to work, reduced health care costs, and fewer disability claims. In addition, individual studies supporting the cost-effectiveness of collaborative pain programs have shown that following multidisciplinary treatment, patients report fewer medical visits,<sup>15</sup> have reduced medical costs,<sup>8, 16–17</sup> and experience greater work readiness.<sup>8, 18</sup> This evidence should be considered in light of a recent qualitative systematic review, however, which concluded that it is not yet possible to draw firm conclusions regarding the cost-effectiveness of multidisciplinary pain programs owing to the poor methodological quality of much of the existing literature.<sup>19</sup> This review cites the need for more studies with improved experimental designs (e.g., the use of appropriate comparison groups, randomization, and economic indices) to ascertain the cost-effectiveness of multidisciplinary treatment programs for chronic pain.

If the empirical evidence supports the notion that collaborative pain programs are both clinically effective and cost-effective, why are there so few of these programs currently in operation, and why have so many been forced to close their doors over the past few years? There are several challenges that must be overcome in order to successfully develop and maintain a multidisciplinary pain program. As noted by Peek:<sup>7(pp47–48)</sup>

All practices or care systems, regardless of size, complexity, or type, face three simultaneous challenges: (1) the clinical challenge of excellent patient care; (2) the operational challenge of employing efficient, well-integrated, and patient-friendly systems of care; and (3) the financial challenge of staying financially solvent, thus utilizing limited health care resources.

These three challenges reflect what Peek calls the three different “worlds” in which health care systems must simultaneously function: the clinical world, the operational world, and the financial world.<sup>7</sup> Peek uses the term “world” to highlight the differences between the various disciplines involved in health care systems; he

notes that the three worlds each have their own languages, focus on different questions and goals, and adhere to different values and standards. As such, a successful health care system must achieve a balance among the three worlds, such that each is equally represented and respected. In a multidisciplinary pain program, this challenge is further complicated by the diversity of the clinical world. The various practitioners involved represent different clinical perspectives with unique principles, distinct methods, and specialized dialects. Although they may share the common goal of excellent patient care, the particular priorities and values associated with each discipline may vary widely. Thus, the balancing act that is required of all health care systems may be particularly difficult for multidisciplinary organizations such as collaborative pain programs.

Because the integration of all three worlds is so critical, the success of a collaborative pain program depends heavily upon the health care system within which it resides. In capitated systems with one financial bottom line (e.g., the Air Force, HMOs such as Kaiser Permanente, the Veterans Affairs system, and free care clinics), there are strong incentives to develop programs that will decrease health care utilization and reduce overall expenses in the long-run. In these systems, collaborative programs, preventive and behavioral medicine programs, and patient education programs are highly valued as cost-effective interventions. However, in private sector, fee-for-service environments, medical and psychological treatments are usually funded through two completely separate systems. Thus, although the evidence indicates that collaborative pain programs may be more cost-effective overall, the short-term incentives in a fee-for-service environment are not aligned with such a model.

In spite of these challenges, collaborative pain programs have been successfully developed and implemented within noncapitated health care systems. In his Three World model, Peek<sup>7</sup> emphasizes that the most effective collaborative programs are those that have carefully considered the clinical, operational, and financial worlds during every phase of development. In an effort to illustrate this point more clearly, we present case studies of two similar patients who were treated in two different chronic pain programs and experienced two very different outcomes.

## Case 1

### *The Patient*

This patient was a 49-year-old married man who suffered injuries to his head and cervical region after falling from scaffolding while working as a construction worker. He lost consciousness and was admitted to the hospital; he was discharged in less than 48 h, still complaining of head pain, blurred vision, nausea, and vertigo. After repeated visits to his primary care physician, a neurosurgeon, three neurologists, and a neuropsychologist, he experienced little pain relief and was finally referred to the pain program 18 months after his initial injury.

## *Treatment in the Pain Program*

This pain program is housed within the private practice of two anesthesiologists. One is board-certified in pain management and serves on the faculty at an academic medical center in the New England area; the other has been in practice for over 25 years and was Head of Anesthesiology at a regional teaching hospital for 15 years. Other staff members include a nurse practitioner, a registered nurse, a medical technician, a radiology technician, and a psychologist. The pain program also has a collaborative relationship with a physical therapy group located at a different site; the physical therapists in this group have all had training in pain management.

During his first visit, the patient met with the anesthesiologist and nurse practitioner, who took a complete history, performed a thorough physical examination, educated the patient about chronic head pain, and addressed the patient's questions. During this initial visit, the patient noted that he had been experiencing constant bilateral pain across his forehead, behind both eyes, and in both ears since the accident. He described periods of severe (7–9/10) pain, as well as intermittent periods of intense (10/10) breakthrough pain, which coincided with photophobia, phonophobia, and nausea that lasted from 1 day per week to every day for 2 weeks. The anesthesiologist diagnosed him with postconcussive headaches and presented him with an overview of the benefits of taking a multidisciplinary approach to managing chronic pain. Within this context, the anesthesiologist started the patient on pregabalin (Lyrica) and arranged a follow-up visit with himself and the psychologist. The patient was also referred for physical therapy to further address his cervical and shoulder pain, which were thought to be contributing to his head pain.

The anesthesiologist met with the psychologist (who was new to the pain program) to review the case prior to the patient arriving for a biopsychosocial evaluation. The anesthesiologist expressed concern about (1) the patient's prior treatment history and its potential to negatively impact the patient's expectations and the doctor/patient relationship, (2) the possibility that the patient's insurance company might begin pressuring him to return to work prematurely, and (3) the patient's receptiveness to new messages about the importance of managing, rather than "curing," pain. This meeting gave the psychologist and anesthesiologist an opportunity not only to review the medical details of the case together, but also to discuss potential concerns prior to the psychologist seeing the patient.

During his first visit to the psychologist, the patient confided that it was not unusual for him to experience suicidal ideation during periods of intense pain. He was relieved, however, to have noticed a dramatic decrease in the frequency and intensity of his headaches since he started taking the pregabalin. The patient also reported difficulty initiating and maintaining sleep, diminished interest in most activities, low energy, and poor concentration since the accident. He expressed anger and frustration related to his previous medical care and stated that he had become increasingly hopeless about his ability to recover. He described a sense of worthlessness regarding his perceived inability to support his family, and he experienced recurring guilt and regret over not asking more questions and being more assertive

about his care earlier in his treatment. He indicated that these thoughts were often in the form of brooding and rumination.

Toward the end of this visit, the psychologist reiterated what the anesthesiologist had explained earlier, emphasizing the importance of taking a multidisciplinary approach to pain management. It was explained to the patient that the goal of treatment was not to “cure” his pain but to help him learn to better manage it, and to do so would require a collaborative approach to address multiple factors, including his pain, mood, work, family issues, and a variety of lifestyle factors. The patient was informed that the anesthesiologist, nurse practitioner, psychologist, and physical therapist would all see him on a regular basis, confer with each other frequently about his progress, and share the common goal of improving his overall functioning and the quality of his life. The medical visits would focus on medication management and symptom management, and would include a series of occipital region injections which could provide the patient with moderate pain relief. Visits to the psychologist would focus initially on educating the patient about headaches and teaching him to keep headache diaries. He would then participate in cognitive behavioral therapy interventions (i.e., relaxation training, pacing, avoiding triggers, reframing thoughts, increasing pleasurable activities, etc.) that have been shown to be effective for headaches and depression.<sup>20</sup>

### *Three World Outcome*

After the patient had been seen four times by the anesthesiologist, eight times by the psychologist, and eight times by the physical therapist, the frequency and intensity of his headaches had decreased significantly. He described no breakthrough episodes of head pain since starting treatment in the pain program. His pain was reduced from a daily average of 7–10/10 to 2–4/10. The patient’s mood was also substantially improved; he described feeling more hopeful and optimistic for the future. He indicated that his sleep and energy level had improved, and that he was engaging in more pleasurable activities. Although he continued to have difficulties with attention and concentration, he described notable improvements in pain control. The patient has not returned to work owing to vertigo and residual pain, but his productivity level has increased significantly. He is now involved in performing household chores (e.g., cooking, cleaning), and he participates in volunteer activities outside of the home. He has abandoned the concept that he must work 60-h weeks to be deemed competent and worthy. The patient has been discharged from the physical therapy aspect of the pain program. He now sees the anesthesiologist for medication refills and has decreased the frequency of his visits to the psychologist to once every 3–4 weeks.

Until recently, the psychologist had difficulty getting reimbursed by the workers’ compensation insurance company, but with persistence was eventually paid. Both the administrative and the clinical staff were satisfied that they had provided the patient with high-quality, evidence-based pain management services that were effective. The patient feels better able to communicate effectively with his other

treatment care professionals, his representative from the labor union, and his workers' compensation manager. Each group has also reported a greater understanding of the patient's current medical status and his concerns about his health and future employment possibilities.

## Case 2

### *The Patient*

This patient was a 21-year-old unmarried man who experienced a concussion, a broken rib, and fractured vertebrae at L1–L4 after falling from a roof while at work. Four days after the fall, he was referred by his primary care physician to the pain program for severe, unremitting (10/10) back pain.

### *Treatment in the Pain Program*

This pain program is affiliated with a regional hospital in the Midwest and is staffed by two anesthesiologists, an acupuncturist, a psychologist (who was new to the group), and several nurses and technicians. At his initial visit, the patient was seen by one of the anesthesiologists, diagnosed with L1–L4 fractures, administered an L5–S1 steroid injection, scheduled for an MRI scan, and asked to return in 2–3 weeks. The patient returned 3 weeks later, stating that the injection had given him some pain relief initially but that its effects had diminished substantially during the second and third weeks. The anesthesiologist reviewed his MRI results with him, performed an L4–L5 steroid injection, prescribed hydrocodone/acetaminophen (Lortab) and carisoprodol (Soma), suggested that he try physical therapy, and scheduled another follow-up visit for 3 weeks' time. Three weeks later, the patient received another steroid injection and prescription refills. He had not gone to physical therapy; he had, however, returned to work, where he continually engaged in activities that exacerbated his pain. One month later, he returned with complaints of "shakiness," "tremors," intermittent periods of rapid heart rate, and difficulty sleeping. The physician reassured him that nothing had changed with regard to his back, refilled his prescriptions for hydrocodone/acetaminophen and carisoprodol, and added another prescription for zolpidem (Ambien) to help him sleep. One month later, the patient returned and reported that he continued to experience pain, stress at work, and difficulty sleeping. The anesthesiologist who saw him during this fifth visit (a different physician from the one the patient had seen during his prior visits) refilled his prescriptions for hydrocodone/acetaminophen and carisoprodol and replaced the zolpidem with temazepam (Restoril).

Two months following this visit, the patient was sent back to the pain program (on an urgent basis) by the emergency room (ER) staff. He had been seen in the ER

several times over the past few weeks with headaches, shortness of breath, and chest pain, but the medical findings were negative. One of the anesthesiologists saw him for a brief visit in the pain center, diagnosed him with panic attacks and anxiety, changed the hydrocodone/acetaminophen to oxycodone/acetaminophen (Percocet), prescribed diazepam (Valium), and suggested he meet with the pain program psychologist. While the patient waited in the waiting area after his visit to the anesthesiologist, the program nurse (who was unaware of the specific details of the case) asked the psychologist to schedule an appointment with the patient for a psychological evaluation. Appointments were arranged so that both the psychologist and the anesthesiologist could see the patient a few days later on the same day.

During the initial evaluation by the psychologist, the patient described his accident (which had occurred 6 months earlier) and his subsequent treatment. He indicated that the injections he had received had helped for a very short time and had then lost their effectiveness. Overall, he indicated that he was doing fairly well managing his back pain, but was having significant problems managing the severe headaches that began following his accident and that had grown progressively worse since their onset. He stated that he had been to the ER on several occasions for these headaches, and that the headaches were his main reason for seeking treatment at this time. He described severe throbbing pain coinciding with photophobia, phonophobia, and nausea once or twice a week that lasted from 1 to 3 days. He reported taking oxycodone/acetaminophen for his back pain, temazepam every night for sleep, and diazepam when he felt “stressed,” which was usually every day; he stated that no medication for headaches had ever been tried. With regard to his mood, he described feeling irritable and “down” at times when his pain was worse. He stated that his only treatment for headaches had occurred in the ER over the past few weeks.

While the patient was waiting for his appointment with the anesthesiologist, the psychologist initiated a brief meeting with the anesthesiologist. The psychologist was new to the practice, and viewed this meeting as important in order to (1) review the medical chart (it was in the anesthesiologist’s office and unavailable to the psychologist prior to the visit), (2) share information and impressions, and (3) agree on a coordinated treatment plan. Upon hearing the psychologist’s impressions (which were based on the biopsychosocial evaluation), the anesthesiologist expressed shock that a psychologist would “practice medicine without a license” and talk to patients about their medical problems or their medications. His understanding was that the psychologist had been invited to join the pain program in order to help patients with their “mental health problems,” and that medical problems and medications ought not be addressed by the psychologist.

### ***Three World Outcome***

The anesthesiologist saw the patient later that day, diagnosed him with occipital nerve neuralgia, performed an occipital nerve block, and refilled his prescriptions for oxycodone, temazepam, and diazepam. Since that date, the patient has returned

to the pain center on several occasions and has received steroid injections and prescription refills. He continues to exacerbate his pain every day at work, and he continues to present to either the ER or the pain center in crisis when his headaches and/or back pain intensify. The patient was referred to another psychologist in the community who works with pain patients, but to date has not made an appointment with her. The psychologist who originally saw the patient has attended multiple meetings with staff and administrators in an effort to develop a collaborative relationship with the pain program; neither of the anesthesiologists has attended any of these meetings. To date, it has been impossible to agree upon a coordinated treatment plan for this patient or a plan for offering collaborative services in the future. The psychologist has not provided any further clinical services to the program.

## **Two Patients, Two Programs, Two Different Outcomes**

There are some striking similarities between these two cases. Both patients fell and suffered from a concussion, back pain, and headaches. Both patients presented to a pain “program” with work-related injuries resulting in chronic pain coupled with lifestyle and mood disturbances. Both patients had to make important decisions regarding their return to work and different health care options. Both patients went to pain “programs” that were housed in private, fee-for-service anesthesiology practices with providers of different specialties onsite, and both psychologists were new members of the two respective pain programs.

In spite of these similarities, the outcomes were dramatically different. In the first case, the patient was treated successfully using evidence-based treatments within a collaborative care model, the administrative structure operated smoothly, and all of the clinicians were reimbursed for their time. The professionals worked within a system in which each was respected and heard, despite the different languages employed. The patient felt that he was being heard, and his needs and concerns were addressed. In the second case, there was little communication among the providers. The patient not only received fragmented/disjointed care that was less than optimal, but his visit to the psychologist catalyzed a complete breakdown in the clinical, administrative, and financial worlds of the program. In the sections that follow, we discuss the major factors that led to these differences and lessons that can be learned from our experiences.

### ***The Clinical Sphere***

The treating anesthesiologist associated with the first practice was trained in a collaborative, multidisciplinary pain center. Believing that he would be unable to provide the highest quality care to pain patients without a behavioral health specialist onsite, he sought out a psychologist to join his program. His goal was to provide

collaborative, integrative care; as a result, the anesthesiologist values input from the psychologist and meets with the psychologist on a weekly basis to exchange information about shared patients. As Peek<sup>7</sup> has pointed out, this anesthesiologist's efforts to understand and respect the different languages and perspectives of other health care professionals led to harmonization of care and improved outcomes for all involved. All of the providers in this program agree that the main goal is to move patients from seeking a cure for their pain to helping them better understand and manage their pain, thus improving their overall functioning and quality of life.

In contrast to this, the focus of the second pain program is on providing anesthesiological interventions for pain. The anesthesiologists invited the psychologist to join them because they were frustrated with the poor access to mental health services in the community. Their goal was to provide better access to mental health services for their patients. As such, they expected the psychologist to offer mental health services in their setting, but they did not want the psychologist to become directly involved in treating their patients' medical problems. In fact, their perception was that "medical" and "psychological" services were separate and not part of one continuum of care. Within this framework, they saw themselves as responsible for managing patients' medical care and the psychologist as responsible for treating their mental health problems. The psychologist, however, joined the group with the expectation of providing collaborative care within the context of a biopsychosocial framework for pain management. Unfortunately, the incongruent expectations of the providers led to a breakdown in the continuity of care and ultimately the collapse of the collaborative pain program itself.

### *The Operations/Administration Sphere*

Pain patients seen by the psychologist associated with the first program are seamlessly incorporated into his larger practice within the hospital. The secretaries in the pain program and the hospital developed a system to coordinate the charts and paperwork. Evaluations and progress notes are placed in the medical chart that is kept in the pain program, and a copy is placed in a duplicate chart kept at the hospital. When patients are scheduled to be seen in the pain program, the secretary in the pain program notifies the secretary at the hospital, who enters the demographic information into the hospital billing system, gets approval from the insurance company, prepares a chart, and makes reminder phone calls.

When the psychologist began seeing patients in the second pain program, it was unclear which secretary should provide administrative support. Should these services be provided by the secretary in the "mental health group," who supports the other psychologists employed by the hospital, or by the secretary in the pain program, who was inexperienced in working with mental health care providers? To lessen the burden, the psychologist dictated evaluations and progress reports using the hospital dictation system only to find that there was confusion about where these types of documents should be placed within the electronic medical record. The hospital



maintains two sets of records that are completely isolated from each other; one set contains the medical records and the other contains the mental health records. Should the evaluations and progress notes of the psychologist in the pain center be placed in the medical record, the mental health record, or both? To further complicate the issue, mental health records can currently only be accessed by those physically located in “mental health sites” affiliated with the hospital.

### *The Financial Sphere*

The psychologist working in the first pain program is employed full-time at a hospital and holds a faculty appointment in an academic medical center. In this capacity, he is expected to provide collaborative care and supervise students providing collaborative care at various sites within the community. The hospital has a vested interest in supporting this model of care. The secretary who manages billing for patients within the hospital practice also handles billing for patients who are seen offsite by the psychologist. As a result, pain patients seen offsite in the pain program are handled financially in exactly the same way as those seen by the psychologist at the hospital. For example, copays are collected by the hospital, and insurance payments are made directly from the insurance agencies to the hospital’s billing company. This particular case was even more complex because it required navigation through the workers’ compensation program’s system as well. Nonetheless, a coordinated effort between the hospital and the pain program led to a positive resolution in this case.

In contrast to this, the psychologist affiliated with the second pain program was employed by the hospital to work 1 day per week treating patients in the pain program. Every other provider of psychological services is a member of the mental health provider group, and this group uses a billing service that is completely isolated from the rest of the hospital. As described already with regard to patient records, one can access this billing system only from the mental health sites, and this led to confusion about how to bill for services provided by a psychologist working in a medical program within the hospital.

### **Conclusions**

These two cases illustrate several factors that can contribute to the ultimate success or failure of a multidisciplinary health care system. First, all health care providers and support staff involved must agree upon congruent goals and expectations, and these must be clearly articulated from the outset. In the first case, the physicians, nurse practitioner, psychologist, and physical therapists all share the common belief that collaborative care is a clinically superior model, and thus also share the common goal of providing collaborative, integrated care. This common goal facilitates

communication, treatment planning, and consistency in patient care. In the second case, there was a lack of communication between the physicians and the psychologist regarding goals and expectations, which turned out to be quite disparate. The psychologist's goal was to provide collaborative care for chronic pain, and the physicians' goal was to provide better access to mental health services for their pain patients. This difference ultimately led to fragmented, suboptimal patient care and a poor clinical outcome.

These cases also highlight the importance of having a viable operational and financial model that supports a collaborative approach. In the first case, the administrative/operational and financial structure was established *a priori* with the goal of providing collaborative care in mind. Openness and respect for all professionals involved (and a working understanding of the multiple languages spoken in their respective worlds) facilitated communication, planning, and organization, which ensured that the administrative/operational and financial aspects of the program ran smoothly. In contrast, the second program was poorly organized; not only were clinical issues not discussed at the outset, administrative and financial issues were also ignored. The patient was seen by several different clinicians who had disparate goals and spoke different languages. Moreover, billing and record-keeping were not addressed at all until after the patient had been seen. By that point, poor communication and misunderstandings had led to conflict, and collaborative efforts had failed in every sphere.

Peek's<sup>7</sup> architectural analogy serves as a useful model for understanding why the first program was successful, whereas the second was destined for failure. In a collaborative, integrated practice, the three spheres can be conceptualized as three perspectives of the same health care system. Peek<sup>7</sup> likens these different spheres to architectural drawings of the same building, each from a different perspective (e.g., front view, side view, top view). Just as a structurally sound building cannot be fashioned from drawings that include only one view, so too will a business plan that includes only one perspective fail to produce a functionally sound health care system. In our first case example, the system was built according to a complete set of drawings that included perspectives of the system from all three spheres. In the second, not only was the set of drawings incomplete, but the one perspective that was represented (clinical) was poorly drawn and lacking in detail. Indeed, given the disparate goals of the clinicians involved, one might say the clinical perspective included the same view of two different buildings. It is no wonder that this "collaborative" pain program was unsuccessful. Lacking agreement among providers in all three spheres (clinical, operational, and financial), this program had no realistic hope of survival.

Studies have shown that collaborative pain programs are both clinically effective and cost-effective, but few are currently thriving outside capitated environments. In this chapter, we illustrated some of the challenges one might face when attempting to establish such a program and showed how an evidence-based, cost-effective, collaborative pain program can operate efficiently in a private sector, fee-for-service environment. The development and survival of such a program requires that the clinical, administrative/operational, and financial perspectives are each represented,

each clearly understood by all the participants, and each incorporated into the overall design of the system. By following the model exemplified by the first case study in this chapter and the successful programs described in other chapters of this book, we hope that new collaborative programs will develop and thrive.

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## **Chapter 7**

# **Integrating Mental Health Services into Primary Care: The Hamilton FHT Mental Health Program**

**Nick Kates**

The Hamilton Family Health Team Mental Health Program (formerly the Hamilton HSO Mental Health Program) has integrated mental health services into the offices of family physicians across Hamilton, a community of 500,000 in southern Ontario, Canada, since 1994. Beginning with 45 family physicians, the program underwent two major expansions in 1996 and 2005 and now serves 148 family physicians in 80 different practices.

The success of the program over the last 13 years has been built on a combination of innovative and high-quality mental health services delivered in the offices of participating family physicians and a program-wide organizational framework that has coordinated these activities. This chapter describes the way the program functions and the key role a central organizational framework has played in establishing and maintaining a program that delivers services in multiple primary care settings.

## **The Canadian Context**

Canada has a universal health care system funded on a cost-shared basis by the Federal Government and Canada's ten provinces and three territories (currently a 25:75 ratio) and is based upon five common principles—universality, portability, publicly funded, comprehensive and accessible—enshrined in the 1964 Canada Health Act.<sup>1</sup> Almost 50% of Canada's physicians are family physicians (Canada has few primary care specialists). The last few years have seen a concerted effort at both the federal and the provincial level to strengthen primary care, as both the entry point to and the foundation of Canada's health systems. This was highlighted in a report produced by the federal, provincial and territorial deputy ministers of health in 1995<sup>2</sup> which promoted comprehensive team-based primary health care, and was reinforced by a recent national primary care renewal fund (the primary health care transition fund),<sup>3</sup> which provided Canadian \$780 million for projects that would assist with the transformation of primary care.

Each province has taken a slightly different approach to redesigning primary care. Ontario—Canada's most populous province, in which 11 million of Canada's

30 million residents live—currently spends over Canadian \$3,000 per citizen per year on health care. Ontario has chosen to develop a province-wide network of primary care teams (Family Health Teams<sup>4</sup>) that integrate nurses, nurse practitioners, mental health workers, pharmacists and dietitians into groups of between 2 and 25 family physicians, with an emphasis on health promotion, chronic disease management and comprehensive care delivered by well-functioning interdisciplinary teams. To date 150 teams have been established.

## **The Hamilton Program**

While family health teams represent a recent stage in the development of integrated and comprehensive primary care, there were a few preexisting examples of programs which had already successfully integrated specialized services into primary care settings and whose experiences influenced the development of family health teams. One of these was the Hamilton HSO (now Family Health Team) Mental Health Program (HHSO MHNP).

The program was established in 1994, integrating mental health services into the offices of 45 family physicians in 13 different practices, and has undergone two major expansions. Forty additional family physicians joined the program in 1996, and in 2006, 70 more physicians joined. The program now provides mental health services within the offices of 148 family physicians in 80 different practices serving 340,000 people across the city of Hamilton, with almost 70% of the city's population having direct access to mental health services in their family physician's office. The program currently employs 50 full-time-equivalent counselors and five full-time-equivalent psychiatrists and is coordinated by a small central management team.

The program was developed because of a desire to bridge the gap between mental health services and primary care settings. While family physicians were playing (and continue to play) the major role in delivering mental health care in Hamilton, as in most Canadian communities, they frequently felt unsupported by mental health service providers. Communication between mental health and primary care providers was often poor and access to mental health services was seen as a major problem. There was also evidence that the majority of people with mental health problems in Ontario received no treatment over the course of a year, even though over 80% of these individuals would visit their family physician during this period.<sup>5</sup>

At the same time, shortages of mental health care providers—especially psychiatrists—was causing mental health services to look at new ways to utilize their resources more efficiently. It became apparent that instead of continuing to deliver mental health services in ways that were not meeting the needs of referral sources and patients, new approaches to care delivery were required. One way to achieving this was to be able to offer a comprehensive range of mental health services within the offices of family physicians by integrating mental health counselors into these practices, supported by periodic visits by psychiatrists who would work primarily as consultants to the counselors and family physicians.

The specific goals in establishing the program were:

- To increase access to a comprehensive range of mental health services
- To strengthen links between mental health and primary care services
- To increase the skills of primary care providers in recognizing and treating mental health problems in the populations they served

From the outset the program saw the need to articulate principles to guide the activities in each of the multiple locations, rather than just introducing the same model in every practice. These principles, which continue to guide the operation of the program today, included:

- The arrangement needed to be seen as a collaborative partnership from the outset.
- Care for individuals being seen would be shared, according to the respective skills and availability of primary care and mental health providers.
- The emphasis would be on short-term care, to ensure that counselors and psychiatrists remained available to see new cases with a minimum of waiting time. Some individuals would need to be seen on an ongoing basis, but this would be in a shared partnership with the family physician.
- Regular communication between mental health and primary care providers was essential. This included writing all mental health notes and consultations within the practice's continuing medical record, whether it be a paper or an electronic chart.
- Family physicians needed to make themselves available to discuss cases with counselors and psychiatrists, who in turn would ensure that their case reviews were brief and fitted within a family physician's time demands.
- Counselors and psychiatrists needed to be willing and able to assess and initiate treatment of a broad range of problems, for children as well as for adults, and for couples and families as well as for individuals, and for all commonly encountered psychiatric disorders.
- The primary care mental health services needed to be well linked with other community mental health services as part of a continuum of care.

## **The First World: How the Clinical Program Operates**

### ***Role of the Counselor***

Counselors in the program are based in the family physician's office and will see any patient referred by the family physician or other primary care providers, including children and seniors. The counselors are predominantly registered nurses or masters of social work (the highest level of social work training in Canada) and all are expected to have had at least 3 years of experience in mental health settings. The ratio of counselors per patient population is one full-time-equivalent counselor for every 7,200–7,500 patients. With an average physician practice size of 2,200

individuals, a solo family physician is likely to have a counselor working in his or her office for three half days a week, while a group of four physicians will have a full-time counselor working with them.

Counselors will see any patient referred by a family physician and provide assessments and ongoing treatment, including specific psychotherapies, monitoring medications, seeing families, crisis interventions, providing support and even running groups. It is a challenging role as the counselors see a much broader range of cases and problems than they would see in a traditional mental health setting but work without the support of a large team

If the needs of an individual cannot be met in primary care—in reality no counselor will possess all the skills demanded by the range of problems patients present with—they will refer the patient on to another local mental health service for more specialized treatment. This might be for more complex rehabilitation needs, specialized treatment of an anxiety disorder such as obsessive-compulsive disorder or access to resources that are not available in the primary care setting.

All referrals come through the family physician, to ensure that he or she is aware that a case has been referred and the emphasis is on short-term care. Approximately 50% of all patients referred are seen for one visit only, while the average number of contacts per referral is 6.5 and has remained fairly constant over the 12 years of the program.

Because they are in the practice much of the time, counselors are available to see individuals on an urgent basis within 24 or 48 h of a problem being identified. They can also provide advice to the family physician or sometimes even see a patient before they leave the office after a visit to the family physician.

The other component of the counselor's role is in providing "indirect" services, when a patient is not seen. This may involve a discussion about a possible new referral, follow-up after someone has been seen at a previous visit, advice about community resources or how to access the mental health system (something family physicians had previously found to be frustrating and time-consuming), educational presentations or participation in team meetings. Most of these discussions are relatively brief, usually taking less than 5 minutes, which fits with the family physician's time frame. Ideally the counselor will sit down with the family physician(s) at the beginning of a (half) day to go over cases either may be dealing with and to work out how the needs of these individuals could best be met (prepared visits).

Increasingly, the counselors are working in the style of a primary care provider i.e., seeing someone for a number of visits during an acute episode and then maybe not needing to see them again for months or even years. If a problem recurs, they are able to see the patient again at short notice without any impediments. There is no formal "intake" process and the only intake criterion is that the family physician is looking for assistance with a case.

Counselors meet as a group every 4 weeks to get updates on program developments, learn about community resources and discuss issues related to the day-to-day operation of the program. Four half-day educational events are organized each year, based on topics identified by the counselors. Some counselors choose to meet regularly in a small peer-support group to discuss cases they are dealing with. Time to attend educational events is built into the counselors' contract.

## ***Role of the Psychiatrist***

The psychiatrists visit the practices on a consultative basis, for approximately half a day per month per family physician. Most are also working in other settings in Hamilton, the home of McMaster University, spending one or two half days a week working in primary care. Like the counselor, they will see any patient referred to them by the family physician, including children. While most of their work is also short-term (one- or two-visit consultations) some individuals may be seen for further sessions either to assist with stabilization or to adjust to medications which the family physician may not be comfortable using. Some individuals can also be seen every few months in prearranged visits because of the need for closer monitoring of their progress or to prevent relapses.

As with the counselor, psychiatrists work in a “shared” model of care, being available to see a patient for a consultation or a follow-up visit before developing a plan and handing care back to the family physician. Family physicians are willing to take on more complicated cases because they know that if the clinical picture changes, the psychiatrist is always willing to see that person at the next visit, or will be available to discuss their management, either in person or by phone.

An important component of the psychiatrist’s work is indirect care. This will include opportunities to discuss or review cases or to follow up individuals who have been seen, or to assist family physicians with managing cases which may not need to involve the counselor or psychiatrist. The focus of these discussions is often medication management. The psychiatrist can also provide regular case-based educational sessions for family physicians and other practice staff and is available by phone in-between visits to support the counselor and family physician, although on average a family physician will place no more than three or four calls a year.

The psychiatrist consults with, rather than supervises, the counselor and primary responsibility for patients seen remains with the family physician, even though liability is shared. As with the counselors, all notes are written in either the electronic medical record or the patient chart before the psychiatrist leaves. While both the counselor and the psychiatrist notes are part of the primary care record, they need to be protected with the same confidentiality safeguards as for a note compiled in a mental health facility.

## ***New Program Components***

In addition to the general mental health service, the program has recently developed four new pilot programs, each of which is being tested in a few practices. These are:

1. A children’s mental health pilot, whereby children’s mental health workers provide selective consultation to family physicians but primarily work to increase the capacity of the practices to handle children’s mental health problems. They do this by providing training, consultation, advice and support to family physicians, counselors and psychiatrists working in the program.



2. An addictions pilot, which follows a similar capacity-building approach to the children's mental health pilot, and is also working to change the attitude of primary care practices to managing the problems of individuals with addiction problems.
3. A program to enhance the care of individuals with depression, based upon the principles of the chronic care model. This helps practices make changes in the way the care they deliver to individuals with depression is organized. This will enable them to identify their problems earlier, implement evidence-based treatments, support self-management and ensure these individuals are monitored closely after treatment is completed.
4. A one-to-one peer-support program for individual with depression, whereby individuals who have dealt with depression in their own lives are linked with people who are struggling to adjust to the presence of depression in their life.

## **The Second World: The Organizational Framework**

Because of the complexities of organizing a program in 80 different locations, the program required a central coordinating group to help manage the logistic issues in such a large program. This team assists family physicians with tasks with which they might have had difficulty, such as recruitment, evaluation, setting standards of care and implementing program components, and serves as a link with both the funding source—the Ontario Ministry of Health and Long-Term Care—and other community resources or partners.

The central management team comprises a manager, a part-time director, a program assistant, a secretary and two evaluation/data-entry personnel. They are based at a central location and are in regular contact with each of the practices through meetings, e-mail, fax, mailing, a Web site and site visits, to ensure they are aware of issues arising at the front line. This team manages the program's budget and is responsible for the allocation of resources to practices (on both a population and a needs basis) and can reallocate resources if demands in individuals practices change.

Recruitment of counselors is coordinated centrally. The program will advertise for counselors and screen all respondents to ensure they have the prerequisite skills and attitudes to work successfully in primary care. It will then send selected résumés to any practice that is looking for a counselor, according to the perceived fit between the needs of the practice and the expertise of the counselors. It is, however, the practice that makes the final choice. Counselors are employees of the Family Health Team rather than the practice in which they work, but have a contract that recognizes the dual nature of their reporting relationships.

The central team is responsible for setting program standards and guidelines. In this model the family physicians are autonomous practitioners rather than being directly accountable to the program, although expectations are codified in a contract each practice signs with the program before staff are allocated. Nevertheless, the program has developed guidelines to cover certain clinical activities, such as charting, protection of confidentiality or making a referral to the mental health

system. For example, no case will be referred to another mental health service until it has been discussed with the practice psychiatrist, to ensure that the service required cannot be provided in the primary care setting or that the program being considered is the most appropriate for the needs of that individual.

Another of the central team's responsibilities is evaluation, an area in which most of the participating family physicians had very little expertise. When initially implementing the program, evaluation staff visited each site regularly, some more frequently than others, to go over the evaluation materials and to determine how they could best be integrated into each individual practice.

Evaluation requirements are kept to a minimum. There is a referral form (consisting primarily of check boxes) completed by the family physician when making a referral. The counselor and psychiatrist both complete forms after the initial assessment looking at the treatment plans, and at the end of an episode of care. Patients will complete simple self-completed outcome measures and satisfaction questionnaires. Both counselor and psychiatrist fill in activity logs which document what they have done over the previous week (counselor) or month (psychiatrist). These data are used for continuing quality improvement as well as evaluation, and also serve as an accountability mechanism, with remuneration being based upon these reports of hours worked.

The central team will also assist individual practices if problems arise that cannot be resolved within the practice. These may include conflicts between different providers, frustration on the part of either the mental health worker or the family physician that the other is not sensitive to or meeting their needs, or concerns that program guidelines are not being adhered to. Fortunately this happens infrequently, but it is important to have a mechanism in place to address these issues if they do arise, otherwise they can undermine the clinical operation. The program will also assist practices if they have difficulty finding space or with additional resources needed to support the counselors, such as furniture or computers.

The central team serves as an intermediary between the funding source (Ontario Ministry of Health and Long-Term Care) and the individual practices. It represents the Ministry within the community, but is also an advocate for the practices with the funding source, being able to represent a concern that may be shared by a number of practices, thereby sparing the family physicians a lot of time and energy.

It is the central team that is also responsible for the program's overall direction, including the development of new program components or making adjustments when things are not working. They will also find and disseminate resources that might be useful across all practices, such as patient education materials, changes in policies of local mental health services or revisions to provisional mental health legislation.

## **The Third World: The Financial Environment**

The Hamilton program benefits from existing within a publicly funded system with all program costs being borne by a single payer, the provincial government. There are no copays or financial impediments or deterrents to using services, with the only referral criterion being that a patient is registered with their family physician. No

individual will be denied care or access to any of the services offered by the program because he or she cannot afford to pay for them. The Ministry of Health also provides sufficient resources to support what the literature suggests are adequate levels of staffing, and at salary levels that enable the program to recruit skilled and experienced staff and to compete with other hospital and community providers of health care.

Accountability is based upon quality of care, according to preset targets, which are monitored internally by the management team and reported to the funding source. These targets are for activities such as number of referrals accepted, patients seen, time spent in direct service, time spent in in-direct service and length of stay. The central program makes sure that targets are set and attained, but there are no financial penalties imposed on either the program or the practices if they are not achieved. Instead, failure to meet targets is discussed with individual practices or clinicians and either strategies are worked out to accomplish these or the targets are realigned because of specific local circumstances. Resources can also be moved between practices if one location is underutilizing the time available, while another needs more time.

The program has not conducted any cost-benefit analysis to date, so there is no evidence to support the cost-efficiency or cost-effectiveness of the model. It is likely that there will be cost savings from reduced use of other health care providers (general medical as well as mental health), more efficient and effective use of medications, and earlier identification and initiation of treatment. This may be offset by increased costs resulting from “case-finding” and initiating treatment for individuals who would not otherwise be seen, although— if they are left untreated—there are likely to be greater costs to the health care system, the community and, above all, the individual and his or her family. The cost per episode of care is also cheaper than in a mental health program, partly because overheads are less, but also because of the emphasis on short-term care.

The method of physician funding in the program moves away from a traditional fee-for-service model (still the norm for family medicine and most specialties in Canada) that often limits the amount of time that physicians are able to spend in non-billable activities. Family physicians are funded on a per capita model (so much per year for each person on their roster, rather than billing for each clinical service delivered) with some additional incentives for achieving preventive targets. This allows them to spend more time in case discussions or reviews with counselors and psychiatrists, as well as other non-billable activities related to their patients’ care (such as discussions with community agencies or attending meetings) without feeling that they are missing billing opportunities. The psychiatrist is paid a fixed rate per half day spent in a practice, irrespective of whether that is spent seeing patients exclusively, teaching or discussing cases.

## **Does It Work? Data From the Program’s Evaluation**

The program now receives over 7,000 referrals a year. From 1996 to 2006, with 76 family physicians participating, the program averaged just over 4,000 referrals a year (approximately 54 referrals per family physician per year), of which 13% were

for patients under the age of 18 and 7% were for patients over 65. The number of referrals per family physician has increased dramatically since the program started. Before the program began, family physicians could only refer individuals requiring general psychiatric care to the region's outpatient clinics. On average, each family physician was referring five cases a year. In the first year of the program this increased to an average of 55 cases per year (one or two of which are referred to outpatient clinics, the rest to the in-practice mental health team) and this has remained constant over the last 12 years. At the same time the number of referrals to outpatient services by these physicians has dropped by over 70%, while admission rates for patients of family physicians in the program have dropped by approximately 10%, with a shorter length of stay compared with patients of family physicians not in the program in the same community.

Seventy-one percent of individuals referred were seen just by the counselor, 12% were seen just by the psychiatrist and 17% were seen by both the counselor and the psychiatrist. The commonest problem referred to the counselors was depression, which was the primary problem in 37% of all referrals, followed by marital problems (14%), anxiety (14%) and family problems (8%). Other common problems include child behavioral problems, work problems, psychotic symptoms, bereavement, anger control, substance abuse and prior sexual abuse

Counselors spend 55% of their time delivering one-to-one (individual) clinical services, 5% seeing couples and 2% working with groups, for a total of 62% of their time being spent in direct care. Eleven percent of their time is spent in indirect care (case discussions with family physicians or other health care providers or with community agency staff), 9% in charting, 3% completing program evaluation materials, 3% in educational activities and 12% in other administrative tasks, including attending program meetings.

The commonest problems seen by the psychiatrists are depression (35% of all diagnoses), anxiety disorders (25%), dysthymia (10%), adjustment disorders (8%), bipolar disorders (5%), psychotic disorders (5%), substance abuse disorders (3%), situational issues (4%) and others (5%).

Over the last 12 years the program has used a variety of outcome measures, including the Centre for Epidemiological Studies Depression Scale (CES-D), the Short Form 12 (SF12), Short Form 8 (SF8) and the General Health Questionnaire (GHQ). Over the last 5 years the program has moved towards scales that measure functioning, such as the SF8, rather than symptoms. With each of these measures, over 70% of patients have shown significant improvement measured by improvement of greater than one standard deviation, an improvement in score of 50% or more, or reduction below an agreed-upon threshold for what determines a "case." Unfortunately it is not possible to compare these figures with those of other mental health clinics in Hamilton, as the outpatient clinics do not collect outcome data.

Satisfaction with the program on the part of people using the services, as measured by both the consumer satisfaction questionnaire and the visit satisfaction questionnaire, is extremely high (for both more than 90%). They were particularly satisfied with being seen in their family physician's office. Satisfaction by all providers working with the services (family physicians, counselors and psychiatrists) has also been extremely high. A further study of family physicians in Hamilton

compared those who had the program and those who did not, and found that the overall level of satisfaction with mental health services in the community was 86% for family physicians with the program in their office, compared with 56% for those without the service.

## **Benefits of This Approach**

The Hamilton Family Health Team Mental Health Program is a unique example (in the Canadian context) of the wide-scale integration of mental health services into the offices of family physicians in a large community.

Data from the program's evaluation demonstrate that it significantly increases access to mental health services, particularly for groups that traditionally underutilize mental health services. These include children, the severely mentally ill, seniors and individuals from different ethnocultural communities. Members of many ethnocultural groups may be reluctant to attend a mental health service, but will be much more comfortable if there is someone in their family physician's office who comes from the same culture, speaks their language or can translate for the counselor.

It also reduces stigma, as patients do not worry about anyone seeing them walking into their family physician's office, even though it is for a mental health session. Patients have consistently appreciated being seen in a familiar environment, which is often a lot closer to where they live than an out-patient clinic.

Integrating mental health services in primary care settings increases the capacity of primary care to handle mental health problems, as many more people get seen for an assessment each year. It also increases the capacity of the mental health system, with primary care settings appropriately being seen as part of the mental health system,

The program also creates a unique situation whereby the referring physician and the receiving service, the consultant and the consultee, and the specialists and the generalist are in regular face-to-face contact, thereby improving many of the problems that bedevil health care delivery systems. This includes better communication (in person and written) as a note is always in the chart before the counselor or psychiatrist leaves the office), and better coordination and continuity of care, as both the counselor/psychiatrist and the family physician work out management plans collaboratively and share responsibility for their implementation and adjustment.

This approach also promotes a shift in thinking for mental health services from the treatment of individuals to the management of populations. Individuals who may be at risk in a practice can be identified, even if they have not come to see their family physician for an appointment for that problem, and linked with mental health services if necessary. For example, dietitians in the same practices are now screening everyone they see with diabetes for depression, and if either of the two screening questions they ask yields a positive answer, treatment will be initiated by the family physician or they can be referred to the counselor. It also offers opportunities for monitoring individuals who may possibly be exhibiting behavioral changes or prodromal symptoms that do not yet fit with any diagnosis or syndrome.

It also makes it easier to monitor individuals after an episode of care has been completed (i.e., they can get a regular phone call or periodic follow-up visit to ensure that things continue to go well), and to reinstitute treatment if things are not working out.

The model offers new approaches to continuing education especially for family physicians, as each case offers opportunities for brief problem-based teaching which is relevant to a case a physician is handling. Not only is this manageable within the time demands of primary care, but it is also consistent with our understanding of the principles of adult learning and what works.

It also provides productive opportunities for learners. Trainees, such as psychiatry residents, see collaboration being modeled and get to see a broad range of problems in a “real world” setting. In addition, not only do they get to be observed interviewing patients on a regular basis, they also get to observe their supervisor conducting assessments.

## Summary

The Hamilton HSO (now Family Health Team) Mental Health Program was established to improve relationships between mental health and primary care services and increase access to mental health care for patients being seen in primary care. Integrating mental health counselors and visiting psychiatrists into the offices of almost 150 family physicians in a community of 500,000 in southern Ontario has strengthened links between the two sectors and significantly increased access to mental health services, especially for patients who traditionally underutilize mental health services. The counselors and psychiatrists working in the program handle a wide variety of cases, including those of children, and will also discuss cases and assist with referrals to community services.

This model of collaborative care has increased the capacity of both the mental health and the primary care system and has led to better communication between providers from the two sectors and improved coordination and continuity of care. It has proven to be popular with both people using the service and providers from different disciplines and has changed patterns of utilization of both inpatient and outpatient services in Hamilton. Above all, it appears to have led to improvement in the outcomes for individuals being seen in primary care with mental health problems.

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**Part III**  
**Primary Care Life**



## Chapter 8

# The Primary Care Behavioral Health Model: Applications to Prevention, Acute Care and Chronic Condition Management

Kirk Strosahl and Patricia Robinson

Research findings consistently suggest that most people receive behavioral health (BH) services in the primary care setting.<sup>1</sup> The annual rate of onset of mental and addictive disorders hovers in the vicinity of 27%, and the vast majority of those afflicted by these problems seek care from primary care providers (PCPs).<sup>2-3</sup> People present to primary care for assistance with a myriad of other BH problems, such as nicotine addiction, obesity, chronic pain, medical nonadherence, insomnia and learning problems. For most problems that challenge the quality of life for citizens of any age, primary care is the beginning and ending point of care. It is unfortunate that most PCPs need to see 20–35 patients a day to stay in business, as the time constraints alone make it nearly impossible for them to detect and treat the BH needs of the patients filling their waiting rooms. Limited training and a growing lack of access to BH providers for consultation further frustrate the typical PCP's efforts to address the BH needs. When not addressed effectively, BH problems contribute to higher medical costs, as well as poorer medical, functional and behavioral outcomes.<sup>4-7</sup> Given this dire situation, primary care systems, both large and small, are exploring collaborative care options.

Currently, BH providers practice collaborative care in numerous medical settings, including hospital-based behavioral medicine programs, free standing multidisciplinary pain centers, family practice and internal medicine residencies, and publicly and commercially funded primary care clinics. Given the diversity in settings, the diversity in the models of collaborative care is no surprise. Next to the word “love,” the most frequently misunderstood terms in the English language may well be “collaborative” and “integrated” care. They often include an array of practice styles, ranging from collegial information sharing between a medical and a BH provider to active comanagement of patients by a multidisciplinary medical team. While the proliferation of models of collaboration and integration generates different strategies for providers in different practice settings, it contributes to conceptual problems, limits the design of needed research studies and obstructs implementation efforts with fidelity to a specific model. What are the hallmarks of an optimally integrated program in the primary care setting? As this is our area of clinical and consulting expertise, this is the question we address in this chapter. In doing so, we

will describe the primary care BH (PCBH) model<sup>8-9</sup> and present three cases to illustrate its wide-ranging applications to the cause of improving health care.

## **Six Vectors in Three Worlds**

Peek's Three Worlds model<sup>10</sup> provides an interesting framework for approaching the question of integration. What is the ideal arrangement for clinical services? What is the best approach for allocating resources for administration and day-to-day operation? Implementation of the following six vectors enhances the likelihood of optimally positive returns for primary care integration efforts.

### ***Mission Integration***

Mission integration is difficult as it requires providers from a variety of disciplines to embrace a common mission. The mission of primary care is to achieve the best health status possible for the most members of the community. This population-focus is the sine qua non of contemporary primary medicine. To achieve improvements to the health of the population, PCPs work in a biopsychosocial model and adapt empirical findings to implementation at the clinic rather than the case level. The effort is to prevent illness and to maintain health while attending to both preventive and acute care needs. The BH provider trained in cognitive behavioral therapy and program evaluation can play a core role by providing preventive and acute care services and assisting primary care colleagues in developing population-based care programs powered by the most potent behavioral technology.

### ***Clinical Integration***

This vector describes the extent to which the clinical activities of primary care team members, including BH providers, are seamlessly connected. Optimal clinical integration involves the use of shared protocols that direct the activities of each team member, as well as active comanagement of patients supported by the same patient education and assessment materials. This is possible in behavioral integration models that emphasize same-day, brief visits with the BH provider and the use of clinical pathways by primary care and BH providers.

### ***Physical Integration***

While it is possible to practice collaboratively without being co-located, it is not possible to be fully integrated unless medical and behavioral health providers are working in the same immediate area. However, physical integration alone does not ensure that other

aspects of integration will materialize. In fact, the co-located specialist approach is a very common method of collaborative care, characterized mainly by having providers practice under the same roof. In this model, the BH provider provides traditional specialty therapy services to patients referred by PCPs. The co-located therapist is really on a completely different mission than his or her primary care colleagues. In contrast, optimizing the potential benefits of physical integration requires the BH provider to practice in the exam room area, providing PCPs with an ongoing visual reminder that they have immediate access to consultation, temporary co-management of patients and the opportunity to engage in shared practice protocols.

### ***Operations Integration***

This vector measures the extent to which the BH provider and the PCP practice within a shared infrastructure. One of the subtle ways that care is segregated involves separating infrastructure operations, such as developing separate billing sheets, having different waiting areas for patients, different entries and role restrictions on support staff. Thus, operations infrastructures that simultaneously support the functions of the BH provider and PCP are a very significant aspect of integration. Examples include using common, scheduling, service capture and billing programs, a common encounter form, common committed hours and productivity standards, as well as shared reception, check-in, nursing and support staff.

### ***Information Integration***

This vector describes the ability of the PCP and BH provider to share clinically relevant information in real time and without needless barriers to access. This includes such strategies as documentation in a common medical record, placement of the BH notes in the chronological record, an integrated problem list and an aggressive culture of “curbside consultation.” Information integration also includes shared, interactive patient care protocols such as patient registries, flow sheets and other care tracking devices. The advent of the electronic medical record (EMR) provides an unprecedented opportunity to achieve seamless and real time information sharing.

### ***Financial and Resource Integration***

This vector describes the ability of a clinic or system to finance integrated services using a blended pot of health care and mental health care resources. In the ideal world, integrated behavioral health is regarded as a core primary care service and is reimbursed on a par with medical services. Taking it one step further, integrated behavioral health services are funded out of the medical insurance dollar, rather than being viewed as a separate and distinct type of service to be managed in a

“carve out” model. This means adopting billing and reimbursement practices that emphasize parity in health care and mental health care benefits and compensation rates. An often overlooked aspect of financial integration involves compensating the BHC using the same strategies that are applicable to fellow medical team members. This might include pay for performance or productivity based compensation methods, in addition to the more traditional hourly and salary based approaches.

## **The Primary Care Behavioral Health Model**

The PCBH model<sup>8</sup> of integration is at the forefront of the integration movement in the USA. First described over a decade ago,<sup>11-13</sup> a variety of large delivery systems employ this approach, including the US Air Force and Navy, Veteran’s Administration, and Kaiser Permanente. In 1999, the Health Resources Services Administration and the Bureau of Primary Care began providing both financial funding and technical assistance training to implement this model in Federally Qualified Health Centers across the USA. Several works address various clinical applications of the PCBH model and similar integration approaches. However, Robinson and Reiter<sup>8</sup> offered the first comprehensive text on the model, and it includes strategies for operations, financing, training and evaluating the model, as well as numerous clinical examples for individual and group interventions and training PCPs in common cognitive behavioral interventions.

The PCBH model requires BH providers to make significant adaptations in practice, some subtle and some obvious but any one of them can be difficult for the BH provider new to primary care life. First, the model describes the mission of primary care BH as that of improving the overall health of the population. Robinson and Reiter<sup>8</sup> recommend that the BH provider pursue this lofty goal in two ways: (1) by augmenting the usual preventive and direct care for behaviorally based problems; (2) through educational interventions and changes to the system of care that improve the primary care system’s ability to provide such care. Achievement of this mission is possible through ongoing assessment of patient health-related quality of life. The PCBH model envisions the process of achieving good health as a social activity that occurs within a biopsychosocial context. Good health means freedom from premature disease and implies ongoing efforts to develop skills necessary to living a meaningful life. Immediate patient access allows distribution of limited BH resources across the largest possible number of patients in the clinic population. The BH consultant (BHC) consultant is co-located in the examination room area and functions as a core medical team member whose services are a part of routine daily practice. The modal patient referral is a warm hand-off, in which the PCP introduces BHC services as a routine part of care. Given this high level of integration, the BHC is likely to see 12 or more patients in a typical 8-h day.

The PCBH model involves a shift from a traditional mental health psychotherapy model to a consultation approach. The BHC functions as a consultant to the referring PCP and the patient, rather than as a therapist. The PCP is the primary

“customer” in this model, and the ideal outcome is to enhance the PCP’s ability to help the patient with whatever problem has surfaced. Because of this, consultation visits are typically shorter (15–30 min) than the traditional 50-min hour of psychotherapy. There are typically fewer consultative visits with any one patient (one to three on average), and the PCP continues to be in charge of the patient’s ongoing care. The high practice volume of the consultation approach allows the consultant to teach core behavioral intervention skills to PCPs in the context of real-time patient care. This increases the likelihood that PCPs will use optimally effective behavioral interventions with the majority of patients, most of whom will not see the BHC directly.

The goal of consultation and temporary co-management is not to cure the patient of all symptoms, but rather to improve the patient’s functional status over time and to empower the physician-patient relationship over the long haul. This means the focus of consultation is not on providing a full mental health evaluation and differential diagnosis, but rather on identifying valued directions and defining concrete, functional goals that the PCP and patient think are vital to improving the patient’s quality of life. This involves a greater emphasis on using strengths-based interventions, psychoeducational strategies and home-based practice to achieve mutually agreed upon goals. All of these intervention strategies are designed to fit the 5-min hour of the primary care visit. Since the BHC service is a part of routine care and is often immediately available in the PCBH model, most patients feel no stigma and readily accept the idea of coaching support for making changes important to health.

## **Applications to Preventative Care, Acute Care and Chronic Condition Management**

The beauty of the PCBH model is that it empowers the PCP to better address any number of BH issues. The PCP has options, including consulting with the BHC about a patient, referring the patient for a direct contact with the BHC, or capitalizing on the BHC’s expertise to develop a clinical pathway program to address specific health conditions. Clinical pathways define a specific population of interest (e.g., patients with diabetes or ADHD) and suggest specific assessments and interventions that various members of the primary care team may provide to improve the health of the patient population of concern. Given the fact that chronic diseases—such as cardiovascular disease, cancer and diabetes—are among the most prevalent, costly and preventable of all health problems, BHCs need to present a power-packed approach for this large and growing group. Chronic, disabling conditions result in major limitations in activity for one of every ten Americans, and seven of every ten Americans who die each year die of a chronic disease. The PCBH model positions the BHC to help PCPs improve outcomes for patients with preventive, acute and chronic care patients.

### ***Prevention in Action: A First Panic Attack***

Lucy is a 32-year-old, married white female mother of two young children. After presenting to a local emergency room over the weekend, she comes to see her primary care doctor on Monday. She explains that she experienced chest pain, rapid heart beat and dizziness on Saturday evening and went to the emergency room because she feared that she was having a heart attack. Since her blood pressure and heart rate were clinically elevated, she underwent further testing. Cardiology examination findings were normal and she left the hospital with a prescription for benzodiazepines.

At the primary care clinic at which the BHC works, patients seen in the emergency room for symptoms of chest pain, dizziness and anxiety are referred by protocol for BHC services at their first clinic follow-up visit. The PCP brought Lucy to the BHC with a request for behavioral interventions and a recommendation concerning the usefulness of medications.

In the initial 25-min consultation, Lucy explained that she was high strung and prone to worry. She had never seen a counselor for anxiety or taken medications for emotional problems. She reported increased stress at home, which started 3 months earlier when her husband was laid off from his job. She worked full-time, but her income did not provide adequate resources for the entire family. She complained that her husband was not trying hard enough to get a job, that he did not help as much as he could at home and that he was more irritable. She was sad about having so little time with her children. Lucy indicated that she had walked her treadmill at least three times a week until a few months ago, when she simply did not have the time to do it. She had slipped back into smoking recently after having quit for a 2-year period. Smoking was about her only way to relax. The episode of chest pain and panic terrified her. She wanted to stop smoking but felt she could not. She had trouble concentrating on routine activities because she was trying to monitor her heart rate so she could prevent another attack. Lucy felt relieved about the test results from the hospital, but she worried that they might have missed something. The BHC provided the following interventions during the initial consultation with Lucy:

1. Information about the behavioral, physical and cognitive aspects of chest pain and other panic symptoms, supported by an interactive patient education pamphlet that included strategies for working with panic symptoms
2. Instruction in a simple mindfulness-based breathing strategy with the recommendation that she practice it twice daily
3. Encouragement to resume all normal activities and to use the mindfulness technique to offset urges to avoid activities that might trigger panic symptoms
4. Encouragement to gradually resume her previous exercise program

During the post-visit curbside consultation, the PCP was advised to reinforce these interventions in a planned follow-up with Lucy in 2 weeks. The BHC recommended against prescribing a medicine at this time and agreed to see her for follow-up in 1 month. This interaction between the PCP and the BHC took approximately 2 min.

The patient returned approximately 1 month later and reported no troubling symptoms of panic. She was exercising three to four times per week and felt more

relaxed. She also enjoyed her mini-mindfulness sessions and was noticing how much muscle tension she carried around on a daily basis. She had in fact noticed some physical symptoms that she associated with her initial panic attack but was not frightened by them. She had reduced her smoking to about a half pack a day and her goal was to stop smoking altogether in the next month. In response to this information, the BHC offered the following interventions:

1. Encouragement to incorporate exercise and mini-mindfulness sessions into her daily lifestyle
2. Continuation of all normal daily activities and mindfulness response to urges to avoid specific activities in an effort to control anxiety
3. Review of the specific plan concerning smoking cessation

The BHC talked briefly with the PCP at lunch that day and reviewed the interventions, giving particular attention to motivational interviewing and stages of change. Lucy planned to follow up with her PCP in 2 weeks. The BHC did not plan follow-up with Lucy, as her functioning seemed to have stabilized. Four months later, while discussing the relationship between smoking and symptoms of panic with the BHC, the PCP mentioned that he had seen Lucy recently and that she had stopped smoking.

### ***Acute Care: Adolescent Rapid Weight Loss***

Maria, a 13-year-old Hispanic female patient, was referred by her pediatrician for unexplained weight loss. He asked the BHC to assess for behavioral factors that might be contributing to the situation, while he awaited results from multiple tests conducted to rule out an organic basis. Marie had lost 27 kg over a 5-month period. Although her father was worried, she was not. She attributed her weight loss to a change in eating, which started when she had braces placed on her teeth. She was sensitive to the pain, particularly after periodic tightening, and she found the hygiene requirements cumbersome. Marie weighed 70.4 kg at the visit to the BHC and measured 68 in, in height, resulting in a body-mass index of 23.5. She appeared to be a happy, carefree youngster, and she related to her parents in a loving, respectful way. She was an above-average student, who planned to become a lawyer. Recreational activities included playing soccer and basketball and serving as the team manager on the school volleyball team. She denied any persistent worries and indicated that she felt she looked okay the way she had looked before her weight loss.

Since a few days had passed between the pediatrician's referral and the BHC visit, the results of the laboratory tests requested by the pediatrician were available to the BHC and all indicated good physical health. The functional analysis did not suggest an eating disorder, and, therefore, BHC interventions focused on reassurance and education, including the following:

1. Support of the family's relationship with the pediatrician and reassurance about his thoroughness
2. Education about the body-mass-index concept

3. Brief overview of guidelines for a healthy lifestyle supported by a patient education handout
4. Suggestion that Marie shop for groceries with her parents
5. Brief exploration of social and emotional meanings of eating and weight in the family and a suggestion

Since the father in particular saw Marie's decrease in appetite as a sign of unhappiness, it was decided that Marie would make more of an effort to express her love and happiness to her father and that the father would focus more on social aspects of Marie's day, and less on what she ate during conversations at the family's evening meal. Follow-up services included visits to the pediatrician in 1 week and the BHC in 2 weeks. Specifically, the BHC planned to evaluate the results of the planned interventions and to see if Marie's weight stabilized at the follow-up.

When Marie returned, she had gained 2kg and she explained that there had been some great food at several recent family celebrations. Her parents were adjusting to her new appearance and her independence in eating. She enjoyed shopping for groceries with her parents and planned to continue with this. The BHC provided a handout on label reading and briefly reviewed the results of several studies indicating the importance of breakfast to academic success in children and youth. Follow-up plans included Marie seeing her pediatrician in 6 weeks or sooner if Marie or her parents had concerns.

### ***Chronic Care: An Opiate-Dependent Older Woman with Multiple Chronic Conditions***

Sherry, a 61-year-old widow, was referred by her family practice physician for participation in the primary care clinic chronic pain program, the Pain and Quality of Life (P & QOL) program. Sherry had multiple health problems, including osteoarthritis of the lumbar spine, shoulders and knees; hyperlipidemia; hypertension; and mild congestive heart failure. She was obese and had become socially isolated since the death of her husband. Her physician had recently asked her to try methadone for pain control, but when she experienced central nervous system side effects, he continued her on low-dose, short acting opiod therapy. The use of pain medication seemed to improve her functioning, and he had not seen evidence of medication abuse.

The BHC saw Sherry for a P & QOL orientation visit and provided the following services:

1. Review of program contract, which included the requirement that she attend a monthly 1-h class in order to receive her opiod prescription
2. Explanation of acute versus chronic pain and the special challenges of learning to live with chronic pain
3. Importance of shifting focus from pain elimination to functioning and quality of life
4. Introduction to assessment approach used in the monthly class



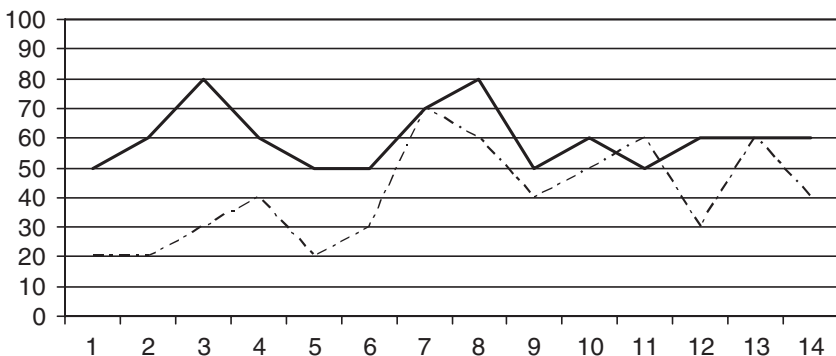
5. Education about the difference between goals and values and the use of values to guide behavior change
6. Introduction to acceptance and commitment therapy (ACT)<sup>14</sup> as the dominant approach used in P & QOL class activities

Sherry responded well to the initial consultation and stated that she looked forward to “going to school again.”

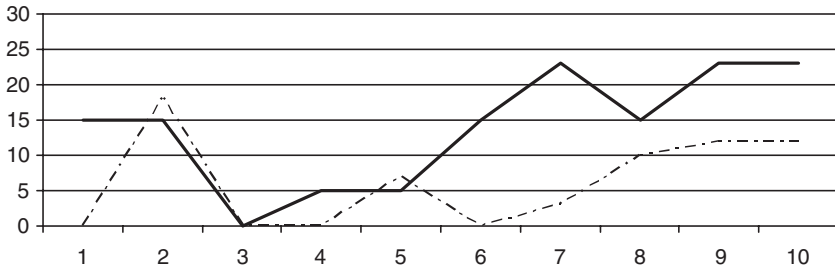
Over the following 27 months, Sherry attended the class faithfully. Her only misses were anticipated and planned and related to surgery or a special family occasion. Sherry enjoyed the social aspects of the class and developed a relationship with another woman in the class who was close to her in age. She told her physician that she was learning new approaches to protecting and maintaining her health and to working with pain. Even with further decline in her health, she did not become demoralized. She was diagnosed with diabetes during her first year in the class, and she took pride in being able to make necessary changes. She underwent surgery for a bladder problem, but only missed one class. She reduced her rate of smoking cigarettes and planted a small garden in her second year in the program. When she began to have problems with falling, she used physical therapy services to strengthen her gait and proprioception and learned to use a cane.

Her physician found BHC chart notes concerning her attendance helpful to his ongoing treatment planning. He consulted with the BHC several times in order to learn more about ACT interventions mentioned in brief class chart notes. Outcome measurements also helped him make ongoing decisions about treatment. During her first 14 months in the program, Sherry completed the Duke Health Profile<sup>15</sup> at each class. The physical health and mental health scores from the Duke Health Profile are graphed in Fig 8.1. As can be seen, her mental health was relatively strong during this time period.

During the second year of participation in the P & QOL program, Sherry completed an adapted version of the Healthy Days Questionnaire.<sup>16</sup> Figure 8.2 provides



**Fig. 8.1** Sherry’s Duke Health Profile physical health (*dotted line*) and mental health (*solid line*) monthly scores during her first 14 months in the Pain and Quality of Life program. The y-axis represents the Duke score, which can range from 0 for worst possible health to 100 for best possible health; the x-axis represents months 1–14



**Fig. 8.2** Sherry’s healthy days (dotted line) and able days (solid line) scores during her second year in the program. The y-axis represents the number of days; the x-axis represents months 1–10

a graph of Sherri’s “healthy days” and “able days” (i.e., days when she was able to engage in valued activities, even with poor physical and/or mental health). Sherry’s health declined significantly during the beginning of her second year in the program. However, her able days scores rose consistently during the second 5-month period of the year, suggesting that she was consistently capable of engaging in valued activities at least half of the time, even with ongoing health problems.

## Summary

The Three Worlds model provides a strong conceptual framework for evaluating possible approaches to collaboration and integration. The PCBH model rates as a highly integrated approach in the six vectors of integration: mission, physical, operational, informational, financial and resource. The PCBH model offers structure for those wanting to create, deliver, evaluate and further develop innovative BH services for the primary care setting. In this chapter, we provided an introduction to this model and examples of its use to (1) prevent onset of a relatively common mental disorder among adults, (2) address an acute medical concern in an adolescent and (3) create a program that plays an important role in helping an older adult with multiple chronic conditions maintain vitality. Use of a consistent model in integration efforts will support consistency among BH providers who work in primary care settings and allow large-scale evaluation of an effort to improve the health the majority of the members of society by providing effective BH care consistent with available health care resources.

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## Chapter 9

# A Collaborative Approach to Somatization

Alexander Blount and Ronald Adler

Mike was a 24-year-old man who had been coming to Ronald Adler (R.A.) for most of his life. R.A. is Medical Director in a family medicine teaching practice. The health center has eight attending family physicians, two nurse practitioners, and 12 residents as primary care physicians (PCPs), one psychologist and one fellow in primary care psychology as behavioral health providers.

Mike had a benign medical history. R.A. took care of the whole family. Mike had graduated from college about a year before and had gotten a job working for the same company as his father, placed in the same unit as his father. He had always seemed to be a fairly normal guy. The change in the story started when Mike came to R.A. asking for an AIDS test.

Mike thought that he needed an AIDS test because he was worried by an itching on his penis and a discoloration he perceived in the skin in his groin. He had had a couple of sexual contacts with women in his past, and to him a problem in his genitals would logically be caused by some sort of sexually transmitted disease. He also reported recurrent diarrhea.

The AIDS test and the tests for other STDs were negative. Instead of being relieved, Mike seemed more anxious. He came back more often, asking for tests and referrals to specialists. He reported a funny taste in his mouth. He began to complain of neck pain. At first R.A. did limited tests, but negative test results continued not to be comforting. At this point, Mike's physician knew that it would be important to manage the progress of the case carefully. Mike might not meet the criteria for somatization disorder, but he was certainly coping with a problem that would fall on the somatization spectrum.

When normal findings make the ill person more anxious, it is reasonable to call the problem "somatic fixation," as McDaniel et al.<sup>1</sup> do. In their words, "Somatic fixation is a process whereby a physician and/or a patient or family focuses exclusively and inappropriately on the somatic aspect of a complex problem."<sup>1</sup>(p248) The belief that the symptoms a person experiences may be the "tip of an iceberg" indicating a terrible disease is a focused way of expressing a much more vague feeling the person has that something is terribly wrong. Each normal finding can increase the person's anxiety as they get more desperate to get a clear answer to focus their looming dread. Each increase of anxiety can worsen some of their symptoms or engender new ones. It is a system primed for runaway.

At his patient's request, R.A. made a referral to a dermatologist, and called the dermatologist to describe the history of his relationship with Mike and the approach he was taking with him. The dermatologist sent Mike back with a letter that offered normal findings and reassurance. The management of the patient's interaction with the specialty medical system is an important part of the care. R.A. communicated both his physical assessment of Mike's situation to the dermatologist and his devotion to and respect for his patient. Both are helpful in maximizing the likelihood that the patient will not be treated in ways that are alienating and anxiety provoking.

Mike got to the gastroenterologist without his PCP knowing he was going. He came back with two new diagnoses and taking four new medications. He did not accept the diagnoses he was given because they were relatively benign. He gradually stopped taking the medications because he saw no improvement. Physicians, being human, can feel the urgency conveyed by the anxiety of the person and want to assuage it. Since the patient is asking for diagnosis and treatment, they provide them. One of the common features of people who meet criteria for somatization disorder (13 unexplained symptoms) is a history of surgeries that did not improve their symptoms. If a person feels there is something terribly wrong inside them, "surgery," the removal of the terrible feeling, is a perfect metaphor for what they are seeking. When people struggle with somatic fixation, all sense of metaphor is overwhelmed by anxiety. "Surgery" can become literal.

At this point, R.A. told Mike about his colleague, Alexander Blount (A.B.). He said that A.B. was expert at helping people cope with the depression and anxiety that can come from having an undiagnosed illness. If A.B. could help Mike cope with his situation of uncertainty, it might help him be more comfortable, even if it did not cure his illness. Mike said he would try a meeting.

For someone coping with somatic fixation, the point at which the involvement of the behavioral health provider is suggested is especially charged. There are a number of things R.A. did to make it possible for Mike to accept a meeting. He did not imply that Mike was changing physicians. He was adding another resource. Accepting a meeting with A.B. did not imply he did not have a "real" disease. It meant he could possibly get some help coping with the difficulties anyone might experience when their illness was not diagnosed. Mike, like many people in his situation, wanted a way to get some relief from his anxiety and depression, but not if it meant losing his way of pursuing some certainty and relief.

A.B. sees patients at the Family Health Center. Everyone he works with gets their primary care in the practice. At the time of this therapy, he had a "colocated" practice at the health center.<sup>2</sup> A colocated practice is one in which the behavioral health practitioner is located in the same space, may share scheduling and billing, but receives patients by referral within the practice. Often there can be an introduction to the patient by the physician, but the care is generally offered at another visit from the patient's visit to the physician.

Much of the rest of the material here is A.B.'s case notes. The notes will seem written in a more narrative fashion than most therapy notes. This is because he begins each therapy visit by reading the note from the last visit back to the patient(s). This accomplishes a number of tasks. It creates an environment of collaboration

between psychologist and patient. It demystifies the written material about the treatment so that the patient is comfortable having it shared with his/her physician. It focuses the work, making visits much more efficient. It allows a way for conveying of meanings and information in ways that are more likely to be useful to the patient. It is not uncommon for patients to ask for a copy of the note to take home after they have heard it read.

A.B.s' notes follow in italics. Comments are clearly separated from the notes.

5/9

*M. comes today because he is so stressed by physical symptoms that he is having and by the uncertainty that he faces because these symptoms have not been able to be diagnosed or treated effectively. Beginning a few months ago he began to experience pain on his penis, a coating or bad taste on his tongue, recurrent diarrhea, and more recently, neck pain. In response he stopped going to the gym and ended both lifting and running. He has seen a number of different doctors for a number of different tests. Because of the pain in his penis he thought it only made sense that these symptoms would be related to sexually transmitted disease and so he has had AIDS tests and other tests continually. His doctors are telling him now that he has no risk factors for STD's since the latest test and that it doesn't make sense to keep testing. On one hand he is relieved that he doesn't have these diseases, and on the other hand he is frustrated, depressed, and anxious because he doesn't have a diagnosis.*

*M. lives with his parents and two younger brothers. He is a college graduate and presently has a job working at a plant. It is a job similar to the kind his father has. He thinks it is fairly interesting and is okay as a career, though it is not what he originally thought he would be doing. He says he gets along well with his family and that none of them have been coping with any disease or injury lately. I did not ask him to go into detail about his family situation and I did not ask what his family's thoughts are about his problems. I think that would be helpful to review next time.*

*He says that some days he has good days. On those days either the pain in his groin is not noticeable or his neck pain goes away. Occasionally the taste in his mouth goes away or the shakiness that he feels goes away. He has also learned to manage the taste in his mouth using lifesavers so that he stops thinking about it. I asked him to keep track of the different symptoms he was coping with and of his feelings generally on a tracking sheet that we made out. We will look to see if there are certain days that work better for him or certain patterns in his experiences that could be useful to know about. He agrees that it might be useful to try relaxation and guided imagery as a way of helping him deal with the anxiety he feels, worrying about his problems, and the depression he feels trying to wait for a diagnosis. I also suggested that he consider going back to the gym for light workouts to see if that had any impact on his general feelings of health.*

In the third paragraph, some movement toward change starts. Mike is asked about the exceptions, when the symptom is "slightly less intense."<sup>3</sup> That leads from the description of things improving slightly on some days to a description of actions he takes to make things slightly better. Helping to establish the agency of the person in their health and symptoms is important. It needs to start at the point that things get slightly better, not with any implication of the person having agency in causing the symptoms.

Here is the tracking form that Mike brought back:

## TRACKING FORM

Name: M _____		Date: 5/9 _____				
Date:	I am tracking pain free penis	I am tracking tongue tastes normal	I am tracking neck comfor- table	I am tracking stools normal	I am tracking I feel happy	I am tracking I feel hopeful
	How: 0-10	How: 0-10	How: 0-10	How: 0-10	How: 0-10	How: 0-10
11-May	6	10	0	7	8	10
12-May	5	10	0	5	5	10
13-May	5	0	2	7	3	10
14-May	4	0	1	8	4	10
15-May	2	0	0	8	1	10
16-May	0	0	9	7	8	10
17-May	0	0	9	8	7	10
18-May	0	0	9	7	6	10
19-May	0	0	10	7	7	10
20-May	5	0	8	8	4	10
21-May	5	0	9	9	3	10
22-May	8	0	8	8	7	10

Tracking makes it easy to begin a discussion of the exceptions to the symptoms and of comparisons between experiences. It was very helpful to ask Mike how he kept himself comparatively happy even when he was in pain. It got him talking about coping, a conversation that is very adaptive when someone has been looking for the “cure” up until then.

At the beginning of the next visit, the note from the first visit was read to him. Here is the note from the second visit.

5/23

*M. came back today having kept excellent records. His records showed two rather striking patterns that we had not known about before. One was his ability to be happy and to enjoy a day even when he was in a fairly substantial amount of pain. The other was a general pattern of easing of pain, both in his neck and in his penis. It was possible for him to explain how he stays happy even when he is in pain. He focuses on what he enjoys. He does not let himself worry about whether the pain is going to be there or not. He just assumes that it will be there and he has things he wants to do and things that he likes to do. It is not as easy to explain why his pain would show a pattern of lessening. It is possible that as he helps himself lower his worry and keeps himself feeling more upbeat, that some level of bodily stress is relieved taking some modicum of pressure off nerve endings in different areas of his body. We also talked about the fact that while it is not the majority of cases, it does happen with some frequency that illnesses resolve before they are diagnosed, meaning that we never know for sure what caused them. There are also times where we know the immediate cause, such as with a headache, but never know what leads to the immediate cause and simply have to look for steps that make the situation better.*

*We talked about what would begin to happen if he is able to get his life back from this pain that he has been facing. He said that he would begin to accept invitations to go out from friends and to put himself in places where he might meet women.*

*I thought this was a very astute observation. I asked him to keep track of the same elements that he had been tracking before, but to also add whether or not he went out with friends. We will meet again in a couple of weeks.*

In this visit Mike spent a fair amount of time talking about himself as a person who coped and going into detail about how he did it. For the first time, the concept that problems sometimes resolve and we never know what caused them was introduced. If there has to be an explanation, we have to keep looking for a cause. If a resolution might be acceptable without an explanation, we do not have to choose between a physical or an emotional explanation.

A first attempt was also made to externalize the problem. It was described as something that was impinging on his life. As he begins to “get his life back,” he would therefore be without the problem to the degree that he took up the activities of his old life. The question of what he would “get back” brings a next step for action and a hint at what some might say was the function of the problem. If he gets better, he would reconnect with his friends and might meet women. His problem up to now has effectively cut him off from female contact and possibly cut him off from a connection that would take him physically or figuratively out of his parents’ home and lessen their influence.

Here is the tracking form he brought to the next visit.

TRACKING FORM

Name: M_____		Date: 5/9_____				
Date:	I am track- ing <i>pain free</i> <i>penis</i>	I am track- ing <i>tongue</i> <i>tastes normal</i>	I am track- ing <i>neck</i> <i>comfortable</i>	I am track- ing <i>stools</i> <i>normal</i>	I am track- ing <i>I feel</i> <i>happy</i>	I am track- ing <i>Out with</i> <i>friends</i>
	How: 0-10	How: 0-10	How: 0-10	How: 0-10	How: 0-10	How: yes/no
23-May	10	0	8	0	6	n
24-May	10	0	8	0	7	y
25-May	8	0	7	-	8	n
26-May	9	0	9	-	5	y
27-May	9	0	9	6	6	y
28-May	8	0	8	7	7	y
29-May	9	0	9	6	8	n
30-May	9	0	6	5	8	n
31-May	9	0	8	5	7	y
1-Jun	8	0	7	6	7	y
2-Jun	7	0	6	7	8	n
3-Jun	6	0	6	6	6	n
4-Jun	8	0	4	5	5	y
5-Jun	5	0	6	7	5	n
6-Jun	6	0	5	5	6	n
7-Jun	4	0	7	3	5	y
8-Jun	5	0	4	0	6	y
9-Jun	4	0	7	4	7	y
10-Jun	3	0	8	5	8	y
11-Jun	4	0	7	7	8	y
12-Jun	3	0	5	7	7	n



6/12

*M. came back today having kept excellent records again. He has been going out with friends more than half the time. It has not led to him spending any time with girls. That is probably the next step. After we read the note from last week, he asked if I thought that he had generalized anxiety disorder. We got out DSM 4 and read the criteria. He said that he didn't think it quite fit him, though he was more and more conscious of how anxious he is. I told him that the diagnosis I had been using is anxiety related to a medical condition.*

*As we looked at his records, we also noticed that he has continued to be able to be happy even while in varying degrees of pain. He said that his pain generally has come down significantly since this whole business started, so now it is kind of on a plateau, but his ability to be happy and to live his life is going up. He said that he also notices that his level of worry has stayed quite high. We talked about the possibility that getting his life back from the pain was probably the first step and getting his life back from the worry might be the next step. We had a conversation about how anxiety affects the body, tightening the very small muscles all around the body and potentially increasing pain levels. He said he would like to try some relaxation to see if that would help.*

*He was very good at relaxation. He sat comfortably in a chair, breathed both deeply and in a more shallow way as felt comfortable to him, imagined relaxation and the lowering of muscle tension in his feet and then imagined that relaxation spreading throughout his body. When his body was relaxed, he imagined being by a camp fire in the woods by a pond in the evening. He found that very pleasant and very relaxing. When we talked about the process afterwards, he said that he noticed his muscles would vibrate in small areas of his body as he was becoming relaxed. We talked about how this was probably related to the spreading of relaxation and to the natural response of a body that is prepared for danger when no danger occurred. He asked if it might be related to Parkinson's disease. That was a good opportunity to talk about how he was managing his pain and his body well and that the worry was clearly still to be dealt with. When he is able to go through relaxation, including muscle twitching and interpret it as natural phenomenon rather than a sign of a dread disease, we will know that he is beginning to make the same progress on coping with his worry that he has made on coping with pain. We will meet again and do more relaxation in the near future. He wished me good luck on my vacation in case he didn't see me before then and that I would catch plenty of fish.*

Mike is the first to suggest that he may be anxious. Both R.A. and A.B. had mentioned that having an undiagnosed illness can make anyone anxious or depressed, but no one had said that anxiety might be behind the illnesses he was experiencing. When someone is looking for certainty, the helpers did not want to try to interpose a different certainty (that it could be caused by anxiety). Rather they chose to keep ideas about cause uncertain to open up possibilities.

Here, as in other notes, there is a hint at a combination of psychological and physical explanations of how things improve. The idea that worry "tightens" the body, and that relaxation releases some tightness which may relieve a little pain

which may increase relaxation, introduces the idea that small changes can lead to big improvement by recursive processes. This is a difficult idea in theory, but not in practice for patients.

Introducing the concept of a developmental process that goes from coping with pain to coping with worry allows the definition of the problem to evolve without invalidating previous definitions. When Mike came out of the relaxation wondering if the muscle vibrations might be Parkinson's disease, A.B. was taken aback for a moment. Then he said, "It got you, didn't it?" "What?" asked Mike. "The worry. It's not giving up without a fight." That externalization got things back on the previous track. At the end of the visit, it was decided that no more tracking was necessary.

The last visit made clear how desperate Mike had felt in the early stages and how far he had come.

7/31

*M. came back today reporting that he feels much better. He has been diagnosed with irritable bowel syndrome and went on a medication that has controlled his diarrhea completely. He talked with members of his family and at least two others have had the same diagnosis. Since he began taking his medication for IBS and has been taking paroxetine (Paxil) for a little over a month, he finds that his neck pain is completely resolved. He attributes this to no longer spending hours and hours on the Internet looking up medical facts. He has not called the CDC (Center for Disease Control) in a few weeks. At times he was calling multiple times a day. He said he had them on speed dial. He said that a lot of his illness just seems to be going away. We had talked in the past about how sometimes illnesses resolve and we never know exactly what the whole situation was. We also talked about the possibility that a diagnosis and a treatment for a small part of the picture that he was facing can lead to hopefulness and to his feeling more relaxed which can lead to resolution of other aspects of the picture. When his anxiety goes down slightly, he no longer feels that he has to look up a medical answer constantly. He no longer feels that there is a problem that has to be solved, so he stops calling the CDC. At times like that he starts to feel better about himself. He has gone back to the gym and is working out regularly. He is putting on weight and is beginning to approach his previous normal weight. He has not yet met any women to date but he is putting himself in places where that might happen.*

*Because he was doing so well and because each improvement in one area seems to be leading to other improvements, meaning that the process of improving has a life of its own, we agreed that he will be on vacation from visiting me for the time being. We talked about his medication and I encouraged him to talk to Dr. Adler about continuing on the paroxetine (Paxil) even if he was feeling well. I said it helps to continue the anti-anxiety medicine until he has regained his regular life so that doing all of his activities comfortably has become a habit again. I said that usually is 3-6 months after someone feels that things are much better.*

The note makes clear that R.A. was still actively involved in the case and that as the definition of Mike's problem evolved in counseling, it opened up possibilities for treatment for his physician.

About 5 years after the beginning of this process, Mike came back for a physical. He had been in a couple of times for acute matters and a graduate school physical, but none of the previous symptoms or any like them had recurred. He was no longer taking a selective serotonin reuptake inhibitor. R.A.'s note reads:

**SUBJECTIVE:** 28-year-old single nursing student seen for CPE. He has no specific complaints today. He continues to practice a healthy lifestyle, exercising 2–3 times per week and eating a balanced diet. He will be completing nursing school shortly and hopes to pass his exams in may. He is currently working as well and reports his immunizations and PPD are UTD. He remains in a relationship with his girlfriend of 21/2 years. No interval change in family history.

The examination was unremarkable. He was advised to have an examination every 3 years unless other issues arise.

It is not possible to name every aspect of the approach that worked for Mike. When he was told that sometimes things get better and we never know exactly why, it was true. We have theories we can offer and patterns we can observe, but every success is in some ways as mysterious as our failures. It is hard for us to imagine this level of success if we were not a part of the same practice. The administrative unit, the primary care practice, allowed Mike to stay within the same group to begin his conversations with A.B., and it fostered the sort of regular conversations between physician and psychologist that meant they both used the same model and almost the same words to describe A.B.'s role. Financially, it was A.B.'s role in the family medicine residency program that largely funded his presence more than his clinical work. This is not a necessary structure, however, and the financial viability of locating behavioral health providers in primary care is improving constantly.<sup>4</sup> In this case it was the microroutines of clinical practice, the “what you say and when you say it,” that were the most interesting of the Three Worlds in explaining the effectiveness of the approach. But without the other two worlds being attended to, these microroutines could not have been available.

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# Chapter 10

## Improved Health Status and Decreased Utilization of an Anxious Phobic Man

Rodger Kessler and Dale Stafford

Patterson et al.<sup>1</sup> accurately observed that success in collaborative and integrated care will occur only when the clinical, financial and operational levels of care are addressed. Conversely, the less attention paid to harmony in each of the three worlds, the less successful the outcome of collaboration. Less successful outcomes abound. While the US Preventative Services Task Force<sup>2</sup> recommends routine screening of adults for depression, review of screening efforts finds that Three Worlds issues are rarely addressed and that there is little support for screening efforts changing patient care.<sup>3-4</sup> At the same time, unrecognized and untreated or undertreated mental health and medical comorbidity result in higher, mostly medical, health care costs.<sup>5-6</sup>

Despite a plethora of projects demonstrating the effectiveness of specific managing of depression and other comorbid mental health issues in primary care,<sup>7</sup> and the positive effect on medical outcomes, such efforts are not part of standard care in most medical settings. While we know that behavioral treatments of comorbid medical-psychological disorders can affect medical outcomes and impact utilization and cost, such treatments rarely are part of routine care.<sup>7-8</sup> There is a high prevalence of patients in primary care with identified psychological disorders who do not receive optimal treatment despite frequent office visits. This ultimately results in limiting the availability of primary care practitioners, and often, increased medication costs.

Grappling with such primary care mental health issues has recently been identified as part of the focus of the evolving role of primary care.<sup>9</sup> Problems in attending to the myriad Three Worlds issues of organizing, financing and delivering care effectively make our efforts difficult. Amongst the difficulties faced in everyday practice are patients who present with a range of clinical complaints that are not quite effectively treated and who have psychological distress in multiple areas of functioning that we are not organized to manage. There is often a significant high frequency of visits resulting in higher charges and costs, yet limited effectiveness of intervention.<sup>10</sup>

The case to be discussed illustrates both the effectiveness and the limitations of collaboration in our efforts to provide integrated care, striving for more organized and more clinically and cost-effective care. After the case has been discussed we will review the Three Worlds issues that the case illustrates and discuss ideas for shifting our practice in response to those issues.

Berlin Family Health (BFH) is a primary care practice consisting of five primary care physicians, up to two psychologists, a physician assistant and a nurse practitioner. It is part of Fletcher Allen Health Care Department of Family Medicine, which is affiliated with the University of Vermont College of Medicine.

Because of the Fletcher Allen relationship there are other medical subspecialties colocated within the practice, including general surgery and ENT. BFH is located on the campus of Central Vermont Medical Center (CVMC) located outside of Montpelier, the state capital of Vermont. The service area of CVMC consists of 66,000 people. The population served is rural and primarily Caucasian.

## **Collaboration at BFH**

Since 1993 R.K. has been the first psychologist to be part of the practice. Much of the time, there has been a second behavioral health practitioner practicing on site. Using the continuum of integration of Gorcy et al.<sup>9</sup> and Peek,<sup>11</sup> one can best describe the current relationship as basic collaboration on site with motivation to move towards a more closely integrated system. Medical and psychological care is provided in intermingled treatment rooms. Rudimentary screening for affective disorder and substance abuse is sometimes in place with a goal of screening data being on top of the medical chart for physician review before the physician sees the patient.

Referral and appointment scheduling are integrated and seamless, with patients receiving a scheduled behavioral health appointment at the same time they receive follow-up medical appointment. The medical chart is provided and reviewed by a psychologist prior to each patient visit. There is regular easy informal access between the physician and the psychologist. Treatment planning function is still distinct, although the behavioral health plan is reviewed by the treating physician, since in this emerging model the psychologist is an extender of the primary medical care. Consultation about pharmacological treatment or changes in pharmacological treatment can occur regularly and rapidly. Since their patient contact is more frequent, psychologists can serve as the monitor of efficacy of psychoactive medications, with reports back to physicians as needed.

Changes or additions to pharmacological treatment are rather easy and if a need for medication change is observed during a psychology treatment session the change is often accomplished by the end of that session. Because of regulation within the larger Fletcher Allen organization, records are distinct. However, clinical notes are regularly exchanged between the psychologist and the physician as needed. Both authors' offices are next door to each other.

The patient to be discussed, J.T.K., is a 60-year-old man employed in the insurance industry. He is married with five children. He was also an assistant football coach at a local college for over 20 years, a position that he gave up 3 years ago. In addition, he volunteers for the local volunteer fire department. He is fit and exercises regularly. He is intensely involved in his work. He has few hobbies and his

primary out-of-work social network revolves around his family and church, from which he gets great satisfaction. Recently he and his wife took a 1-week vacation away from home, a length of time away that has not occurred in over 20 years.

According to the medical chart, J.T.K. began primary care treatment in our office in 1984. In 1988 he was seen by D.S. for a complaint of panic attacks, coming 4 months after his father's death. He was prescribed alprazolam (Xanax) at that first brief visit, but he returned 2 days later with worsened anxiety and "racing thoughts." He said he also worried that he might have been bitten by a bat, but not known it. At this visit he appeared to have a slow, strange affect. There was a concern he might be experiencing more than just worsened anxiety, perhaps psychosis, given what D.S. interpreted as delusions and disordered thinking. He was referred to a psychiatrist, who diagnosed a panic disorder and possible obsessive compulsive disorder, but was not treated with any medications.

J.T.K. was seen over the next 4 years for physical examinations and mentioned only occasional anxiety symptoms. In 1992, however, he was seen with complaints of panic symptoms and intrusive thoughts that he had for a number of days. He was concerned that he had gotten a splinter near a doghouse. He acknowledged a history of animal avoidance at that time. D.S. suspected that he was having panic attacks secondary to an animal phobia. He was again referred to a psychiatrist, though a different one, since the first had since left town. No feedback was received from the psychiatrist.

J.T.K. returned 6 months later because he had encountered a mouse's nest and a bee's nest while clearing a woodpile and was again experiencing anxiety symptoms. At that visit D.S. found out that at the psychiatric consultation two medications had been prescribed, neither of which was taken because of fear of the medicines. There was only one psychiatric visit and no follow-up and no information was received from this psychiatrist regarding her consult. At this point D.S. referred J.T.K. to a counselor, W.M.

Over the next 4 years there were nine phone calls and office visits related to fear of contracting disease from animal exposures. These included bats, hitting a dead deer in the road, seeing a raccoon near his home, and one instance where a member of the football team he coached had been bitten by a rabid fox. J.T.K. was afraid that he might have contracted disease by exposure to this boy. During this time he saw W.M. sporadically and D.S. often had to initiate restarting counseling. D.S. was also needed to reassure him about absence of disease contraction.

Finally, in July 1997 at another office visit for what now seemed like disabling anxiety symptoms related to this phobia, J.T.K. was started on fluoxetine (Prozac) and lorazepam (Ativan). D.S. encouraged continued counseling with W.M. J.T.K. reported improvement in anxiety symptoms related to animal exposures and was even able to have his daughter move into his home with her cat. The fluoxetine was stopped after 2 years, in 1999. Likewise, he had stopped seeing W.M.

One year later, he again was coming to the office with fears of disease from animal exposure. Once he was afraid a bat might have come down the chimney and bitten him while he was cleaning it and later he had a close contact with a dog.

D.S. reassured him that he had not contracted any illness and restarted fluoxetine. He began seeing W.M. on a regular basis, and again seemed to improve. Three months later, he had stopped taking the medication and stopped counseling because he thought he no longer needed them. This was the last contact with the initial counselor. Over the course of 8 years of counseling, the therapist and D.S. had only one or two conversations about the case, always initiated by D.S.

Later that year (2001), at a physical examination where J.T.K. reported some mild anxiety symptoms, D.S. recommended that he see the psychologist who was now in our office, R.K., to learn some relaxation techniques. J.T.K. revealed to R.K. a multiyear treatment history with a community-based social worker whose working diagnosis was panic disorder. Review of the medical chart documented intermittent anxiety about animals that was validated by J.T.K. during the initial contact. His review of his functioning was that he was nervous a lot, and that medication helped, but that he never felt like he was getting better.

He acknowledged a severe reaction to any kind of domestic and wild animals that generated extreme reactions that often had him seeing D.S. for acute pharmacological treatment to help him cope. There were times, he reported, that he stayed at home for numbers of days after an animal contact, feeling scared, helpless, dizzy and sick to his stomach. He reported that there was such a fear of animal contact that it left him always anxious and wary of animal contact, and that while it had been discussed in both medical treatment and his prior counseling, the problem remained unchanged. In addition, his job structure and content were highly stressful and overly time-consuming. Work tasks and thinking about work were frequently brought home. He also reported frequent bouts of insomnia.

Three months later he was seen by D.S. because of an exposure to "skunk saliva" while mowing his lawn, leading to a panic attack. Lorazepam was prescribed and he was asked to return to see R.K., who he had not yet been seeing regularly. He appeared 4 months later because his secretary had been exposed to a weasel and this cause worsened his anxiety and insomnia. Medications were changed to clonazepam and he was encouraged to have continued visits to R.K., who he had begun to see regularly.

Once discussions between D.S. and R.K. were initiated, it was clear that there were interdependent medical and psychological dimensions that were cocreating this man's impaired functioning and increased distress. Medically, there was frequent contact with D.S. during a crisis time for which pharmacological medication was administered with palliative affect, but little change in function while reinforcing dependence on the medical visits. Psychologically, J.T.K. had clear anxiety dimensions that were a generalized result of the hyperarousal generated by phobic reactions in specified situations. He was stress-reactive and was both cognitively and physiologically easily aroused and reactive. It was clear from this assessment, contrasted with records from previous counseling and earlier medical notes, that panic disorder was secondary, if present at all, and that the driver of psychological function and a major contributor to medical presentation was the unresolved animal phobia. The anxiety and arousal-based reactivity were a function of reinforced anxious hypervigilance. The untreated phobic response generalized, limited function

in multiple dimensions and reduced efficacy in family, work, social and self-management dimensions. The primary psychological diagnosis was specific phobia—animals. There was also an anxiety disorder and a sleep disturbance.

On the basis of this, a first element of treatment was conceptualized with two parts. The first was psychoeducation, helping J.T.K. understand the relationship of animal phobia to chronic arousal and the other symptoms with which he presented. The second treatment focus was a common conceptualization of the case between psychologist and physician.

After the initial psychoeducation phase, the next part of treatment involved lessening the high levels of cognitive and physical arousal. Initially this manifested itself as cognitive and behavioral avoidance, catastrophic thinking, rapid fear and anxiety reactivity, and rumination. Physically, sleep interruption, physical tension and headache were almost constant. There was intensification of those symptoms during periods of specific stress reactivity.

Behaviorally, there was diminished socialization with his wife and family, avoidance of situations in which there was the potential of animal presence, and overengagement in both his primary work task and his coaching. There had not been more than a couple of days in a row of vacation from work in many years.

Three primary strategies were taught to help him learn and buy into the idea that animal reactivity could be changed. The first was that there was such severe fear that psychological and physical arousal from the fear were regularly impacting other areas of his life. As this occurred he was then taught to challenge and correct intrusive inaccurate thinking. The third strategy employed was teaching self-regulation of physical reactions to decrease stress reactivity and arousal.

The outcomes of this 1.5 years of psychological interventions were an ability to decrease physical arousal, a decrease in catastrophic thinking, consideration of giving up his second job and lessening the at-home work activity. Avoidance and reaction to the presence of animals persisted, as did episodes of disturbed sleep.

Over the 18-month period there were no medical visits or phone calls from the patient. At this point R.K. and D.S. spoke about continued episodes of insomnia. On the basis of that conversation, D.S. prescribed trazodone at bedtime. Seven months later (March 2004), R.K. had decreased contact with J.T.K. to monthly contact and about this time brought to D.S.'s attention that there was still some insomnia on the low dose of trazodone (25 mg). This dose was then increased with good results.

At the end of the second year of psychological treatment, J.T.K. moved to an area that contained fields and woods and was a habitat for foxes, deer and assorted other animals. Interestingly J.T.K. had not thought about the presence of animals in the area, and when he realized this, catastrophizing increased to the point of discussing moving from the new home. This significantly increased *specific* wild animal reactivity but did not increase domestic animal reactivity. Even though wild animal reactivity increased, J.T.K. initiated cognitive behavioral strategizing with a result that situations were more frequent but actively managed, with a resulting reduction in intensity of reactivity, and shortened length of the postsituation recovery time. There was also no corresponding increase of medical visits.



Around this time a greater tolerance of domestic animals occurred, which has persisted. Avoidance was reduced and there were consistent nonprovoking encounters with minimal sequelae. Also, while sleep problems situationally occurred, there was an overall diminished frequency and they lasted for shorter times.

In 2004 there was one medical contact with J.T.K. He had a bat sighting and was given clonazepam for his anxiety symptoms. In 2005 he had one visit for anxiety related to seeing a dead skunk in the road. At his physical examination in 2005 he related a story of how a fox (probably rabid) had been shot at his house and he was unable to leave his home for 2 days owing to fear of exposure. He had not, however, felt the need to contact D.S. for reassurance or medicine at the time of the incident and reported to R.K. that although he reacted more than he probably could have, he was pleased how he had handled the situation.

In 2005 J.T.K. gave up his secondary work activity and began considering strategies that would eventually lead to retirement, and postretirement alternatives. He took steps to limit primary work activities, limited the amount of work he brought home and increased social activity with his wife. During this time the frequency of contact with R.K. was reduced by mutual decision, and there continued to be a decrease in overall utilization of health care.

Over the last 2 years, concerns about and reactions to domestic animals have reduced to the point that they are no longer an active treatment focus. Incidents with wild animals persist but are actively managed with greatly reduced reactivity. Sleep issues have continued at a lessened level and utilization of health care has become consistent and infrequent with fewer arousal-based problems.

J.T.K. was seen by D.S. three times in 2006, once for an annual physical, another time for referral to physical therapy after an exercise generated back strain and a third time, during a time period when R.K. was unavailable, for an animal-related concern. In September of 2006, a bat had taken up residence at the entrance to J. T.K.'s office. It had become an item of great discussion and photography which was shared around the office. He was able to go to work, but was having a harder time functioning there. He did not need reassurance about disease exposure, but needed help with his anxiety related to this problem. D.S. prescribed clonazepam, which he had not used in a long time, and arranged for follow-up with R.K. on his return.

J.T.K. has continued to see R.K. roughly on a monthly basis. There is minimal reactance and no avoidance associated with domestic animals and moderate reactivity to wild animals, but always accompanied by successful strategizing to deal with the issue and to reduce reactivity. He has reduced work stress and given up a secondary job. Episodes of sleep disturbance have lessened. He is more actively engaged in social activities with his wife and noted that in the last year he has taken more vacation days than in the last 5 years combined. In summary, there is limited phobic reactance and avoidance, he is less easily reactive, more actively and effectively coping, has a broader quality of life and relies on less frequent but consistent contact with the authors, particularly at peak stress.

Over the course of 5 years J.T.K. has been seen by R.K. 44 times. The frequency has decreased over time to its current monthly level. We think that treatment has continued for an extended period of time because of:

- The level and length of arousal generating a chronic level of hyperarousal
- An unwillingness by the patient to in vivo exposure to animals, causing the need to rely on naturalistic and imaginal exposure
- A high degree of reliance of both authors as regular support
- The history of using medical contact as part of the strategy to cope with unresolved psychological issues which had been reinforced by the history of medical treatment and the lack of collaborative medical and behavioral health care
- The lack of opportunity to plan and provide treatment in as integrated fashion as we have now begun

## Summary

Medical and psychological conceptualization of this case suggests and supports the presence of a primary psychophysiological disorder. Review of other medical complaints clearly unrelated or of limited relatedness to the psychophysiological disorder reveals an age-appropriate relatively unremarkable medical history and health status. Because things maintained over time without resolution, treatment focus became symptomatic, with palliative, ongoing crisis focused medical contact with this office. There were multiple episodes of pharmacological treatment, little specific attention to treating the problem psychophysiological, with little resolution and limited outcomes

Regular communication is an important element. During the time prior to collaboration, there was limited contact with the prior counselor. During psychiatric consultation medication trials were initiated and not followed up, but there was no communication to the primary care physician.

This case, and writing about it, has changed the authors' practice pattern. On Peek's stages of collaboration, our efforts have moved from basic on-site collaboration to closer collaboration in a partially integrated system. Early on, our well-intended but inefficient collaboration probably contributed to diminished treatment effectiveness on both our parts.

This case highlights Three World issues, from both organizational and personal standpoints. Our medical and administrative colleagues in the practice are interested in the steps to collaborative care we have taken but have not yet participated at the same levels. We interpret this as high levels of interest but limited available organizational resources to reorganize the processes of care necessary to implement the next stages of collaboration. For example, if R.K. and D.S. want to schedule a patient visit together, we are still struggling with the difference and changes this creates for the people who schedule appointments. A recently awarded grant may assist the process of implementing some of these shifts throughout the practice.

There are outstanding issues. We need to decide on a process to screen patients for the presence of conditions that have both medical and psychological components. If they are present, we need to determine how to decide if the case can be satisfactorily managed solely by medicine or whether there should be behavioral health collaboration. As care goes on, we need to figure out how to determine whether either primary case physician managed care or collaborative care is being effective or whether different strategies need to be employed. Clinically the practice is limited to using R.K. as an on-site psychologist. There is the potential for better gender match and different skill sets if we were to have other available clinical options. We are currently recruiting a female psychologist who has experience in neurology and interest in oncology and women's health issues. This will certainly impact on the range of opportunities to expand our collaborative activities.

Both authors are currently discussing implementing a collaborative group visit model for patients with headache and for patients with persistent insomnia. Thus, far the easiest part of this has been the clinical conceptualization. We next need to tackle the substantial administrative and financial challenges of this direction. We recognized that the next stage is to make collaborative care standard for those specific medical presentations where there is evidence to support such efforts.

Financially, the case just discussed demonstrates that as we can find the time and resources to collaborate, financial resources can be better utilized and probably reduced by the use of collaborative clinical care. This is recognized and supported by the people responsible for financial viability of the practice, but the complexity of providing behavioral health care in a medical setting and the difficulties in regularly quantifying the information that would allow us to look at the cost-effectiveness of our efforts are limitations. Also while clearly active regular communication between collaborators is important, and while there are billing codes approved for those activities, funding sources such as insurance companies have not yet agreed to pay for them.

Nevertheless, the case we have described has resulted in both progress for the patient that had not been evident prior to collaborative care, and progress in our efforts to collaborate on patient care. J.T.K. reports improvements in his family life, professional life and ability to manage difficult situations. His psychological improvement has also generated a more efficient utilization of health care with less frequent and more appropriate office visits.

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# **Chapter 11**

## **The Train Wreck: Assessment and Management of a Complex Medical Patient**

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The views expressed in this chapter are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, Air Force, Department of Defense, nor the US Government.

### **A Physician's Perspective**

The difficult patient, like the illustrative train wreck about to be described, is a complex dilemma not infrequently confronted by physicians in the clinical setting. These patients come in many versions but typically involve complicated medical histories, extensive medication lists, and repeated medical visits without any apparent medical benefit. The patients do not always seem to want to get well and physicians are frequently unsure what to do to make them better, leading to ineffective care. Recurrent, vague complaints such as insomnia, back pain, dizziness, fatigue, or abdominal pain are superimposed on known medical conditions that are typically suboptimally treated. The pursuit of diagnoses to explain somatic complaints can distract from the care of other chronic conditions, adding frustration to the encounter. Clinical time constraints, productivity demands, and a desire to cure further result in conflicting expectations between the patient and the physician. In spite of a commitment to care, the physician working with a difficult patient may feel guilty when his or her efforts to treat a patient appear to be failing. Unsure of where to start or what to treat, the individual physician begins to experience a sense of helplessness, not so dissimilar from distress experienced by the patients themselves.

A clinical health psychologist is a strong ally of the physician in caring for these challenging patients. Since unrecognized psychiatric problems often lead to high health care system utilization and vague medical complaints, health psychologists have added expertise in identifying these issues. Less confined by the time constraints of a 15-min encounter and separated from the pressures of treating concomitant health conditions, health psychologists may accomplish a more comprehensive assessment. Further, training in patient advocacy and collaboration make them a natural partner in ongoing treatment. With the layers of complexity identified, effective care may begin.

## Background Information and Basis for Referral

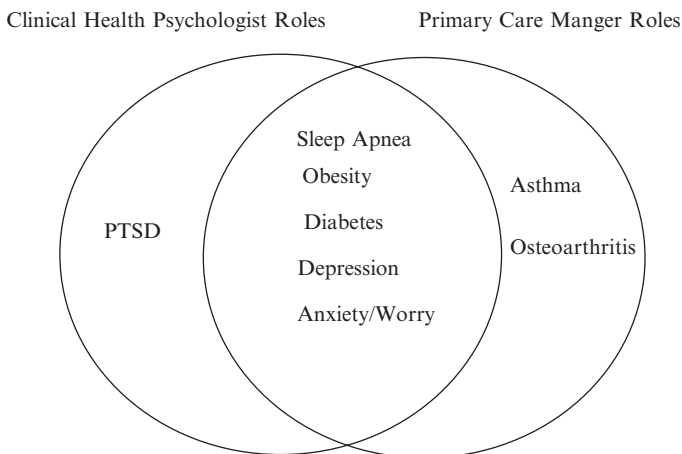
A 51-year-old married African-American woman was referred by her primary care provider (PCP), a nurse practitioner, to a specialty clinical health psychology (CHP) clinic. The consult requested assistance with weight management as well as poor adherence to diabetic and asthma self-care. The CHP clinic is a consult-only clinic in a large hospital setting. Referring providers are given detailed consult responses verbally and in writing with the goal of working collaboratively to help the individual to improve his or her quality of life and functioning, to decrease symptoms, and to minimize, delay, or eliminate morbidity and mortality. Providers in the CHP clinic often coordinate the care of patients with other hospital specialty clinics and educational programs throughout the hospital.

## Presenting Medical and Psychological Complaints

The initial interviews and assessments with the patient revealed a set of multiple and complex problems, including obesity, sleep apnea, asthma, depression, anxiety, worry, diabetes, and osteoarthritis. Additionally, she later revealed an extensive history of sexual abuse throughout her childhood. In the 2 years before she was seen in the CHP clinic, she had been seen 39 times in the health care system, including an emergency department visit for “anxiety,” and 12 visits to her primary care team. On the SF-36, a quality-of-life measure of general physical and mental health, her responses suggest that her perceived physical limitations were influencing her ability to function during her daily activities. Her multiple medications are presented in Table 11.1. Patients who come through primary care settings demonstrating the extent of problems seen in this patient are sometimes referred to as “train wrecks.” With so many intertwining pieces, it can be hard to know where to start with their

**Table 11.1** Medical interventions and medications at initial assessment

Medication/medical Intervention	Amount	Condition	Duration
Continuous positive airway pressure		Obstructive sleep apnea	
Glyburide	6 mg	Diabetes	10 years
Glucophage	2,000 mg	Diabetes	8 years
Rosiglitazone	2 mg	Diabetes	1 month
Maxide	25 mg	Hypertension	1 month
Nifedipine	30 mg	Hypertension	1 month
Zyrtec	10 mg	Asthma/allergies	7 years
Azmacor	2 puffs; 4 times per day	Asthma	10 years
Venolin	2 puffs; 4 times per day	Asthma	10 years
Flonase	Once per day	Allergies	2 years
Celecoxib	100 mg	Joint pain	1 month
Lisinopril	10 mg	Hyperlipidemia	2 years
Celexa	20 mg	Depression	1 month



**Fig. 11.1** Conditions targeted by the clinical health psychologists and primary care provider. The area of overlap between *circles* represents conditions that involved collaboration between the clinical health psychologists and the primary care provider for this patient

medical and behavioral health care. Figure 11.1 summarizes the areas of collaboration between the health psychologists and the PCP for this patient.

### ***Obesity***

At her initial appointment she reported a weight of 307 lb and a life-long struggle with maintaining weight loss. She denied any significant weight changes in the past year. She stated she had “tried everything” to lose weight (e.g., Weight Watchers™ and Jenny Craig™), but had not been able to maintain her weight loss. She indicated that she used to walk or ride a stationary bicycle, but she had not engaged in these activities for 2 years. Her depressed and anxious moods were associated with binge eating (e.g., a 10-in. pizza, 16 hot wings, a cherry coke float, french-fries, and ten to 12 cookies in one sitting) that served as a comfort for and distraction from distress. She denied any purging behaviors. As a consequence of her weight she had difficulty managing her blood glucose level, leading to increased medication use over time. Further, she reported joint pain, sleep apnea, low energy, and difficulty moving over short distances (e.g., 100 yards), all attributed to her weight. Additionally she was frustrated with the way she had “let [herself] get.”

### ***Sleep Apnea***

The patient reported being diagnosed with obstructive sleep apnea in 1982. She has used a continuous positive airway pressure (CPAP) machine that was useful in helping her get quality sleep. Four years prior to the assessment she started having

trouble with the CPAP machine. At the time of the assessment she was waking approximately 1-hour after falling asleep with the air blowing out the sides of the mask, even with the mask and airflow adjusted appropriately. She stated that she would often take her mask off and sit upright in a chair trying to fall asleep. Throughout the night she would awaken three or four times, and stay up for about an hour before falling back asleep. Not surprisingly, she reported feeling chronically sleepy and has not felt rested upon awaking in several years.

### *Diabetes*

She reported that her diabetes was managed for 10 years with medications. However, her blood glucose level was 166 mg/dL at the time of the assessment, suggesting that her diabetes was inadequately managed. She reported having diabetic neuropathy, to include itching under the bottom of her feet and pain in her shins, which increased after walking. Further, the pain and itching in her legs at night contributed to her difficulty falling asleep or falling back to sleep after waking.

### *Osteoarthritis*

She had started taking medication for osteoarthritis over the last month and reported significant improvement. At the time of the interview she did not identify joint pain as a major concern.

### *Asthma*

She denied any significant problems with asthma, unless she stopped taking her medications in conjunction with increased allergens in the local area. She indicated that she was more likely to stop her medication when her mood was depressed.

### *Depression*

She reported initial onset of depressive symptoms 3 years prior to her CHP appointment and over the prior 6 months her depressed mood had significantly increased. Her score on the Beck Depression Inventory was 47, indicating that her depressive symptoms were in the severe range. She reported that she had stopped enjoyable activities in several areas of her life and felt hopeless about the future. Approximately 1 month prior to assessment, she had stopped taking all her medications for about



1 week, resulting in unmanaged blood glucose level, which further impaired her ability to concentrate and decreased her energy level. In response to feeling depressed she would also stop eating for 2–3 days because she was disgusted with her weight. This fasting period led to increased trouble concentrating, difficulty with memory, decreased energy, poorly managed blood glucose level, and was often followed by binge-eating behavior. The month prior to assessment she reported having thoughts about wanting to give up and die, but she denied any direct plan or intent to kill herself, citing her children as a reason to live.

She reported a history of what sounded like multiple major depressive disorder episodes. As an adolescent she had cut her wrists in a suicide attempt. She was found by her sister, who took her to the hospital. Approximately 16 years ago she reported putting a vacuum hose on her car exhaust, putting it in the car, and starting the car. Her husband came home earlier than expected and stopped her attempt. Also around this time period she reported trying to run her car off the road. The police were involved and took her to an inpatient psychiatric hospital for evaluation and stabilization.

She described being treated with a variety of antidepressant medications for depression in the past, including Prozac for 3 years, Zoloft for the past year, and Celexa for the past month.

### *Anxiety/Worry*

She worried about the future regarding her health and her family. She had been a worrier for much of her life and stayed busy to distract herself from the worrisome thoughts. Worry is positively correlated with increased depressed mood and predictions of an unpleasant future life, fear of the worst happening, and difficulty managing her medical problems. Worrying is also associated with difficulty falling asleep, increased distress, and decreased quality of life. She had a fear of dying, losing control, was unable to relax, had muscle tension, difficulty breathing, and an upset stomach. On the Beck Anxiety Inventory, her score was 47, which placed her symptoms in the severe range compared with an outpatient psychiatric population.

### **Case Conceptualization**

Physically, the patient's body-mass index of 47.6 placed her in the extremely high risk range for medical-related complications, morbidity, and early mortality.<sup>1</sup> Her weight contributed to other physical problems, including her joint pain, difficulty managing her diabetes, and sleep apnea. Owing to her increased weight she engaged in less physical activity, which contributed to further deconditioning. Her poorly managed obstructive sleep apnea left her sleep-deprived, contributing to trouble

concentrating, poor energy, high blood pressure, difficulty with memory, and depressed mood. Her diabetic neuropathy limited her physical activity and her ability to stand for extended periods of time, making it more difficult for her to do the things she enjoys, like cooking.

Cognitively, her negative and worried thinking appeared to contribute to her feelings of hopelessness and depressed mood. She also dwelled on negative aspects of past events and “how wrong” things were, which seemed to increase her depressed mood, as well. Disgust with her eating habits was related to not eating for several days in a row. This was followed by thoughts of not caring at all about herself or her future, which precipitated binge eating. Thoughts of her life and her medical regimen being overwhelming and unrewarding were associated with increased depressed mood and anxiety, decrease or cessation of medical self-care behaviors such as taking medication properly, and decrease or cessation of valued and enjoyable life activities.

Emotionally, her depressed and anxious mood contributed to her tendency to withdraw from social interactions to avoid being perceived as “needing” to be taken care of by others. She avoided enjoyable or valuable activities in response to depressed and anxious mood, which likely only intensified those emotions. To avoid emotional distress she often binged on food, which contributed to her weight gain and difficulty managing her diabetes.

Behaviorally, her eating behaviors of fasting and bingeing significantly impacted her ability to manage her diabetes. Nonadherence to her medication regimen significantly impacted her chronic medical conditions, such as her diabetes, which placed her at greater risk for more significant medical problems. Limiting physical activity contributed to deconditioning, which impacted her ability to engage in activities. Her lack of participation in enjoyable activities likely increased her negative mood and limited her exposure to opportunities for enjoyment.

Environmentally, her family members were generally supportive. However, in response to their “caring or helpful behaviors” the patient would often become more irritable, angry, and/or down. Her children were older and did not need her assistance as often, which allowed the patient to withdraw more easily. Similarly, her spouse did not initiate activities with the family and instead often slept when he came home.

Her initial diagnoses were (1) major depressive disorder, recurrent, severe; (2) psychological factors affecting a medical condition; and (3) generalized anxiety disorder. She was subsequently also diagnosed with posttraumatic stress disorder.

## **Treatment Recommendations**

On the basis of the assessment and case conceptualization, the consulting health psychologist made six treatment recommendations. The first recommendation was to target her depressed mood through behavioral activation since it is recommended that obese individuals with major depression be treated for their mood disorder

prior to undertaking weight loss treatment<sup>2</sup> since there is evidence that depressed obese individuals are more likely to drop out of obesity treatment.<sup>3</sup> Although the patient saw obesity and the management of her medical problems as important, she identified depressed mood as being the most salient problem for her at the time of assessment. Behavioral activation is an effective evidence-based treatment for depression<sup>4</sup> and fit well with the patient's decrease in valued and enjoyable activities.

The second recommendation was to use cognitive therapy to help decrease her depressed and anxious thinking. Not only would this have potential to minimize symptoms, it would be a good fit with helping to decrease her extreme thinking, producing better distress tolerance and facilitating appropriate health-related behavior choices. The third recommendation was to increase physical activity to improve stamina, as an adjunct to depression treatment and part of a combined treatment approach to losing and managing weight.

Once her depressed mood had decreased and daily functioning had improved, the fourth recommendation, behavioral treatment for obesity would start. This treatment would follow the National Heart, Lung, and Blood Institute<sup>1</sup> recommendations to include calorie reduction through behavior change (e.g., stimulus control, change in portion size) with the goal of reducing weight by 10% over 6 months. The last two recommendations were to target unproductive sleep habits with sleep behavior changes and teach relaxation skills, to decrease autonomic arousal associated with anxiety. These recommendations could be easily combined with the behavioral activation and cognitive therapy to expedite symptom reduction.

Additionally, the health psychologist recommended a consultation with a pulmonologist to correct ineffective use of her CPAP device since unmanaged obstructive sleep apnea could be exacerbating energy, concentration, mood difficulties, and blood pressure.<sup>5</sup> Further participation in a diabetes self-management class was recommended to provide social support, to encourage the patient to leave her home for a valued activity that might improve depressed mood, and to provide education and/or reeducation on a number of topics that could improve diabetes management and weight loss. Finally, follow-up with her PCP was recommended for continued antidepressant medication management.

## Course of Treatment

The evaluating health psychologist, C.L.H., contacted the patient's PCP and discussed assessment findings and treatment recommendations. The PCP medically cleared the patient to start a walking program. Together the health psychologist, C.L.H., and the PCP established a plan for a walking program for the patient. C.L.H. agreed to help the patient initiate a walking program and to problem-solve any difficulties, while the PCP agreed to monitor the walking program as a part of future appointments as well. A consultation with a pulmonologist was arranged by the PCP, as recommended for further evaluation of obstructive sleep apnea and

recommendations for CPAP adjustment. When the patient was not contacted for this appointment the patient's PCP was informed by C.L.H., and another consultation was arranged. Ultimately the patient was finally seen and her CPAP device was adjusted.

The PCP was in full support of the patient attending a diabetes self-management class. To aid the provider, C.L.H. contacted the diabetes self-management class organizer, discussed the case, and secured access for the patient to attend the next set of classes. The PCP requested that the patient schedule a 6-week follow-up appointment for laboratory work in order to assess the impact of C.L.H.'s interventions and the diabetes self-management class from a biological perspective.

The patient was seen by C.L.H. for 6 months and was then transferred (C.L.H. moved out of state) to J.L.G. for 12 months, attending a total of 47 treatment appointments over the 18-month period. Treatment started with behavioral activation for depressed mood to include increasing valued activities and exercise, and cognitive therapy for thoughts related to increased autonomic arousal, anxious, and depressed mood. A behavioral weight loss plan was subsequently started and included stimulus control, monitoring caloric intake, meal planning, and physical activity. After starting a walking program, the patient experienced increasing pain in her knees. The patient was encouraged to meet with her PCP, who increased her pain medication (i.e., Celebrex) dosage, which resulted in decreased pain, allowing the patient to continue her walking program. C.L.H. and J.L.G. regularly focused on assessing the patient's adherence to her medication regimen, particularly her use of her diabetes medications and antidepressant medication.

When she was transferred from C.L.H. to J.L.G., she indicated a preference to focus on her extensive traumatic history. To decrease her sympathetic arousal and perseveration associated with the traumatic memories, we used cognitive processing therapy,<sup>6</sup> which focused on education; identifying, defining, and changing unhealthy thoughts and emotions; using a written account of events; and discussing concerns related to safety, power and control, intimacy, and bereavement. Throughout the course of these sessions, focus was maintained on her desired weight loss. Interestingly, she expressed concerns that weight loss might place her at greater risk of being retraumatized. Because there is some evidence to support the notion that obesity may serve as an adaptive function for those who have been sexually abused (see Gustafson and Sarwer<sup>7</sup> for a review), it was necessary to target her thoughts that linked her weight and trauma history before weight loss was ultimately successful.

As she began to improve her ability to discuss her traumatic history with less emotional distress, she was interested in refocusing on her weight loss. Although the treatment plan was focused on limiting food intake she demonstrated an inconsistent ability to follow this part of the plan. In addition to monitoring her food intake, a plan was implemented to increase her physical activity through the use of a pedometer in order to give her immediate, objective feedback about her activity level. She also chose to enroll in a Weight Watchers<sup>™</sup> program where she was able to discuss weight loss with other individuals and simplified the method of monitoring her caloric intake through the Weight Watchers<sup>™</sup> point system.

Behavioral activation was a consistent focus of treatment across sessions. Small goals were made to both maintain her activity level as well as encourage additional activities, including spending time with her spouse. Suicidal ideation was also monitored. She was encouraged to consider alternatives to suicide when she was distressed. Cognitively, she learned to identify how her thoughts increased her emotional distress and how to engage in activities that were consistent with her values. As the patient lost weight and improved her physical activity she reported needing less diabetes medication to manage her blood sugar level. As a result, she was encouraged to discuss with her PCP how to appropriately change her medication regimen to effectively manage her blood glucose level.

## **Medical and Psychological Outcomes**

Over the course of treatment the patient's weight initially increased from 307 to 317 lb but dropped to 288 lb after 18 months of care, which achieved the initial 10% weight-loss goal. In 6 months she increased her steps from an average of 3,659 steps per day to 8,084 steps per day, which improved her stamina. Her repeat Beck Depression Inventory–II score dropped from 47 to 11, her Beck Anxiety Inventory score dropped from 47 to 17, her posttraumatic stress disorder symptom scale score dropped from 39 to 29, and on the SF-36 her physical and mental health component summary scales were within the average range, suggesting that she did not perceive her functioning to be significantly impaired compared with that of the normal US population. She reported taking her medications as they were prescribed at the start of treatment. Her hemoglobin A1C count declined from 8.8 to 6.7%. Outside of her diabetes group participation and CHP appointments she was seen 13 times by other health providers over the course of 1.5 years.

Within the first 18 months of care, the patient functioning was at a much higher level than when she initiated treatment. Undoubtedly, she would continue to need frequent contact with the medical system and her treatment team to maintain her medical and behavioral gains. It is unlikely that all of the pieces of a “train wreck” can be reshaped into a fully functioning form. However, in the case of this patient, the pieces were at least picked up and pieced together into the shape of a functioning individual.

## **A Physician's Perspective**

This complex patient required a multidisciplinary, time-intensive treatment plan. The health psychologist played a valuable role for the physician by not only making clear treatment recommendations, but also following through as an effective team collaborator and patient advocate. For successful collaboration to occur, a physician must trust in the assessment of a health psychologist and be willing to accept

and/or discuss treatment plans. The health psychologist must be confident in his or her ability to perform these comprehensive assessments and willing to following through to identify the necessary resources to meet the patient's treatment needs. Both of these elements appeared to have been in place in this case. Periodic meetings by all members of this patient's team may have further improved the patient's health outcomes by ensuring that appropriate reinforcement occurred between members as well as reducing duplicity of effort. The latter may have been able to further reduce the number of visits that the patient required. It is unclear if the patient's psychotropic therapy was optimized, which may also have improved her outcomes.

Ultimately, the transformation of a "train wreck" into the beginnings of a "functioning" individual is a remarkable shift that required a strong commitment by the health psychologists who, through consultation, collaborated as a member of her care team. Effective care finally commenced by understanding and addressing the cognitive, emotional, and behavioral issues contributing to her additional health conditions of obesity, sleep apnea, and diabetes. Provider frustration and patient mistrust likely decreased as well.

### **Three-World View**

The financial, operational, and clinical worlds, when not working together, can lead to dissatisfied providers, patients, poor patient care, and financial insolvency. Fortunately, in the military medical system, where services for this individual were provided, cost did not negatively impact or inhibit multidisciplinary care. In fact, it could be argued since cost was not a concern, appropriately targeted clinical care was provided in a way that was both evidence-based and consistent with patient preferences. However, even when cost is not a concern, good patient care cannot be guaranteed. The overarching operational system and goals encouraged communication and comanagement of this patient to produce the best possible care. Generally military providers see themselves as part of a big team, each bringing a set of unique skills that are valued and used to produce the best health care possible. While there was a delay in getting this patient reevaluated for her CPAP device, as a whole, the operational system made it easy to communicate, share medical records, make appointments, and reinstate the unaddressed consult. All three worlds were working well together to produce the best outcome for a medically challenging patient.

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## Chapter 12

# Collaborative Medical and Behavioral Health Treatment of Patients with Migraine Headache

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Behavioral health treatments for headache are based on the conceptualization that headache is a psychophysiological disorder. Psychophysiological disorders are physical disorders that are influenced by stressors in a person's environment. When patients seek medical care for their headaches they often feel overwhelmed by the impact of their condition on their lives. Many feel as if they have failed because they cannot control their headaches, and often patients feel as if their lives are being ruined. These patients dare not make plans for fear of being unable to follow through with them, resulting in increasing isolation, impaired productivity, and family and occupational stress. These patients seek an explanation for uncontrollable headaches, sometimes fearing the worst possible prognosis, or being unable to accept reassurance following a thorough diagnostic workup. Given the disruptive nature of chronic headaches on patients' lives, it follows that, in addition to receiving standard medical care, patients need to learn skills to cope with the multiple resultant stressors. Behavioral health treatments involve attention to a patient's behaviors, emotions, and cognitions related to the headaches and associated stressors.

Behavioral health treatments have been shown to be efficacious in randomized clinical trials compared with a variety of control conditions, with reductions in headache frequency and intensity of 40–50% in migraine and tension-type headache. The evidence for behavioral treatments of headache is so strong that professional practice organizations now recommend the use of behavioral headache treatments in conjunction with pharmacologic treatments for headache (see, for example, Farmer and Freitag<sup>1</sup>).

Considering current treatment guidelines, it is not only appropriate, but also best practice to couple behavioral and psychopharmacological treatment for primary headache. Unfortunately, in many cases the typical referral scenario proceeds from primary care physician to multiple physician specialists, all focusing on palliative psychopharmacologic treatments without considering the patient's lifestyle and

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<sup>1</sup> Some of the details of this case were changed in order to protect the anonymity of the patient. The outcome data are actual outcomes from the patient discussed in the paper. The Millon Behavioral Medicine Diagnostic (MBMD) description was derived from a similar case, but from a different individual.



possible need for behavioral and/or cognitive change. Inattention to the behavioral, cognitive, and emotional aspects of chronic headache often results in the involvement of multiple physicians, repeated medical visits, and poor headache management.

Some of the advantages to physicians utilizing behavioral health consultation with their headache patients include the following: (1) patients become collaborators in their own care, which greatly facilitates treatment compliance and gives them a sense of control over their headaches; (2) behavioral intervention increases the efficacy of the medications, while decreasing the likelihood of inappropriate usage, in turn reducing the likelihood of rebound headache; (3) access to behavioral treatments decreases patients' reliance on physicians as their de-facto mental health practitioners, thereby decreasing the need for lengthy appointments associated with patient distress; (4) behavioral health treatments increase patient satisfaction with medical treatment.

This chapter provides an overview of a collaborative effort between a university-based psychologist who is both a clinical researcher and a practitioner (the first author) and a neurologist in private practice who specializes in the treatment of headache (the second author). A case presentation is used to illustrate the model of collaboration and care given to patients with headache.<sup>1</sup> In most cases, patients are initially treated at the Kilgo Headache Clinic and, using a stepped-care approach (i.e., starting with the simplest and most straightforward treatment and progressing to more intensive treatment as needed), the patient may then be referred for adjunctive behavioral health treatment. Medical care continues during and following the behavioral intervention. Occasional reciprocal referral involves patients seeking behavioral treatment prior to being medically evaluated for head pain. The latter type of patient is referred to the collaborating neurologist if he or she has not received a comprehensive medical evaluation for headache within the last 6 months.

## **The Collaborating Facilities**

The Kilgo Headache Clinic is a subspecialty clinic with a focus on head and neck pain, directed by Gary Kilgo (neurologist). It is located in Northport, Alabama, and provides care to patients in the west Alabama region. The psychology clinic at the University of Alabama is a training clinic serving the west Alabama community, including, but not limited to, university students. Beverly Thorn (clinical health psychologist) directs a subspecialty pain management clinic within the psychology clinic and offers behavioral health treatment for chronic headache in the form of cognitive-behavioral therapy (CBT) groups.

The Kilgo Headache Clinic is located within 5 miles of the University of Alabama outpatient psychology clinic. This geographic proximity, although not ideal because the two sites are neither colocated nor integrated, provides relatively easy access for both patients and staff to each facility. Further, regular communication between the staff members either by telephone or by e-mail compensates for the

geographic separation of the two clinics. Graduate students from the university are also involved in onsite clinical research at the Kilgo Headache Clinic. This serves to keep the lines of communication open between the two clinics and provides additional interactions with the patients onsite at the Kilgo Headache Clinic. Even given close communication between clinics, the geographical divide between them is seen as a barrier to ideal patient management, requiring patients to travel to two separate treatment locations. Additionally, since the behavioral health treatment is offered within a psychology clinic (instead of as part of the comprehensive care provided by the Kilgo Headache Clinic), some patients may be hesitant to accept psychological treatment for fear that this implies their pain is not real.

## **Case Description and Medical and Psychological Assessment**

T.R. was referred to the Kilgo Headache Clinic by her family physician for evaluation of refractory headaches. At the time of initial assessment at the Kilgo Headache Clinic, T.R. was 35 years old, married, and had two children (a 10-year-old boy and a 7-year-old girl). T.R. was of European-American ethnicity, had a college degree in small business management, and was employed as a mid-level manager of a local bank. T.R. reported random and infrequent headaches over the previous 10 years. These headaches, however, had increased in frequency 12 months prior to presentation and had become sufficiently troublesome that she sought help from her primary care physician. She was prescribed symptomatic agents with partial relief but had not been on any preventative medications. She found the following medications to be somewhat helpful for pain relief: a hydrocodone-containing combination narcotic analgesic and nonopioid, non-salicylate analgesic/antipyretic (Lortab), and sumatriptan, a selective 5-hydroxytryptamine receptor subtype agonist frequently used as an abortive agent for migraine headaches (Imitrex). For control of nausea, T.R. found ondansetron hydrochloride, an antiemetic (Zofran), to be beneficial.

The pain was circumferential about the head and spared the neck. It was migratory and did not start in the same location each time. Various terms were used to describe the pain: throbbing, stabbing, boring, pressure, and tight. Each headache was associated with nausea and vomiting. Noise and light sensitivity were also reported.

At the time of intake, T.R.'s headaches were occurring every 7–10 days and would last as long as 3 days at a time. Her reported pain intensity ranged from 3 to 10 on a pain intensity scale of 10. It would generally take the pain 3–5 h to reach peak intensity. She denied any auras but reported prodromal fatigue and sleepiness the day before the headache started. Even between the headaches, T.R. described feeling forgetful, easily distracted, and as though she did not return to “normal.”

Known headache triggers included bright lights and stress, while cough and exertion did not trigger her headaches. T.R. also noted a tendency for her headaches to occur at the onset of her menstrual period. Additionally, T.R. cited pressure in her job as a trigger of headaches. T.R. reported that her pain was relieved by lying down and by sleep.

## Medical and Psychological Assessment

At the time of presentation T.R. appeared in no distress. Her vital signs, body mass index, mental status, and neurological examination were essentially normal. Sensory examination to pinprick showed generally decreased sensation in the right upper extremity. Deep tendon reflexes revealed a decreased right biceps reflex but no pathologic reflexes were noted. Magnetic resonance images (MRI) of the brain and cervical spine revealed a small pineal cyst (a common finding in asymptomatic patients upon autopsy) and borderline cerebellar tonsillar ectopia (referring to a mild abnormality in the position of the cerebellar tonsils related to the placement of the foramen magnum). Minimal degenerative arthritic changes were noted in an X-ray of the cervical spine. When reviewed by a neurosurgical consultant, these findings were thought to be incidental and probably noncontributory factors to the patient's clinical symptoms.

Upon initial intake at the Kilgo Headache Clinic, patients are asked about anxiety, depression, and distress, and they are asked if they are presently under the care of a psychologist. If the patient responds affirmatively to any of these questions, further questions regarding symptom severity and coping strategies employed are asked. One way that the Kilgo Headache Clinic has found successful to approach inquiry about these psychosocial issues is to note that many individuals with headache may have a brain serotonin deficiency and therefore they may feel depressed or anxious. The physician explains to the patient that knowing about such symptoms will help with medication selection. This approach seems to lessen patient concerns that asking about psychosocial distress means that the physician thinks the pain is feigned or psychogenic in nature.

On initial presentation to the Kilgo Headache Clinic, T.R.'s affect was normal, appearing neither overtly anxious nor depressed. Nevertheless, T.R. reported stress in her life related to being a "chronic worrier." She reported feeling responsible for other people's happiness and sought to "tend to other people's business." T.R. noted that she characteristically avoids expressing anger, citing the fear that getting angry would trigger a headache. An important past stressor was a previous physically abusive marriage resulting in multiple injuries to T.R.'s ribs, shoulder, and face and trauma to the jaw that required corrective surgery. More immediate stressors reported included her present husband being laid off from his job, the poor quality of her marital relationship, and serious ongoing health problems experienced by her son. It was noteworthy that although T.R. was forthcoming about significant stressors in the past and present, she reported them in an emotionally detached, almost professional manner. Thus, her outward demeanor would not have prompted questions regarding distress if the medical clinic did not routinely include these inquiries as part of the comprehensive assessment.

Working diagnoses at this point were headache, likely migraine without aura, self-reported "chronic worrier," possible generalized anxiety disorder, right upper

extremity sensory loss possibly related to cervical radiculopathy, and abnormal MRI of the brain showing incidental abnormalities not thought to be contributory to symptoms. At the working diagnosis stage, we have found it useful to be inclusive and descriptive, rather than follow an ICD diagnostic label format.

At the Kilgo Headache Clinic patients are administered the Millon Behavioral Medicine Diagnostic (MBMD)<sup>2</sup> if themes of distress, anxiety, or depression come up on initial intake or at another appointment early in treatment. Although we do not have any data regarding the prevalence of use of the MBMD in primary care or specialty care medical facilities, we believe that it is fairly unusual for a specialty care physician to attempt to systematically assess psychological factors that might be associated with headache.

The MBMD was designed to assist health professionals in treating patients holistically by assessing psychological factors (e.g., attitudes, behaviors, and concerns) that influence the course of treatment for medical issues. The key elements of this measure are that the practitioner gets an idea about the patient's coping styles, stress moderators, negative health habits, and treatment prognostics. The MBMD manual provides more information on the scale construction, improvements over the Millon Behavioral Health Inventory (MBHI), and psychometric data.<sup>2</sup>

T.R.'s MBMD profile revealed valuable treatment-related information. She reported clinically significant levels of both depression and anxiety. Her pattern of responding indicated that feelings of frustration, being overwhelmed and unable to cope, and wanting to give up were likely pervasive. Further, her profile pointed to potential difficulties in adhering to a detailed medication regimen as a result of excessive worrying. T.R.'s responses suggested that she is uncertain if she has the support of others, which can compound her stress related to managing a treatment regimen and self-care responsibilities. Moreover, her strong need to be cooperative and please others may lead her to distort her symptoms (via either underreporting or overreporting) to what she believes the physician wants to hear. T.R.'s responses also indicated that her identification with spiritual sources of support and coping methods could be a strong asset. On the basis of T.R.'s MBMD profile, referral to a behavioral health specialist for group or individual treatment was seen as merited, and a compassionate but consistent medical approach was deemed to be appropriate and necessary. Also, on the basis of her MBMD responses indicating personal preferences for coping, it was deemed potentially useful to encourage spiritual coping efforts (e.g., prayer, meditation), especially during stressful periods.

We find it important to note that T.R., like many of the Kilgo Headache Clinic patients taking the MBMD, endorsed "do not agree" on the item "I would change my lifestyle on my doctor's advice." This means to us that patients who have received standard medical care have not been sensitized to the associations between stressful lifestyles and headache. Thus, they may see lifestyle changes as irrelevant, and also not under the purview of a treating physician. Once an alliance among patient, physician, and psychologist is well established, and the patient has been appropriately educated about the importance of behavioral health, we would expect the response on this item to change to the affirmative.

## Initial Treatment Plan

T.R. was seen every 2 weeks in the early treatment phase at the Kilgo Headache Clinic. A stratified approach was encouraged for outpatient medication treatment of a given headache, with first-line, second-line, rescue, preventive, and ancillary medications being used as appropriate. Because of a good response to sumatriptan (Imitrex) prescribed previously, it was continued at a dose of 100 mg in tablet form. See McCrory and Gray<sup>3</sup> for a systematic review of the efficacy of selective serotonin 5-hydroxytryptamine agonists (triptans, sumatriptan) for use with migraine headache. T.R. was advised not to exceed ten tablets per month of hydrocodone (5 mg) plus acetaminophen (Lortab) (500 mg) owing to concerns about habituation. Rather, she was to use it as a rescue agent for pain not responsive to sumatriptan (Imitrex).

In addition to considering changes in the medication regimen, patients are provided with intensive education during their early medical visits. At the Kilgo Headache Clinic, the primary goal of the patient education program is promotion of the idea that headache management “is not a pill, it is a process.” Indeed, a major treatment aim of both collaborative care clinics (the Kilgo Headache Clinic and the psychology pain management clinic) is to help patients experiencing headache change their mindset from “you fix it” to “what can I do to participate in the management of this chronic condition?” A well-informed patient is more likely to take an active role in searching for the underlying causes of his or her headaches.

During the initial office visit, T.R.’s learning style and needs were assessed by the clinical nurse specialist. General information about the various aspects of headache was reviewed. An educational packet which included information about the nature and types of headache as well as potential environmental and lifestyle influences reinforced the verbal instruction. T.R. was encouraged to use these materials as a reference and to pay close attention to the events and sensations that occurred during her headaches. A headache diary was included in her packet so that details about each headache could be recorded in a timely manner. At each subsequent office visit, T.R. was instructed about her medications, including proper use and potential side effects. Realistic expectations were established regarding the limitations of medication, particularly if used on a daily basis, and the potential for patient overreliance or dependence. T.R. was asked to repeat the information at the end of each office visit to assess her level of understanding and to allow her to verbalize any questions or concerns about the treatment plan.

From routine self-monitoring of headache frequency and severity (a procedure taught to patients at their first medical visit), we were able to determine that at the end of the first month T.R. had experienced 22 headache days and of these four had been debilitating. On her second visit, she appeared anxious and tearful, and she was particularly fearful about the MRI abnormalities that had been found. Several weeks into treatment escitalopram oxalate, a selective serotonin reuptake inhibitor (SSRI)<sup>2</sup>

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<sup>2</sup>On July 19, 2006, the FDA notified healthcare professionals and consumers of new safety information regarding taking medications used to treat migraine headaches (triptans) together with certain types of antidepressant and mood-disorder medications, SSRIs and selective serotonin/norepinephrine reuptake inhibitors (SNRIs). A life-threatening condition called serotonin syndrome

(Citalopram), used to treat depression and anxiety was begun at 10mg daily for her increasingly apparent anxiety symptoms. The option of targeted adjunctive behavioral health treatment for her headache pain was also discussed, and T.R. was receptive to that possibility, although she preferred to try the SSRI first.

At the next follow-up visit, T.R. reported feeling somewhat better, but described herself as still “worrying” and “picking on husband.” At subsequent follow-up 1 month later, she reported she continued to have headaches. Although the frequency had decreased to 5 days per month, most of these headaches were debilitating. Further, “bad news” was prone to “throw” her into a headache triggered by “emotional upset.” She had determined that the SSRI was “not effective” and she decided to accept a referral to the psychology clinic.

One of the limiting factors associated with patient participation in the cognitive-behavioral pain management groups is that it involves a significant time commitment as well as effort. We require patients to complete a number of pain-related questionnaires on a repeated basis in order to track patient progress, we require them to self-monitor their headaches as well as medication use and nonmedication attempts to manage the pain, and we require homework between sessions. The sessions themselves consist of ten 90-min weekly sessions, which many patients find difficult to schedule and make an initial commitment to attend. Nevertheless, those patients who do make the commitment to attend the groups tend to complete all sessions rather than drop out of this phase of treatment prematurely.

## **Assessment at the Pain Management Psychology Clinic**

As a standard part of participation in the CBT group, T.R. completed a battery of cognitive and psychosocial assessments at multiple points: at initial intake 5 weeks prior to the first treatment session, immediately before the first session, at the midway point of the 10-week group therapy, at the completion of the group therapy, and at approximately 6 months after treatment. In addition to the ongoing self-monitoring assessment of pain, and physician assessment of physical functioning, the battery included assessments of depression, anxiety, and pain catastrophizing. Additionally, posttreatment and follow-up assessments included narrative patient descriptions of improvement (or worsening) and satisfaction with treatment. Broadening our domains of assessment of treatment effectiveness beyond pain intensity gives us a more complete picture of the overall functioning of the patient. Additionally, taking the same assessment measures throughout treatment (and at longer-term follow-up) gives us a sense of the treatment outcome trajectory of each patient, allowing us to determine if there are residual psychosocial problems (e.g., depression, anxiety) that require more intensive treatment.

Depression was assessed with the Beck Depression Inventory–Second Edition<sup>4</sup> (BDI-II). The BDI-II is one of the most widely used instruments for assessing

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may occur when triptans are used together with a SSRI or a SNRI. See <http://www.fda.gov/medwatch/safety/2006/safety06.htm#Triptans> for more information.

depression in adults. Information regarding the psychometric properties of the BDI-II and subsequent assessment tools is beyond the scope of this chapter, but can be found by consulting the cited literature. Depression was a key variable assessed for several reasons. First, depression has been shown to be a common comorbid condition in individuals with chronic headache<sup>5-7</sup>. Researchers have suggested a bidirectional relation between headache and depression, with each factor increasing the likelihood of the onset of the other.<sup>5-6</sup> Additionally, pain patients with comorbid depression are more likely to report disabling pain, greater symptomatic severity, and lower health-related quality of life than those reporting pain without depression.<sup>8</sup> Both headache and depression have been shown to independently influence quality of life, and in individuals with daily or near daily migraines, depression is a major predictor of overall impairment.<sup>9-11</sup>

Generalized anxiety was assessed with the Beck Anxiety Inventory<sup>12</sup> (BAI). Anxiety has been found to be more common in individuals experiencing chronic headache than in the general population, and the association between headache pain and anxiety strengthens with increasing reported pain severity.<sup>5-6,13</sup> Additionally, fear of pain is said to evolve when the pain is viewed as threatening.<sup>14</sup> In T.R.'s case, anxiety was thought to be a particularly relevant issue to assess in light of her reports of increasing anxiety symptoms. The Pain Anxiety Symptom Scale<sup>15</sup> (PASS) was used as a measure of pain-related anxiety and fear. Four components of pain-related anxiety are assessed: fearful appraisal of pain (e.g., "When I feel pain, I am afraid something terrible may happen."), cognitive anxiety (e.g., "During painful episodes, it is difficult for me to think of anything besides the pain."), physiological anxiety (e.g., "Pain seems to cause my heart to pound or race."), and escape-avoidance behavior (e.g., "I avoid important activities when I hurt."). Changes in pain-related anxiety have been shown to predict outcomes following a multidisciplinary treatment for chronic pain, independently of changes in depression.<sup>16-17</sup>

Pain catastrophizing, an amplified negative mental set about pain, has been consistently associated with increases in reported pain severity for individuals with a broad spectrum of pain conditions, including those with chronic headache.<sup>18-19</sup> Catastrophizing is also related to greater frequency and duration of pain behaviors and greater pain-related disability (see Sullivan et al.<sup>20</sup> for a review), and changes in catastrophizing have been shown to account for changes in pain-related outcomes following multidisciplinary treatment for chronic pain.<sup>21-24</sup> It is important to note that catastrophizing has been shown to be a more robust predictor than disease state, severity of pain, depression, or anxiety in patients with pain.<sup>20</sup> Thus, it may be argued that assessment of catastrophizing is a critical component of any comprehensive medical or psychosocial assessment of patients with pain. We assess catastrophizing using the Pain Catastrophizing Scale<sup>25</sup> (PCS),<sup>3</sup> which is a 13-item scale that is simple and quick to administer. Research suggests that patients obtaining a

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<sup>3</sup>For a copy of the pain catastrophizing scale and a scoring key, contact M.J.L. Sullivan, Department of Psychology, McGill University, 1205 Docteur Penfield, Montreal, QC H3A 1B1, Canada., e-mail: michael.sullivan@mcgill.ca.

total score above 38 (the 80th percentile) are particularly prone to adjustment difficulties and poor progression through pain rehabilitation.<sup>26</sup>

T.R.'s assessments revealed that, at intake (5 weeks prior to the start of the CBT group treatment), she experienced moderate depressive symptoms (BDI-II score 25), although her reports of depressive symptoms had decreased by the time of assessment immediately prior to the group beginning (BDI-II score 16, minimal depressive symptoms). T.R. also reported moderate anxiety (BAI score 19) at intake and immediately before treatment, as well as a moderately high PASS score at intake (123), although her reported PASS score reduced somewhat at the immediate-pretreatment assessment (95). T.R.'s initial score on catastrophic thinking about pain was low relative to that of other patients with pain (PCS score 16), and this score remained low throughout treatment and follow-up.

## **Treatment at the Outpatient Psychology Clinic**

The purpose of the 10-week CBT is to teach non-medication-based methods of reducing pain and other undesirable correlates of pain, such as disability and emotional distress. In CBT approaches, patients are guided towards identification of habitual thinking patterns that exacerbate their headaches. These thought patterns take the form of situationally specific automatic thoughts (e.g., "I'll end up the Emergency Department with this headache"), more global attitudes and beliefs (e.g., "The only way I can control a headache is by taking medication"), and deep-seated core beliefs (e.g., "These headaches are a punishment because I am a bad person"). These distortions in thinking lead to negative emotions (anxiety, depression, anger) and lead to maladaptive coping behaviors (e.g., inappropriate reliance on pain medications). The behavioral part of CBT teaches patients specific stress management techniques, such as relaxation, assertiveness training, and pacing their behaviors instead of overdoing or underdoing in response to pain cues. Behavioral approaches help teach patients ways to avoid or deal with stressful events that cause or exacerbate headaches.

The CBT groups are referred to as a "class" to reduce patient concerns about receiving treatment for pain at a psychology clinic. In many healthcare contexts outside the collaborating clinics, our patients are told their pain is not real or that the pain "is all in their head." Referring to the behavioral health treatment as a class conveys our belief that the patients' pain is real pain, yet there are cognitive and behavioral skills that can be learned and employed to help them manage pain. See Rains et al.<sup>27</sup> for a review of the empirical literature regarding the efficacy of CBTs for headache.

Although it is quite appropriate to administer CBT on an individual basis, we prefer group treatment for its efficiency and the mutual support it provides among patients suffering from headache. Each group consists of four to nine individuals with chronic headache (e.g., migraines, tension headaches, mixed headache),



although many group members experience pain from a variety of comorbid conditions such as fibromyalgia, arthritis, or other musculoskeletal pain problems. Generally, groups are co-led by Beverly Thorn and a master's level graduate student, although one therapist trained to utilize this evidence-based approach is sufficient.<sup>28</sup> Groups meet weekly for about 1.5h for 10 weeks. Ten sessions allows us to cover the cognitive-behavioral material in sufficient depth, plus it allows the patient time to practice the exercises so that behavioral changes are more likely to be incorporated into the patient's lifestyle rather than learned as an abstract concept. Particularly for cognitive change, it appears that patients need repeated sessions to understand the importance of their thoughts, and to learn how to change them. Each session consists of a review of what was learned the previous week, introduction of a new skill or concept, and a homework assignment designed to reinforce the use of new techniques and to promote understanding of new ideas.

An introductory session is devoted to a theme emphasized throughout the group: the stress–pain connection, and the relation between the techniques taught and the reduction of stress, pain, or both. The bulk of the treatment consists of two parts: (1) four 1-week sessions focusing on cognitive strategies for managing reactions to pain (pain-specific as well as general distress) and pain-specific as well as general beliefs about the self; (2) four 1-week sessions focusing on behavioral strategies for reducing pain and pain-related disability. A final session is used to promote a sense of closure and promote generalization over time, discussing how all of the techniques and concepts taught in the group can be integrated and maintained over time. See Table 12.1 for an outline of the 10-week course.

If a patient misses a session, an individual make-up session is offered. Although the patient will not receive the added benefit of the group discussion on that topic, we find that make-up sessions allow group members to stay on track with the course and to still thoroughly learn the information provided. Our make-up policy also helps us maintain a low group drop-out rate. Although group members typically miss no more than one session, T.R. missed three sessions owing to a variety of emergencies and serious health problems in her immediate family. Although she did make up each missed session, it is notable that she obtained benefits from the class, since she missed the benefits of the group interaction. T.R.'s experience supports our reasoning for providing make-up sessions.

## **Patient Outcomes During and Following Multidisciplinary Treatment**

Immediately following her completion of the CBT group treatment, T.R.'s assessments indicated that she was now experiencing only minimal depressive symptoms, anxiety symptoms, and self-reported fear of pain. T.R.'s reports of pain-related catastrophic thinking remained low throughout the treatment and at follow-up. At completion of the CBT group treatment, T.R. reported 6 days with headache in the

**Table 12.1** Outline of 10-week cognitive-behavioral therapy group treatment for chronic headache

Session	Objectives
1	Establish rapport and the purpose of the group. Introduce the stress–pain connection and the cognitive model of pain (thoughts influence feelings, behavior, and physiology).
2	Define automatic thoughts (negative and often exaggerated thoughts that occur without conscious recognition; these thoughts have a powerful impact on emotions, behavior, and pain; for example: “I can’t work anymore, so nothing I can do is worthwhile.”). Begin to identify negative automatic thoughts and emotional, behavioral, and physical changes associated with negative thinking.
3	Examine negative automatic thoughts. Develop alternative, more adaptive thoughts (more adaptive and realistic thoughts; for example: “I can’t do some things I used to do as a result of my pain, but there are still many things I can do that are worthwhile and enjoyable.”) Identify emotional, behavioral, and physical changes resulting from alternative thinking.
4	Define and identify negative intermediate and core beliefs (deeply held beliefs that give rise to automatic thoughts and other beliefs about the self; for example: “If I don’t do as well as others, I’m a failure,” and “I’m inadequate.”) Introduce techniques used to modify maladaptive beliefs.
5	Introduce use of “coping cards” (index cards with frequently occurring automatic thoughts on one side and more adaptive alternative thoughts or affirmations on the reverse side) as a method of modifying frequent negative automatic thoughts; for example: “I have shirked my family responsibilities because of these headaches” (negative automatic thought), “I forgive myself for being imperfect” (positive affirming self-statement).
6	Introduce passive muscle relaxation techniques (a technique distinct from the tension-relaxation process employed in progressive relaxation, passive relaxation teaches patients for focus on specific muscle groups, attend to any sensations produced by the muscles, and then allow the muscles to relax).
7	Introduce the behavioral principles of identifying and managing changeable stressors (e.g., considering, and possibly changing, the tendency to rush to finish a project once a migraine aura has begun rather than stopping the stressful activity and taking time out to engage in passive relaxation). Select a stressor to begin addressing in a planned way.
8	Introduce the principles of assertiveness (e.g., making direct, simple, nonapologetic requests; saying no to a request without hostility or guilt). Plan an assertive communication.
9	Introduce the principles of behavioral pacing (e.g., planned use of discrete periods of time engaging in productive, but potentially stressful, activities (“uptime”), alternating with periods of restful, relaxing activities (“downtime”), and the benefits associated with use of pacing).
10	Discuss the integration and maintenance of the previously learned concepts and techniques.

last month (compared with 22 headache days in 1 month at intake), with intensities ranging from 3 to 9 out of 10. The headaches were reported to rarely last beyond 1 day, and only one of the headaches was judged by T.R. to be debilitating (compared with reports at the initial intake of headaches lasting up to 3 days at a time, with

four in 1 month being debilitating). Furthermore, T.R. reported that her life in-between the headaches was “more normal” and she reported feeling that she had “gotten her life back.”

T.R. was next seen at the Kilgo Headache Clinic immediately after completing CBT group treatment at the psychology clinic (6 months after her initial visit). She found the CBT to be very useful, especially learning to develop “alternative thoughts” and using passive muscle relaxation. She now reported feeling the need to face her problems rather than “shrink away.” A subsequent medical follow-up 3 months later (3 months after completing CBT group treatment) revealed the patient to be stable clinically, using sumatriptan as needed for headache. A follow-up MRI of the brain revealed no change in the pineal cyst.

Although she was scheduled for a follow-up appointment at the Kilgo Headache Clinic 3 months later (6 months after completing CBT), she did not keep that appointment and did not return to the Kilgo Headache Clinic until 9 months later (12 months after completing CBT group treatment). T.R.’s follow-up battery (in conjunction with the CBT groups) to be completed 6 months after completing CBT group treatment was not completed until about 8 months after completing CBT group treatment owing to repeated difficulties reaching her by phone. T.R. reported in a phone interview that her headaches were less severe and less frequent than they were before participating in the CBT group; however, she reported a noticeable increase in her headaches after a marital separation during this time.

When T.R. returned to the Kilgo Headache Clinic almost 12 months after completing the CBT group treatment and 9 months after her last appointment, she reported that she had “crashed and burned” emotionally. She reported ten headache days the preceding month, three of which had been debilitating. She noted that distress during her marital separation had prompted her to visit her primary physician, who had started her on paroxetine hydrochloride (Paxil), a SSRI unrelated in chemical structure to other SSRIs. She felt the paroxetine (Paxil) had helped some and was reassured by the stability of her neurologic examination. She was followed at 2-week intervals for the next few weeks and reported improvement in her headaches and her emotional stability. Her headache frequency decreased to 2 days per month, including only one debilitating headache day. She rated her depressive feelings at a 3 on a scale of 0–10, saying she was “teary” at times. Likewise, her anxiety was much improved. She rated it at a 0 on a scale of 0–10, even though it occasionally flared up for “2h once a week.”

In general, despite periods of headache flair-ups due to life stress, the patient’s headache frequency has been improved and she is now more skillful in the outpatient management of her headaches. She describes both sumatriptan (Imitrex) and paroxetine (Paxil) as “very effective” and she continues to use the cognitive and behavioral techniques to help her manage the headache-causing stressors in her life. The conflict with her husband is nearing a hopeful resolution, and although they were separated for a time, they are presently attempting reconciliation. The conflict is now out in the open and being dealt with rather than being repressed. The patient remains under care at the Kilgo Headache Clinic.

## Conclusion

This discussion highlights the interaction between the clinical, administrative, and financial worlds discussed by Patterson et al.<sup>29</sup> The physician and psychologist collaborators on this case work within two very different health delivery systems (one a private practice, and one an academic training and research facility). This difference raises some unique challenges, but offers some advantages as well. Operationally, the collaborators work from physically and administratively separate facilities. Since the neurology practice is privately owned and operated, there are few administrative constraints imposed on the collaboration. One exception is that the neurologist's and nurse's time must be compensated through private pay or third-party reimbursement. In the case of the psychologist, these CBT groups are offered as part of a federally funded study<sup>4</sup>, and thus participation in the group is free, with a nominal stipend provided to the participants to cover transportation costs. Administratively, the psychologist is primarily bound by the ethical and administrative guidelines of the Institutional Review Board evaluating and approving the treatment protocol. In both cases, the administrative burden is viewed as somewhat lighter than it would probably be if the physician and psychologist worked within a larger corporate system (e.g., a hospital.)

Although we have written this chapter from the point of view of one case study (having blinded the case to protect confidentiality), this is only one representative case from a larger private specialty care neurology practice, and only one representative case from a larger clinical trial in the psychologist's clinical research program. It is unclear whether the participation rates that have been obtained in the overall treatment outcome study would generalize to a private practice setting where patients would be charged for the psychologist's time. Additionally, since patients at the Kilgo Headache Clinic are strongly encouraged to participate in behavioral health care by the treating physician, it is unclear whether participation in the psychologists' groups would be as successful if not directly linked to an enthusiastic and influential physician.

Our collaboration has raised the issue of how best to manage the medical and psychological treatment if both were to be undertaken within a private practice setting. The authors agree that a colocated, integrated approach within the same practice would probably maximize effectiveness. An important consideration is that a colocated practice would ensure more efficiency for the treating physician, allowing him or her to make immediate contact with the psychologist at the time of the medical visit, instead of making a referral that may or may not be followed up by the patient. Having immediate access to the psychologist ensures that more of the physician's time will be spent attending to medical, rather than behavioral health issues. Furthermore, this model of treatment allows each specialist (physician, psychologist) to utilize the specific skills in which he or she was trained rather than having to attempt other forms of treatment for which he or she was not trained (e.g., physician as psychotherapist.) Nevertheless, for this model to work,

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<sup>4</sup>This research was funded by NIH award R15 NS 41323 to Beverly Thorn.

each specialist must have more knowledge and appreciation of the other's area of expertise than that of the typical physician or psychologist.

We have begun discussing ways in which we might begin a weekly integrated clinic, while at the same time operating under the constraints imposed by both a private practice and an academic job. At present, we are planning to institute a half-day clinic within the Kilgo Headache Clinic in which the neurologist, nurse, psychologist, and a graduate student in clinical psychology will work together as a private practice team. It is fortunate that the Kilgo Headache Clinic has the physical space in which to conduct behavioral health assessments as well as individual and group interventions. The mechanism through which research could also be ethically conducted while seeing patients who pay for their treatment is not yet clear, although we recognize the critical need for practice-based research in real world (i.e., non-research-based) clinics.

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# Chapter 13

## Collaborative Care for an Immigrant Couple

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According to the US Census Bureau,<sup>1</sup> 28.4 million people living in the USA are immigrants, accounting for 10.4% of the population. Immigration is a transition accompanied by a myriad of losses, including loss of family and friends, and the loss of a familiar language, customs, and rituals.<sup>2-3</sup> It is also accompanied by attempts to form an identify affiliation in a new culture,<sup>4</sup> which places families in two worlds (old and new) and yet not quite fitting in either one.<sup>5-6</sup> Therapy can help families balance change and stability, “so that a sense of continuity, identity, and stability can be maintained while new patterns of behavior, interactions, or beliefs evolve.”<sup>2(p284)</sup> The family described in this chapter provides an illustration of the challenges associated with continuity and change for immigrant families, particularly changes in the marital structure that may occur during and after the transition.

### Clinical Setting

The Division of Family Medicine (DFM) is an academic unit of the University of California at San Diego (UCSD) School of Medicine and a clinical unit of the UCSD Medical Group. The DFM operates three offices with approximately 24,000 patients who represent the wide diversity of cultures living in the greater San Diego region. A substantial but unknown proportion of the 35% Latino patient population of the DFM offices represents recent immigrants to the USA.

In 2002, a collaborative care model was established. Current students and graduates of the Marital and Family Therapy (MFT) program at the University of San Diego train alongside family medicine residents at UCSD and provide mental health services to patients in two offices. A significant amount of the training MFT students receive is in collaboration with medical providers. Similarly, family medicine residents receive extensive training on mental health assessment, patient and family interviewing skills, and how to utilize the services of an onsite mental health professional.

## **The Family's Initial Visits and Chief Complaints**

Marta, 47-year-old Hispanic woman, and her husband, Gilberto, a 48-year-old Hispanic man, saw Gene A. Kallenberg (G.A.K) for medical services. Marta was first brought in by one of her children, Sandra, who already received her medical care (and that of her children) from G.A.K. in the same family medicine office at UCSD. She was initially treated for hypertension and was otherwise thought to be healthy. After a year and a half, she presented with new concerns, including low sexual desire, daily headaches, and a constant buzzing in the ears. She reported to G.A.K. that she was experiencing high stress at work and at home, which appeared to be related to her husband's health problems, which included diverticulitis, severe gastroesophageal reflux, and then increasingly disabling lumbar spondylosis with radiating pain to his right leg that has left him unable to work. Her low sexual desire started after she had her last child 7 years ago. She stated that she was worried that her problem could be related to menopause or a hormonal problem. The initial medical evaluation failed to reveal any endocrinologic or other clear organic cause for her symptoms.

Gilberto presented with back pain that had not resolved after surgery; he still had a great deal of radiating pain down his leg. He also was plagued by bilateral persistent rotator cuff syndrome in both shoulders. He controlled his use of narcotics quite closely and consequently remained in moderate pain chronically. G.A.K. believed that his health problems greatly impacted his mood; he appeared depressed. Gilberto also described dissatisfaction with his sexual relationship. He noted that his wife was not interested in having relations and he suspected that she might be worried about his medical condition interfering with or being affected by having relations.

As G.A.K. provided care to both Marta and Gilberto, he concluded that marital and sexual issues contributed to both Marta's and Gilberto's overall health and daily functioning.. He also knew that teasing apart each partner's concerns would take greater time and counseling skills than he had. Therefore, he asked for a referral for counseling services on behalf of Marta and Gilberto.

## **Therapist–Family Physician Collaboration**

### ***First Contact***

After receiving the referral from G.A.K., Sol D'Urso (S.D.), a family therapist who spoke Spanish, contacted the couple to schedule an initial interview. However, Marta insisted on coming alone. S.D. tried to explain the importance of Gilberto's participation, but Marta refused to start marital therapy. Initially, the therapist encouraged her to view the problems as residing in the couple's relationship. However, over time S.D. came to understand that her participating individually was



not a sign of resistance to change, but rather an opportunity to differentiate and explore her own needs and desires.

### *First Therapy Session: Marta's Presenting Concerns*

In the initial interview, S.D. implemented a biopsychosocial assessment<sup>7</sup> to understand Marta's presenting concerns. Engel's biopsychosocial model highlights the importance of context in understanding a patient's presenting concerns. It allows a therapist to consider the interaction of multiple systems in a patient's life, including biological, psychological, relational, and cultural systems. One cannot fully understand a system (or part of a system) without understanding its relevant context.

When asked about her reason for coming to therapy, Marta stated that she had low sexual desire, pain during intercourse, and difficulties reaching orgasm. According to Marta, she began experiencing a decrease in sexual desire and pain during intercourse 7 years ago, after the birth of her youngest child. She and her husband thought that it could be related to a hormonal imbalance, but G.A.K.'s evaluation ruled out this possibility.

Next, S.D. further assessed Marta's beliefs about the cause of the problem.<sup>8</sup> If her low sexual desire was not due to a hormonal imbalance, what was her explanation for it? Did the problem reside in her, in Gilberto, in her marriage, or in a combination of the three? How does Gilberto explain the problem? Were there any other chronic stressors affecting her and the family? Marta reported that she and her husband viewed the problem as her problem, which was one of the reasons why she wanted to come to therapy alone. She reported that she had never considered herself a very sexual person, but her sexual desire had gotten worse over the past several years. She also wondered whether working night shifts and taking care of the home was adding a lot of stress and could be affecting her sexual desire.

S.D. attempted to learn more about Marta's sexual history, but her answers gave S.D. the impression that she was reluctant to provide details about such private information at this early stage of therapy. S.D. was respectful of Marta's initial interest in privacy. Gradually, Marta felt more comfortable sharing her private sexual history. She shared that she had never initiated physical contact with her husband; it was hard for her to ask for what she wanted or needed. She shared that she enjoyed more cuddling and talking to her husband than having sexual intercourse and this was hard for Gilberto to understand.

In S.D.'s assessment of depression, Marta reported having trouble sleeping, feeling tired daily with low energy, and a loss of interest in most activities. She reported that she had been experiencing these symptoms intermittently since she started working 3 years ago. Marta reported that the symptoms negatively affected her, but they did not keep her from being able to function and maintain a routine. Depression was familiar to Marta; her sister has a history of depression and two suicide attempts. She also reported that her family had been struggling financially since her husband's accident and job loss. He was still working on securing governmental assistance.

In response to S.D.'s questions on individual strengths, family strengths, and social support, Marta reported that she took pride in being a hard worker and having her family as the main priority in her life. She also stated that she felt proud that her family was still intact after struggling with many difficult circumstances. Her family was her primary source of support in San Diego.

### *Family Development*

With the assistance of a genogram,<sup>9</sup> S.D. gathered information on the family's structure and development. Marta emigrated in 1975 from Mexico to northern California. In 1977, she married Gilberto, also an immigrant from Mexico, and they had four children. Gilberto, Marta, and their children lived with Gilberto's mother. Marta worked as a housewife and Gilberto worked in the fields.

According to Marta, the family suffered a traumatic setback in 1996; Gilberto suffered a significant injury at work, which was the cause of his chronic pain described earlier. He fell off a tractor and suffered a serious lesion in his spine. After the accident, he could only work intermittently and experienced severe pain. According to Marta, Gilberto previously used alcohol to cope with the stress and constant pain but stopped using it after their move to San Diego. His injuries continue to prevent him from returning to work and, according to Marta, he was occasionally angry and withdrawn.

In 2003, Marta and her family moved to San Diego to be closer to family. Marta realized that her husband's health was not getting better, and he was surrounded by friends that supported his drinking habits. Marta's motivation to move to San Diego was to look for a job in a bigger city. Marta reported that Gilberto resisted her decision at first because he did not want her to start working, but then he decided to go with her. It was important for Marta to go to a city where she had family support.

### *Second Therapy Session: Focusing the Assessment*

In the second session, S.D. gave Marta the Beck Depression Inventory<sup>10</sup> to further assess for depression. Marta's score of 18 confirmed that she was suffering from mild to moderate depression, which led to an agreement that S.D. and Marta would talk with G.A.K. about the possible benefits of medication.<sup>11</sup>

S.D. and Marta continued their work on Marta's family genogram. In this session, S.D.'s questions were gender-focused<sup>12</sup> and culture-focused<sup>13</sup> to get a better understanding of family roles and beliefs. As S.D. started knowing Marta better, she created a conceptualization of the case taking into account gender, culture, poverty, and immigration issues.

## *Conceptualization*

Marta and Gilberto valued the traditional family structure of Mexico. They came from a culture and families where gender roles were defined for men and women. In traditional Mexican culture, a woman's role is defined by motherhood and devotion to her family; she is socialized to respond to other's needs and not to her own.<sup>14-16</sup> Based on this role, women tend to overdevelop their identity as a caregiver and sacrifice the development of other identities.

A man's role in patriarchal cultures is to provide for his family through work outside the home. His masculine identity is defined by expression of his authority over his family and his sexual potency.<sup>16</sup> These gender differences are hierarchical, wherein masculine values supersede feminine ones. Hispanic families can find themselves trapped in these gender stereotypes and views of themselves and others. This dilemma is accentuated when immigrant families retain connections to their country of origin and simultaneously try to find belonging and identity in their country of adoption.

Until Gilberto's accident, the couple had fit cultural stereotypes of a traditional Hispanic couple. Gilberto's injuries disrupted the family's equilibrium and created a reversal in gender roles: Gilberto could no longer work, and Marta had to find employment outside the home to financially support her family. The family faced issues brought on by both poverty and immigration to a new culture. Marital conflict, depression, and sexual problems appeared to be partly related to the incongruence between their traditional cultural values and the stressors that the family faced. As a result of stress, Marta had low sexual desire, while Gilberto had high sexual libido because it was through his sexuality that he could maintain his masculine identity and possibly compensate for his reduced physical strength and inability to work.

Faced with this broken equilibrium and high level of stress, Marta decided to relocate to San Diego to seek work opportunities and be closer to her sister. Marta was trying to find a new equilibrium; she started working outside of the home, changed physical location, and sought outside support. The family's move was related to cultural values: Hispanics often place a high value on extended family and community and look to each other for help and support. The support of her sister increased the likelihood for positive change in her family and addressed the couple's need for a stronger social network.<sup>17</sup> After the move to San Diego, Gilberto stopped drinking and started taking over some of the housework, which decreased the family stress.

Besides culture and gender, a third social force influencing the couple was poverty. According to Sapolsky,<sup>17</sup> stress, linked to low social status, affects overall health and well-being. Sapolsky<sup>17</sup> suggests that fundamental human needs such as autonomy and full social participation are crucial to one's health. Low control over one's life and low social participation have a powerful influence on disease risk. In general, people at the bottom of the socioeconomic scale have worse health than those above them.<sup>18</sup> As poor immigrants, Marta and Gilberto faced numerous challenges related to poverty, social class, and social participation in a foreign culture.

## Treatment

In therapy, S.D. implemented several strategies. First, she closely collaborated with G.A.K.. After the second session, S.D. asked G.A.K. for his opinion of Marta's depression and whether he thought medication would be helpful. In his next medical visit with Marta, G.A.K. and Marta further discussed her depression and possible medication options. Marta reluctantly agreed to try medication because of concerns about side effects. Thus, G.A.K. prescribed a low dose of bupropion to treat Marta's depression, which Marta says increased her energy level.

Second, S.D. implemented cognitive therapy<sup>19</sup> to challenge Marta's constraining views of her sexual self as a woman who can only nurture others and procreate. They also discussed cultural stereotypes and how Marta felt about breaking her family and cultural rules, not only by considering a different type of sexuality but also by assuming a new responsibility as the bread winner in her family.

Third, S.D. conducted interventive interviewing techniques<sup>20-23</sup> to explore potential pathways to change. More specifically, S.D. and Marta looked at the exceptions in her sexual relationship with Gilberto: "When was your sexual relationship with Gilberto more satisfying? When were you able to express yourself and ask for what you want in your intimate relationship with Gilberto?" The purpose of these questions was to get reacquainted with preferred moments in Marta and Gilberto's relationship, which could get lost when the couple was overwhelmed by the stress of daily life.

Finally, to help Marta navigate different cultures, S.D. helped her connect her two worlds and her different identities.<sup>16</sup> S.D. asked, "What could Marta keep from the old culture, and what could she incorporate from the new culture?"

In summary, S.D. supported Marta's differentiation<sup>24</sup> from Gilberto and her culture: She helped Marta define her sexual and intimacy needs based on her individual preferences and simultaneously remain loyal to her husband and culture.

## Outcome

Treatment helped Marta maneuver the many demands and challenges of her life and address the conflict between her values as a traditional Hispanic woman and her new possibilities. In therapy, she was able to understand that the problems resided in the challenges that she and her husband faced and were influenced by many outside factors, including cultural stereotypes, financial stressors, social isolation, and health issues. The changes that emerged from therapy helped her and her husband start seeing each other in new ways.

A new view of the problem and a better understanding of the cultural, socioeconomic, and gender dynamics helped the couple feel more free to define the roles and responsibilities they wanted in their marriage. According to Marta, Gilberto was pleased that she was expressing her sexual needs more directly. Further, he was becoming more receptive to her needs. At the conclusion of therapy, their

communication improved, and their intimacy increased. Medically, Gilberto continued to see the orthopedic and pain specialists and has received additional psychological assessment and will be entering group therapy within the Pain Clinic at UCSD. Marta continues to take her medicines and has been medically stable. She has not been in to see G.A.K. in several months.

## **Clinical, Operational, and Financial Coordination**

While antidepressant medication helped treat the resulting symptoms of the challenges that Marta faced, symptom amelioration was not enough. The common struggles of Hispanic immigrant families were confounded by Gilberto's accident and chronic pain. The demands on the family and marriage were eroding the couple's marital satisfaction, sexual satisfaction, and overall well-being. Since Marta and Gilberto were patients in a university-based family medicine clinic that offered therapy services, their health care providers could address the underlying issues, not just treat the resulting symptoms with medication.

### ***Clinical Coordination***

The university-based clinic had several unique characteristics that facilitated the family in obtaining helpful services. Clinically, the clinic leaders recognized that 35% of their patients spoke only Spanish. It was not enough to simply offer therapy services alongside traditional medical services; they needed a bilingual therapist. In addition, the clinic had to have therapists who were familiar with cultural differences between European-American and Hispanic families. Marta was fortunate to have a therapist from Argentina who was also fluent in Spanish. In addition, the therapist had an excellent working relationship with the physicians, and she was comfortable seeking out G.A.K.'s expertise and guidance. G.A.K. and S.D. had already worked together on several cases when they began collaborating about Marta and Gilberto's care. Their history of close collaboration and mutual respect facilitated the ongoing treatment planning that was necessary as the family's life story and resulting challenges emerged over time.

Flexibility is a key trait of collaborative care. Patterson et al.<sup>25</sup> discussed the importance of working with a patient's medical conception of the problem. In addition, it is not essential to tease out what patient problems are "medical" and what part is "mental." In collaborative care, therapists and physicians recognize that patients' problems are intertwined. In addition, therapists and physicians using a collaborative care model consider the patients' views of their problems in both assessment and treatment planning. They seek shared meaning between the physician, patient, family, and therapist.

In this case, the therapist could have simply focused on the wife's depression. The physician might focus attention solely on the husband's chronic pain or alcohol

abuse. Both perspectives would have been incomplete. Instead, the therapist and physician increased their clinical understanding of the couple's struggles each time Marta came to the office. In addition, although the therapist initially sought to do couple's therapy, she eventually deferred to Marta's wishes to have individual therapy. The therapist came to understand Marta's preferences for a chance to have some place where she could focus on her own struggles, as an individual and in her marital relationship.

### ***Operational Coordination***

Gilberto and Marta would probably not have been willing to attend individual or marital therapy had it not been associated with their medical care. Fortunately, Gilberto and Marta were part of a seamless operational system. Therapy services occurred within their primary care clinic, literally in the same examining rooms as their physician saw them; thus, they had not needed to go to a new location or try to enter a new clinic system. Since therapy services were part of services available in the primary care clinic, it was not necessary for Marta and Gilberto to overcome any stigma for receiving mental health or marital services. The clinic system allowed for frequent communication between their physician and therapist. After addressing confidentiality concerns, the therapist and physician were able to collaborate as often as necessary because they saw each other daily in the office. No extra time or energy was necessary to support the collaboration.

### ***Financial Coordination***

Marta and Gilberto had limited financial resources. Their only insurance was MediCal. Thus, there were significant financial restraints against seeking psychotherapy. The couple barely had resources to live and provide for their children. Expensive, traditional, private psychotherapy would have been impossible. In fact, the family did not initially consider therapy as a possible solution to their problems. They were fortunate because their care was embedded in a system that had created financial channels supportive of collaborative care. There was minimal extra cost and demand for Marta to attend therapy.

### **Conclusion**

This clinical history demonstrates the advantages of working collaboratively in a patient-centered, family-oriented, joint medical-mental/behavioral health model of care delivery. In order to provide true patient-centered care, physicians must respond to the social, cultural, language, and economic contexts that define each

patient's unique context. Continuity of care, a challenging goal in today's world of mobile populations and changing insurance coverage, remains *the key* to providing patient-centered care. In addition, while patients usually present with individual complaints, they often have problems that involve other members of their family. Collaborative care helps physicians and therapists consider the multitude of influences affecting their patients' illnesses and lives and helps providers plan treatment beyond simply treating isolated symptoms such as depression or chronic pain

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## Chapter 14

# Assessment and Management of Somatoform and Conversion Symptoms

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Somatoform and conversion symptoms are common elements of inpatient and outpatient medical practice. Somatization has been called “one of medicine’s blind spots,”<sup>1</sup> where the assumptions of Cartesian dualism can discourage the gathering of useful ideographic information and negatively impact efforts at successful treatment. From our perspective, the presence of somatoform and conversion factors demonstrates the need for continuous refinement of individualized assessment and treatment practices tailored to fit the constraints of clinical, operational, and financial parameters inherent in clinical settings. The pragmatic value of variety in clinical presentations is that it remind us that the focus of medical treatment is fundamentally to alleviate disease and suffering in the patient. To meet this responsibility, we are continually confronted with two dilemmas. First, the more we learn about the human being, the more we are confronted by the futility of Cartesian dualism in assuming that physical and mental factors are independent rather than *interdependent*. Second, the heterogeneity of human experience and response to illness reminds us that the science of medicine (or any other applied discipline for that matter) may be precise but successful application is often an art based on the accommodation of information and experience.

The authors’ setting is a residency training program at a 200-bed hospital in the rural charity system of the Louisiana State University Health Sciences Center. The patient population is generally the uninsured or poor with limited resources or ability to seek treatment elsewhere. Most contact is with internal medicine clinic or family practice inpatients and outpatients, with service extending to all departments and specialty services at the hospital. Responsibilities include teaching, resident training, consulting, neuropsychological and psychological testing service, crisis intervention, management and treatment of general medical, behavioral and psychiatric conditions, as well as directing all research projects at the facility. This is accomplished by two clinical psychologists and a clinical trials coordinator for research management. Such an environment may be seen by some as restrictive for the practice of traditional clinical psychology, but in reality the setting is an opportunity to work with physicians and develop models of functional interdependence in disease management with the reality of limited institutional and financial resources. These limitations often dichotomize patient care into models such as psychiatric vs. medical to meet the demand for care and feasibility

models of institutions. To meet this challenge we have learned that communication with physicians must be brief and focused on salient information; assessments must be creative and brief to utilize the time allowed; and evaluations and recommendations must be concrete and achievable in a community with limited mental health resources for the poor and the tendency for patients to fail to follow through with referrals outside the hospital. Budget and operational constraints do not allow for sufficient staff to provide thorough psychological treatment in-house.

## **A Case of Somatic Eructation**

In August 2000, this patient was seen in the internal medicine clinic owing to a referral for upper gastrointestinal (GI) endoscopy to evaluate for what the patient referred to as “hiccups” but the symptom observed was aerophagia with eructation (belching). It was observed that during the sedation process for the endoscopy that the intravenously administered benzodiazepine had a “magical” effect on inhibiting her symptoms. During the procedure I discovered that she had peptic ulcer disease, however, it was felt that this finding would not explain her symptoms.

Aerophagia is mainly seen in individuals in a state of anxiety. The reflux of air naturally follows. After a time, in some individuals, a “habit” can be established continuing the practice and the symptoms even when anxiety is not as prominent. She was placed on antiulcer medications and lorazepam (Ativan) pending evaluation by a psychologist. During the period that the patient was seen in the psychology department, diagnoses made included somatization disorder, depression, and generalized anxiety disorder. Recommendations were offered for medications and referrals to social service agencies.

The patient was seen in the medicine clinic and given monthly, regular follow-up visits with medication refills. The benzodiazepine was changed to alprazolam. She was lost to follow-up around July 2001 but was able to refill her prescriptions by phone until February 2002. Following this, she had emergency room (ER) visits for various reasons. She was seen in the Med-Quick clinic in June 2002 and had prescriptions renewed for her medications. Plans at this visit were made to wean her off of the alprazolam. She was last seen in January 2003 and medications were renewed with refills authorized with a decrease in visits to semiannually was set up. In September 2003 she presented to the ER with thumb pain and swelling and the physicians’ notes reflect that she was on venlafaxine instead of alprazolam. In November 2003 she presented to an outlying ER with GI-related complaints.

From a review of the medical records it seems that the patient’s medical and psychosomatic illness was better managed during the time frame between the first visit for the epigastric distress, the psychology evaluation, and until she was lost to follow-up about 11 months later. Although she was able to renew her prescriptions by phone for a time, she clearly began to have problems, and lack of frequent contact resulted in ER visits. She apparently had further complaints of a GI nature and ultimately underwent partial gastrectomy at another institution. The patient also

had some arthritis which likely led to the use of some analgesics that may have exacerbated her peptic ulcer disease. One could speculate that had she been able to follow up monthly in the clinic as initially intended many issues could have been handled without resorting to medications that may have prolonged and aggravated her GI symptom complex.

This 37-year-old white woman was referred by the internal medicine clinic for a comprehensive psychological evaluation in order to assess nonmedical factors that were influencing medical management. The patient had been followed in the clinic for 6 months following her sister's death for symptoms of epigastric distress. Indeed the patient appeared to have a burbling fountain in her chest from which hiccups, burping, belching, and excessive eructation were ongoing. Following an upper-GI endoscopy with biopsy, she was diagnosed with peptic ulcers and was treated with lorazepam, which was very effective in controlling these symptoms. However, patient had missed two appointments owing to transportation problems and her medications had not been renewed.

Her medical chart reflected various complaints since 1991, i.e., bronchitis, nausea, pelvic pain, headaches, epigastric burning with occasional vomiting, gastroesophagitis, otitis media, and gastroenteritis. The patient had had three C-sections and a partial hysterectomy. She also reported "severe headaches as a child," and glaucoma, for which she had had three surgeries. At age 23 she reported that she was legally blind with no vision in her left eye and had limited vision in the right eye.

Current complaints included excessive eructation, daily headaches, sleep onset and maintenance difficulties, crying, depression, fatigue and lethargy, nausea and vomiting. Current medications included cimetidine (Tagamet), 400 mg twice a day; 0.5% timolol maleate (artificial tears); lorazepam, 1 mg twice a day as needed; and Aleve for headaches. The patient also reported drinking alcohol (i.e., a few beers daily) and utilizing over-the-counter stimulants (i.e., GoGo and C-4 pills) a few times each week to "help me get out of bed."

Developmental history as reported by the patient revealed that she was one of 13 children. She stated that her father was emotionally and physically abusive to her mother and siblings. She attended special education classes until she was 20, when she received a high-school certificate. Her work history included bartending, cashier, and cleaning. After her mother's death, she reportedly married in order to become the guardian for her younger siblings. The patient noted that her "stomach problems" started after her mother's death. The patient reported that her marriage was characterized by physical abuse and arguments and ended in divorce approximately 10 years prior. She had three children of her own, but stated "I basically raised six children."

This patient indicated that she experienced symptoms of stress, i.e., nightmares, flashbacks, with auditory and visual hallucinations after witnessing her brother's murder 13 years ago. The symptoms lasted for several weeks.

At the time of assessment, the patient reported that she lives with her brother and 16-year-old daughter. Activities included weekly pool tournaments at her local bar. She reported: "I can't really do much because of my poor vision,...cleaning the

house,...I just sit and think about the past and my mother,...guilt about not giving my children what they need....I cry.”

Extensive time was spent establishing rapport as the patient exhibited a passive and guarded demeanor. She was casually dressed and adequately groomed. On examination, she was alert and oriented times 3 with an appropriate affect and an anxious, irritated mood. Speech was spontaneously generated and goal-directed. She displayed appropriate eye contact and put forth adequate effort. She exhibited a trial-and-error approach to problem solving. Notably when she was engaged in a task, her hiccupping ceased, but as her attention waned the excessive eructation began again.

The patient completed self-report measures in which she acknowledged very severe levels of anxiety and depression. She indicated the presence of suicidal ideations but no desire to carry them out. Clinical findings are thought to reflect affective disturbance and visual deficits.

Psychometric testing revealed the following. Wechsler Adult Intelligence Scale—III (WAIS-III) results indicated that this patient was intellectually functioning in the extremely low to borderline range (full scale IQ 65; verbal IQ 66; and performance IQ 69). The verbal comprehension index of 63 and perceptual organization index of 69 were in the extremely low range. The working memory index of 75 and the processing speed index of 79 were in the borderline range. Within the verbal and nonverbal domains, the subtest patterns were relatively equivalent, revealing no significant scatter or relative strengths and weaknesses.

The CVLT was administered to assess her skills in learning and retention, her performance over five trials was standardized to a test score of 32, which was consistent with her educational history and intellectual functioning. The assessment revealed mild to moderate deficits in short- and long-delay recall. Discrimination and recognition indices were within normal limits as was her learning curve.

On the Stroop Color Word Test her performance revealed that she had a good ability to selectively attend to her environment and screen out interference.

The results of the Wide Range Achievement Test—Revised indicated that her reading recognition and spelling skills were equivalent to a second-grade level, with arithmetic skills at a third-grade level.

The patient completed a Minnesota Multiphasic Personality Inventory—2 utilizing an audio tape of the items, but it was determined to be invalid owing to her demonstrated difficulty understanding the items on the test.

As a result of the testing procedures, interview, consultation with the physician, and chart review the following DSM IV diagnoses were made with subsequent recommendations:

1. Axis I
  - (a) 311—depression not otherwise specified
  - (b) 300.82—undifferentiated somatization disorder
  - (c) 300.02—generalized anxiety disorder
  - (d) Rule out 305—alcohol abuse
2. Axis II:317—mild mental retardation

3. Axis III: Deferred
4. Axis IV: Lack of transportation, inadequate social support; reported legal blindness
5. Axis V: Global assessment of functioning (GAF) 40

The patient's description of events surrounding development of eructation symptoms suggests that they represent the physical manifestation of psychological distress in that they occurred when her sister died. From a review of her medical chart and completion of this assessment, it is apparent that there is a strong somatization component to her medical complaints. The patient described symptoms that meet criteria for generalized anxiety and major depressive disorder; however, there is a question about the impact of her use of alcohol on the development and maintenance of these symptoms.

Somatization disorders typically have a chronic course with symptoms emerging and receding. A conservative approach is recommended for these disorders, but it is important to aggressively treat the coexisting psychiatric disorders. When feasible it is recommended that the patient be given regularly scheduled appointments with the frequency based on the patient's current frequency of visits. This schedule is designed to remove the need for symptom escalation in order to visit the physician, while providing a concrete reflection of concern and reassurance. In general it is recommended that medications be kept to a minimum as her financial and daily coping skills may not enable her to track a complex medication regime. Complex or costly treatment regimes may increase risk of treatment failure or more complicated illness. It is important to remember that this patient has limited coping resources for managing excessively high levels of stress.

Recommendations:

- Antidepressant medication to address anxiety and depression.
- Encourage her to restrain from using alcohol and energy pills.
- A nutritional evaluation with recommendations for an appropriate diet to reduce epigastric distress.
- When giving her directions, take into account her limited intellectual skills and the presence of visual deficits.
- Referral to the Office of Developmental Disabilities for case management services may provide her with access to transportation and other services that could improve her quality of life.
- Referral to a service that can assess visual needs and assistive aids to increase her ability to perform activities of daily living.

## **A Case of Neurological Conversion**

This patient was first seen by the internal medicine clinic on July 4, 2000. The symptom presentation was of left facial numbness, questionable "drooping" of the face, and left-side motor weakness. All of the symptoms resolved on the way back

from CT examination during ER evaluation. The results of studies done during hospitalization were essentially normal. The patient, however, reported transient episodes of symptoms during hospital stay which never lasted long enough to be observed or confirmed by the attending physician.

The patient was subsequently seen in the neurology clinic and calcium channel blockers were prescribed as migraine-related symptoms were postulated. The patient was readmitted on July 24 reporting transient symptoms which could not be confirmed by observation. The neuropsychological evaluation took place following discharge from the hospital and antidepressant medication was recommended. Diagnoses of depression with psychotic features, conversion disorder, and dependent-personality disorder were confirmed.

Citalopram (Celexa) was added to the medication regimen and the calcium channel blocker was removed by the neurologist as symptoms were not believed at this point to be migranous. By October 2000, the patient was asking for a statement to be able to return to work and reinstate his driver's license. He was last seen in September 2001 asking to be weaned off citalopram, stating he was experiencing no symptoms and "felt great." It is of some interest that on giving his initial history he related that several of his relatives had died in their 20s from some form of "muscular dystrophy."

During his second hospital stay, the impression began to be formed by the treatment team that his symptoms were exaggerated, psychiatrically related, or occurring in the context of his desire to avoid returning to work. Interestingly, it was the patient who called for a revised diagnosis (from migraine to stress) so that he could get a statement to allow him to return to work. In this case there was a clear relationship between how the patient wanted the physician to view his symptoms and the patient's direction of his energy toward illness or recovery.

This 29-year-old white man was referred by the neurology clinic for a comprehensive neuropsychological evaluation in order to assess cognitive functioning and provide diagnostic and treatment recommendations.

The patient reported that 1 year prior he began having episodes occurring weekly in which the left side of his face was numb and drooped, with "left arm sag and left eye shut or weak." He was diagnosed with Bell's palsy and prescribed cortisone for a 3-week period. Symptom remission occurred for approximately 10 months. When symptoms returned he presented to the ER approximately five times and was admitted with inpatient status twice. Cortisone led to symptom remission for 24–48 h before the symptoms recurred. The findings from the following diagnostic procedures were normal: MRI of the brain, X-rays of the chest, and EEG alert state. Ultrasound, however, revealed a "possible 10% stenosis in the internal carotid artery bilaterally." The neurologist diagnosed migraines and prescribed calcium channel blockers. One week prior to this evaluation, the patient reported that he "caught a gag in his mouth, the whole left side went numb, couldn't walk."

At the interview date, the patient lived with his 9-month-old daughter and wife, who provided further history. She stated that "sometimes he loses awareness or acts like a zombie...has blackouts, memory lapses, spaces out, and says stupid things, like 'the enemy is after me.'"

The reported medical history included sprain of the left ankle and a dislocated left shoulder as an adolescent due to football. He reported that as a “drunk passenger in a motor vehicle accident” he hit the windshield and dislocated his right shoulder with no residual effects noted. At age 15, he reported depression after “a girl broke up with me...woke up in hospital in an alcohol coma.” Recurrent episodes of depression were also reported. He denied any history of suicidal ideations or attempts and any significant use of alcohol or illicit drugs.

The family history indicated alcoholism, migraines, muscular dystrophy, polycystic kidney disease, and heart disease.

Current complaints included tension, overeating, mood changes, aggression, nervous tics, feeling out of control, sleep maintenance problems with early morning awakening, feeling unattractive, fear of dying, lethargy, and fatigue. “I worry that the doctors will say...like they did with my stepmother 4 years ago... ‘don’t worry, it’s all in your head...’ until it is too late for any treatments to work.”

Current medications include 1 mg clonazepam (Klonopin) twice a day, 180 mg verapamil daily, and 75 mg clopidogrel (Plavix) daily.

The patient reported that his mother had diabetes, breast cancer, and “was in a wheelchair for a long time. She was also mentally ill and may have tried to commit suicide.” His mother and two brothers had polycystic kidney disease. His father had heart disease. His siblings “had problems with alcohol and drugs...one in jail...one went from doing dope to becoming all good...goody twoshoes...nicky knowall... sister has problems with substance abuse and mooches off of grandmother.” He also acknowledged that after 6 months he still grieved the loss of his stepmother, who died after a lengthy illness.

The patient reported graduation from high school with good grades in math. “My reading was really bad, poor reading comprehension...was humiliated when we had to read out loud.” His employment history included labor, construction, cashier, and machine operator. He indicated that he was probably going to have to find another job, “when I had a talk with the boss about returning to work, I had a little symptom in my left side.”

The patient was appropriately dressed and well groomed. He was alert and fully oriented with an anxious affect and mood. Rapport was easily established and maintained. He requested considerable feedback on his performance, becoming more anxious without cues from the examiner. This was even more obvious when he was performing a blindfolded task. He also reported fatigue in both arms with this task. On a different task of manual manipulation, he did not use his left hand at all, even though it may have increased his efficiency. He appeared a bit immature, e.g., when he commented that he was having trouble concentrating, the examiner asked, “What seems to be the problem?” The patient responded, “I don’t know, I am not the doctor, you are...” and laughed. At times his affect appeared inappropriate, e.g., he grinned throughout the questions on comprehension, but commented, “Sometimes, I have trouble understanding your question...I just felt my face lift up, it’s not sagging no more, is it?” The patient asked the examiner to observe his face as he reported numbness and drooping on the left side. Observations noted lisping and slurring of words but no obvious drooping.

Another observation occurred during a memory task and concerned his response to a story about a woman who has her money stolen, which causes serious problems for her before the police come to her aid. The patient retold the story as "...somebody stole her money, \$55. She told the police. Pity party, police took up a collection for her."

In general, the patient was personable and remained engaged with the assessment process, exhibiting good motivation and considerable anxiety about his performance and the examiner's perception of him. The completed self report measures indicated that the patient was acknowledging severe levels of anxiety with moderate levels of depression. Clinical findings were thought to reflect considerable affective disturbance. The results may reflect current functioning, but likely underestimate capacity. For example, intellectual functioning is estimated to be in the low-average range.

Psychometric testing revealed the following: WAIS-III results indicated that the patient was intellectually functioning in the borderline range (full scale IQ 79; verbal IQ79; and performance IQ 84). In the verbal domain he exhibited a relative strength in verbal math problems with a relative weakness in immediate auditory recall for digits. Performance scores were relatively equivalent. The perceptual organization index and processing speed index were in the low-average range, while the verbal comprehension index and working memory index were in the borderline range.

Wechsler Memory Scale -III results indicated average abilities on tasks of immediate and delayed auditory memory with low-average skills on measures of immediate and delayed visual memory.

The CVLT was administered to assess skills in learning and retention. His performance over five trials was standardized to a T score of 41, which is within normal limits. The assessment revealed mild to moderate deficits in short- and long-delay recall consistent with intellectual functioning. Discrimination and recognition indices were within normal limits, as was his learning curve.

On the Stroop Color Word Test his performance revealed that his ability to selectively attend to the environment and screen out interference was within normal limits.

The patient's performance on the Halstead-Reitan Neuropsychological Test Battery revealed overall moderate deficits (Neuropsychological Deficit Scale 60). Severe deficits were observed on the Impairment Index of 0.9, Booklet Category Test, and the Tactile Performance Test (TPT) total time. TPT memory and localization scores revealed moderate deficits. On trails A he exhibited moderate deficits, but surprisingly on the more complex trails B, the score was in the average range.

On the finger tapping test, he exhibited moderate deficits with the nondominant left hand and an average performance with the right hand. Left/right differences were in the severely impaired range for grip strength and finger tapping. Left/right differences on the TPT were within normal limits. The severe deficits observed on a measure of tactile form recognition were the result of a combination of a significantly longer time to misidentify forms in five of the eight trials with the left hand.



There were no errors on bilateral auditory stimulation; in contrast, however, bilateral tactile and visual stimulation revealed severe deficits. His performance on tactile finger recognition exhibited severe deficits. His performance on the Speech Sounds Perception Test was within normal limits and on the Rhythm (recognition) Test he exhibited moderate deficits.

The patient also completed a valid Minnesota Multiphasic Personality Inventory–2. The interpretation included depression and anxiety, which may, under conditions of excessive stress, deteriorate into symptoms of psychotic thought disorder.

As a result of the testing process, interview, consultation with the physician, and chart review, the following DSM-IV diagnoses were made with subsequent recommendations.

1. Axis I
  - (a) 296.34—major depressive disorder, severe with psychotic features, recurrent
  - (b) 300.11—conversion disorder
2. Axis II: 301.6—dependent personality disorder
3. Axis III: Deferred
4. Axis IV: Financial problems, complicated bereavement
5. Axis V: GAF 30–35

As noted earlier, intellectual functioning was estimated to be in the low-average range. There were several inconsistencies in performance, e.g., moderate deficits on a task of complex scanning but average performance on a task which incorporates the complex scanning and adds another level to track. Performance with his left side was consistently poorer than with the right hand.

In terms of personality and developmental history, the patient appears to meet the criteria for dependent-personality disorder in his willingness to place himself in relationships and situations where he disregards his own needs and places most of his resources in the hands of someone else. His fear of losing relationships leads him to maintain excessive control over his emotions and the expression of dysphoric feelings. He denied suicidal ideation; however, owing to the extreme cognitive confusion and anxiety, this is a concern.

In general, the clinical findings do not suggest a progressive neurological disease but a chronic and pervasive disturbance in his relationship skills and his inability to gain satisfaction from maintenance of employment. Conversion of dissatisfaction and confusion coupled with fear of his physical symptoms may account for a great deal of the distress. Chronic depression and slowed information processing also contribute to the clinical picture.

Care should be taken to monitor motor coordination and pattern of strengths and weakness noted here. It is certainly possible that these symptoms are emotionally driven, but also they may represent an “early warning” of a more serious progressive condition.

Recommendations:

- Antidepressant medication to address anxiety and depression. Encourage the patient to abstain from drug and alcohol use.

- Monitor closely for Bell's palsy or exacerbation of symptoms.
- Administer neuropsychological reevaluation within 1 year if symptoms do not remit or if they should worsen.
- Individual and family therapy to address stress management, employment, and relationship issues. Refer to the local united way agency for this service.
- The patient should be encouraged to develop an exercise program.
- Maintain regularly scheduled medical appointments to monitor progress and decrease ER visits.

A review of medical chart reveals that 1 year later the patient requested to wean himself off citalopram and return to work. It appeared that he did not follow through with psychotherapy but symptoms were reported as diminished and he was more realistic about what was required for him to return to work, such as reinstating his driver's license and maintaining an activity level that would improve his daily functioning.

## **Somatoform and Conversion Disorders**

Somatoform and conversion symptoms complicating the presentation and management of medical conditions have proven to be an area where interdisciplinary collaboration has improved the management and delivery of treatment services, positively impacted the excessive and, at times, unnecessary utilization of medical services, and improved the outcome of medical treatment.<sup>2-3</sup> To accomplish these goals in the context of balancing the clinical, operational, and financial aspects of institutional functioning is a task facing all of us who work in health care. By providing a discussion of the functional and ideographic information contributed by symptoms of conversion and somatization followed by specific case presentations, the authors hope to demonstrate that better understanding the nature of the patient who has the disease can indeed make a significant contribution to successful treatment and effective health maintenance.

Mai<sup>4</sup> has suggested in a recent review of somatization disorders that the most effective treatment is accomplished by collusion between the physician and the patient to investigate the veracity and utility of symptoms rather than rejecting them in favor of limited referral resources or limited time spent with the patient. The area of information gathering and functional assessment of symptoms, strengths, weaknesses, and the impact of life stress arising from an illness event are areas where psychologists can be of great service in the medical milieu. In addition the "translation" of patient issues to the physician can often widen the scope of the treatment plan or recognize crucial variables in function that may improve treatment outcome and compliance. Sometimes, the issues are specific as in the case of a noncompliant diabetic who believed he was going to die regardless of how he managed the disease. During interview with this patient, he revealed that he was rapidly approaching the age at which both of his parents died of complications of the disease. His

noncompliance was rooted in fatalism, fear, and a lack of understanding of the progress made in diabetes management since the time of his parents' deaths. Education about current progress in diabetes management given in the context of respecting and validating his fear proved tremendously helpful in creating an alliance to improve compliance. Offering these services to the physician can limit ad hoc assumptions of psychiatric vs. medical issues and help both the physician and the patient in seeing that all elements of patient functioning are important to successful disease management.

While there may be some benefit in drawing the distinction between medical and psychiatric components of an illness event, the reality in an acute medical setting is toward understanding how to alleviate the patient's suffering and physical impairment stemming from the illness event. Smith<sup>5</sup> has described a high amount of comorbid depression in patients with somatoform disorders. He concluded that (1) patients with somatization disorder have a high prevalence of depression (48–94%), (2) patients with major depression have substantial levels of somatization (63–94%) and hypochondriacal symptoms (30–80%), and (3) depression can be treated successfully when it coexists with somatization disorder. In some cases, patients may find that symptom patterns can be circular in the sense that identification of one process (depression) may not represent the entire clinical picture (somatization). Treatment may then be incomplete or inefficient, increasing utilization of services. These figures make more sense when we distinguish illness and disease as factors in an illness event. Illness has been described as the response by the individual and family or support system to symptoms. Disease is defined by the physician and is associated with pathophysiological processes and documentable lesions. Abbey<sup>6</sup> suggests that mismatches between illness behavior and disease are common and at the root of many management problems for general medical populations. Many patients, such as those with hypertension, may not perceive themselves as ill and, as a result, may be noncompliant with treatment. This creates a greater need for services when a major illness event occurs. Patients with somatoform disorder, on the other hand, may view themselves as ill despite not having a disease and overutilize services, straining institutional resources. Illness behavior can also vary across individuals depending on the patient's cognitive ability, resources, social support, and motivation. This variability in the context of time restraint can foster concepts of "normal" vs. "abnormal" illness behavior as viewed by the physician. The role of brief psychological assessment in medical settings can help the physician avoid the normal/abnormal duality and achieve a quick understanding of why this particular patient exhibits these specific behaviors at this time. It is the ability to formulate timely and useful treatment interventions which work within the clinical, operational, and financial priorities of the treatment setting that can be seen as psychology's most helpful role in primary care.

The principles of management for somatoform disorders are directed toward successful treatment of the primary disease and minimizing social-learning problems which may cause an exaggerated response to illness. Abbey<sup>7</sup> has documented seven target areas of management:

1. *Emphasize explanation.* It is important for patients to feel that they are taken seriously. Education and formulation that makes sense of symptom presentation can strengthen the collaboration between physician and patient.
2. *Arrange for regular follow-up.* Patients seen on a regular schedule rather than on an “as needed” basis are less likely to escalate symptoms to seek attention or overuse medical resources.
3. *Treat mood or anxiety disorders.* Whether the mood or anxiety is preexisting, exacerbated by medical problems, or a primary cause of impairment, treating the symptoms of depression or anxiety can improve healthcare outcomes.
4. *Minimize polypharmacy.* Some symptoms attributed to somatization can, in reality, be caused by medication interactions or effects in a patient that is already hypervigilant to minute changes in physical sensations.
5. *Provide specific therapy when indicated.* Arousal reduction training may be a viable mechanism in reducing somatization. Craig et al.<sup>7</sup> have suggested that persistent somatization seems to be linked to higher levels of emotional arousal. Arousal reduction training is easily accomplished in about 30–40 min with the patient and can be generalized to the home setting by providing tapes or CDs for the patient to use on a daily basis. If the setting allows, psychotherapy for the somatization behavior can be beneficial.
6. *Change social dynamics.* Social skills building, life skills training, assertiveness training, and physical reactivation programs may be useful. Group therapy may also be a beneficial vehicle for these issues.<sup>8</sup>
7. *Recognize and control provider negative reactions and dualistic (mind vs. body) thinking.* Patients with somatization disorder are complex and can evoke powerful positive and negative emotional responses from physicians which can result in less than optimal care<sup>9</sup>.

Information and education for both the physician and the patient can help to avoid this dilemma. Psychologists can provide this information in a manner that can be accepted by both parties to resolve timely and costly barriers to successful treatment.

In our service, we have had to face the reality that owing to constraints of time, operational demands, and financial issues, the physicians seeing patients on a daily basis frequently do not have the time allotted to explore intricacies of each patient’s personality style and psychological resources. Because of the demands presented by a busy med-surg setting, we as psychologists have also been challenged with the idea of adopting a format which often requires brief visits with patients, limited psychological testing, and limited resources in the community for mental health care. As a result, the interview skills required to establish a pattern of functioning for the patient and our ability to provide education which the patient can benefit from are important skills required by the setting. Psychological testing is used to supplement our assessments and confirm the severity levels of a mental disorder. While we certainly do not have time to thoroughly test all of the patients referred to us, experience has taught us that time-efficient and case-directed psychometric testing can yield valuable information about levels of coping skills present and

cognitive capacity that are important in making decisions to maximize treatment outcomes. Another area of consideration, arousal reduction training at the hospital and in a format that the patient can practice at home (via a CD), has proven to be a useful tool in efforts to manage somatization more effectively. A problem with the old “relaxation therapy” model is that frequently it provides too little too late. This is clear when a patient with a long history of anxiety symptoms (chronically elevated sympathetic arousal) tries a relaxation tape at the hospital with little or no positive result. Often it is not explained to the patient that parasympathetic stimulation over time will better balance autonomic functioning in much the same way that repeated lifting will strengthen muscles. By educating the patient in this manner we are avoiding quick rejection of an effective treatment strategy following an experience that does not provide immediate resolution of the problem. The cases offered here demonstrate this process of assessment and education as well as offer useful concepts in patient management.

In summary, the presentation of these cases, we believe, highlights the need for continued revision of our assumptions and risks of compartmentalization in primary care. The collaboration of data gathering, conceptualization of assessment data, and cooperative treatment planning served both of these patients well. During these times we are consistently confronted with disparities between clinical, operational, and fiscal priorities of the institutions where we work. Peek<sup>10</sup> has written about the problems these three levels of organization can create when they are viewed from one perspective. In the cases presented here, we have selected methods of assessment and treatment that are time-conservative, collaborative, and directed to the best outcomes possible given restrictions in funding, time, and case load volume. The overall goal was to provide the physician with the most information possible as well as to assist medical treatment in any way by providing time-limited and self-directed care for the patient (arousal reduction, self-monitoring, etc.). In many ways, adapting ourselves to current environments and restrictions created by the realities of financial, operational, and clinical aspects of treatment settings is not much different from adapting ourselves to the ideographic characteristics of each patient within diagnostic categories and developing management strategies that consider each patient’s profile of relative strengths and weaknesses. In essence, we believe that we face challenges that are similar whether we are treatment providers, administrators, or fiscal managers. In Peek’s model, collaboration and communication are essential as is the ability to perceive the field outside of your own framework. The ability to listen to each other with the assumption that validity is inherent in each perspective is strongly recommended by Peek. In following this direction we can often see that entire systems are dynamic, responding to surplus and deficit that affect the systems’ ability to survive. This process of collaboration is based on respect for different organizational levels as well as respect for the variability and unique patterns of human experience and illness. Toward this end, collaboration in this manner can remind us that organizations and the people that run them represent the same variability of experience that effective assessment can demonstrate in our patients. In collaborative medicine, each person seeks to define his or her perspective and contribute to the service provided to the patient. The art of balance is to

realize that opposing forces that are worked with rather than against contribute to the ability of the entire system to maintain a functional balance. It is indeed true that all elements of human experience are inherent in every other element of experience. To this end, our ability to tolerate aspects of system functioning we do not always understand is remarkably similar to our need to develop a tolerance and understanding of variability in our patient's presentation of medical symptoms.

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**Part IV**  
**Women's Health**

# **Chapter 15**

## **Chronic Pelvic Pain: A Case for an Interdisciplinary Evaluation and Treatment Approach**

**Allen H. Lebovits and Kenneth A. Levey**

### **Introduction**

Chronic pelvic pain is a common problem for women, being the single most common reason for referral to a gynecologist,<sup>1</sup> with an estimated prevalence of 38 per 1,000 women.<sup>2</sup> Over \$881 million is spent annually in the USA managing chronic pelvic pain on an outpatient basis.<sup>3</sup> It is a common disabling condition whose causes and treatments are poorly understood.<sup>4</sup> Many women as well as health care providers get frustrated with the all-too-often lack of relief after many interventions and attempts at pharmacological treatments. It can have a devastating effect on a woman's sexuality and her relationship with her partner.

It is commonly recognized that psychological issues play an important role in the origin and treatment of this condition.<sup>5-6</sup> A recent extensive systematic review of the literature regarding factors predisposing women to chronic pelvic pain concluded that both gynecological and psychosocial factors are strongly associated with chronic pelvic pain.<sup>4</sup> This would appear to mandate a comprehensive collaborative medical and psychological approach to the evaluation and treatment of women suffering with pelvic pain. The objective of this paper is to demonstrate the utility and mechanisms of this approach.

### **Description of Collaboration**

The collaborative relationship between the team at the NYU Pain Management Center and the NYU Pelvic Pain Center represents a true interdisciplinary approach. Both contained within a large academic medical center, there is a close working relationship between the two centers, with specialists from each center attending collaborative meetings. The teams meet on a weekly basis to discuss cases, outcomes, literature, and collaborative plans. Collaboration is enhanced by phone calls and e-mails with nonidentifying patient information. Collaboration occurs both within the centers and between the centers' specialists with pain expertise from different specialties. Specialists involved in caring for patients in centers include



gynecologists, psychologists, psychiatrists, anesthesiologists/pain management specialists, neurologists, neurosurgeons, physical therapists, rheumatologists, gastroenterologists, and acupuncture practitioners.

## Case Description

The patient was a 32-year-old woman who was referred to the NYU Center for Pelvic Pain and Minimally Invasive Gynecologic Surgery by a general gynecologist in the community (whom she found via the Internet). She presented with approximately 2.5 years of vulvovaginal complaints, including frequent episodes of candidiasis. She related onset of pain to stopping paroxetine (Paxil) about 8–12 months prior to the onset of symptoms. She said that over the last 6 months her pain had become progressively worse. Her average numerical pain rating score over 1 month (where 0 represents no pain at all and 10 represents the worst imaginable pain) was 7 out of a maximum of 10. She had had previous treatments at a vulvovaginal treatment center which had helped her, but the symptoms had returned. Pain was confined to the vulva and introitus.

She described the pain as a burning sensation as well as a feeling of her skin tearing. She complained of entry dyspareunia as well as pain when wearing tight clothes. She had no radiation, low-back pain, dysmenorrhea, urinary, or gastrointestinal symptoms. She had no blocking vaginismus, no pain with digital entry on masturbation, and was able to have an orgasm with sex and with masturbation. There was occasional vaginal yellowish discharge that cleared spontaneously with no pruritis. She had a history of HPV but no other STD. She had no gait abnormalities.

Her pain occurred only during intercourse and lasted, as a throbbing sensation, for the next hour. It would take about 1 week for her vaginal area to heal and during that week it felt raw and sore. She stated that also before her period she would develop an achiness and uncomfortable sensation. Sexual position did not matter. She reported that her husband's penis is average in size. With medication she was able to sleep. Her medical history was unremarkable except she had been treated for bacterial infections.

## Physical Examination

On physical examination, her back, abdomen, lower extremities, and lumbosacral nerve roots were all normal. Her Q-Tip score was 6, with maximal tenderness from 5 to 7 o'clock. There was a slight erythema distal to Hart's line. There was a small amount of thin white discharge and no odor. The cervix was normal. There was visible spasm of the bulbocavernosus muscles. She had normal muscle awareness but with severe pain on single digit insertion. There was clear spasm of the levator ani muscles complex. The obturator muscles were normal as was muscle strength. The remainder of the pelvic examination was unremarkable. The wet prep was normal. Urine, urethral, and cervical cultures were all normal.

## Psychological Evaluation

After the initial medical evaluation which suggested a diagnosis of mild to moderate depression and poor sexual function, the Director of the NYU Pelvic Pain Center (K.A.L) referred the patient to the NYU Pain Management Center psychologist (A.H.L) for evaluation and possible treatment. She was appropriately oriented to all three spheres and presented herself in a businesslike manner, well-dressed and very organized. She stated she had not been happy for the past year and had not felt good about life. She felt there had been significant changes in her relationship with her husband as well as job stress. Evaluation for depression showed a depressive and somewhat restrictive affect. She denied any disturbance in appetite or anhedonia. She also denied any suicidal ideation or panic attacks currently but did acknowledge a sense of hopelessness. During the evaluation, she seemed somewhat removed and angry. She did not enjoy sex and had not felt sexual for the past year. She had not had anyone to talk to about it. Her pain had a significant effect on her relationship. Regarding alcohol and drug dependency, in college she used to party a lot, but does not drink anymore and she denied any current use of recreational drugs

## Relevant Psychiatric History

In college she saw a psychiatrist for 1.5 years because after smoking marijuana one time she developed panic attacks with associated physical symptoms, where she wanted to die, which lasted throughout college. He put her on imipramine (Tofranil) and sertraline (Zoloft), which she was on for a few years. She then tried paroxetine (Paxil) but went off paroxetine about 2 years prior to presentation. She subsequently saw a psychologist off and on for about 7 years, who treated her with cognitive behavioral therapy for “life problems.” She stopped about 3 years ago. Additionally, she was in couples’ therapy for a few sessions with her husband before they were married.

## Social Environment

Upon the initial visit, she had been married for 5 months, after having lived with her partner for 2.5 years. She had been previously intimate with approximately nine partners. She stated that during the beginning of her current relationship everything was good, including sex. At the initial visit however, she described her relationship with her husband as very stressful: they fight a lot and yell but there is no domestic violence or abuse. She stated that they fight about money. She described him as very controlling and herself as an independent individual. At the time of the initial visit, they had not been intimate for about 6 months and would not even touch or kiss. Stress exacerbates her pain; and the stress of a move here from another city 3 years ago was significant. Despite their significant marital issues, they want to have children.

## Family History

She had a positive friendship support system, but her friends did not like her husband. Her parents were divorced when she was 10. She denied any history of physical, sexual, or emotional abuse, except for emotional abuse where she stated that she used to be put in the middle of her parents' fights.

## Functional Level

She was a sales executive for the past 8 years, felt it was very stressful, and although she enjoyed her work only somewhat, she nevertheless was doing well. She would stay up at night worrying about work and meetings she had. She would work one to two late nights a week. She stated they need her income. She was fully functional; her pain did not interfere with her work. Exercise made her feel better; she exercised two to three times a week.

## Testing

The McGill pain score was 8.5. The Beck Depression Inventory was 15 at the gynecologist's assessment and was consistent at 16 when done at the initial psychological evaluation, both reflective of a minor depressive mood state disturbance. Her Spielberger Trait Anxiety score was 39 (60th normative percentile, indicating that she was above average in characterological anxiety) and the Abbreviated Sexual Function Questionnaire (ASFQ) was 51, which suggests there is a borderline to high probability of normal sexual function.

## Diagnoses

*The diagnoses were as follows:*

- Pelvic floor spasm secondary to chronic vulvar vestibulitis. The vestibulitis remained present and there was no clear evidence of infection.
- Chronic pain, combined type (both medical and psychological contributors to her pain).
- Depressive mood state disturbance.
- Generalized anxiety disorder.

## **Treatment—Medical**

She was started on a topical combination of triamcinolone (Aristocort), gabapentin (Neurontin), lidocaine (Xylocaine), and ketoprofen (Orudis), 10 mg escitalopram (Lexapro), as well as 25 mg desipramine (Norpramin) every night. She was given instructions for vulvar care, and was told to abstain from sex for 6 weeks.

After the induction therapy with the topical medication, she was referred for physical therapy for pelvic floor muscle retraining with specific pelvic biofeedback twice a week, which she felt helped.

## **Treatment—Psychological**

She acknowledged the need to relax and she was very interested in psychotherapy, particularly to help herself in her relationship. Accordingly, a psychological intervention was undertaken, with the following components:

1. Learning self-regulation skills to help lower her levels of anxiety. This was accomplished through multimodality biofeedback using temperature, surface electromyography (EMG), heart rate, and basal skin response. She was taught a self-hypnosis exercise using breathing exercises and guided imagery.
2. Cognitive behavioral therapy to improve her coping skills particularly when faced with stressors, especially regarding her husband, her work, and her family.

Biofeedback and cognitive behavioral therapy have been demonstrated to be effective treatment modalities for chronic pain.<sup>7-8</sup>

## **Progress in Treatment—Medical**

Over a period of 6 months she demonstrated steady improvement. Her Q-Tip score went down to zero and she was able to resume normal intercourse. At the 7-month mark she presented for a preconception counseling visit. She stated that since she had found help things were better. Her husband thought that she was not attracted to him. She is able to orgasm through her clitoris and they are intimate now.

## **Progress in Treatment—Psychological**

After the initial evaluation, she had seven sessions of cognitive-behavioral therapy, including two sessions of general (non-pelvic-floor) biofeedback over a period of 5 months. She was quite successful in her two biofeedback sessions. She was able

to regulate all four physiological parameters to a more relaxed state: she increased her hand temperature, increased her basal skin response (reflective of increased relaxed state), lowered her heart rate, and lowered her levels of surface EMG (placed on her forehead), which were quite high initially (reflective of high levels of muscle tension). The biofeedback was done in conjunction with a self-hypnosis guided imagery exercise. She practiced the self-hypnosis exercise on her own on a daily basis to help her cope with stress and regulate her level of body tension.

Cognitive-behavioral therapy focused on her ability to cope with stress, which she was having a great deal of difficulty in doing. She had been very reactive to stress, particularly in her relationship with her husband. She was taught stress management techniques such as physical exercise, coping skills (use of humor, distraction, prioritization), and time management. She vented quite readily regarding her stressors: her relationship with her husband, her father who was hospitalized, work, and her family conflicts. She benefited significantly from cognitive-behavioral therapy and showed less reactivity to stress, a greater understanding of her relationship with her husband as well as her other stressors, and lowered levels of depressive mood state disturbance. Together with her physical ability now to be fully intimate with her husband, she was able to enjoy a closer and less stressful relationship with him.

## Discussion

Chronic pelvic pain is one of the pain syndromes that is more strongly associated with significant emotional distress as well as a previous history of emotional, physical, or sexual abuse.<sup>4-5</sup> As such, its assessment and treatment mandates a comprehensive interdisciplinary approach. The patient presented with significant levels of depression and anxiety. While there was no history of physical or sexual abuse, she was involved in her parents' unhappy marriage and divorce when she was only 10 years old.

This case demonstrates the effectiveness of a collaborative approach in assessing and treating a very painful condition that can be very debilitating to young women, and is often refractory to treatment. The interdisciplinary approach has been proven to be an effective as well as an efficient way of treating chronic pain.<sup>9-10</sup> The collaboration in this case occurred often, on the telephone as well as at weekly meetings where she was discussed at the weekly interdisciplinary team conference where specialists review and discuss challenging cases—progress as well as difficulties. The goals of both the gynecologist and the psychologist were the same—to provide collaborative and integrative care to improve the patient's quality of life. Her pain was impacting very negatively on her relationship with her spouse, her mood state, and her ability to manage stress.

In this case, the improvement in her medical symptoms facilitated the psychological work; it made it easier for her to learn relaxation and enabled her adaptation of more positive coping skills in managing her significant stressors. The improvement

in her psychological state enabled her to defocus from her pain. Both the medical and the psychological approaches had a significant positive effect on her pain, which in turn enabled her to enjoy a fully intimate relationship with her spouse. Her medical and psychological care was not financially burdensome to her as both providers accepted her managed care plan; she was just responsible for her copayments. The interdisciplinary care did not bring on any additional financial burden on her. It is one of the benefits of assessment and treatment in an academic medical center. In summary, she received patient care by pain specialists specifically trained to help her, in clinical settings that were well integrated, patient-friendly, and financially affordable.

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# **Chapter 16**

## **Biobehavioral Management of Hot Flashes in a 48-Year-Old Breast Cancer Survivor**

**Gary R. Elkins, Christopher Ruud, and Michelle Perfect**

Hot flashes are among the most severe and frequent menopausal symptom experienced by postmenopausal women and breast cancer survivors. In fact, over 66% of healthy menopausal women and 78% of women treated for breast cancer experience hot flashes. Kronenberg et al.<sup>1</sup> described a hot flash as “a transient episode of flushing, sweating, and a sensation of heat, often accompanied by palpitations and a feeling of anxiety, and sometimes followed by chills.” The onset of a hot flash is sometimes preceded by an aura, but it often manifests itself suddenly. The initial symptoms typically included a rise in heart rate and peripheral blood flow.<sup>1-2</sup> The sensation of a wave of heat spreads over a person’s body, especially the upper body,<sup>3-4</sup> causing him or her to sweat. Although there is a sensation of heat, evaporation of sweat from the forehead and chest results in a drop in temperature in these areas.<sup>1</sup> As a result, the flash is sometimes followed by a chilled feeling.

Several studies have identified hot flashes as the most frequently reported physiological and psychological experiences associated with menopause. Hot flashes can be severe and interfere with daily activities. For example, in a study<sup>5</sup> examining the symptoms associated with hot flashes among breast cancer survivors, 89 of 102 women reported having severe hot flashes. Some physical symptoms included weakness, feeling faint, rapid heartbeat, and itching sensations. Over one third (37%) noted that the hot flashes interfered with their routines and disrupted their sleep. Thirty-seven percent of the women indicated that these hot flashes interfered with their daily activities and disrupted sleep. Pansini et al.<sup>6</sup> reported similar symptom presentation of hot flashes and also identified headaches, irritability, palpitations, and vertigo as common symptoms.

### **Treatment Considerations for Hot Flashes**

Most women who experience hot flashes seek medical treatment. A recent survey revealed that gynecologists were the most frequently consulted.<sup>7</sup> Up until just a few years ago, hormone replacement therapy (HRT) was the recommended treatment of choice owing to the empirical support for its efficacy. However, the Women’s Health Initiative Trial,<sup>8</sup> a randomized controlled trial of hormone therapy with

estrogen and progestin as primary prevention in postmenopausal women, demonstrated that healthy women who took HRT over extended periods had a 1.2–2.0-fold increased risk of developing breast cancer. HRT was also shown to be associated with increased cardiovascular disease and stroke.

Given the potential risks involved with hormonal interventions, efforts have been made to identify nonhormonal agents or nonpharmacological interventions for hot flashes. Studies have been conducted to investigate the use of: soy supplementation,<sup>9</sup> vitamin E,<sup>10</sup> gabapentin,<sup>11</sup> black cohosh and St.-John's-wort,<sup>12</sup> and clonidine.<sup>13–14</sup> None of these agents have been found to be very efficacious and can be associated with a high toxicity profile.<sup>15–17</sup>

Other studies have investigated the use of antidepressant medication for hot flashes. Evidence to date strongly suggests that the most effective nonhormonal alternatives for hot flash management lie with the newer antidepressants. Research has been done with venlafaxine,<sup>18</sup> as well as with selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine,<sup>19</sup> paroxetine,<sup>20</sup> citalopram,<sup>21</sup> and mirtazapine.<sup>22</sup> Most of these agents provide a 50–60% reduction in hot flashes. However, these nonhormonal agents are not effective for all patients, and side effects can include dry mouth, insomnia, dizziness, somnolence, and nausea.<sup>20,23</sup> Also, some breast cancer survivors and menopausal women may not want to take antidepressant medications even at reduced doses. Because of this, mind–body interventions have received increasing attention as an alternative behavioral treatment for hot flashes. There is increasing evidence that behavioral interventions can be very effective for some women and have minimal side effects.<sup>24–25</sup>

## Behavioral Interventions for Hot Flashes

Behavioral and life style factors may contribute to the frequency and severity of hot flashes for some women. While hot flashes can occur spontaneously without any identifiable trigger, some women report specific precipitating factors<sup>26</sup> such as hot weather, spicy foods, alcohol, smoking, and caffeine.<sup>27–29</sup> Also, psychological stress is often cited as a precipitant<sup>29</sup> for hot flashes. Specific behavioral recommendations for management of hot flashes can include:

- Avoiding spicy food
- Avoiding alcohol
- Decreasing use of caffeine
- Lower ambient temperature
- Wearing layered clothing
- Smoking cessation

In addition, several studies have now suggested that relaxation and instruction in mental imagery techniques may have a positive effect on reducing hot flashes. In an early study, Stevenson and Delprato<sup>30</sup> reported a reduction of 41–90% of self-reported hot flashes from the baseline when patients were provided with instruction



in relaxation, self-suggestions of cool thoughts, and temperature biofeedback. More recent studies<sup>31–32</sup> also demonstrated that interventions utilizing relaxation were effective in reducing hot flash frequency. In one of the few studies to include ambulatory monitoring, Freedman and Woodward<sup>33</sup> demonstrated that relaxation and paced breathing resulted in both subjectively reported and ambulatory monitored hot flashes in menopausal women. A pilot study of a group intervention where participants were taught relaxation and cognitive strategies found a moderate reduction in self-reported hot flashes.<sup>34</sup>

There have been several recently published reports indicating that hypnosis may be beneficial in reducing and/or alleviating hot flashes.<sup>24</sup> Hypnotic relaxation and mental imagery have also been shown to be effective as a mind–body therapy that may be defined as a deeply relaxed state involving individualized mental imagery and suggestion. Hypnosis has been successfully used with cancer patients to induce relaxation and to reduce anxiety and distress.<sup>35–38</sup> In a small exploratory study, Younus et al.<sup>39</sup> reported a significant reduction in self-reported hot flashes among 14 women following four weekly group sessions of hypnosis; however, no control group was included and the women's levels of hypnotizability were not assessed. More recently, Elkins et al.<sup>25</sup> reported on the use of hypnosis to reduce hot flashes in 16 breast cancer survivors. Each patient provided baseline data and received four weekly sessions of hypnosis that followed a standardized transcript. Patients were also instructed in self-hypnosis. Throughout the clinical care, patients completed daily diaries of the frequency and severity of their hot flashes. Patients also completed baseline and posttreatment ratings of the degree to which hot flashes interfered with daily activities and quality of life. The results indicated a 59% decrease in total daily hot flashes and a 70% decrease in weekly hot flash scores from their baselines. There was also a significant decrease in the degree to which hot flashes interfered with daily activities for all measures, including work, social activities, leisure activities, sleep, mood, concentration, relations with others, sexuality, enjoyment of life, and overall quality of life. This study strongly suggests that clinical hypnosis may be an effective nonhormonal and nonpharmacological treatment for hot flashes.

## **Collaborative Efforts for Hot Flash Symptom Management**

Collaborations between those trained in medicine and those with backgrounds in behavioral health are quite appropriate for the treatment of hot flashes and their associated symptoms. Accordingly, the host of physiological, psychological, and environmental factors that influence the onset and experience of hot flashes warrant interventions from multiple perspectives. Collaborative efforts should begin from the time a patient raises a concern regarding her experience of hot flashes. During the assessment phase it may be helpful to review the patient's life style and any factors that may be possible contributing triggers. Many women benefit from medications to reduce hot flashes. Lower doses of HRT may be a consideration for some

patients. However, patients with a family history of breast cancer or for whom there are concerns about the risk of health problems associated with hormone replacement, alternative medications such as SSRI antidepressants may be a consideration. Behavioral interventions such as hypnosis may be utilized as an adjunct or as a primary treatment modality within the patient's overall medical care. However, some physicians may not be aware of the potential benefit for mind–body interventions and patients need to be educated about the use of these behavioral modalities. Usually hypnotherapy is provided by a medical or mental health professional with specialized training in health psychology and hypnosis. Therefore, a collaborative model of care is often ideal for providing biobehavioral intervention for treatment of hot flashes. The following case example illustrates this approach.

## **Case Study**

### ***The Patient***

This 48-year-old woman had a mammogram that revealed a prominent cyst in the upper outer quadrant of the left breast and an additional smaller cyst in the right breast. At the time, she was taking hormone medication, which was Premarin as she was experiencing hot flashes. She had elected to not continue taking the HRT because of concern about breast cancer. She had a prior hysterectomy. The patient then tried some over-the-counter herbal remedies (e.g., black cohosh, red clover) to help with her hot flashes but found them to be ineffective for her. Her physician prescribed 75 mg venlafaxine ER for her and she reported an estimated 50% decrease in her hot flashes. However, after 5 months on the medication alone she was still troubled with hot flashes and night sweats. Also, she expressed a dissatisfaction with taking an antidepressant medication and asked if there was “anything else (she) could do?” She expressed a desire to discontinue taking any antidepressant medication and concern about possible negative side effects (although she was tolerating the medication without excessive side effects). A biobehavioral approach to managing hot flashes was discussed with her and she was referred to a clinical health psychologist (G.R.E.) for further discussion of hypnosis and behavioral approaches to managing her hot flashes.

### ***Biobehavioral Treatment of Hot Flashes***

During the initial consultation the patient's history of hot flashes was reviewed and the use of hypnosis was discussed. Hypnosis was discussed as a mind–body therapy that involves relaxation and mental imagery. A hypnotic induction involving suggestions for deep relaxation and mental imagery associated with “coolness” was discussed. She was asked if she could identify any particular personal memory or

imagery of being relaxed and cool that could be used in hypnosis. She related a memory going on a picnic with her family at a park that had a very cold spring fed lake. She was asked to write down some of the details of this pleasant memory for future use in hypnosis sessions. It was also discussed that she would be asked to begin practice of self-hypnosis on a daily basis and to monitor how deeply relaxed she was able to be during each time. She was a nonsmoker and did not drink alcohol. She stated that she rarely ate spicy foods. However, she did feel that her hot flashes were worse during times of stress or at least could be triggered by stress. She was asked to note any such times so that any stresses could be discussed at later sessions. She was asked to begin keeping a record of her hot flashes, noting the number and severity of hot flashes each day. She was asked to rate her hot flashes on a scale from mild, to moderate, severe, or very severe.

At the time of the initial consultation the patient was experiencing an average of 15 hot flashes per day, with the most of her hot flashes in the moderate range. At the next session a hypnotic induction was completed. The patient was asked to sit in a recliner and focus her attention on a spot on the wall. Suggestions were given that she could become more relaxed and suggestions were given that she could imagine "a wave of relaxation" spreading from the top of her head to her feet. She was instructed to "let her eyelids close" as she became aware of feelings of relaxation and "letting go" of tension. It was then suggested that she could deepen relaxation and hypnosis by imagining walking down a path in a forest "and with each step going deeper relaxed." The hypnosis session then included suggestions to imagine being at her favorite park with her family and going for a swim in the "very cool, even cold water in the spring-fed lake." She was able to imagine this very vividly and reported feeling very cool on her face and head during the hypnosis session. She was then given suggestions to alert feeling "cool, relaxed, and refreshed." It was suggested that her hot flashes would become less frequent and less severe with daily practice of self-hypnosis. The session was recorded on an audiocassette tape and she was instructed in daily practice. She was also asked to keep a daily diary of the frequency and severity of her hot flashes.

At the end of week 1 her hot flashes had decreased to an average of 11 per day (ranging from 13 to six per day) and most were moderate. She was encouraged by this and reported that she was using the self-hypnosis tape each day. She provided more details of the type of mental imagery that she found to be helpful (i.e., time of the day that she imagined being at the lake, sounds that she could remember, etc.) and another hypnotic induction was completed. In addition, the patient was given instructions in self-hypnosis (i.e., focus attention, relax, image coolness) and encouraged to practice hypnosis some of the time without using the tape. She continued to use venlafaxine but asked about decreasing the dose. She was asked to discuss that possibility with her physician.

Over the next 2 months the patient was seen for five additional visits for hypnotherapy. Each visit included a hypnotic induction and individualization of mental imagery. She reported good compliance with practice of self-hypnosis. At the end of the fifth visit her hot flashes had decreased to an average of seven per day, with the majority (more than two thirds) rated as mild. She also reported that her sleep

had improved and that she was having fewer night sweats. She stated that she “felt more relaxed” and better able to cope with stresses. During this time she was able to decrease her dose of venlafaxine by half and she reported the side effects to be minimal and much more acceptable to her.

## Conclusion

This case illustrates the potential benefits of collaborative care and a biobehavioral approach to management of hot flashes and some menopausal symptoms. The patient’s satisfaction with her medical care was positive and quality of care improved with a favorable outcome. There is an emerging body of research that is supportive of the integration of behavioral interventions as one alternative for management of hot flashes. Clearly, for some patients menopausal symptoms can be reduced and additional improvements can include better sleep, reduced anxiety, and a sense of empowerment associated with self-management of symptoms.

However, there are a number of important considerations in successfully utilizing a biobehavioral approach to hot flashes. First, there must be a medical or mental health professional with sufficient expertise in hypnosis or others mind–body interventions. Certification in the professional use of hypnosis requires considerable training<sup>40</sup> and practice. Some settings may not have such expertise readily available. Second, some patients may not be good candidates for hypnosis. For example, hypnosis should be avoided or only be used with extreme caution in patients with a history of severe mental disorder (e.g., borderline personality disorder, schizophrenia, or posttraumatic stress disorder). Also, some patients may be in the low range of hypnotizability and as a result may benefit less.

Third, some physicians may not be aware of or open to mind–body interventions for menopausal symptoms. In the present case the patient was referred with the knowledge and support of her physician. Hypnosis does not represent a replacement, in any sense, for good medical care. However, when the patient’s physician is supportive, communication about alternative therapy is likely to be open and there is a more collaborative relationship between patient and care giver. Communication between providers is essential as is follow-up in addressing any potential problems that may arise during biobehavioral treatment.

Fourth, the focus of behavioral intervention is on empowerment of the patient and increasing self-control. However, some patients may hold myths and misconceptions about hypnosis and resist referral for this type of therapy. Our experience has been that such resistances are usually easily overcome by spending a few minutes addressing such concerns, providing education, and with the communication of confidence in the potential utility of hypnotherapy from the patient’s physician.

Fifth, the long-term cost of therapy may be reduced by a biobehavioral approach to hot flashes and menopausal symptoms as reliance on medications may be reduced and self-management of symptoms is a target of intervention. However, hypnotherapy may not be covered by some insurance and the patient may encounter

increased financial burden during treatment. Such concerns must be weighed up by the patient and physician along with the long-term benefit in deciding on treatment recommendations.

In spite of these issues, a biobehavioral approach is likely to be attractive for some patients and can yield benefits beyond a strictly pharmacological approach to care. It has been our impression that the major strength of integrating self-hypnosis into a biobehavioral approach is that it empowers the patient to control her own symptoms. However, a randomized trial against drug treatment is needed to clearly define the integrative role of self-hypnosis in treatment of hot flashes. In addition, more long-term studies are needed. It has been our experience that “booster sessions” of hypnotherapy are sometimes needed to maintain the reduction in hot flashes achieved by our hypnotic intervention. A biobehavioral approach also provides an opportunity for contact within the context of behavioral health counseling without the stigma that is sometimes associated with referral to a mental health professional. In some cases, the increased satisfaction with care can be a worthwhile source of increased collaboration between medical and behavioral health professionals in treating hot flashes and some patients may prefer this collaborative approach.

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# **Chapter 17**

## **Preserving a Life and a Career: How a Partnership Between Medicine and Psychology Saved a Physician with Anorexia Nervosa**

**Barbara Cubic and Daniel Bluestein**

### **Introduction**

There is no doubt that serious risks are posed by impaired health care professionals. Impairment increases the likelihood of medical errors, compromised patient safety and suboptimal care.<sup>1</sup> Although punitive actions are often taken, e.g., license revocation, lawsuits and imprisonment, society loses when highly knowledgeable, well-trained individuals are removed prematurely from training or the work force. A better alternative is early detection and rehabilitation.<sup>2</sup> This is especially true in the case of an impaired physician, given the time and resources dedicated to medical education. There is already a dearth of physicians practicing in rural areas and pursuing certain medical specialties and the anticipated physician shortage will only make a physician a more treasured commodity in the future.<sup>3</sup>

Obtaining epidemiological data about impaired physicians is difficult.<sup>4</sup> Very few studies have been conducted on the topic and the available research is replete with methodological limitations.<sup>5</sup> The data collection methods used do not allow for comparisons to be made between physicians and other populations, especially in regards to less prevalent conditions. Studies that are available tend to be descriptive in nature, overly reliant on data regarding medical students and residents, and utilize samples of convenience, i.e., physicians in treatment owing to impairment. To further complicate the picture, it is difficult to develop an objective definition of the term “impairment” and there are multiple incentives for physicians to project well-being and competence despite impairment.

What is clear is that society must safeguard patients from impaired physicians. While each state establishes its own approach to dealing with impaired health care professionals, most boards of medicine rely heavily on physicians themselves to identify and report their own impairment or that of a peer. In fact as early as 1973, the American Medical Association Council on Mental Health<sup>6</sup> stated that “it is the physician’s ethical responsibility to take cognizance of a colleague’s inability to practice medicine adequately by reason of physical or mental illness including alcoholism and drug dependence.” Therefore, for institutions attempting to establish procedures to identify impaired physicians and refer them for rehabilitation the task is a difficult but an important one. To date, programs geared towards impaired



professionals have shown that the majority of identified impaired physicians are reported for substance abuse and other referrals are generally related to mood disorders, cognitive impairment and, less commonly, eating, personality and psychotic disorders.<sup>7-8</sup>

## **Anorexia and Physicians**

Anorexia nervosa predominantly afflicts females, though not exclusively, and usually begins in adolescence or early adulthood. The disorder is described as “culture-bound” because it is seen primarily in affluent Western societies. The cardinal characteristic is emaciation achieved through rigorous exercise and drastic restriction of food.<sup>9</sup> At its onset, anorexia nervosa is difficult to differentiate from typical dieting because both occur when concern about weight or weight gain is provoked, often in adolescence after the individual has been teased about weight or the onset of puberty’s bodily changes. The hallmark difference is that in anorexia nervosa extreme measures of weight control are adapted and maintained. At first the weight loss may be reinforced by others through praise, especially if the individual was previously overweight. However, to continue the weight loss, the individual steadily eats less, exercises more and avoids eating-related circumstances. Over time, over half of the individuals with anorexia nervosa will also develop bulimia nervosa symptoms during their illness or will alternate between anorexia and bulimia nervosa.<sup>10</sup>

Thus, purgative behaviors such as self-induced vomiting or abuse of laxatives, diuretics and enemas commonly co-occur with the dietary restriction, especially if the individual was previously overweight. The body image concerns seen in this patient population substantially exceed the typical preoccupation with body image seen in adolescents and young adults. Additionally, as the disorder progresses it becomes all-consuming, requiring more creative steps to be taken to disguise the disorder, which often culminates in social isolation.<sup>11</sup>

Similar to other conditions that may cause physician impairment, anorexia nervosa is a chronic disease characterized by exacerbations under stress, and results in behavioral dysfunction, cognitive limitations and medical complications (Table 17.1). There are also additional complications if the patient with anorexia nervosa binges or purges.<sup>11</sup> Particular note should be paid to cardiovascular complications since these are implicated in mortality. Abnormal neuroimaging is found in over half of individuals diagnosed with anorexia nervosa and persistent deficits on neuropsychological testing have also been consistently observed.<sup>12</sup> Thus, the comprehensive toll of anorexia nervosa on the mind and body means that the disorder has the potential to impair a physician’s ability to carry out professional responsibilities. Further compounding the picture is the fact that anorexia is recalcitrant.

The medical literature is surprisingly silent on the prevalence of eating disorders among physicians, especially in regards to anorexia nervosa. This leads individuals interested in the topic to have to extrapolate from available data that have focused on medical students and their potential disturbances in eating-related behaviors and

**Table 17.1** Medical complications of anorexia nervosa

Systemic	Hypotension Bradycardia (often <30) Hypothermia
Dermatologic	Yellowish discoloration (hypercarotenemia) Dry skin (xerosis) Fine hairs on the face and arms (lanugo) Brittle nails Hair loss (alopecia)
Cardiovascular	Blue tinge to hands and feet (acrocyanosis) Reduced heart muscle mass Mitral valve prolapse QT interval prolongation
Hematological	Neutropenia Anemia Thrombocytopenia
Endocrine/metabolic	Electrolyte abnormalities Hypoglycemia and disturbances of insulin metabolism Thyroid abnormalities Disturbances of steroid metabolism Infertility
Neurological	Osteopenia and osteoporosis Reversible cortical atrophy Ventricular enlargement Peripheral neuropathy
Gastrointestinal (effects of self-induced vomiting)	Gastric dilation (leading to abdominal pain and bloating) Gastric rupture Esophagitis Gastrointestinal bleeding
Gastrointestinal (effects of laxative abuse)	Aspiration pneumonia Chronic severe constipation Hemorrhoids Rectal prolapse

attitudes. These studies typically measure eating disorder predispositions, based on preoccupation with eating and weight as reflected in scores above 20 on the Eating Attitudes Test–26 (EAT-26). Recent studies of this type have noted eating disorder predispositions in 9–12% of medical students at European universities and up to 20% of medical students in Pakistan.<sup>13–14</sup> Other studies in European and American medical student populations have yielded similar percentages of persons at risk.<sup>15–16</sup> In each of these studies when elevated scores did occur, elevations were noted predominantly in women with low body-mass indexes (BMIs). Additionally, an older study with medical students, but the only one of its kind, noted that the prevalence of eating disorder predispositions in medical students did not seem to increase with increasing responsibility.<sup>17</sup>

Although these data would imply that female medical students and the practicing physicians they ultimately become might exhibit a relatively high rate of disturbed beliefs and behaviors related to weight and eating, it still remains unclear

how many would qualify for a clinical diagnosis of an eating disorder, especially one as severe as anorexia nervosa. Underreporting may also occur because an eating disorder, such as anorexia nervosa, is not viewed as a problem to the afflicted clinician and, especially milder manifestations of the disorder are easily missed by peers and other observers. Subsequently, the only conclusion that can be drawn is that it is likely that these disorders occur with some frequency in practicing physicians given their prevalence in the population as a whole, the elevated prevalence of eating disorder predispositions in medical students and the comorbid characteristics that lead one to excel as a physician and to develop an eating disorder, e.g., striving for perfection. However, medical review boards generally do not monitor for eating disorders, although one such program, i.e., the New South Wales Board in Australia, intervenes when a potential or practicing physician's BMI falls below  $17.5 \text{ kg/m}^2$ .<sup>18</sup>

### **Anorexia Nervosa: A Three World View**

In essence, probably no disorder epitomizes the dilemmas created by the Three World view<sup>19</sup> more than anorexia nervosa. The early onset, longevity and life-threatening and costly nature of the disorder means that attending to the clinical needs of this population within the operational and financial limitations of most systems becomes virtually impossible. These complexities are only magnified when an impaired professional is the identified patient.

While current estimates suggest a prevalence rate of 0.5% for anorexia nervosa,<sup>9</sup> the incidence of the disorder has steadily increased over the last few decades, with current lifetime prevalence rates ranging from 0.5 to 3.7%. The early onset, typically between ages 12 and 25,<sup>10</sup> and the intractable nature of the disorder poses clinical, operational and economic treatment challenges. Comorbid diagnoses of major depression, dysthymia and obsessive-compulsive disorder are common,<sup>20</sup> increasing the challenges of adequate care. And, the stakes are high as the mortality rates for anorexia nervosa are the highest of any psychiatric disorder,<sup>21</sup> owing to deaths from arrhythmias, inanition, infection, hypothermia and suicide.

The medical complications of severe anorexia nervosa (Table 17.1) alone place a strain on the financial resources available to this patient population.<sup>11</sup> And, there is additional overlap between complications of anorexia nervosa and bulimia nervosa to the extent that the patient with anorexia nervosa binges or purges. Particular note should be paid to the clinical demands and costs associated with cardiovascular complications since these are implicated in mortality due to visceral protein depletion and prolongation of the QT interval predisposing individuals to dangerous and potentially fatal arrhythmias.<sup>22</sup> This conduction delay is accentuated by drugs used to treat the psychological symptoms of the disorder such as tricyclic antidepressants, neuroleptics and other psychotropic

medications and the inevitable electrolyte disturbances (i.e., low potassium, low sodium, low phosphate, acid–base disturbances) that accompany the disorder.

Additionally, to date no one type of psychosocial intervention has been shown to be superior in treating anorexia nervosa.<sup>12</sup> Lengthy and costly hospitalizations often result in temporary improvements but high relapse rates. Therapy approaches, whether inpatient or outpatient, need to utilize a combination of psychodynamic, supportive and cognitive-behavioral techniques because of the complexity of anorexia nervosa. Early interventions must address patient education, help patients deal with weight gain and body image changes, provide support to patients and families and utilize behavioral approaches; therefore, sessions are frequent and lengthy. Once the patient's nutritional status has been restored, long-term psychotherapy utilizing a cognitive behavioral approach<sup>23</sup> is still needed to address healthy ways to achieve a sense of control and self-worth, skills deficits (e.g., lack of assertiveness, poor problem solving, limited communication) and poor emotional expression as a high percentage of patients with anorexia nervosa are alexithymic.<sup>24</sup>

The psychological and medical co-management of the patient with an eating disorder requires close collaboration and communication between eating disorder specialists (often psychologists or psychiatrists), physicians and nutritionists. The current structure of health care does not facilitate this.<sup>25</sup> Barriers include differences in theoretical orientations, lack of a common language, different practice styles, different problem-solving styles and varying expectations for assessment and treatment. Other potential barriers may include lack of proximity of providers and insurance reimbursement issue.

When these barriers are surmountable there are still obstacles created by poor “mental health literacy” (MHL), namely, the “knowledge and beliefs about mental disorders which aid their recognition, management or prevention.”<sup>26</sup> When there is a lack of MHL regarding eating disorders, efficacious treatment is inhibited because professionals do not have the knowledge base needed to accurately diagnose and treat these conditions.<sup>27</sup> Surveys of primary care practitioners have suggested that poor MHL of eating disorders in general<sup>28–32</sup> is commonplace, and thus the assumption can be made that MHL regarding anorexia nervosa is even rarer given the complexities associated with diagnosis and treatment of the condition.

Concerns and conflict about clinical accountability may also arise. Ideally, some of these barriers will be reduced in the future through joint training programs and changes in health care delivery and reimbursement. For the present, joint management of eating disorder patients requires flexibility and commitment to the interdisciplinary model of care.

## Julie

Please note that identifying information has been altered owing to the sensitive nature of a case study, especially one of a practicing physician, but the details are in keeping with the actual cases of anorexia nervosa treated by the authors.

## *Referral Details*

In keeping with the philosophy that impaired physicians need resources, many medical schools have established intervention programs for medical students and residents which rely on trainees and faculty to police impairment. Eastern Virginia Medical School (EVMS) created such a program called the Phoenix Assistance and Intervention Program (Phoenix). Phoenix is a network of EVMS full-time and community faculty and EVMS students who are tasked with providing trainees with support and resources to maintain well-being and to intervene with impaired trainees. Many trainees self-select to contact Phoenix for interventions for depression, anxiety, stress and other difficulties. However, often Phoenix intervenes in situations where denial is prominent, e.g., addiction, or the level of distress experienced is impairing the trainee's judgment and performance, e.g., depression.

Julie was referred for collaborative care by Phoenix following an intervention. Her case was somewhat atypical and there was some dissension about whether an intervention was warranted. Julie was already underweight at the time she began her residency in emergency medicine. As residency represents one of the most intense physician training periods and is highly stressful owing to the long hours and rapid acceleration in clinical care responsibilities, a physician with anorexia nervosa would be at risk for relapse during residency. During her first year of residency, her academic and clinical performances were outstanding but her weight gradually decreased further. It was undeniable that she was malnourished. She was also socially isolated from her peers. Faculty, other residents and patients attributed her physical appearance to an undisclosed medical problem and felt uncomfortable prying. However, a few of her peers were suspicious that the weight loss resulted from an eating disorder given the frequency of her exercising, her avoidance of eating-related situations and her lack of awareness about her emaciated state. Therefore, Phoenix identified a primary care physician and a psychologist with expertise in eating disorders to consult with them about how to proceed.

The consultants began by explaining to the residency faculty that with dieting becoming the norm, physicians often discount the possibility of eating disorders, and seek medical explanations when severe weight loss, signs of vomiting or gastrointestinal distress are present.<sup>33</sup> The message was sent that a delay in care increases medical complications, mortality and the likelihood of a less favorable prognosis.

Subsequently, a carefully crafted intervention was designed. Julie was asked to attend a meeting with the residency director without forewarning about the meeting's purpose. When Julie arrived at the meeting a Phoenix representative, the residency director, two of Julie's peers who could provide specific details about her behavior, and the consultants Phoenix had identified as a resource were waiting for her. The health care team explained that it was their impression that Julie had an eating disorder and needed assistance. Julie denied that she had a problem and pointed to her exemplary evaluations as evidence of her success as a resident. Despite her denial Julie was asked to comply with a medical, psychological and nutritional evaluation to determine whether she had an eating disorder. She was also informed that if she would not she would be placed on a leave of absence from residency

until her apparent nutritional deficiencies were addressed because the intervention team was concerned that cognitive deficits created by malnourishment could impair her clinical judgment.

To further convince Julie to act in her own best interest her role as a physician was discussed. The team explained that her treatment would enhance her potential to be an asset to the emergency department and an effective resource for the community. It was underscored that female emergency physicians generally report greater knowledge about health promotion, spend more time with their patients in the emergency setting and engage in more health-promotion counseling than do their male counterparts (see a recent study by Rondeau et al.<sup>34</sup> for data to support this assertion). The intervention team underscored how it was difficult for Julie to effectively practice health promotion for her patients in her current physical state.

### *Julie's Assessment*

Because eating disorders are best viewed as clinical syndromes owing to their diverse determinants and various courses, each individual with an eating disorder displays an idiosyncratic collection of beliefs and behaviors. Therefore, Julie completed a medical evaluation, nutritional consultation and a psychological evaluation that consisted of a clinical interview with Julie that was supplemented by data from the Eating Disorder Inventory–2 (EDI-2).

At the time of the intervention Julie was 27 years old. She was a single, Caucasian female, 5' 6" and weighed 88 lb (a BMI of 14.2 kg/m<sup>2</sup>). She was raised in an intact family, the youngest of three siblings. Her father was a physician and her mother was a homemaker. The presenting issues which were most apparent in Julie's case included severe malnourishment, amenorrhea, food obsessions, excessive exercise, depressed and irritable mood, and denial about the severity of her problems. Further evaluation suggested that Julie was also experiencing anhedonia, decreased self confidence, decreased energy and sleep, and impaired concentration. Julie had no known medical concerns that were unrelated to her anorexia nervosa. She had a history of a broken collar bone from a basketball injury, to be described later. She took a daily vitamin and Tums to increase her calcium intake. There was no known family history of serious medical problems, mental illness or substance abuse.

Julie was considerably underweight and appeared pale and malnourished. Her skin and hair appeared dry. She described her mood as fine but her affect was congruent with a significant degree of depression, irritability, and anxiety. She often would not respond to questions and acknowledged that she was only participating in outpatient consultation to remain a resident and to avoid an inpatient hospitalization. Her thought content was overly focused on weight, food and body image issues. Her judgment appeared impaired especially in relationship to her eating behavior and she demonstrated poor insight about her eating disorder. She was willing to discuss general issues but would become reticent to speak when questions about eating, weight or body image were asked.

The psychological evaluation yielded the following information. Julie perceived her early home life as a generally safe environment. She described a tense relationship with her mother because her mother had attempted to force her to eat and get treatment during high school and had recently expressed new concerns about Julie's health. She also felt that her mother had been generally controlling. She described her father as rarely emotionally available to her and stated that she and he both rarely talked to others about their private thoughts or feelings. She believed that her father had focused on the importance of excelling academically and in sports. Julie described her relationship with her brother as close. Julie described herself as a high achiever, indicating that she had always focused on academic subjects and sports. She felt that as a child and adolescent she had strong peer relationships.

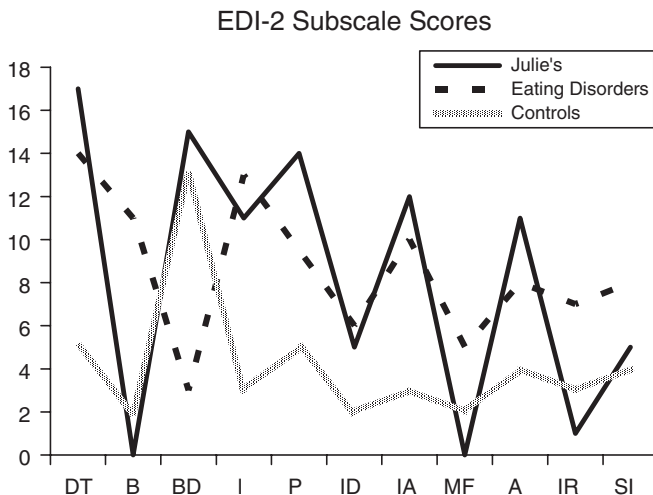
Prior to the tenth grade Julie was always a thin, highly active individual who excelled at school and sports. In the tenth grade she decided to excel at basketball and practiced vigilantly. However, in the fall of that year she broke her collar bone during a basketball match and had to discontinue the sport and could not actively exercise as she had before. She became increasingly restrictive, which led to a significant amount of weight loss. Julie's weight was 113lb before she began practicing intensely for basketball (she was already 5'4") prior to this significant weight loss. By the spring of the following year Julie's weight fell to 71.5lb and she was medically hospitalized. While Julie's weight improved and her status stabilized she never again had a weight within a healthy weight range for her height and Julie has not had a menstrual cycle since her original weight loss.

Julie recognized that during her medical school education and residency she would become easily frustrated if she did not excel. She talked about being preoccupied with restricting her eating and a desire to exercise. Her social support system was limited, growing increasingly smaller over the last year, which she attributed to the fact that her interests were different from those of most of her peers.

On the EDI-2 Julie obtained scores which reflected denial or minimization of her problem (Fig. 17.1). This was consistent with her clinical interview which suggested an overall defensive stance. With the exception of acknowledging a high drive for thinness, she denied even typical, expected levels of body dissatisfaction. She did, however, admit to the expected degree of non-body related self-doubts for women of her age without any eating-related difficulties. This minimization seen on the EDI-2 profile was consistent with the degree of denial about the seriousness of her problems and did not likely reflect a deliberate attempt on her part to deceive the evaluator. Rather, this profile was consistent with a lack of insight about her eating disorder.

### ***Julie's Treatment***

Because of the egosyntonic nature of anorexia nervosa the importance of relying on objective outcome measures in Julie's case was clear. She and her residency director



**Fig. 17.1** Julie’s scores on the Eating Disorders Inventory–2 (*EDI-2*) compared with expected scores for patients with eating disorders and controls. *DT* drive for thinness, *B* bulimia, *BD* body dissatisfaction, *I* ineffectiveness, *P* perfectionism, *ID* interpersonal distrust, *IA* interoceptive awareness, *MF* maturity fears, *A* ascetism, *IR* impulse regulation, *SI* social introversion

were told from the onset that it was the consulting treatment team’s opinion that she had anorexia nervosa and that an incremental treatment approach was recommended. Given her BMI at the time of evaluation, it was recommended that she participate in an inpatient program until a reasonable degree of weight restoration was achieved. She was told that the length of the hospitalization and aftercare recommendations would be determined by her inpatient treatment team. She was informed that either during her hospitalization or after her discharge a BMI of 17.5 kg/m<sup>2</sup> would need to be reached to return to clinical practice and additionally that she would need to make a commitment to remain actively engaged in her treatment. Lastly, she was also informed that if her BMI fell below 16 kg/m<sup>2</sup> after her release to residency training suspension from clinical practice would be required again. These parameters allowed her residency program and treating professionals to offset the likelihood that there would be a significant difference between Julie’s view of her functioning and the views of her treatment team. These parameters were also set as typically it would be recommended that a patient discharged from inpatient treatment for anorexia nervosa take a period of extended leave from occupational duties, but Julie did not want to consider this option.

Julie participated in an intensive inpatient program for professionals with an eating disorder for 4 weeks. During her inpatient treatment rapid feeding was avoided to decrease the potential for marked fluid retention, which could precipitate congestive heart failure; unnecessary abdominal pain, bloating, constipation and acute bowel obstruction; side effects such as acne and breast tenderness; or a refeeding syndrome, a potentially catastrophic complication resulting from



refeeding-induced hypophosphatemia that can produce cardiac arrest and delirium. In addition to the focus on nutritional intake an interdisciplinary approach was used to address the psychological issues related to anorexia nervosa. Although psychotropic medications are not routinely prescribed to severely malnourished patients with anorexia nervosa owing to increased risk of side effects, these medications can be useful in less severe cases to enhance outcome. She was started on an antidepressant, 40 mg fluoxetine, after a modest weight gain in the hospital and it proved useful in regards to Julie's comorbid depression and obsessive-compulsive traits. Julie then participated in a partial hospitalization program for 2 weeks prior to being discharged to return home.

When released to outpatient care Julie's BMI was 16, Julie opted to see the treatment providers who had conducted her initial consultation. Upon her discharge, established standards for nutritional rehabilitation were used to define a healthy target weight range and rates of controlled weight gain (e.g., 0.5–1 lb/week)<sup>35</sup> were maintained. Subsequently, Julie was also asked to monitor her daily intake and to discuss it with a nutritionist regularly after her discharge. Julie was required to meet with her physician weekly. At the initial evaluation an electrocardiogram was obtained to evaluate the QT interval since QT prolongation is a complication of anorexia nervosa, is a cause of sudden death and can be increased by drug effects, including those of tricyclic antidepressants. Her general medical monitoring included assessment of vital signs and observation for edema, rapid weight gain, congestive heart failure and gastrointestinal and neurological symptoms. Management strategies also included monitoring of serum electrolytes (sodium, potassium, chloride, bicarbonate, calcium, phosphorus and magnesium), and repletion as indicated. Julie was encouraged to take calcium, 1,000–1,500 mg/day, and a multivitamin with 400 IU or more of vitamin D intake. Metoclopramide and stool softeners were also used to offset bloating and abdominal cramps. Julie also was referred to a psychiatrist to oversee her psychotropic medications.

Simultaneously, Julie met twice a week with the psychologist, an eating disorder specialist, to address her current level of anxiety and inability to eat. A specific behavioral contract was established with Julie regarding a minimally acceptable weight, a target weight range she should strive to meet and the amount of weight she should gain weekly/monthly, and included details about the weight she would need to establish to return to residency. This contract also outlined other goals regarding honesty, commitment to recovery and skills needed to recover (e.g., positive self-care, assertiveness, emotional awareness, relaxation, ability to self-soothe when negative emotions occurred). Cognitive behavioral therapy techniques were generally employed and family therapy sessions were held as needed.

Careful coordination of her care between her primary care physician, nutritionist, psychologist and psychiatrist occurred regularly. Throughout treatment Julie realized that immediate hospitalization would be warranted if there was any deterioration in her status.

## **Julie's Outcome: A Three World Perspective**

### *Clinical Sphere*

During her participation in treatment Julie's weight gradually stabilized (average BMI 18.5kg/m<sup>2</sup>) and she was able to complete her residency. She attended all of her required sessions with her primary care physician, psychiatrist, nutritionist and psychologist but initially attempted to distort details about her food consumption, exercise level and weight. For example, when weighed at the psychologist's office (with her back to the scale so that she could not see the weight) she would hide items in her clothing to create a higher weight. Additionally, she would turn in food monitoring forms to her nutritionist that detailed compliance with her meal plan but later acknowledged that she had either not eaten or only partially eaten the items that she had listed on the forms. Also, she would complete cognitive behavioral homework assignments geared towards helping her to combat her eating disorder from an intellectual stance. In other words she would write what she thought others would want her to think in response to her eating-disordered thoughts but when challenged would admit that the new thoughts she had written had no believability to her.

As treatment progressed, Julie was able to more actively participate. Over time she accepted the concept that she had an eating disorder and that she had to be proactive to counter eating-disordered thoughts and behaviors. She was encouraged to see her treatment providers as resources to help her offset her eating disorder rather than as individuals mandated to oversee her recovery or professionals trying to control her. She was encouraged to bring feared foods into her therapy sessions and over time ate them more readily and openly discussed the fears of weight gain created by their consumption. This systematic desensitization paradigm allowed her to increase her overall nutritional intake and nutritional variety. After several months of therapy she agreed to allow her exercise to be determined on a random basis (i.e., each morning she would draw out a ticket from a jar that would identify if that was a day she could exercise or not) to decrease the opportunity to use activity to compensate for nutritional intake.

In the later phases of treatment Julie's ability to identify her emotions and to utilize coping strategies, e.g., assertiveness, relaxation, distraction and problem solving, improved. She was able to reenter into social activities, at first with high levels of anxiety, but over time she felt more socially comfortable. In her family sessions Julie was able to resolve many of the relationship issues which had preceded as well as stemmed from her anorexia nervosa. Lastly, her body image preoccupation and dissatisfaction improved through a series of body image exercises in which she identified triggers for body discontent, developed behavioral strategies for coping with body image related anxiety and engaged in cognitive restructuring exercises to offset disparaging self-talk.

Treatment continued throughout Julie's entire residency although she was only mandated to participate in treatment for the 10 months after she had been identified

by Phoenix. Initially, 4–5 h a week was spent in sessions with her treatment team and she was also encouraged to attend a local eating disorder support group. As she showed progress, the number of sessions recommended weekly decreased. Upon completion of her residency, Julie's treatment team encouraged her to continue treatment. The pros and cons of continued treatment were discussed and despite the fact that she acknowledged therapy would be of benefit to her she did not comply with appointments. Within 4 months of beginning her career her weight had drastically plummeted and she was actively reengaged in her eating disorder. Julie recognized that the stress of her occupation had led her to revert to destructive behaviors and contacted her psychologist and asked to reengage in treatment with the entire treatment team. After she had reentered treatment for 4 months, her weight restabilized. Julie then committed to weekly attendance at the eating disorder support group, monthly therapy sessions, quarterly check-ins with the nutritionist and follow-up with her primary care physician and psychiatrist as needed. Her status remains stable as of the writing of this case study.

### *Administrative Sphere*

As described earlier the psychological and medical co-management of a patient with an eating disorder requires close collaboration and communication between all treatment providers involved. Although the typical structure of health care does not facilitate this, in the current case the successful implementation of treatment of Julie was achieved through flexibility and commitment to an interdisciplinary model of care. The treatment providers were also aware of the complexities of treating an impaired professional and the need to therapeutically utilize the power provided by an overseeing entity such as Phoenix to motivate a patient. Therefore, the treatment team designated a member, i.e., the psychologist, to serve as a coordinator of the process who ensured that clinical information was shared across treatment providers and that progress reports were made to Julie's residency director. Releases of information to allow these communications to transpire were obtained at the onset of treatment and updated as needed.

The case of an impaired physician also has administrative issues aside from the clinical service delivery administrative dilemmas. Given that anorexia nervosa may yield subtle cognitive dysfunction, mood instability and medical effects that detract from clinical practice, the public must be protected. Subsequently, to balance what was in Julie's best interest while protecting the public, treatment goals were established which relied on objective outcome measures (e.g., BMI and work-performance parameters). This led to setting the criteria that if Julie's BMI fell below 17.5 kg/m<sup>2</sup> she would remain in clinical practice because there were no inherent risks to patients, but that if her BMI fell below 16 kg/m<sup>2</sup> suspension from clinical practice would be required. While other programs<sup>18</sup> have established a BMI of less than 15 kg/m<sup>2</sup> as a cutoff for suspension from practice, the consultants in Julie's case felt that her clinical history, her reluctance to take an extended leave of absence after

her inpatient hospitalization and her level of duties warranted establishment of a more stringent criterion.

Another administrative step related to addressing the legal issues associated with the identification of an impaired professional and the degree of influence the institution and treatment consultants had to require treatment at different phases. Therefore, a memorandum of agreement was written between Julie and her residency program that outlined what was expected from the parties involved and included an explanation of the type of information that her treatment providers could and could not provide to her residency director. Information that was released to her program only included details regarding compliance with treatment, BMIs and progress.

### ***Financial Sphere***

The treatment of anorexia nervosa is an expensive endeavor. Subsequently, many insurers have limited the amount of treatment provided for patients with the condition because of the high associated costs and lack of clearly documented efficacy for treatment. However, cost-modeling analysis has supported the incremental cost-effectiveness of treating anorexia nervosa. In fact, data taking into account age of onset, life expectancy and disease-associated mortality and assuming an approach such as that used in Julie's situation have yielded a cost per year of life saved of \$30,180.<sup>36</sup>

In the case of a physician with an eating disorder the financial savings associated with effective treatment for the individual and society as a whole are even greater. These savings are reflected in the cost of training, the services provided during training and the patients served once training has been completed. In terms of the cost of training, when tuition and fees, living expenses, books and equipment are considered the estimated cost of medical school over 4 years of attendance is about \$140,000 for public schools and \$225,000 for private schools.<sup>37</sup> As part of their training, physicians who are completing residency are considered by most hospitals as an inexpensive source of labor. This is especially applicable in terms of caring for patients who are poor and uninsured. Additionally, the World Health Organization predicts an anticipated shortage of almost 4.3 million health care providers and as expected the shortage is and will continue to be greatest in the poorest countries and most rural areas.<sup>38</sup> Nationally, these same concerns regarding a future shortage of health care professionals are being expressed by the American Medical Association and the Association of American Medical Colleges,<sup>39</sup> making the loss of one physician from anorexia nervosa meaningful.

### **Conclusions**

Confronting a colleague or trainee in the health care profession about impairment is generally anxiety-provoking for all involved. However, intervening is unarguably a necessary step and interdisciplinary cooperation is vital. Successful intervention

allows professionals to maintain their professional licensure, clinical privileges and inclusion in managed care or health maintenance organization provider panels. The rewards of a thoughtfully constructed intervention are enhanced outcomes for the individual and all of their future patients and society as a whole. A listing of intervention programs for impaired physicians within the USA can be found at <http://www.fsphp.org>.

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## **Chapter 18**

# **Collaborative Care to Heal Gender Relations Across Generations: A Couple of Trainees Watch a Couple of Experts Treat a Couple of Couples**

**Tziporah Rosenberg, Daniel Mullin, Susan H. McDaniel, and Kevin Fiscella**

We sat behind the one-way mirror watching a couple in pain. Helen was in her early 60s, frail on the outside but with an obvious inner strength. She was hunched slightly in the chair, visibly uncomfortable, holding ice packs on her neck. She struggled to turn her head to look at her husband, Elliot, while he talked, her range of motion severely constrained by chronic, intractable pain in her neck and back. Elliott, in his late 60s, sat next to her. While both agreed he was the healthier and stronger of the two, both also quietly agreed he was suffering, vulnerable, and in pain himself. Elliott sat tall in his chair, active and expressive with his hands while he spoke. “Do they cut the nerve or don’t they?” he asked to no one in particular, seeming almost impervious. “I’m overwhelmed...it’s like I’m working two jobs, you know?” The couple seemed comfortable in the therapy room; it was a familiar place with familiar, supportive listeners.

We (T.R. and D.M.) are postdoctoral fellows in medical family therapy and primary care family psychology, respectively. We both completed internships in primary care settings, and pursued fellowships at the University of Rochester to receive additional training in collaborative care with the faculties of the Departments of Family Medicine, Psychiatry, and Medicine. We were invited by an expert team of collaborative cotherapists to observe their work with two sets of couples around a complex matrix of biopsychosocial issues. Though this was not the beginning of therapy, which had started some 14 years earlier, it was also not the end. As observers, we witnessed firsthand the value of transgenerational family treatment delivered by a family physician–family psychologist pair, focusing on physical, behavioral, and relational health issues.

This chapter represents our observations, a case study of two generations of couples from the same family, struggling with the same themes of somatic complaints, mood disorders, family loyalty, and role negotiations as couples. We focus on the transgenerational transmission of somatizing issues and also of gender roles and expectations, roles and responsibilities. We will also highlight the unique structure of the therapies. Both couples were treated by the same cotherapists: Susan McDaniel, a psychologist with training in family therapy and collaborative care, and Kevin Fiscella, a family physician with training in family therapy. Their collaboration represented a balance in motion for these two couples with complex physical, emotional, and relational health issues.

## Initial Presentation to Treatment

Elliott and Helen first presented for therapy after a referral from Helen's neurologist. She was experiencing seizures of unknown origin, and underwent a series of evaluations and tests before her in-hospital care team concluded that they were nonelectrical in nature. Nonelectrical, or psychogenic, seizures often resemble epileptic seizures, and may include symptoms such as loss of consciousness, twitching or jerking, and unusual emotional states, such as intense feelings of fear or déjà vu.<sup>1</sup> While these episodes may be difficult to distinguish from true epileptic seizures, psychogenic seizures are not associated with electrical abnormalities in the brain. Long-term monitoring with videotaping and electroencephalogram can typically clarify the diagnosis of psychogenic seizures, after which anticonvulsive medications may be discontinued and psychotherapy added to address the underlying psychological issues that may be triggering the episodes. In many cases patients experiencing psychogenic seizures have unresolved psychic or interpersonal conflicts which are expressed physically in the form of psychogenic seizures or other physiological episodes.<sup>2</sup>

The family's neurologist contacted Susan McDaniel after reading *Medical Family Therapy*<sup>3</sup>; she was relatively easy to find, at the other end of the medical center, on sabbatical conducting a study on epileptic seizures and psychogenic seizures. McDaniel had already established a positive collaborative relationship with the neurology team, and was an obvious choice for the neurologist and the family, both of whom wanted nothing more than a resolution of these symptoms. McDaniel recalled later, "Helen was surprisingly open to the idea that her episodes were related to stress. She jumped on the chance to bring her husband into therapy. Turns out she had hoped to do so for close to 30 years." The neurologist told Helen that the stress likely triggering these episodes was rooted in family and marital difficulties, so Helen readily accepted the referral.

## Cotherapists and Collaboration

Dr. McDaniel accepted the case and held the first session with Elliott and Helen, two of their adult children in their 20s, and the referring neurologist, who joined the meeting for the last 15 min. The session's content focused on Helen's seizures, joining with the family, and listening to their concerns. To Dr. McDaniel's surprise, both Helen and her daughter, Sylvia, clearly identified Elliott's depression as a major problem.

Years later, after we observed from behind the mirror what seemed to be a natural and balanced team of cotherapists, we learned that the original treatment did not begin with both of them in the room. Dr. McDaniel shared that she knew almost instantly that she wanted another therapist in the room, and that Dr. Kevin Fiscella,



whom she had trained in family therapy, would be a good choice. She recalled her own reactions in that initial session to what she describes now as the couple's rigid gender roles. Her countertransference reaction to Elliott, she worried, was a potential barrier to her ability to validate and support them both in a way that would help them resolve the problems fueling the psychogenic seizures. She anticipated that Dr. Fiscella's medical expertise and calm demeanor would help balance the treatment team and address Elliott's concerns.

Dr. McDaniel reportedly took the lead initially with Elliott and Helen, though Dr. Fiscella's participation was critical. It soon became evident that their teamwork made the work more efficient and effective. Dr. McDaniel supported and challenged Helen around her health and family difficulties, while Dr. Fiscella could "take on" Elliott, particularly around issues related to fathering, showing support to his wife, and self-soothing during emotionally intense moments.

## **Beginning the Work by Ending the Seizures**

Elliott's and Helen's initial presentation was for psychogenic seizures, though the intensity of their marital conflict was palpable. The first 20 sessions over 8 months of intensive treatment focused on increasing the couple's effectiveness in working together, decreasing Elliott's criticism and hostility, increasing Helen's assertiveness, labeling Elliott's "moods" as depression, and initiating antidepressant medication with Elliott. The cotherapy team directly addressed the emotional abuse Elliott perpetuated, and challenged Helen on her indirectly hostile responses, all of which Dr. McDaniel and Dr. Fiscella believed contributed to the seizures. Dr. Fiscella, in particular, was able to convince Elliott that antidepressants were a wise medical intervention for his seasonal depression; even early in treatment, Elliott respected Dr. Fiscella's expertise, and eventually heeded his advice.

During this initial phase of treatment, the cotherapy team explored the couple's families of origin through stories and constructing their genogram (Fig. 18.1). They discovered that Elliott's and Helen's roles were essentially established long before they even met. Elliott came from an English background. He was the oldest of two children, and the only male. His father died on the operating table when Elliott was in his early 20s, leaving him with the responsibility of helping to care for the family without a role model for how to be an effective father and partner, and without validation of the efforts he did make. He was clearly accustomed to being a provider, but also to being taken care of by others around him.

Helen was from a traditional Greek family, the second of two children, and the only female. She quickly emerged as the caretaker in her family, joining, and in some cases, taking over for her mother who, herself, had serious health problems. She reported early in the treatment that her father had been placed in a psychiatric institution years prior, and that he was physically abusive to his wife and family. Helen was the only one in her family who visited him in the hospital, and continued

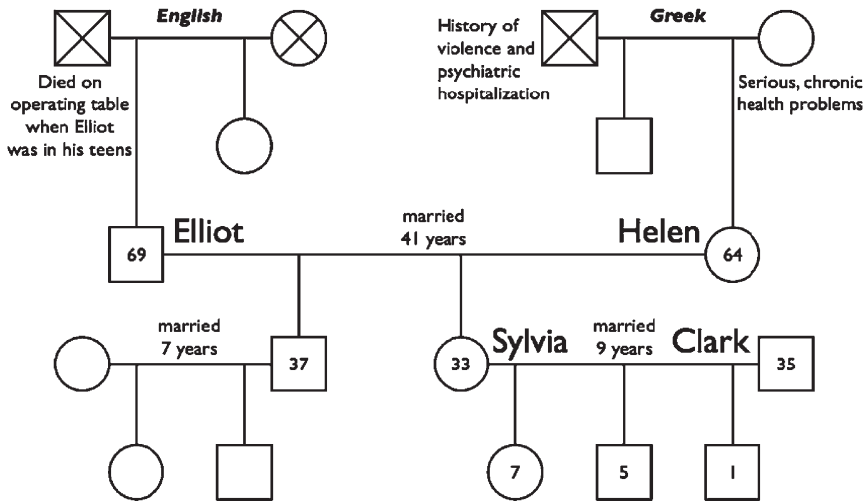


Fig. 18.1 Genogram

to care for him over the years. Through this family of origin work, Dr. Fiscella’s role shifted from medical expert to supportive and encouraging man. Dr. Fiscella was able to acknowledge Elliott’s strength, soften his angry expressions and reframe them as fear, vulnerability, and frustration; he was able to elicit Elliott’s emotional experience, validate and comfort him in ways that Dr. McDaniel could not. Elliott’s early loss of his own father created an opportunity for Dr. Fiscella to compassionately guide Elliott to more direct, gentle, and productive interactions with his wife. Dr. McDaniel, for her part, worked with Helen. She acknowledged Helen’s inherent capacity to care for others, while simultaneously encouraging her to express ambivalent and angry feelings and voice her own needs within her marriage.

### The Next Generation

Sylvia is Elliott and Helen’s only daughter, and their youngest child. While Dr. McDaniel met Sylvia at her parents’ initial session with the rest of her family, Sylvia and her husband did not engage in treatment, themselves, until just after her first child was born. She complained of severe postpartum insomnia and anxiety, both of which were impeding her ability to function as a wife, mother, and teacher. She and her husband, Clark, are both teachers, she in kindergarten and he at a community college. Clark was also quite athletic, participating in several seasonal sporting activities with friends and coaching youth teams at school.

As was the case with Helen and Elliott, Sylvia and Clark's division of household labor was formed around traditional gender roles. Sylvia was a full-time professional, not unlike her husband, and also a full-time mother. The brunt of responsibility for raising their children fell on her; like her mother, she took pride in it, and did it well. However, the couple experienced difficulties in negotiating how each partner could fulfill their parental and marital roles, while also securing enough personal and social time to spend outside the home. It was not uncommon to hear Sylvia's frustration with her active husband's weekends away, or Clark's quickness to placate her to diminish the intensity of their conflict. Her insomnia and anxiety eventually would prompt Clark to become temporarily more engaged, only to return to his usual pattern once marital tension had abated somewhat.

Sylvia and Clark, both in their 30s, were referred to Dr. McDaniel and Dr. Fiscella by Sylvia's parents for treatment of her sleep difficulties. At intake, she had been rarely sleeping more than 1–2h per night for approximately 6 weeks. Her primary care physician had tried various antidepressants which were only marginally effective in addressing her symptoms. Sylvia's insomnia was further complicated by having to awake regularly to care for the couple's 3-month-old child. She reported a history of insomnia under stress, with notable previous episodes, including during the summer before her wedding and during her college years. Helen attempted several times to get Sylvia into therapy for help with her sleep, to no avail. Sylvia also reported significant symptoms of anxiety, including daily episodes of panic and crying.

Dr. McDaniel and Dr. Fiscella's work with this couple also began with an exploration of the partners' families of origin and how those experiences shaped how the couple coped with medical and relationship difficulties. While the cotherapy team had already been working with Sylvia's parents, they continued to learn about the family through Sylvia's eyes, experiences, and stories. She described an important closeness with her mother (Helen), but also deep feelings of responsibility and guilt around that relationship. She functioned in a caretaking relationship with Helen similar to the kind that Helen had established with her own mother; Sylvia, as the only female among her siblings, "inherited" this role, just as her mother had in her family. She was challenged to balance the demands of a marriage, caring for two young children, and caring for her mother, whose physical health was steadily declining. Her family demands made the insomnia even more difficult to manage.

Clark was the eldest among five boys, born to parents who were also both schoolteachers. He described his mother as controlling, traditional, a woman who espoused "woman's work" but also quick to "get over" emotional challenges or hardships. She was a go-getter who was also spread thin with responsibilities. Her husband, Clark's father, died of lung cancer at age 33, when Clark was 10 years old. Clark's leniency and impulsivity counterbalanced his wife's sense of structure and regimen. His wife, Sylvia, suggested to Dr. McDaniel and Dr. Fiscella that Clark showed signs of attention deficit, though it had never been formally diagnosed.

Dr. McDaniel remarked early in treatment how much their marital interactions reminded her of those of Sylvia's parents. As we (T.R. and D.M.) observe Sylvia and Clark's sessions, we too have noticed similar themes of an overfunctioning wife and mother and a traditional, entitled husband. Sylvia did seem more ready to

label her frustration than her mother was early on. For his part, Clark, unlike Elliott, has still not recognized the need for him to be more proximally involved as a husband and father.

## **Illness as an Invitation To Change Traditional Gender Roles**

Illness had been a struggle in this extended family for at least two generations. But now, with the assistance of the partnership of a physician and a family therapist it was also an invitation to do and be something different. Elliott and Helen both came from families in which traditional gender roles were culturally reinforced and encouraged. They accepted these roles and enjoyed the safety and familiarity afforded them. Helen's chronic, progressive illnesses, especially after her psychogenic seizures, ultimately rendered her disabled and unable to perform her comfortable, caretaking role.

The psychogenic seizures resolved within the first 8 months of marital therapy, during which Elliott began a seasonal regimen of antidepressant medication following acknowledgment that his moods were worsening considerably during the winter. Seemingly, his medicine cured his wife's symptoms. In the years that followed, Helen developed an unfortunate series of serious medical problems, including multiple sclerosis, idiopathic pulmonary fibrosis, hypertension, and arthritis. She also developed debilitating chronic pain after she was injured falling down the stairs at her daughter's home. Both Dr. McDaniel and Dr. Fiscella agree that the most pivotal interventions of the marital therapy were in the first year of treatment when marital roles began to shift. For the first time, Elliott acknowledged that he too suffered from depression (rather than insisting that he was 100% healthy, in stark contrast to Helen) and initiating pharmacological treatment, beginning to assume accountability for his own insensitive behavior and emotional reactions. At the same time, Helen began to voice her own needs and began to stand up to her husband's critical remarks. Even they could not anticipate how critical this transformation would be for the family when Helen became incapacitated.

From the perspective of a recent graduate of a biopsychosocially oriented doctoral psychology program (D.M.), this early couples work was novel and elegant. While I had an appreciation for systems theory, it had never occurred to me that treating one partner with a selective serotonin reuptake inhibitor could provide relief of the other partner's seizures. Though this appeared on the surface to be a straightforward pharmacological intervention, it is unlikely that it would have been possible without the collaboration of the family physician and the family therapist. The couple, challenged with illness and isolated by gender roles, had to first accept that their suffering was connected. From there, it was a safe leap to understanding that their relief would also be connected.

The changes that Elliott and Helen were able to make in their first year of marital therapy laid the necessary foundation for them to face the hardship brought on by Helen's worsening health problems. The husband, who once prided himself on not

needing to get his own salt and pepper when seated at the dinner table, was now in charge of housekeeping and cooking for his wife. Elliott joked, "My regular cook is incapacitated." Helen's pain was abated only by sleep, which became increasingly infrequent and fragmented. The only control she retained, both seemed to agree, was whether and when she took her medications or kept her appointments, both points of increasing contention between the couple.

"We couldn't have predicted how important it would be to have a physician in this case," Dr. McDaniel reflected more than once, particularly after the couple's most recent sessions, which are largely focused on Helen's physical problems. Dr. Fiscella easily fills the role of expert physician, which seems both to ease Elliott and Helen's worries and uncertainties, and to validate their illness experience and the experience of other medical professionals charged with her care. While he is not their family physician, Dr. Fiscella naturally takes on responsibility as interpreter, decoding the medical news and information they receive elsewhere and helping them understand what it may mean for them. This intervention seems to us to have greatly increased the couple's ability to respond to medical issues and to ask for what they need from their health care providers.

We also continue to be impressed with Dr. Fiscella's ability to truly listen to Elliott and Helen, and to validate how difficult it is to struggle as they do with her illnesses and the changes illness has forced into their lives. The couple seem to appreciate this gift of understanding, which, unfortunately, is not ubiquitous in their interactions with medical providers.

Dr. McDaniel and Dr. Fiscella continually reflect on Elliott's and Helen's transformation. Though Elliott continues to occasionally "spout off" at his wife, he does this much less frequently and with much less intensity. He now acknowledges his inappropriate outbursts and apologizes, accepting that his reactions stem from the compound effect of his own depressed mood and fears around his wife's suffering. Helen comfortably calls her husband on his depressed mood, and in her own way tries to be accountable for the impact of her health on his. In many ways, the couple have successfully navigated a reassignment of roles. While for years Helen catered meticulously to Elliott's every need, now Elliott has become a tireless primary caretaker to Helen. The couple now reflect more balance, directness, and mutual understanding than existed at the start of treatment. They focus on the critical aspect of repair when they make a misstep. Elliott's softening and Helen's self-advocacy have shifted the "rules" for this couple, and have opened new possibilities for their interactions with each other and their response to new challenges.

The cotherapy team continues to encourage Elliott to model this new paradigm of maleness for his son-in-law. They continue to encourage him to provide paternal guidance to his son-in-law, including assuming greater family and marital responsibility. While this transformation for Clark and Sylvia is in its infancy, they are showing early signs of their own metamorphosis. Now they have three children, each with varying degrees of difficulties and special needs. Sylvia's natural tendency to overextend her caretaking to the point of exhaustion is still comfortable for their family, though in the most recent session, she demonstrated the ability to voice her opinion, set more limits, and request help from her husband.

## Key Interventions

In each of the therapies, we (T.R. and D.M.) identified several key interventions which seemed to drive the family's growth and progress. First, Dr. McDaniel and Dr. Fiscella adeptly modeled egalitarian roles between male and female participants in a working partnership. Dr. McDaniel, a clinical psychologist and Associate Chair of the Department of Family Medicine, represents a woman with strong leadership skills and authority. Dr. Fiscella, a family medicine physician and researcher, demonstrates the ability to validate, to empathize, to assume a nonreactive and nondefensive stance, and to show warmth. Together they model role flexibility and ease of negotiation between them, each taking the lead at different times, highlighting each other's strengths and demonstrating how to blend their professional cultural backgrounds in an effective and respectful way. They invite Elliott and Helen, as well as Sylvia and Clark, to consider a different way of being in their roles without giving up a fundamental sense of who they were in those roles.

Second, they quickly connect the physical and behavioral/emotional manifestations of "the problem." They demonstrate the ability to validate the very real and distressing physical symptoms (i.e., seizures, insomnia, chronic pain, panic), while also overtly connecting them with family stress and marital interactions. They enact a "both-and" perspective rather than an "either-or" one, acknowledging and addressing each biopsychosocial component in turn and recursively. In a family system that often seems to operate within an "either-or" paradigm, this intervention also models the possibility of a new way of being and doing. Dr. McDaniel, a psychologist, and Dr. Fiscella, a physician, embody the collaborative culture desperately needed by this family.

The most striking example of this intervention was the end of Helen's seizures. Family physician colleagues have shared that they often encounter patients who present with somatic and physical complaints with no obvious medical explanation. While they realize that the symptoms may be psychogenic in nature, they may not know how best to help the patients discover or resolve the underlying psychological or relationship dynamics that perpetuate them. Dr. McDaniel and Dr. Fiscella's identification of Elliott's emotional abuse was a critical first step in dismantling the seizures, which they interpreted as Helen's attempt to regain a sense of control and power amidst feelings of powerlessness in her marriage. The cotherapists observed Elliott's and Helen's dance of anger and hostility several times in the beginning of their marital work, and they responded quickly and consistently to offer them tools for engaging differently. The psychotherapy literature is replete with evidence that abuse, both historical and present, can trigger somatizing symptoms in those who experience it.<sup>1, 4-6</sup> Helen's experience of emotional abuse in her marriage likely perpetuated present-day reactions to the abuse she experienced in her family of origin, and made it that much more difficult for her to express her needs directly in a safe environment. Once the marital therapy had helped to create an environment with a more self-controlled and responsive partner, and once the abuse and Elliott's depression had been addressed, Helen's seizures stopped. She discovered other ways of more effectively communicating those needs.

## What We Are Learning as Trainees

While our training has already prepared us (T.R. and D.M.) to consider the psychosocial issues behind physical symptoms, we both have learned that including a primary care physician as part of the therapy team can not only save time but can also make psychosocial interventions more effective. Dr. Fiscella's partnership with Dr. McDaniel in each case increased the family's trust in both the medical and the behavioral health interventions, while reinforcing the inextricable connections among family, psyche, and soma.

By seeing multiple generations of the same family in simultaneous but separate therapies, we could see how family roles, patterns, and illness behavior are "inherited." While Dr. McDaniel and Dr. Fiscella continue to meet with both couples individually, the cotherapists are aware that the therapies play off of each other and reciprocally impact each other. This "extended family therapy" approach seems to us not unlike conducting individual sessions with members of the same couple, with the hope that intervention in one partner will effect a response in the other. We have not seen systems theory applied in quite this way before; we appreciate now the kind of change that can happen for family members who may not even be present in the same treatment room. The important lesson is that there are micro and macro systems operating in each presenting problem and collaborative interventions provide crucial opportunities to intervene simultaneously in both as they impact the same presenting problem. Amongst the four partners and across the generations over now 14 years of intermittent treatment, there evolved several "hidden patients,"<sup>7</sup> each of whom appears to be improving through the interconnected relational work. The coordination of care provided by the family therapy team revealed these hidden patients and made explicit both their roles in perpetuating the problem and their contributions to alleviating it.

Lastly, we recognize our (T.R. and D.M.) role as a fourth dyad in this complex therapeutic matrix, one that likewise bridges differences of ethnicity (Eastern European and Swedish/English/Irish/German), gender (female and male), and culture (Jewish/Eastern US and Catholic/Midwest US). While perhaps we share commonalities as mental health professionals, our training in family therapy and clinical psychology predisposes us to consider vastly different perspectives regarding this case. It is unclear to me (D.M.) whether an intrapsychic rather than a systems oriented approach to this case could have been successful in treating Helen or Sylvia, the "identified patients." Nevertheless, it is indisputable that the scope of this intervention has enabled change that could impact this family for generations. This perspective has had a profound impact that shifted my conceptualization of cases and techniques I might choose for treatment.

While my own (T.R.) training did emphasize the critical importance of family systems and relational work, observing the therapists' approach to care in this case has likewise challenged me to be mindful of how individual personality, styles, and motivations impact how these individuals relate with each other. Our conversations after observing these sessions have been tremendous learning opportunities for

both of us to understand how our own perspectives shape, and in some ways hinder, our vision for what may be most helpful. Dr. McDaniel and Dr. Fiscella's work invited us to try on the same "both-and" paradigm they modeled for Elliott and Helen, Clark and Sylvia.

## **Moving Forward**

Dr. McDaniel and Dr. Fiscella continue to meet with both couples every few months, focusing mainly on adjustment issues. Elliott and Helen's work mainly focuses on how they are using the skills they learned in therapy to negotiate the demands of multiple, progressive debilitating illnesses that brought Helen to what may be her last years. Elliott and Helen continue to pursue whatever medical interventions may decrease Helen's pain (mostly at Elliott's behest), and Dr. McDaniel and Dr. Fiscella continue to challenge the couple to maintain their focus on how they treat each other, in the face of feeling out of control and at the mercy of illness. While we are saddened by the tremendous struggle this couple continue to face in managing dialysis, experimental treatments for pain control, and the deleterious effects of chronic depression on their bodies, we are hopeful about how Elliott and Helen have responded to illness as if it is something for them to fight together rather than allowing it to pit them against each other. It is a reminder to us of the power of their early transformation, and the long-lasting effects of the marital therapy on the now-constant adjustments to illness and the ever-present nearness of death.

Clark and Sylvia persist in chipping away at what had been rigid gender roles. While their change has not garnered the same momentum as that of Sylvia's parents, they have made progress in how they acknowledge each other's needs, their own needs, and validate and express each. Sylvia no longer reports distressing insomnia, and she is becoming stronger in recognizing limits to her own resources, emotionally, physically, and otherwise. For his part, Clark has become increasingly participatory in parenting their three children, particularly when Sylvia is constrained by other responsibilities.

Dr. McDaniel and Dr. Fiscella continue to collaborate as cotherapists and colleagues, each recognizing the strengths and contributions of the other, in a culture of respect and openness. They maintain a balance reflective of this culture. Both in and out of session, they continue to model why this work is so critical, and how to do it well. As for us (T.R. and D.M.), we are actively engaged in learning about merging the practices of primary care medicine and psychotherapy, both by observing these cases and by practicing in the integrative and collaborative spirit of Dr. McDaniel and Dr. Fiscella's work with these families. As a couple of trainees watching a couple of experts treating a couple of couples, we are excited by the power of partnership within couples, between generations, and across professions.



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**Part V**  
**Specialty Mental Health Care to Medical**  
**Patients**

## **Chapter 19**

# **The Complex Orofacial Pain Patient: A Case for Collaboration Between the Orofacial Pain Dentist and the Clinical Health Psychologist**

**John L. Reeves II and Robert L. Merrill**

*“We are all in the same boat, in a stormy sea, and we owe each other a terrible loyalty.”*

*G. K. Chesterton (1874–1936)*

### **Aim**

This chapter presents an example of an integrated biopsychosocial collaborative relationship between a dentist board-certified in orofacial pain and a board-certified clinical health psychologist with advanced training in clinical psychopharmacology. The orofacial pain dentist and the clinical health psychologist collaborated in diagnosing and successfully treating a patient with complex chronic orofacial pain and excessive narcotic and benzodiazepine use. After reading this chapter the reader should have an appreciation of how utilizing an integrated collaborative biopsychosocial model results in a comprehensive treatment plan that guides a dynamic treatment process to optimize clinical outcome.

### **Introduction**

Perhaps no area in health care has witnessed the application of the collaborative model more than pain medicine. It is here that the standard of practice is defined as psychologists and pain medicine physicians partnering in an equal relationship to diagnose and treat chronic pain from a multidisciplinary perspective. The contributions that psychologists bring to the table are most noteworthy. It was the psychologist Ronald Melzack along with the late Patrick Wall who proposed the gate control theory of pain that revolutionized the field of pain.<sup>1</sup> Of particular importance, the gate control theory proposed neurophysiological mechanisms through which psychological factors and treatments affect the pain experience. Although on the basis of the most recent research this model has shortcomings,

no other model has had its heuristic value. Wilbert Fordyce<sup>2</sup> introduced the idea that pain is behavior and like all behaviors is subject to the influences of environmental contingencies. This led to the development of behavior-based pain rehabilitation programs targeting operant pain behaviors and a reconceptualization of traditional mind-body thinking that had previously dominated the field of pain management. More recently psychologists have described cognitive mechanisms that mediate the pain experience and have developed very effective cognitive-behavioral interventions that target pain-related cognitions and behaviors.<sup>3</sup> In addition, psychologists are increasingly gaining postdoctoral training in clinical psychopharmacology. With prescriptive authority for psychologists gaining momentum this will dramatically expand the scope of the collaborative relationship and enhance continuity of patient care.<sup>4</sup> Clinical health psychologists now address not only psychological factors impacting the diagnosis and treatment of pain, as would be expected, but also factors which are more traditionally the purview of medicine, such as targeting pain perception, determining the side-effects potential to medications and procedures, providing risk factor assessments for surgical and interventional treatments, and enhancing compliance with medical treatments. Moreover, the clinical health psychologist, trained in clinical psychopharmacology, will also be involved in determining psychopharmacological interventions designed to target both mood and pain and help monitor drug effects, drug-drug interactions, and disease-drug interactions. In order to truly partner with pain medicine, the clinical health psychologist must now be versatile not just in diagnostic and psychotherapeutic approaches traditionally defining clinical psychology, but must also be thoroughly knowledgeable in the neurophysiological, medical/surgical, and pharmacological realms of pain medicine.

Dentists too are now key players in pain medicine. No longer limited to just treating temporomandibular disorders, dentists with specialized training in orofacial pain and pain medicine and board-certified in orofacial pain are treating the broad spectrum of facial pain, including neuropathic pain such as trigeminal neuralgia, and deafferentation pain; they treat sympathetically maintained facial pain as well as neurovascular pain, central pain, musculoskeletal pain, and headache. They utilize the entire spectrum of physical medicine, pharmacological and interventional approaches in their treatment of orofacial pain and headache. Their scope of practice has evolved to encompass what has traditionally been the domain of the neurologist. They are also actively involved in clinical orofacial pain and headache research as well as basic research describing the neurophysiological mechanisms involved in chronic orofacial pain and headache.

Like physicians with board certification in pain medicine, the dentist, board-certified in orofacial pain, is collaborating with clinical health psychologists to treat orofacial pain and headache from a biopsychosocial model. In contrast to the failed medical or disease model of pain, the biopsychosocial model recognizes that pain, like all other disease states, involves a dynamic interaction between pathophysiological processes and psychological and social factors.

## The Collaborative Relationship

There are many forms which a collaborative relationship can take. Collaborative relationships range from the most common, which is the simple collaborative model, to the integrated collaboration. In the simple collaborative model, physicians refer patients to the psychologist when they suspect psychopathology or more commonly when their interventional and pharmacological approaches have failed and they “have no more to offer the patient.” In this relationship the physician is not necessarily interested in further input from the psychologist, or even that psychological input, when offered, will affect their medical management of the patient. Rather, he or she simply wants the psychological problem addressed and many times the patient taken out of his or her hands. By stark contrast the highest level of collaborative relationship is the integrated biopsychosocial collaboration described in this chapter. In this collaborative relationship both the dentist or the physician and the psychologist share a common treatment philosophy. They work from the perspective that the patient’s presenting complaint is a function of both biological and psychosocial factors, all needing to be addressed in order to optimize treatment outcome. In the integrated biopsychosocial collaborative model, the dentist or physician and psychologist work side-by-side making mutual decisions regarding the patient at every step of the treatment. The communication is bidirectional and “give-and-take,” with the pain medicine specialist and the clinical health psychologist providing each other with critical input and modifying their respective approaches on the basis of this input. This is a dynamic process and one not bound by mutually exclusive treatment protocols.

There are several factors that determine the nature of the collaborative relationship. For example, some conditions lend themselves better to a collaborative relationship like chronic pain, while on the rare occasion, others may favor a simple collaborative relationship, for example, some acute pain conditions. However, the predominant factor in determining the nature of the collaboration is the dentist’s or physician’s and psychologist’s model of illness. Dentists and physicians are trained in a medical model that focuses on identifying underlying disease processes or pathophysiological processes thought to be at the root of a pain condition. They then target their treatments to *fix* the pathological condition. In pain medicine the interventional anesthesiologist and the surgeon may best exemplify the pinnacle of the medical model orientation. Their focus is to diagnose the pain condition and target the proposed pathophysiological processes or putative mechanisms usually with little concern for the person experiencing the pain. They then perform interventions such as spinal injections or surgery in hopes of correcting the pathophysiological processes and alleviating the pain. When there is not an appropriate response, they refer the patient to the psychologist to help them *learn to live with their pain* or take care of the psychological problem *resulting* from or many times *causing* the pain. As previously stated, there is rarely an intention on the part of the referring physician that the psychologist’s interventions or input will affect the treatment plan. This model of course has proven woefully inadequate in addressing chronic pain despite its widespread

acceptance and profitability. By and large psychologists suffer from limitations similar to those of their physician cohorts. Psychologists are trained in a psychological model largely devoid of training in the medical aspects of pain, neurophysiology of pain mechanisms, pharmacology of pain, and psychopharmacology. Thus, the psychologist is willing to accept referrals from pain medicine specialists and provide psychological treatments in relative isolation from the referring physician. When an evaluation is written by the psychologist it is typically not geared towards the referring physician's needs but rather to those of other psychologists. The inclusion of psychobabble is seen as largely irrelevant by the referring physician and is of little help in assisting the physician's treatment of the patient. Thus, a culture of referral and not collaboration is the norm rather than the exception, even within many multidisciplinary pain settings. Psychologists need to reorient their approach and provide information to the pain medicine specialist that is directly relevant to their diagnosis and treatment of a patient's pain condition. It is also the psychologist's responsibility to educate the physician that what he or she has to offer is so much more than *psychotherapy or counseling*.

## **Purpose**

The purpose of this case presentation is to illustrate the implementation of the integrated collaborative biopsychosocial model. A pain medicine specialist, in this case a dentist board-certified in orofacial pain, and a board-certified clinical health psychologist specializing in pain management, with advanced training in clinical psychopharmacology, collaborate in diagnosing and treating a case of complex chronic orofacial pain. The patient had failed multiple prior interventions, was narcotic and benzodiazepine-dependent, and as a result disabled. The patient had multiple pain and psychiatric diagnoses which were not uncovered by her prior physicians. In addition, much of what she presented with was iatrogenic and further complicated by significant psychological factors that impacted the accuracy of her pain reports, diagnosis and response to treatment.

## **Chapter Organization**

In this chapter we first introduce the clinical setting in which the collaborative relationship takes place. This is followed by the case presentation, which includes the identifying information. Here we describe the patient's current complaint and current medications. We then present the orofacial pain history, orofacial pain evaluation, diagnoses, summary, and treatment recommendations. This is followed by the clinical health psychologist's psychological evaluation and includes the psychological history, mental status examination, diagnoses, summary, and treatment recommendations.

We then describe the collaborative treatment plan, followed by a session-by session account of the treatment and key collaborative interactions to demonstrate how the integrated biopsychosocial collaborative model guides a dynamic treatment process unbound by rigid protocols.

## **Clinical Setting**

The clinical setting of this collaborative relationship is a university-based multidisciplinary orofacial pain clinic. Patients are referred by dentists, physicians, and other health care providers for evaluation and treatment of orofacial pain and headache. The orofacial pain clinic is part of an orofacial pain residency training program and a clinical rotation site for various physician specialists and health psychology graduate students, interns, and postdoctoral fellows. All patients entering the orofacial pain clinic are provided with an orofacial pain history and physical examination by a resident and are supervised by a core faculty member who is board-certified in orofacial pain. The patient is administered a set of psychometric tests after the history and physical examination. Once these have been completed and scored, the patient is scheduled for a clinical health psychology evaluation by a psychology trainee or a supervising faculty member. After all evaluations, including testing, imaging, and laboratory studies have been completed, the patient is reviewed in a multidisciplinary team conference by the entire orofacial pain team and a comprehensive treatment plan is devised. A written treatment plan is then drawn up and presented to the patient and his or her significant other during a subsequent treatment planning session. Breach of the treatment plan by the patient constitutes grounds for termination from the program. The patient is then scheduled for six consecutive weekly treatment sessions seeing both the dentist and psychologist, on the same day when possible. The patient is subsequently reevaluated every third session until he or she is discharged to follow-up or the program is terminated due to lack of significant progress. The orofacial pain dentist and the clinical health psychologist discuss the patient at each visit in a multidisciplinary team conference format prior to seeing the patient, or whenever needed, and collaboratively decide on the course of treatment.

## **Case Presentation**

### ***Identifying Information***

The patient is 26-year-old single woman who was referred by her neurologist for a comprehensive pain medicine evaluation and treatment of a suspected temporomandibular joint (TMJ) disorder marked by chronic right-sided orofacial pain of 3 years' duration. She had been unable to tolerate trials of antiseizure and antidepressant

medications. The neurologist also suspected a significant psychological overlay because of her labile mood, dramatic and demanding presentation, and constant “animated” requests for more narcotics and benzodiazepines.

## Current Complaint

The patient initially presented with the following complaints:

- *Right-sided facial pain.* The pain was reported to have engulfed the entire right side of her face, which she described as continuous aching, sharp, burning, and throbbing. The pain was rated as ranging in intensity from a low of 9/10 to a high of 10+/10 on the Visual Analog Scale (VAS), with 10 indicating “the most intense pain imaginable.” On the McGill Pain Questionnaire–Short Form (MPQ) she endorsed all pain descriptors at the highest level. She also reported that she would often have nausea and vomiting associated with the pain when it became unbearable. She thought that, in addition to the pain, her nausea might also be caused by her medications, which she would begin escalating when the pain intensity started to increase. She also reported a 2-year history of intermittent, very intense, sharp electrical pain lasting seconds to minutes, shooting down the right maxilla and occurring several times a day. This pain rated as 10+/10 was described as so severe that it would “bring her to her knees writhing in pain”. She was unable to identify any temporal pattern to her pain. The patient indicated that the pain was aggravated by talking, eating, and brushing her teeth. Stress and exertion also influenced her pain. Additionally, she stated that restricting her diet to soft food was less painful. When questioned regarding what gave her relief, she said that she got some relief with hot packs and narcotics.
- *Depression/mood lability.* The patient reported a long history of intermittent depression and labile mood which escalated in intensity with the onset of her pain. Though not actively suicidal, she did endorse passive suicide ideation. She reported getting so depressed that often she could not get out of bed. She reported associated fatigue, irritability and at times rage since the onset of her pain.
- *Sleep disturbance.* The patient reported extremely disrupted sleep because the pain kept her from falling asleep and awakened her throughout the night. She naps throughout the day. She obtained her best sleep with the aid of 350 mg carisoprodol (Soma®), coupled with as much as two 40 mg oxycodone (Oxycontin®), 20 mg diazepam (Valium®), and 30 mg temazepam (Restoril®).
- *Functional limitations.* The patient rated her level of functional limitations as 9/10 on the VAS, with 10 indicating that “...Pain completely interfered with activities of daily living.” She went on disability benefit 2 years ago. She spends most of her time alone in her room watching television and is unable to concentrate on reading because of pain. Her father shops, cooks, and takes care of her.



## Current Medications

Medication	Dose	Schedule
Soma® (carisoprodol)	350 mg	6 po qd prn
Oxycontin® (oxycodone)	40 mg	2 po bid/prn; 80 mg po qhs
Restoril® (temazepam)	30 mg Po qhs	
Valium® (diazepam)	10 mg Po tid	

*qd* per day, *bid* twice a day, *cid* three times a day, *qhs* at bedtime, *prn* as needed, *po* orally administered

The patient denied the use of oral contraceptive pills, nicotine, or alcohol.

## Orofacial Pain History

Approximately 4 years ago the patient began noticing an intermittent throbbing sensation in tooth 4 (Fig. 19.1). She went to her dentist, who immediately referred her to an endodontist since the tooth had no caries or restorations, and the periapical X-ray showed no periapical lesion. The endodontist took additional periapical X-rays, pulp tested the tooth, and did a periodontal examination, finding that the tooth was vital. She was referred back to the dentist, who decided to place her on a short course of narcotics (Vicodin®, 5 mg/500 mg, up to four a day) on an as-needed basis. The episodes of pain began to be more persistent and frequent and the pain began to spread to the entire right side of her face.

When questioned regarding any accompaniments to the pain, she indicated that sometimes she would get nauseous when the pain became intense. Additionally, she thought she had sinusitis on the right side and consulted her primary care physician, who indicated she may have chronic sinusitis. He placed her on antibiotics on two different occasions without any relief. When questioned about the sinus symptoms, she indicated that she would feel intense throbbing pressure in the right maxillary sinus when the facial pain escalated. She also indicated that she has persistent nasal

Location of teeth numbers 3, 4 and 5.

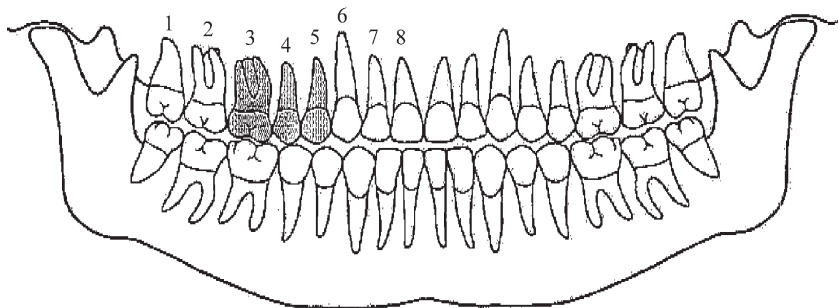


Fig. 19.1 Location of teeth 3, 4, and 5

discharge. On being asked for more details regarding the discharge, she stated that the discharge was always colorless and not purulent.

She returned to her dentist, who thought that bruxing or temporomandibular disorder problems may be aggravating the tooth pain, and he made her a night guard. However, he did a Panorex examination of the TMJs that indicated no TMJ disease. The splint not only failed to alleviate her symptoms but she continued to complain of intermittent 3–4-day severe pain in the tooth and right side of her face with decreasing frequency of pain-free days between the attacks. At the insistence of the patient, the dentist decided to do a root canal therapy on tooth 4. The patient reported that she had some significant pain relief for 4 weeks following the root canal therapy, but then the pain “came back with vengeance.” The dentist increased her narcotics to six to eight pills of Vicodin a day but this failed to provide relief.

She was referred back to the endodontist, who retreated tooth 4 without a change in her pain. She was then referred to an oral surgeon, who extracted the tooth. The patient indicated that because of the frustration of not knowing what was causing her toothache, her mood ranged from giddy to irritable to extremely depressed. Additionally, she was beginning to lose considerable work time. The dentist prescribed diazepam for her anxiety and emerging sleep disturbance. After she had the tooth extracted, the pain continued to persist and seemed to be spreading to adjacent teeth 3 and 5. She returned to the dentist who had done root canal therapy in these teeth but since she continued to have the same pain, she was referred back to the oral surgeon, who extracted the additional teeth, again without relieving her pain. After the extractions of teeth 3 and 5, she began experiencing a dull burning sensation around the extraction sites. The pain was more continuous and was sometimes accompanied by sharp electrical shooting pains lasting seconds to minutes with an intensity of 10/10 on the VAS, radiating out from the extraction sites. The oral surgeon recommended that she see a neurologist. The neurologist diagnosed the patient with trigeminal neuralgia and ordered a magnetic resonance image and a magnetic resonance angiogram, both proving normal. He prescribed 600 mg carbamazepine per day with the idea of increasing the amount to 1,200 mg. The patient almost immediately began experiencing dizziness, drowsiness, ataxia, blurred vision, and headache and became severely depressed. She stopped taking the medication on her own and returned to the neurologist, who started her on 300 mg gabapentin (Neurontin®) twice a day. This medication, according to the patient, seemed to help the tooth pain but she could not function due to the sedation and again discontinued it without consulting her neurologist. The neurologist then changed her narcotic from Vicodin to 10 mg Oxycontin and increased the dosage to six to eight per day on an as-needed basis. She reported that she liked the Oxycontin and it was the only thing that had helped her. However, it did not control the periodic attacks of shooting electrical and throbbing facial pain. She reported that she had been unable to tolerate any other analgesics, which included hydrocodone and hydromorphone. She also reported that 100 mg of intramuscular meperidine (Demerol®) provided her with 1–2 h of pain relief.

The patient’s symptoms continued to worsen and the neurologist referred her to a neurosurgeon for consideration of a microvascular decompression, although the MRI was normal regarding a vessel encroaching on the trigeminal nerve. The

patient was frightened about having “brain surgery,” and refused the microvascular decompression. The neurologist then referred her to an anesthesia-based pain center for pain management. The anesthesiologist performed an occipital nerve block under sedation which subsequently resulted in a severe flareup. He proposed several more blocks and a trigeminal rhizotomy, but she refused. The anesthesiologist increased her Oxycontin to the current levels. She was then referred back to the neurologist and the anesthesiologist said she was an “addict” and had “borderline personality disorder”. The neurologist then referred the patient to the UCLA Orofacial Pain Clinic for evaluation, since she was taking more narcotics than he was comfortable prescribing and she was also escalating her narcotic demands and consumption. She was also obtaining additional Oxycontin from other unspecified sources, including the Internet. He also thought that she may have TMJ problems since she did have pain and clicking in the right TMJ area.

## Orofacial Pain Evaluation

The cranial nerve examination was grossly intact. The examination of CN II noted that visual acuity was intact, the visual fields were intact to confrontation and the fundoscopic examination showed flat and sharp discs and an absence of hemorrhage or exudate. No double vision was reported with testing the extraocular eye movements. The pupils were equal, round, reactive to light, and accommodating. The pupillary reflex was present. No lateral or vertical nystagmus was noted. The trigeminal sensory and motor testing was normal and symmetrical. The corneal reflex was also intact and symmetrical. Facial movements were normal with no facial nerve paresis noted. Her hearing was normally responsive to finger rub and the Weber’s test result was midline. Her palate elevated symmetrically and the gag reflex was present. The motor of CN II was bilaterally equal and normal and her tongue was midline. Upper and lower motor strength was normal and all reflexes were 2+. Finger–nose coordination was smooth and on target.

Intraoral neurosensory testing was done and visual inspection of the extraction sites showed well-healed sites with no lesions apparent. Static mechanical allodynia was noted over the extraction sites. Application of 20% benzocaine dropped her aching and burning extraction site pain level from 10/10 to 7/10 and infiltrating 2% lidocaine into the area further decreased the pain to 5/10. She reported that the dull aching, throbbing pain remained unchanged.

The stomatognathic examination noted a voluntary pain-free opening of 24 mm. The patient could actively open to 33 mm with pain and she could be passively stretched to 44 mm with significant preauricular and masseter muscle area pain on the right side. An early click was noted in the right TMJ that the patient indicated had been there since she was a teenager. The click was not painful and she denied a history of jaw locking. The jaw deviated to the right during the initial opening path then returned to midline as she approached the widest opening. When she clenched on a tongue blade placed between the posterior teeth on the left side, she had increased preauricular pain on the right. Clenching on a tongue blade on

the right side was not painful. Her occlusion was grossly normal with contacts in all quadrants. Significant tongue–cheek ridging was noted. This is an indication of significant jaw parafunction. Additionally, she had only mild dental attrition, indicating that she probably was clenching more than grinding her teeth.

The palpation examination noted severe pain on the capsule of the right TMJ and mild pain on the left TMJ capsule. Palpation of the right masseter muscle caused severe pain that spread to the right TMJ and the temple area. This replicated some of her facial pain complaint. Palpation of the right temporalis and masseter muscles also caused severe radiating pain and dysesthesia in the extraction sites of teeth 3, 4, and 5 largely replicating her pain. Additionally, she had severe pain with palpation in the splenius capitus muscles bilaterally that radiated to the occiput. Severe tenderness was also noted in the mid-trapezius muscles, radiating up the neck.

## Orofacial Pain Diagnostic Impressions

1. Traumatic trigeminal neuropathy
2. Myofascial pain syndrome
3. Right more than left capsulitis
4. Narcotic-induced secondary hyperalgesia
5. Rule out psychological factors

## Orofacial Pain Assessment/Summary

The patient had difficulty accurately describing her pain and discriminating differences in pain intensity and pain quality without significant probing. Rather, she referred to her different complaints in a global fashion seeing them as one pain rather than layers of different pains. On the basis of this examination it appeared that the patient was experiencing several different pains, including traumatic trigeminal neuropathy secondary to her endodontic treatments and subsequent extractions. In addition, it appears that the patient's tooth pain may have initially been myofascial in origin since temporalis and masseter muscle trigger points referred a dysesthetic sensation into the areas of teeth 3, 4, and 5.<sup>5</sup> The spreading burning and aching pain into the entire right side of her face was likely a result of narcotic-induced secondary hyperalgesia,<sup>6</sup> myofascial pain, and right-sided capsulitis which was further aggravated by the clenching of her teeth.

## Treatment Recommendations

1. Refer the patient for a behavioral medicine evaluation prior to initiating any physical medicine treatment since the patient's psychological status may grossly affect accuracy of diagnosis and the treatments rendered for the pain.

2. Prior to initiating any medication trails obtain the psychologist's recommendations for medications that will treat both her mood and her pain.
3. Pain management will require controlling and eventually discontinuing the Oxycontin which is involved in hyperalgesia. Since she is taking Oxycontin on a daily basis, it may be necessary to use a blinded descending dose pain cocktail with methadone to facilitate withdrawal from the narcotic.<sup>7-8</sup> During this phase of treatment, the patient will be advised that random urine screening will be required to make certain she is not taking other narcotics or drugs.
4. Carisoprodol, which is highly habit forming, should be withdrawn and replaced with a more appropriate muscle relaxant, if needed.
5. Her benzodiazepine use will also need to be tailored with the ultimate goal of completely withdrawing the diazepam and temazepam.
6. The patient will be given a treatment contract outlining the treatment protocols and what is expected of her in terms of compliance and medication use.
7. The patient will be given a myofascial pain physical medicine protocol that involves learning home stretching exercises for the jaw and neck. This will include the use of moist heat and ice and Spray and Stretch<sup>®</sup> (Fluori-Methane<sup>®</sup>) vapocoolant spray to facilitate the stretching. Trigger-point injections will be considered at some point in the future and contingent upon compliance with the home stretching exercises.
8. The neuropathic pain will be treated with a topical anesthetic applied over the extraction site to desensitize the trigeminal neuropathy. In addition, an appropriate membrane stabilizer will be prescribed that will target both pain and mood. It should be noted that the patient had been given both carbamazepine and gabapentin, but they resulted in adverse effects that caused the patient to discontinue taking them. This likely reflected the high starting doses of these medications.

## Psychological Evaluation

The patient was administered the Minnesota Multiphasic Personality Inventory–2 (MMPI-2), Cognitive Strategies Questionnaire, Beck Depression Inventory, and Beck Anxiety Inventory immediately following her first meeting with the orofacial pain specialist. The test scores were as follows:

- MMPI-2: L, 56; F, 68; K, 43; Hs, 78; D, 90; Hy, 84; Pd, 79; MF, 43; Pa, 75; Ps, 78; Sc, 72; Ma, 63; ES, 32; MAC, 77; Goldberg, 59.

Brief summary: The MMPI-2 indicates a severely psychologically compromised individual with labile mood, severe depression, anxious and obsessive thought qualities, and poor coping resources. The profile further indicates a significant potential for operant/behavioral contributions to her pain and disability. The profile suggests significant somatization, poor insight, externalization of blame, and a high potential for side effects, poor compliance, significant substance abuse potential, and long history of volatile interpersonal relationships and possible childhood abuse.

- Beck Depression Inventory score 44.  
Brief summary: This Beck Depression Inventory score shows severe depression with mild to moderate suicide ideation indicated by her endorsement of suicide ideation without intent on question 9 and hopelessness (question 2).
- Beck Anxiety Inventory score 36.  
Brief summary: This Beck Anxiety Inventory score is indicative of severe anxiety.
- Cognitive Strategies Questionnaire: Diverting attention 12; reinterpreting pain sensations 13; coping self-statements 10; ignoring sensations 15; praying 28; hoping 28; catastrophizing 33; increase behavioral activities 12.  
Brief summary: Taken together, these Cognitive Strategies Questionnaire scores indicate a significant reliance upon catastrophic thinking and endorsement of passive coping strategies with a conspicuous lack of active coping strategies.

Once all psychometric testing had been completed and scored, the patient was scheduled to see the clinical health psychologist alone for a 1-h evaluation session. The patient's father, her only significant other with whom she lived with, was also scheduled to see the psychologist separately during the initial session.

## Psychological History

The patient was born on January 16, 1980 in Los Angeles, California. She was an only child raised by a mother who was an alcoholic and verbally, emotionally, and sometimes physically abusive of her. She thinks her mother had either borderline personality disorder or bipolar disorder although no formal diagnosis was ever given. The mother's mood was described by both the patient and her father as very unstable and unpredictable with frequent outbursts of rage. Her mother committed suicide when the patient was 17 years old. She described her father as a meek and passive individual who was always very supportive of her and the only one who ever loved her. However, he worked long hours and was rarely available to her. She reports having been diagnosed with ADHD in grade school but was unable to tolerate the trials of methylphenidate. She reports that as she got older the ADHD symptoms improved, but she became dysphoric for long periods of time. She denied manic episodes, although there were questionable hypomanic episodes which the patient minimized as nonproblematic. The patient presented with a long history of unstable relationships. She had a prior overdose attempt resulting in a 72-h hold 5 years ago relating to one of her failed relationships. She also reports a long history of anxiety. In the past she reports periods of abusing alcohol, cocaine, and THC but has not used any of these substances since her psychiatric hospital discharge 5 years ago. She worries a lot and feels misunderstood and unappreciated. She was employed as a surgical nurse for 5 years prior to going on disability benefit because of her pain. She reports being a hard worker but always had conflictual work relationships. She attributes this to having to work with others that are "incompetent" and do not meet her standards of care. She had never seen a psychologist before but she was in psychoanalysis

with a psychiatrist for 3 years in her late teens and early 20s. She felt therapy helped her “some.” She stated that aside from her father he was the only person that would “listen to me, be nonjudgmental, and not place any demands on me.” Her primary care physician and neurologist prescribed 20 mg fluoxetine (Prozac®), 100 mg sertraline (Zoloft®), and 150 mg bupropion SR (Wellbutrin SR®) in the past for her depression and anxiety but she was unable to tolerate them because of tearfulness, anxiety, and significant agitation. Her father reported that while taking the antidepressants the patient exhibited hypomania (i.e., she went several nights without sleeping, cleaned her room repeatedly, spoke with rapid pressured speech, and became very active, but was not “out of control”). She reported that diazepam was “great” in terms of helping her anxiety, sleep, and occasional muscle spasms. However, her neurologist limited the dosage to 60 mg daily when her daily dosage escalated to over 80 mg daily and he found out that she was procuring it from multiple sources. She denied history of sexual abuse, self-mutilation, eating disorder, panic disorder, and obsessive–compulsive disorder.

## **Mental Status**

The patient was driven to the evaluation by her 64-year-old father with whom she is now living since being placed on disability benefit 2 years ago. The patient was interviewed for 1 h and then separately her father was interviewed for 20 min. Her mental status examination revealed a well-nourished, well-developed woman looking younger than her stated age of 26. She appeared very depressed and agitated. At times she slurred her words and failed to make good eye contact. However, she was able to maintain a linear train of thought. There was no evidence of thought disturbance or psychotic thought processes. She appeared to be of above-average intelligence. Her speech was pressured and she was intermittently tearful. She reported short-term memory and concentration difficulties due to the pain. Long-term memory was intact. She reported passive suicide ideation and noted that although she has no plan or intent she stated that she can “...no longer live this way since my physician limited my medications.” Her impaired cognitive status appeared to reflect excessive narcotic and sedative use as well as her mood disturbance. A formal mental status examination was not conducted and further cognitive testing was not warranted at the present time.

## **Psychological Diagnostic Impressions**

1. Bipolar 2 disorder (depressed)
2. Rule out borderline personality disorder
3. Psychological factors affecting physical condition
4. Narcotic and benzodiazepine overuse

## Psychological Summary

Psychological factors play a critical role in this patient's presentation. It is clear that her psychological status is impairing an accurate assessment of her pain complaint. The patient views her pain as a constantly severe 9/10 to 10+/10 level of pain, unaffected by anything and she is unable to discern the subtleties of what is a multidimensional pain problem. As a result of her tumultuous behavioral style the pain serves to operantly remove the patient from conflictual psychosocial/interpersonal relationships. Pain further acts to modulate her significant interpersonal distress which preceded and was further aggravated by the onset of her pain. Narcotics are also used in a similar mood-modulating manner. The patient likely has bipolar 2 disorder that has never been adequately addressed with psychological treatments or the appropriate mood-stabilizing medications. In addition, she has features of borderline personality disorder on the basis of her long history of dramatic and volatile-unstable relationships, demanding self-serving history of psychosocial interactions, history of parasuicidal behaviors, and self-destructive behaviors. However, such behaviors are also seen in the bipolar spectrum disorders. The physicians that were prescribing her the psychotropic medications and the psychoanalyst who saw her for 3 years failed to make the correct diagnoses and undertake an appropriate course of treatment. They viewed her as having *agitated depression* secondary to her pain. Due to the patient's articulateness, ability to be charming, and the fact that she was very attractive, she was able to present herself in a much less disturbed manner, although the neurologist suspected a significant psychological overlay. She has, in the past, become more agitated, anxious, dysphoric, and hypomanic when trialed on fluoxetine, sertraline, and bupropion. Such reactions to antidepressant medications are often reported in patients with bipolar disorder and are frequently the signal for undiagnosed bipolar disorder. Given her past reactions to antidepressants and since she presented agitated to her neurologist he decided to place her on benzodiazepines. Though she continued to feel depressed her agitation became more tolerable and her sleep improved, but she required increasing benzodiazepine doses to maintain her calmness and some semblance of well-being. Her impaired cognitive status and slurred speech are a direct result of her medication intake and depression and should improve once these medications are appropriately tailored. Moreover, benzodiazepines should be restricted in patients with potential borderline personality disorders since they tend to disinhibit agitation and may also rapidly escalate in dose. Of paramount importance is that her mood disturbance complicates her presentation by decreasing her ability to discriminate pain from suffering. As a result it is almost impossible to make an accurate diagnosis while her mood and medications are unstable. She also presents with a moderate to severe potential for side effects and is a poor surgical-interventional candidate. In order to derive the most accurate assessment of her pain, her mood will have to be stabilized and her narcotics and benzodiazepines will need tailoring using a blinded pain cocktail format. Moreover her carisoprodol will also need to be systematically reduced and eliminated. The patient has greatly compromised coping resources and



is unable to modulate her emotional reactivity. As a result she amplifies her symptoms, uses catastrophic coping mechanisms, and retreats into passive and regressive coping modalities. She uses narcotics and benzodiazepines as a means of tempering her emotional reactivity. She may also be using side effects operantly to ensure a supply of the narcotics and sedatives of her choice. Somatization is severe and needs to be addressed directly through cognitive-behavioral treatments.<sup>9</sup> Although she has passive suicidal ideation there is no plan or intent and her suicide potential is low, at the present time. Her sleep disturbance feeds into her pain and mood disturbance and this too needs addressing both behaviorally and with appropriate pharmacologic treatments.

While psychological factors are critically determinant of the patients overall presentation they do not imply a lack of significant pathophysiological processes that need to be addressed, rather this points to the complex and multidimensional nature of the patient's pain complaints.

### **Clinical Health Psychology Assessment/Recommendations**

1. It is critical to first stabilize her medications using a blinded pain cocktail format. Consider replacing Oxycontin with methadone on a time-contingent basis. An open-pill format will be challenging at best and will certainly prove ineffective. In addition, diazepam should be included in the cocktail.
2. Systematically reduce the carisoprodol by one pill a week.
3. The patient will require random drug toxicity screening.
4. Next, attempt to stabilize her mood disturbance. A very low initial dose of a mood stabilizer that will target her mood, agitation, and possibly neuropathic pain is recommended such as lamotrigine (Lamictal®).
5. Do not prescribe any antidepressants for pain due to potential for switching to mania, hypomania, or increase her agitation secondary to bipolar 2 disorder.
6. Temazepam needs to be systematically reduced and eliminated and replaced with behavioral sleep hygiene.
7. The potential for side effects to medications and interventional procedures is moderate to severe; therefore, ease into interventional procedures if required. Start medications at very low doses because of her potential for side effects and since in the past most medications had been initiated at too high a dose. Her side-effects profile may also be a means by which the patient is able to operantly control her treatment and medication choices, so strict limits need to be specified regarding drug use and requests for medications. Also present the patient with substantial information regarding medications prescribed since she is a bright individual who requires considerable information. Behavioral techniques will be used to manage side effects.
8. Compliance may be very problematic, especially to self-management techniques, due to her passive coping style. Provide the patient with small initial assignments prior to embarking on a full program.

9. Introduce a daily activity–walking program in the morning once medications and mood are beginning to stabilize.
10. Initiate cognitive-behavioral pain management and target emotional self-regulation, coping skills, compliance, and side-effects control.
11. Once the patient’s medications, pain, and mood have been stabilized refer her for dialectical behavioral therapy<sup>19</sup> to treat her mood and personality issues. She will be too overwhelmed if this referral comes too early.

## Collaborative Treatment Plan

The orofacial pain dentist and the clinical health psychologist met following their evaluations and reviewed all findings. They integrated their respective recommendations and agreed upon a comprehensive pain medicine treatment plan and the best sequence of treatment delivery to optimize outcome. The collaborative treatment plan was as follows:

1. The patient will first be provided with a written treatment contract. It will specify a time-limited 6-week initial period of treatment and then a reevaluation period. It will specify that all medications will be provided only by the orofacial pain specialist and will be filled only at a specified compounding pharmacy. She will also be required to accurately and honestly complete daily pain and activity diaries. Noncompliance with any aspect of the contract will be considered grounds for immediate discharge from the treatment program.
2. The next step will be to stabilize the patient’s medications using a liquid pain cocktail.<sup>2</sup> The blinded pain cocktail contains the medications suspended in clear cherry syrup to mask the flavors. The patient is not able to determine the amount of medication included in the syrup and is instructed to take a set volume of the cocktail, usually 10ml, by the clock and not on a pain contingent basis (as needed). The blinded cocktail affords many advantages to prescribing pills. It eliminates the obvious counting of pills by the patient that reinforces the behavioral attachment to the pain medications and it allows a precision of control over the dosing that is not achievable with pills. As the active ingredients in the cocktail are reduced, the deficit is replaced by additional cherry syrup. Her Oxycontin will be changed to an equivalent dose of methadone. The cocktail will also include diazepam. An approximately 20–25% per week taper will ensue following 1 week, or if needed 2 weeks, of adaptation to the new drug delivery format. Prescriptions will be filled on a week-to-week basis at her weekly appointments and there will be a strict no-loss agreement regarding her medications and prescriptions. Temazepam and carisoprodol will be systematically withdrawn and replaced with behavioral strategies. Random drug screens will be required.
3. After her initial medication doses have been stabilized the patient’s mood will attempt to be stabilized with a trial of lamotrigine starting at a very low dose (25 mg daily) and slowly increasing it to the highest therapeutic dose. Although lamotrigine has proven effective in the treatment of bipolar depression it is considered an “add-on” medication for trigeminal neuropathy/neuralgia. Once her

mood and ability to discriminate pain from suffering have improved, additional treatments will be added in a systematic manner.

4. The patient will be provided with a physical medicine self-management program to treat the myofascial pain and promote self-control and active coping. This will involve performing stretching exercises targeting her head and neck muscles on a six times per day basis.
5. The patient will be prescribed Orabase® with Capsaicin® to be mixed in equal proportion and applied to the extraction sites of teeth 3, 4, and 5 six times a day to address her trigeminal neuralgia.<sup>10-11</sup>
6. The patient will be sent for a full blood workup, including complete blood count, liver function tests, and renal panel, prior to the onset of any treatment in order to obtain baseline levels.
7. The primary goal for the clinical health psychologist will be to contain the patient and navigate her through the pain medicine program. This will involve behavioral medicine treatments targeting the patient's mood, sleep disturbance, side effects, and compliance and coping resources. The psychologist will also assess the effects of the medications on the patient's pain, sleep, mood, mental status and behavioral status.
8. Once treatment is approaching completion she will be referred for dialectical behavioral therapy to target her long-standing mood and personality issues. This may also involve a referral to a psychopharmacologist to reevaluate her psychotropic medication regime.

## **Collaborative Treatment**

### ***Session 1***

#### **Team Conference**

Prior to the treatment planning session with the patient, the dentist and the psychologist met in a team conference to discuss the patient and ensure that we had our treatment plan in place. It was decided that the session would be primarily run by the dentist, with the psychologist providing input as needed. We would ask the patient to take notes during the session and the psychologist would review the patient's notes with her to ensure accuracy and completeness. The patient's medication dosing schedule was computed.

#### **Treatment Planning Session**

The patient completed all assessment forms, which included VAS, for current pain and highest, usual, and lowest pain over the past week. The assessments also included a VAS for sleep quality, mood, and functional limitations as well as a modified MPQ. The first session was a conjoint treatment planning ses-

sion with the dentist, psychologist, and the patient and her father. The session started with the dentist and psychologist's overview of their findings, their assessment of the findings, treatment rationale, and presentation of the comprehensive time-limited treatment plan. Establishing rapport with the patient was an important part of this session. During this session the patient signed the written treatment contract and the narcotic contract. Any noncompliance would be cause for dismissal from the program. During this session all forms, including pain diaries, were reviewed and obstacles to compliance discussed. Immediately after this meeting the patient's neurologist and primary care physician were contacted and presented with the diagnosis and treatment plan. They both agreed not to prescribe any further medications relating to her pain complaints or mood. In addition, the patient was provided with written information regarding the medications that were going to be prescribed and written informed consent for the medications and treatment was obtained. Her first set of prescriptions were written by the orofacial pain specialist. The first step was to stabilize her medications using a blinded pain cocktail targeting her use of Oxycontin and diazepam. Aside from affecting mood, narcotics are well known to upregulate opioid receptors at the level of the rostral ventromedial medulla and induce secondary hyperalgesia.<sup>6</sup> Moreover, the carisoprodol is extremely problematic and, in our opinion, has no place in pain management. It is a prodrug that breaks down to meprobamate, a highly habit forming sedative with questionable muscle-relaxing properties. Meprobamate originally was marketed as *Miltown*<sup>®</sup> but is now rarely used because of its habit-forming potential, toxicity, and drug–drug interactions. Withdrawing the potentially offending medications initially met with resistance from the patient since these have been the "...only thing that helps my pain." We emphasized that she would experience many changes and some would be challenging to deal with at first. She was also told that at least 6 weeks was required to evaluate our treatment program and that her compliance with the program and what she chose to do were the key factors that would determine a successful outcome. The patient signed the treatment contract.

### **Orofacial Pain Treatment Session**

The dentist prescribed her pain cocktail and provided verbal and written instructions regarding how to take the solution as well as possible adverse drug reactions. The prescription was written for exactly 7 days, to be refilled at her next appointment. The medication dosing and scheduling is listed below.

The dentist took impressions for a night guard to address the patient's capsulitis and bruxing and then answered her questions. The nurse then obtained a urine and a blood sample for toxicity screening and baseline blood works. Following this, the patient was sent to the psychologist's office.

## Current Medications

Medication	Dose	Schedule
Pain cocktail	10 ml	Po q8h
Methadone	168 mg	Po qwk
diazepam	210 mg	Po qwk
Carisoprodol	350 mg	Po 6 qd prn
Temazepam	30 mg	Po qhs 7 nights/week

*qwk* per week, *a8h* every 8 h, *qhs* at bedtime, *prn* as needed, *po* orally administered

## Psychological Treatment Session

During this session the psychologist acted in a supportive role assuring the patient that he understood her concerns about the treatment and altering her medications which she felt had helped her in the past. The psychologist pointed out that in spite of the medications she was still experiencing significant pain and disability and that it was now time for a new strategy if she wanted to change. The psychologist reviewed all of her psychological diagnoses and testing results in detail. He presented her with the psychological treatment plan that consisted of six to ten structured weekly sessions emphasizing skill-focused cognitive-behavioral pain interventions. The patient was told that she was the most important team member and what she did or did not do was the ultimate determinant of success. Potential obstacles to successful treatment were reviewed and problem-solved. The patient was then taught a basic diaphragmatic breathing relaxation exercise and told to practice three times a day for at least 3 min each time. The patient was provided with 0–10 numerical pain rating diaries to complete four times a day (8 a.m., 12 noon, 3 p.m., and 8 p.m.). Medications and brief one-word descriptions of her activities, including relaxation, were also recorded in the diaries. The patient was instructed to no longer nap during the day and to have her father awaken her no later than 8 a.m. The patient was scheduled to return for her follow-up visits in 1 week to see both the dentist and the psychologist. The psychologist reviewed her session notes and answered her questions.

## Session 2

### Team Conference

The patient was reviewed during multidisciplinary rounds the morning prior to her clinic appointments. She had called daily several times a day complaining about being overly sedated and nauseous and of higher pain levels. She was instructed by the dentist

to continue the cocktail and he reminded her that the change in delivery format and narcotics often resulted in challenges during the first week. As she escalated her demands during the week the psychologist set a daily phone session with her to deal with her distress and side effects and provide her with support and drug-effect monitoring. During these phone sessions the patient sounded very sedated and exhibited slurred speech and impaired cognition. She was dramatic and tearful and repeatedly requested that she be switched back to Oxycontin. Although she reported increased pain she could not specify what dimensions of her pain were most problematic.

### Current Medications

Medication	Dose	Schedule
Pain cocktail	10ml	Po q8h
Methadone	168 mg	Po qwk
diazepam	210 mg	Po qwk
Carisoprodol	350 mg	6 po prn
Temazepam	30 mg	Po qhs 7 nights/week

*qwk* per week, *q8h* every 8 h, *qhs* at bedtime, *prn* as needed, *po* orally administered

### Orofacial Pain Treatment Session

The patient completed all pretreatment assessment forms. The orofacial pain specialist reviewed the diaries and medications with the patient and provided her with reinforcement for what she had completed. The dentist prescribed Orabase with Capsaicin to be mixed in equal proportion and applied 6 times a day to the extraction sites of teeth 3, 4, and 5 to begin to address her trigeminal neuropathy.<sup>10-11</sup> She was asked to record the times that she applied the mixture in her diaries. He then had her apply the mixture to the tooth sites and discussed the side effects with her, which was primarily a burning sensation from the Capsaicin. Since the patient was experiencing significant sedation he reduced the Soma by 50% to three pills a day on an as-needed basis. The pain cocktail was reduced by approximately 20–25%. He instructed her to continue to take the pain cocktail on an every 8 h basis. The patient complained about the blinded format and “why can’t I know about how much medications I am taking” and that “this seems childish and doesn’t work anyway.” The dentist again explained the rationale for the blinded pain cocktail format and pointed out that her pain levels remained unchanged in her diaries and from the baseline. He provided her with support but maintained the firm stance that this would be the only way we would work with her aside from placing her in an inpatient detoxification program. Moreover, he explained that the issue was not about trust, but was about providing the most effective means of stabilizing her medications. The patient’s prescription was not filled until after the psychologist met with her. The patient was scheduled to return for her follow-up visit in 1 week to see both the dentist and the psychologist. She then went to the psychologist’s office.

## Psychological Treatment Session

The psychologist reviewed her diaries. She had missed or had retrospectively rated her pain for several days. The psychologist focused on problem-solving the non-compliance and discussing the importance of keeping *accurate and honest* diaries as she had agreed to do in the treatment contract. The patient animatedly and angrily complained of feeling sedated and experiencing nausea since starting the pain cocktail and the psychologist provided her with the exact same message that the dentist had regarding this matter. She continued to feel depressed and at times very agitated. The psychologist normalized the adverse events and then attempted to focus on distraction and relaxation to control the nausea, assuring the patient that her symptoms would diminish. All of the patient's complaints remained the same and she was agitated because she was not getting immediate results. The psychologist focused on this issue, reminding her that it would take some time to see results and that she had only been in treatment for 1 week. Although the patient reported taking the medications as directed, her father reported that she was doubling up on her medications at times, had run out of the pain cocktail by midweek, and had been taking other medications that she had stockpiled. Moreover, the father was worried that she might overdose on the medications and that her mood had been swinging "wildly". The psychologist firmly confronted the patient with the drug information and reminded her that this was a breach of her treatment agreement and that she had a choice. First, we could discharge her from treatment immediately or her father would dispense all medications as we directed. The patient became very tearful and verbally aggressive but confessed to taking additional medications and doubling up when the pain "got real bad." The patient was advised that her noncompliant and aggressive behavior would not be tolerated and that the only relationship allowable was a mutually respectful one. She agreed to have her father dispense her medications and the psychologist further informed her that breaching the contract again would be grounds for dismissal with no further chances for treatment in the clinic and that we would suggest an inpatient drug rehabilitation program. The psychologist sent her for a toxicity screen and then met with the dentist prior to leaving. The patient's temazepam was decreased to 30 mg for five nights and 15 mg for two nights, also to be dispensed by the patient's father. The dentist met with the father and wrote out the entire medication schedule. The psychologist scheduled a maximum of three phone calls from the patient during the next week in order to begin to rein in her multiple daily calling. The patient was sent for a toxicity screen.

## Session Summary

At this point in treatment lack of compliance with the medications and diaries was the critical issue. The patient had not been forthcoming with the dentist and only when the father was interviewed was the breach of the narcotic contract revealed. The dentist and the psychologist took a very firm stance as this was no time to "process" her reasons for noncompliance, but rather to rein it in and set strict limits

with respect to medication use and her behavior. Her lack of compliance also demonstrates the importance of obtaining external data from the significant others of patients, especially those patients with bipolar disorder and personality disorder. Also of importance is that the dentist did not prescribe the medications until the patient had met with the psychologist in order to get his feedback.

### Session 3

#### Team Conference

The patient called shortly after her session the previous week and again complained about the blinded pain cocktail delivery and of no pain reduction, and more nausea and intermittent vomiting and throbbing in the facial area with associated dizziness. The psychologist reminded her that she had two more calls left and that she should use the time wisely calling only when they were really needed. The patient continued to call daily but after the third call the psychologist did not return her calls. During the final call she did not complain as much about sedation and sounded much less cognitively impaired over the phone. Her father collaborated that she was doing better after an argumentative initial 3 days of him dispensing her medications. He also reported that her mood continued to be depressed although she seemed less agitated to him. The toxicity screen from the previous week revealed hydromorphone, which is a metabolite of oxycodone. This indicated that the patient had taken Oxycontin (oxycodone) during the period prior to the analysis. It was decided, on the basis of the psychologist's conversation with the patient and her father over the week, that the dentist would reduce the active contents of the pain cocktail by approximately 20–25%.

#### Current Medications

Medication	Dose	Schedule
Pain cocktail	10 ml	Po q8h
Methadone	130 mg	Po qwk
diazepam	176 mg	Po qwk
Carisoprodol	350 mg	3 po prn
Temazepam	30 mg	Po qhs 5 nights/week
Temazepam	15 mg	Po qhs 2 nights/week
Orabase Capsasian	Apply q6h	

*qwk* per week, *q8h* every 8 h, *q6h* every 6 h, *qhs* at bedtime, *prn* as needed, *po* orally administered

#### Orofacial Pain Treatment Session

The dentist reviewed the pain diaries and toxicity findings with the patient and her father. Her father reported that she had been compliant and seemed “much better” to him in terms of her mood and behavior. The dentist delivered the splint and



instructed the patient to only use it at night when she went to bed. The dentist reduced her pain cocktail by 20%. Temazepam was not changed since the patient reported increased sleep disturbance. Carisoprodol was reduced by another pill each day.

### **Psychological Treatment Session**

Following the patient's meeting with the dentist she met with the psychologist, who reviewed her diaries, medication response, and mood. The psychologist addressed concerns she was having about the medications, especially the sedation, dizziness, and nausea but he did not reinforce complaints by attending to them. Reinforcement was given for action and positive coping. The patient complained of limiting her phone calls and she was reminded to choose them wisely and again was limited to three calls for the next week. The psychologist reviewed the use of relaxation for nausea, pain, mood, and sleep. She felt her mood was about the same. The psychologist began an in-depth discussion about discriminating pain versus suffering (bothersomeness) using the MPQ descriptors as examples of sensory and affective dimensions of pain. He discussed that treating the patient's suffering with analgesics and medical procedures would be futile and that suffering should be treated psychologically. She was asked to include a rating of pain bothersomeness in her pain diary four times a day at the same time she rated her pain intensity. The psychologist also discussed the importance of stabilizing her mood using a mood stabilizer, in this case lamotrigine. The psychologist fully informed the patient regarding lamotrigine and its possible adverse effects. The patient was informed that lamotrigine was also being used to treat her trigeminal neuropathy. The dentist then prescribed lamotrigine (25 mg/day). The recommended target for bipolar monotherapy is as high as 200 mg/day in divided doses and maintenance dosage for neuropathic pain is 200 mg/day. For medical-legal purposes the medication was provided to her by the dentist for pain. The psychologist then reviewed the relaxation and instructed her in cue-controlled relaxation. Sleep hygiene was initiated.

### **Session Summary**

Though limited to three phone calls, the patient called multiple times daily following session 2. The psychologist set limits with the patient's repeated calling by no longer answering her calls after she had exceeded her limit of three calls. Thereafter, when she called with an emergency she was instructed by the office staff to go to the emergency room at the university hospital, which usually involved several hours of waiting, or to distract herself by taking a walk, listening to music, or doing relaxation. The emergency room wait also served as a deterrent for the patient's repetitive calls to complain. When the patient tried to call the psychologist after exceeding her call limit she tried contacting the dentist and the resident, who did not return her calls. Though this may sound somewhat brutal, persistent calls to her physicians to

lodge the same complaints is under operant control and constituted a behavior in need of modification. Moreover, both the dentist and the psychologist used contingent eye contact during all sessions, that is, only making eye contact and responding to the patient when she displayed appropriate and noncomplaining verbal behaviors, focused on what she did rather than did not do, and exhibited adaptive coping. Since her pain cocktail appeared to be stable it was decided to address her mood liability and trigeminal neuropathy using lamotrigine. The constant communication between the dentist and the psychologist as well as the consistent message provided to the patient kept her from “splitting” her treatment team and helped contain her acting out.

## Session 4

### Team Conference

The patient only called three times during the week and during those calls she did not complain or act out. She reported that her shooting facial pain seemed to have reduced “some” and she did not feel as emotional or irritable. She denied side effects to the lamotrigine. Her father reported she was better and that she continued to exhibit labile mood although to a less severe degree. They had gone out for a meal and to a movie one evening for the first time in years. The patient’s pain cocktail would be reduced approximately 20–25%, Soma would be reduced by one pill and lamotrigine doubled. It was agreed that the patient was ready to initiate the physical medicine portion of the pain medicine program. The patient’s toxicity screen from the previous week was positive only for the drugs that were prescribed.

### Current Medications

Medication	Dose	Schedule
Pain cocktail	10 ml	Po q8h
Methadone	100 mg	Po qwk
diazepam	140 mg	Po qwk
Carisoprodol	350 mg	2 po qd prn
Temazepam	30 mg	Po qhs 5 nights/week
Temazepam	15 mg	Po qhs 2 nights/week
Orabase Capsasian	Apply q6h	
Lamictal	25 mg Po qhs	

*qd* per day, *qwk* per week, *q8h* every 8 h, *q6h* every 6 h, *qhs* at bedtime, *prn* as needed, *po* orally administered

### Dental Orofacial Pain Treatment Session

After she had completed her rating scales the patient was seen by the dentist. The dentist reviewed the patient’s diaries and rating scales and reinforced her compliance. The patient rated her pain as 30% improved. She reported that the Orabase–Capsasian

mixture was helping the burning pain considerably, but that she was now noticing intense throbbing pain that seemed to be localized to the areas of extracted teeth 3, 4, and 5. The throbbing was not as global or as persistent as she had initially reported. She said that she now remembered that the current throbbing in the teeth area was the same as that experienced in teeth 3, 4, and 5 prior to their extraction, but was now much more intense. She also reported that her nausea and occasional vomiting was associated with increased throbbing tooth pain. Thus, the dentist revised his diagnosis to include facial migraine<sup>12-13</sup> and medication-overuse headache. Facial migraine is a great masquerader, frequently being misdiagnosed as tooth pain or sinus headache and may result in unnecessary interventional treatments and inappropriate medications. This, of course, increases the likelihood of iatrogenic complications. The dentist then discussed these new diagnoses with the patient and provided her with a revised treatment plan. The facial migraine would be treated initially by giving the patient frovatriptan (Frova<sup>®</sup>), a triptan, to abort the acute toothache (headache) and topiramate (Topamax<sup>®</sup>), an antiseizure medication which is also a first-line migraine prophylactic. A trial of Frova would be used as a diagnostic trial to determine if the throbbing pain in the sinus area was also due to the facial migraine or to a sinus problem. She also reported that her sleep was slightly better and that she was not napping during the day as we had instructed. First, however, the patient would have to have her narcotics and benzodiazepines greatly reduced if not withdrawn since they are offending agents which may render potentially efficacious migraine treatments ineffective.<sup>14</sup>

In order to address the myofascial pain component of her complaint the patient was given a set of three stretching exercises and instructed to stretch six times a day for six repetitions each and holding the stretch for six seconds each (termed 6X6X6 exercises).<sup>15</sup> The patient was informed that the exercises were a very important component of the treatment because they would help to decrease the pain in the muscles and also that by doing the exercises in the prescribed manner throughout the day it would give her a positive adaptive coping strategy to control her pain. In addition, she was instructed to use moist heat two to three times per day applied to the face and neck in addition to the stretching exercises. Illustrated handouts were provided to the patient depicting the stretching exercises. It should be noted that myofascial pain contributes afferent nociception to the brainstem, where the migraine generator resides, aggravating the migraine-associated toothache and increasing central sensitization.<sup>16</sup>

The dentist reduced the active ingredients in the pain cocktail by approximately 20–25% and reduced the carisoprodol to one pill a day.

### **Psychological Treatment Session**

The psychologist reviewed her diaries and rating scales and reinforced compliance. He reassessed the patient's mental status and found her to exhibit much improved mood and cognitive functioning. On the basis of her improved mood and lack of

adverse reactions to the lamotrigine the psychologist recommended that the dentist increase her lamotrigine on an accelerated dosing schedule. This involved doubling her dosage for the next week to 25 mg twice a day. The psychologist reinforced her for waking each morning at 8 a.m., noting her sleep had improved even though she was taking less temazepam. In fact the patient felt she did not need to be taking the 30mg doses of temazepam, so she was instructed to reduce her dose to 15 mg at bedtime, and take no temazepam one night per week. The psychologist reviewed the use of relaxation and cue-controlled relaxation for pain control, side effects, and sleep. He instructed the patient to purchase a pedometer and walk four mornings during the week for 0.25 mile each time at a comfortable pace. The time and distance were to be recorded in the diary. The psychologist then reviewed the patient's pain and bothersome ratings, which revealed significant discrepancies. That is, the patient frequently rated high levels of bothersomeness associated with lower levels of pain and vice versa. This launched the cognitive pain treatment program with the patient<sup>9</sup> which emphasized the role that her emotions and cognitive processes had on her pain experience and ability to discriminate pain from suffering. Thought diaries were not provided during this session in order not to overwhelm the patient. The patient was once again limited to three phone calls during the week. She was sent for a toxicity screen.

### **Session Summary**

The patient's improved mood and trigeminal neuropathy pain likely reflected the initiation of lamotrigine and stabilization of her other medications using the time-contingent delivery of her pain cocktail. Moreover, with the possibility of having other drugs detected in the toxicity screens the patient did not appear to be consuming nonprescribed medications or illicit substances. The patient only called three times during the week and the calls were informative and reasonable, unlike during her previous weeks. She acted appropriately during her office visits and her ratings of overall pain had reduced by over 30%, although her throbbing tooth pain was now emerging as a clear and distinct complaint. The dentist and the psychologist decided to proceed with her physical medicine program, which included a walking program as well as a stretching program prescribed by the dentist to address the myofascial pain component of her pain. Again this was a collaborative decision taking into account her ability to comply with increased program demands. It was decided to continue to have the father dispense all medications and to continue the toxicity screens to ensure compliance. The psychologist, up to this point, had not initiated a structured behavioral pain medicine treatment. Instead the psychologist acted to contain the patient, "navigate" her through the medication titration process, and target side effects with behavioral treatments. Adhering to a strict cognitive-behavioral protocol was not seen as important at this point in the treatment. With expertise in psychopharmacology, the psychologist was able to monitor the effects of the lamotrigine on the patient's

mood and make dosing recommendations to the dentist, while the dentist was able to focus on its effects on her trigeminal neuropathic pain. The critical aspect of this session was the revealing of a previously undiagnosed facial migraine. Prior to her mood being addressed and medications brought under control, her pain was described in very global terms with little discrimination of its multifaceted nature, with exception of the trigeminal intermittent shooting pain. However, at this point the patient was better able to describe the throbbing pain as originating in and being localized to the extraction sites of teeth 3, 4, and 5. Moreover, she was now able to associate the nausea and occasional vomiting with increases in her throbbing pain, all indicators of facial migraine.

## Session 5

### Team Conference

The patient only called once during the week and reported that she was doing better and tolerating her medications. The team agreed to continue on the medication titration schedule.

### Current Medications

Medication	Dose	Schedule
Pain cocktail	10 ml	Po q8h
Methadone	80 mg	Po qwk
diazepam	110 mg	Po qwk
Carisoprodol	350 mg	1 po qD prn
Temazepam	15 mg	Po qhs 6 nights/week
Orabase–Capsasian	Apply q6h	
Lamotragine	25 mg	Po bid

*qd* per day, *qwk* per week, *bid* twice a day, *q8h* every 8 h, *q6h* every 6 h, *qhs* at bedtime, *prn* as needed, *po* orally administered

### Orofacial Pain Treatment Session

The dentist reviewed her daily pain ratings, checked her ability to do the stretching exercises, provided her with corrective feedback, and reviewed the results of the toxicity screen, which once again was positive only for the substances prescribed. The dentist also adjusted her splint, which she felt was a little tight. The patient reported continued improvement of her trigeminal shooting neuropathy. She, however, said that she was experiencing more nausea and vomiting and that she was also having periods of photophobia and phonophobia and increased throbbing pain at the extraction sites. She also noticed more of a deep aching

sensation in the right side of her face and periauricular region. She reported a reduction in the burning facial pain, likely reflecting the significant reduction in narcotic intake. The patient reported an additional overall pain reduction of about 20% from the prior week and that her mood continued to improve. She also reported improved memory and sleep. Very importantly she said she had much more energy. She reported that the stretches seemed to be helping her throbbing and burning pain. The dentist then prescribed an additional set of three new neck and shoulder girdle stretches to add to the three previously given to her. After palpating the muscles, the dentist found trigger points in the sternocleidomastoid and temporalis muscles that clearly reproduced some of the pain at the extraction sites, and all of the aching pain in the right facial region. The dentist wanted to proceed with trigger-point injections in order to determine whether this would reduce the pain, confirming a diagnosis of myofascial pain. He also wanted to give the patient a diagnostic injection of DHE-45 in order to confirm the diagnosis of facial migraine. The patient immediately became anxious about the injections and wanted to postpone them. The dentist relayed her injection concerns to the psychologist to see if he could spend time reducing her distress about proceeding with them during the next session. The dentist then used Fluori-Methane Spray and Stretch over the putative trigger points and produced a reduction of her facial aching pain of over 50%. The patient was instructed in the use of Spray and Stretch spray over the masticatory and posterior cervical muscle and the dentist wrote an additional prescription for Fluori-Methane. Handouts describing the exercises were also provided to the patient. The dentist prescribed Frova Frovatriptan (2.5 mg) in an attempt to relieve her throbbing facial pain and the “sinus” pain. She was instructed to use only one tablet per day. He also prescribed topiramate (25 mg/day) as a migraine (tooth site throbbing pain) prophylactic. He reduced the methadone and diazepam pain cocktail by approximately 20–25% in the blinded pain. Carisoprodol was reduced to one pill per day.

### **Psychological Treatment Session**

After reviewing the patient’s diaries, the psychologist again delayed cognitive pain treatments and instead focused on the pain reductions she achieved during her session with the dentist from the Spray and Stretch. Her fear of injections was addressed. The psychologist, along with a nurse, performed graded exposure with the immediate goal being not the reduction of fear but the tolerance of fear. Research suggests that fear toleration may be more important than fear reduction<sup>17–18</sup> in graded exposure paradigms. The explanation of graded exposure and fear tolerance was discussed with the patient, who consented to the procedure. The graded exposure involved gradual exposure to a syringe and culminated in a saline injection into the bicep. The patient performed the task well and

was able to tolerate the injection. The patient reported sleeping better over the past week and that her mood was greatly improved and that she had periods where she felt very hopeful and could “see the light at the end of the tunnel.” The psychologist reinforced the importance of complying with the stretching routine and the patient was also instructed to continue walking each morning, increasing her distance by 20% per week and recording this in her diaries. The importance of *working to quota and not to tolerance* was emphasized.<sup>2</sup>

On the basis of her continued improvement with respect to her neuropathic pain and mood the psychologist suggested increasing the lamotrigine to 25 mg in the morning and 50 mg at bedtime. In addition, her sleep continued to improve and we recommended that she maintain the temazepam at 15 mg but limit it to only five nights a week. The psychologist also recommended that her father continue to dispense the medications.

### **Session Summary**

The psychologist and the dentist met prior to ending the session and discussed her progress and medications. It was decided that she would meet with the psychologist prior to meeting with the dentist during the next session to do another graded exposure exercise surrounding her fear of injections. Thus, the shift of the psychologist’s next session was to deal with her injection fear using graded exposure and thought stopping. The dentist was making progress and was able to produce significant reduction of her myofascial pain with Spray and Stretch. With the patient’s mood and medications much more stable, the patient was now able to better discriminate the subtleties of her different pain complaints and distinguish pain from suffering. This was not possible prior to this point in her treatment. Her inability to accurately discern her pain complaints was certainly at the core of her prior misdiagnosis and treatment failures.

## ***Session 6***

### **Team Conference**

The patient called at her scheduled time and reported continued progress and increased activities. She reported being compliant with the physical medicine and exercise program as well as with the behavioral interventions. She reported no adverse drug events. She also reported a much improved and stable mood. Her father confirmed her progress. He continued to be responsible for scheduling the patient’s medications. He reported that she had gone out with friends on two occasions during the week.

## Current Medications

Medication	Dose	Schedule
Pain cocktail	10 ml	Po q8h
Methadone	64 mg	Po qwk
diazepam	80 mg	Po qwk
Carisoprodol	350 mg	1 po qd prn
Temazepam	15 mg	Po qhs 5 nights/week
Orabase–Capsasian	Apply q6h	
Lamotragine	25 mg Po qam	
Lamotragine	50 mg	Po qpm
Topiramate	25 mg	Pp qd
Frovatriptan	2.5 mg Po qd	

*qd* per day, *qwk* per week, *q8h* every 8 h, *q6h* every 6 h, *qam* in the morning, *qpm* in the afternoon, *qhs* at bedtime, *prn* as needed, *po* orally administered

## Psychological Treatment Session

The psychologist met with the patient first. He reviewed the patient's diaries and reviewed her walking program. Rather than walking alone the patient decided to go to a local gym with a friend and found this much more gratifying. She enrolled in an introductory group treadmill walking program at the gym and went almost daily with her friend. The psychologist reinforced her initiative. The diaries indicated continued overall pain reduction from the previous week. The shooting pain was dramatically reduced in intensity and frequency. She said that she was tolerating the medications well and that she no longer felt sedated all of the time but the topiramate was causing mild cognitive dysfunction. This was discussed briefly and normalized as a common side effect to topiramate. She reported that her sleep and mood were greatly improved from the previous week. She said that irritability was greatly diminished, her depression improved, and that she went out with friends three evenings. Her father confirmed her reports, noting that her transformation was "remarkable." She felt the cue-controlled relaxation was benefiting for her sleep, pain, and distress.

Along with the nurse another session of graded exposure was performed, culminating in a saline injection in the bicep. The patient, though anxious, performed the graded exposure well and felt she could go through with a series of trigger-point injections. The role of tolerating uncomfortable emotional experience and pain was discussed. The patient was instructed to increase her relaxation exercises to at least 5 min three times a day and to practice cue-controlled relaxation throughout the day for very short period of times for one or two breaths when she felt tension or pain starting to increase or become bothersome. The psychologist met with the dentist prior to the patient's appointment with him and suggested increasing her Lamotragine to 50 mg twice a day. He also recommended that the dentist ease into the trigger-point injections and consider only injecting one or two trigger-point sites and then assess the patient's response over the course of the week. Frequently



patients will experience immediate pain reductions with trigger-point injections and later this is followed by increased pain and soreness.

### **Orofacial Pain Treatment Session**

After discussing the patient with the psychologist, the dentist reviewed the patient's diaries and exercises with her. After the patient had demonstrated her proficiency with all exercises and the use of Spray and Stretch, the dentist proceeded with the trigger-point injections into the temporalis and masseter muscles. On the basis of the psychologist's recommendation rather than injecting several trigger points, as would be the normal course of action, the dentist instead chose to inject only the one most active trigger point in the masseter and temporalis muscles in order to reduce her distress and to minimize postinjection pain that might result in the patient becoming more fearful. The dentist instructed the patient to use the cue-controlled relaxation and cognitive strategies that the psychologist had instructed her in. After fully informing the patient, he applied moist heat to the injection sites and then injected the masseter and temporalis muscle trigger points respectively using a 5% lidocaine solution. The patient showed an immediate and dramatic 60% reduction in the aching myofascial component of her facial pain following the trigger-point injections. The patient was instructed to apply ice to the injection sites and during the week to continue the stretching routine six times a day and use Spray and Stretch twice a day. The dentist again decreased the patient's pain cocktail by 20% and discontinued the carisoprodol. She was instructed to increase lamotrigine to 50 mg twice a day and increase her topiramate to 25 mg twice a day. The dentist also reviewed her use of Frova and her side effects to topiramate, and answered any questions she had about the medications or her treatment. He noted that the patient's sleep was greatly improved using the behavioral strategies and the dentist reduced the temazepam to 15 mg, four nights a week.

### **Session Summary**

The patient's use of methadone, diazepam, and carisoprodol had been decreased significantly without signs of withdrawal. The patient's sleep continued to improve using behavioral approaches as her use of temazepam had simultaneously reduced significantly. Her mood and cognitive status was also improving and her activity levels significantly increased, reflecting her mood stabilization, improved sleep, and of course her reduction in use of methadone, diazepam, carisoprodol, and temazepam. Moreover she reported good "compliance" with the stretching program and that the stretching was resulting in significant reductions of her myofascial pain. This reinforced her sense of self-control over important aspects of her pain and motivated her to comply. She also reported that she felt she was able to abort

an escalation in her tooth site throbbing pain (migraine) with the stretching independent of her use of Frovatriptan. She reported a significant decrease in the throbbing facial migraine pain, nausea, and vomiting. The sharp electrical shooting pain down her right maxilla was responding to the lamotrigine, and her mood was greatly improved since being placed on the lamotrigine and using her coping strategies. Her sleep also improved significantly with sleep hygiene, relaxation, and elimination of daytime napping. Since the patient was not showing signs of withdrawal it was decided to continue reducing the active contents of the pain cocktail at the same rate of approximately 20–25% per week. She called once during the week to report her progress. She reported difficulties doing the exercise program on a daily basis because the friend she was going to the gym with was out of town. She was doing the stretching six times a day since it reduced her pain and “felt good.” The psychologist helped the patient problem-solve the compliance issues and she was reinforced for doing as much as she had. At this point in the treatment the focus had switched from containment to reinforcement of active coping.

This session demonstrated the dynamic treatment process. Both the psychologist and the dentist altered their normal course of treatment based on their collaborative input to one another. At the request of the dentist the psychologist focused on injection fear reduction using graded exposure. To this point the psychologist still had not embarked upon an in-depth structured cognitive-behavioral pain management program, although aspects of cognitive-behavioral treatments were introduced to the patient to target specific issues. The dentist altered his routine trigger point injection protocol, reducing the number of injections at the request of the psychologist in order to reduce the patient’s injection fear and postinjection pain, which would likely serve to reinforce her anxiety. Deciding on medications and dosages continued to be a collaborative venture.

### ***Treatment Sessions 7–12; Follow-Up Sessions***

The patient continued improving and by session 10 was almost totally pain-free, sleeping well without temazepam, and was actively using her stretching exercises on a daily basis both on a prophylactic and on an abortive basis. By session 12 she had been stabilized on lamotrigine (50 mg twice a day), topiramate (150 mg/day), and Frovatriptan (2.5 mg as needed). She had also been completely withdrawn from carisoprodol. Methadone and diazepam were also completely withdrawn using the blinded pain cocktail format. The patient did experience some mild to moderate withdrawal symptoms after the reduction of methadone and diazepam in session 10. She was provided with a clonidine patch (0.1 mg) to reduce the withdrawal symptoms but did not like the lightheadedness (hypotensive) feeling on the patch. After discussing this with the psychologist she decided to “ride out” the withdrawal symptoms, which were tolerable and lasted in varying degrees for about 6 days. By session 10 the patient was also alert, with no signs of adverse drug effects, her cognitive status was normal, and she was reading again and preparing herself go back to nursing

school to become a nurse anesthetist. Her father was elated to see his daughter doing so well and reported that she was going out with friends and had resumed her social life. While her reductions in medications and pain were impressive, it was her mood that showed paramount gains. With her mood stabilized, she rarely got irritable, angry, or acted out inappropriately and when she did, the intensity was greatly diminished. Upon reevaluation, the psychologist dropped the “rule out borderline personality disorder” from the list of diagnoses. It appeared that it was an undiagnosed bipolar disorder that was contributing to her life-long unstable mood and interpersonal difficulties. Certainly, the diagnoses of borderline personality disorder and bipolar disorder share many overlapping symptom clusters, and in fact borderline personality disorder is now seen by many as a member of the family of *bipolar spectrum disorders* and not as a different diagnosis.<sup>20</sup>

The patient was placed on a 1-month follow-up at session 12 and continued on the pain cocktail, although there were no active ingredients in it. Often it is important to keep the patient blinded to the fact that the pain cocktail no longer contains active drugs for several weeks. This allows the physician to assess the patient’s pain behavior when he or she is no longer taking active medications. Also when the dentist/physician discusses the possibility of discontinuing the active ingredients in the cocktail with the patient it is not uncommon for the patient to display significant anxiety and we have even seen pseudo-withdrawal symptoms, even though the patient has not taken the active ingredients in 2 weeks. The act of taking narcotics or benzodiazepines to reduce pain and distress is a strongly reinforced behavior and is independent of their actual physiological effects. It can be difficult to extinguish pill-taking behaviors. Being able to tell patients in a compassionate way that they have actually been functioning well off the narcotics and benzodiazepines in the cocktail for a period of time can be a transforming experience for the patient. Moreover, the most difficult phase of most narcotic detoxifications is trying to eliminate the last few milligrams/pills when using an open or nonblinded format. The blinded pain cocktail eliminates this challenge, so when the physician and the psychologist present the idea of coming completely off the active medications the patient will have a history of having effectively done this, thus reducing his or her distress. The pain cocktail is a greatly underutilized tool in pain medicine.

The patient was subsequently placed on a 3-month and then a 6-month follow-up. At her 6-month follow-up the patient continued to maintain her therapeutic gains. She had been referred to a clinical psychologist for dialectical behavior therapy<sup>19</sup> and to a psychiatrist, who continued to maintain the patient on lamotrigine. Both reported that the patient was continuing to make excellent interpersonal progress.

## Discussion

In this chapter we have presented a session-by-session case tutorial demonstrating the implementation of a collaborative biopsychosocial relationship in diagnosing and treating a patient presenting with complex chronic orofacial pain. While we

have provided some key details regarding the collaborative interactions and decision-making process, we merely scratched the surface, omitting many subtleties inherent in working closely with a colleague sharing the same model of disease. As shown in this case presentation, failure to consider psychosocial factors in diagnosing and treating complex orofacial pain is likely to result in treatment failure and iatrogenic complications.

To summarize, when the patient initially presented to her dentist she was, in all likelihood, experiencing facial migraine manifesting itself as pain localized in tooth 4. Since this presentation is uncommon, the migraine was misdiagnosed as tooth disease despite a lack of collaborating radiological and dental evidence. The tooth underwent a root canal therapy by her dentist and subsequently by an endodontist. When this failed it was followed by root canal therapies to adjacent teeth 3 and 4. Persistent tooth pain and associated nausea and vomiting ultimately led to extraction. The throbbing pain continued at the extraction site locations even in the absence of the three teeth. Shortly thereafter, the patient began also experiencing dull aching pain at the extraction sites when they were touched by the tongue or food. The dentist began prescribing narcotics for pain control and this increased the throbbing and associated nausea and vomiting, since medication-overuse headaches or analgesic-rebound headaches are a well-documented result of analgesic use.<sup>14, 21–22</sup> The narcotics were also causing the spreading burning facial pain, termed “secondary hyperalgesia,”<sup>6, 22</sup> further complicating the multiple-layered diagnosis. In addition, trigger points in the head and neck musculature were referring pain into the tooth site and face, contributing to her TMJ pain.<sup>5, 15</sup> The dentist also missed her capsulitis because of her overwhelming array of symptoms and her dramatic and demanding behavioral style. The dentist prescribed diazepam to decrease her distress and temazepam for sleep disturbance—both contributing to her mood disturbance and further disrupting her sleep architecture. Thus, a cycle of poor sleep and poor mood was likely an ongoing process. The dentist then referred her for a neurological evaluation following the failed extractions and escalating demands for drugs, coupled with her deteriorating mood. Diagnosing her with trigeminal neuralgia and agitated depression, the neurologist attempted several antiseizure and antidepressant medication trials and, with the exception of escalating doses and strength of narcotics, the patient experienced intolerable side effects to each of them. He also prescribed carisoprodol as a muscle relaxant, which further disrupted her mood. Frustrated, the neurologist sought a pain medicine consultation with an interventional anesthesiologist. After an occipital nerve block under sedation had been performed on the patient, the patient experienced a severe flareup. The anesthesiologist then wanted to perform a variety of other interventional and ablative procedures. The patient wisely refused and the anesthesiologist then began escalating her narcotic doses to the point where he accused her of being a “drug addict” and referred her back to the neurologist with the recommendation for a drug rehabilitation program. At this point the neurologist referred her to the UCLA Orofacial Pain Clinic.

Of critical importance in this patient’s failure to respond to prior treatments was her increasing mood disturbance and concomitant somatization. Her mood disturbance was grossly affecting her ability to provide accurate symptom information. Her

mood acted to amplify her symptoms. It resulted in a poor ability to discriminate pain from suffering and accurately discriminate pain levels, as evidenced by her constant pain ratings of 10/10 on the VAS, with 10 indicating “the most intense pain ever imaginable.” When attempting to address her mood using antidepressant medications, the patient became hypomanic and anxious. This reaction is pathognomonic for bipolar disorder which had gone undiagnosed and instead was viewed as agitated depression. This is not surprising since there is ample evidence showing the ineffectiveness of physicians and dentists in diagnosing and treating common mental disorders. In fact, one study showed that primary care physicians met the minimal standard for treating depression only 53% of the time and less than 10% for substance abuse.<sup>23</sup> In another study, dentists were shown to have great difficulty identifying depression in their pain patients.<sup>24</sup> Physicians working outside the context of a collaborative relationship with a psychologist will more often than not fail to adequately identify and address psychological factors that can profoundly impact the diagnosis and treatment of their pain patients. Clearly her mood disturbance was the critical factor confusing her diagnostic presentation. It was not until the health psychologist evaluated the patient that the psychosocial factors impacting her diagnosis and treatment were identified and addressed. Once the patient’s mood began to stabilize and her acting out was contained, a clearer picture of her multiple problems emerged.

In the present collaborative treatment plan, structure and consistency were the main factor leading to the successful treatment outcome. The patient was seen weekly by both the dentist and the psychologist. The dentist and the psychologist emphasized self-management on aspects of the treatment where the patient was capable of compliance. The dentist provided the patient with a home stretching and exercise program, not just to address the pain, but also to engender a sense of self-efficacy. However, her father was charged with delivering all medications due to the patient’s labile emotional status and tendency to rapidly escalate medication dosages in times of distress. The offending medications had to be withdrawn and the orofacial pain specialist and the psychologist decided that the most effective means of achieving this was by utilizing a blinded methadone pain cocktail. The prescriptions were written for only 1 week at a time. This is not only an issue of safe prescriptive practices but also tended to ensure compliance with regard to maintaining her appointment schedule. It was expected that once the narcotic, diazepam, and carisoprodol had been withdrawn, the migraine component of the pain would become less refractory to treatment and would respond to both prophylactic medications and an abortive triptan and, in addition, help to stabilize her mood. The extraction site pain and tenderness was blockable with topical and local anesthetics, indicating a peripheral neuropathy. The orofacial pain dentist and the psychologist collaboratively decided to use lamotrigine to treat the pain and provide an added benefit of stabilizing her mood. Lamotrigine is a sodium channel blocker and has shown efficacy in treating trigeminal neuropathic pain, as well as functioning as a mood stabilizer.

A unique and critical aspect of the collaborative relationship is the dynamic treatment process. That is, both the dentist and the psychologist alter and constantly fine-tune their respective treatments on the basis of the input and interventions of

the other. The pain medicine and psychological treatments build on each other. For example, the dentist chose lamotrigine instead of other antiseizure medications with greater proven efficacy in controlling trigeminal neuropathy based on the psychologist's input. Importantly the dentist did not prescribe an array of antidepressant medications, specifically a tricyclic antidepressant, that would normally be included in the treatment plan because of the psychologist's input and concerns that they might switch the patient to mania. In the present case the psychologist never delivered a systematic course of cognitive-behavioral pain management. Instead, the psychologist acted more as a navigator, guiding the patient through the dentist's pain medicine treatments. The psychologist tagged on aspects of cognitive-behavioral treatments as they were needed to facilitate the patient's journey through the pain medicine treatment program by targeting side effects, difficulties with the narcotic and benzodiazepine tapering, and disruptive behaviors and sleep disturbance.

The collaborative relationship is most optimal when the collaborating parties share the same model of pain, in this case the biopsychosocial model, and the collaboration is conducted in an atmosphere of mutual respect. It is here that the psychologist must take the initiative. It is up to the psychologist to educate the dentist and the physician what it is they have to offer. This is done by providing the referring dentist and physician with a prompt phone call and dictation following their assessment of the patient. The dictation must be written specifically for the dentist and the physician, providing them with practical information that will directly impact their ability to diagnose and treat their patients. This must be free of psychobabble. The dentist and the physician do not care if the patient had an abusive childhood, history of substance abuse, or a bipolar disorder. What they care about is *specifically* how these issues will impact their diagnosis and treatment and what they need to do to address these issues most effectively in order to optimize their pain medicine interventions. The psychologist must also participate in grand rounds with the referring physicians and actively provide meaningful information in a brief and concise manner. These are critically important and adaptive behaviors for the psychologist in terms of maintaining a collaborative relationship. Such collaborative interactions provide patients with a consistent message and also serve to calibrate the dentist/physician and psychologist's respective views of the patient and how they are progressing. The vast majority of physicians and dentists welcome any input that will make them more effective and reduce risk to both the patient and themselves. It is in the area of risk management that the psychologist has a considerable amount to offer the orofacial pain dentist and the pain medicine physician. Identifying how the patient's psychosocial status can foster a potential for adverse events in regard to medications and interventions is the main "selling point" for dentists and physicians to enter into a collaborative relationship with the psychologist. It is important to understand that in many ways it is the *physician* the psychologist is "treating" more than the patient.

While it is rare to find a setting using the integrated collaborative relationship, it offers many advantages not only for the patient but also for the professionals. There are three key benefits inherent in the collaborative relationship for the professional.

First, collaboration offers a means to *diffuse patient-related responsibilities*, thus reducing work load. Working with a complex pain patient, such as the patient described in this chapter, is demanding, time-consuming, and difficult work. Professionals working in isolation are simply not equipped to address the many challenges that these patients present, especially within the context of a busy practice. Second, and perhaps most important, is that the collaborative relationship *diffuses the emotional distress* involved in working with these challenging patients. The importance of this cannot be underestimated. Collaboration helps to prevent patient burnout. Burnout is at the root of most “dumps,” that is, referral of patients simply to get rid of them because working with them has become too frustrating and intolerable to the clinician. Collaboration allows the professionals to offer support to one another and to avoid patient splitting, miscommunications, and to contain the difficult patient, all sources of distress to the clinician. These difficult patients should not and cannot be effectively treated in modality-based clinics where the goal is to choose the appropriate interventions or medications targeting proposed pathophysiological mechanisms viewed as “causing” the pain. These patients should not and cannot be effectively treated solely through the use of psychological treatments which fail to account for and address pathophysiological mechanisms through the use of modalities and medications. These patients must be treated in a truly comprehensive pain medicine setting where they have access to appropriately trained dentists, physicians, and psychologists working in a collaborative relationship and acting in the best interest of the patient.

Finally, the collaborative relationship serves as an important *form of risk management*, with the physician ensuring that critical pathophysiological factors are not missed by the psychologist and the psychologist ensuring that critical psychosocial factors are not missed by the physician.

In summary, increasingly like pain medicine physicians, dentists trained in orofacial pain and psychologists trained in clinical health psychology are entering into collaborative relationships to treat their difficult pain patients. Like pain medicine physicians, the orofacial pain dentist has little to no training in psychology and psychopharmacology. The crux of the matter is that in the majority of situations, it is up to the psychologist to initiate the collaborative relationship with the dentist and the physician. It is up to the psychologist to learn the language and needs of the physician and the dentist, and to provide in-depth education to the physician and the dentist about what it is that they have to offer to enhance their patient care. These relationships take work and constant refinement. There is always a period of proving one’s worthiness. Openness to mistakes and poor calls is critical and should be viewed as an opportunity to learn from them and to strengthen the collaborative relationship. Unlike the present case, these patients frequently do not improve, or show only little improvement. A collaborative biopsychosocial relationship optimizes the chances of a successful and safe outcome. Once such a collaborative relationship has been established, it is certainly a professionally gratifying experience for both the patient and the health care professional alike.

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## Chapter 20

# Integrated Care in a Cardiac Rehabilitation Program: Benefits and Challenges

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Imagine the following:

Ms. A, a 67-year-old retired accountant, was referred to cardiac rehabilitation after bypass surgery. During her first session of rehabilitation, the staff was concerned by her heart rate changes in response to exercise. As a result, she was being carefully supervised while on the exercise equipment. Over the course of Ms. A's second session, her case manager observed that she was extremely anxious and arranged an appointment with a psychologist. The earliest appointment available was in 2 weeks. At the end of the third session, Ms. A refused to stop exercising, even though the session was over for the day and there would be no supervision for her. She insisted that she needed to "do whatever it took" to improve her health. The staff saw her behavior as dangerous. The patient saw the staff as interfering with her recovery.

Situations like this are not unusual in outpatient cardiac rehabilitation (CR) programs. More than 13 million Americans have coronary heart disease, and approximately nine million of these individuals are candidates for CR,<sup>1</sup> a secondary prevention program for individuals who have experienced a cardiac event (e.g., myocardial infarction, coronary artery bypass graft, percutaneous transluminal coronary angioplasty, stent placement, and chronic angina). Rehabilitation focuses on improving physical functioning and making lifestyle changes that can lower an individual's risk of future cardiac events.

A significant amount of empirical evidence has now accumulated to support the fact that a collaborative approach to CR is essential for optimizing outcomes.<sup>2</sup> Given previous findings demonstrating that exercise, weight loss, improvements in mental health, and modifications of risk factors (e.g., smoking cessation) independently improve cardiac functioning and reduce mortality rates, it is not surprising that a combined approach would be most effective. Indeed, several studies using a comprehensive approach focusing on lifestyle alterations (e.g., psychosocial and dietary intervention) have found CR to be associated with improvements in cardiac functioning, reductions in mortality rates, increases in exercise tolerance, and decreases in depression and anxiety (see Linden<sup>2</sup> for a review). One study found that cardiac patients who underwent comprehensive treatment (i.e., recognition and modification of stress symptoms, relaxation, and education on diet and exercise) had lower mortality rates and were significantly less likely to have a recurring cardiac

event than the comparison sample.<sup>3</sup> More recently, Linden et al.<sup>4</sup> found that adding a psychosocial component to standard CR decreased patients' mortality rates, cardiac recurrence rates, and level of psychological distress compared with those of patients who received only standard CR.

Consistent with the findings demonstrating the value of a collaborative approach, the American Association of Cardiovascular and Pulmonary Rehabilitation<sup>5</sup> (AACVPR) set forth guidelines that require CR programs to address core components with strong behavioral influences, including weight management, diabetes management, nutritional counseling, and smoking cessation. Further, programs must attend to psychosocial concerns including anxiety, depression, stress, coping skills, and other issues affecting health-related quality of life. In strong support of a multidisciplinary approach to secondary prevention in CR, the AACVPR guidelines state that "cardiovascular disease risk factors demand an integrated approach to medical and lifestyle management because of their unique and complex interactions."<sup>5(p4)</sup>

The collaborative care model required for accreditation by the AACVPR is an excellent example of Peek's "three world model," which emphasizes balancing the clinical, operational, and financial worlds in order for a program to be successful.<sup>6</sup> In CR programs, Peek's clinical world involves the daily management of the patient's needs (e.g., establishing workout regimen, monitoring vitals, education, provision of referrals as necessary); the operational world refers to the CR program's efficiency and productivity (e.g., staffing, staff training, performance excellence, outcomes, patient satisfaction); and the financial world refers to the financial viability of the CR program as well as the hospital. To be successful, these three spheres must be developed and implemented in concert. A CR program should simultaneously provide optimal clinical care, operate efficiently, and be financially viable. Indeed, this model predicts that consistently emphasizing one world over the others will ultimately result in the failure of the program, which, as detailed below, was precisely our experience.

In this chapter, we present an overview of our current CR program followed by the case of Ms. A, a patient who was successfully treated within this program. We then discuss the benefits as well as the challenges of collaborative care in CR programs. To illustrate some of the challenges in more detail, we describe a former CR program that failed, explore the reasons for its failure, and discuss how it was successfully reorganized using the core concepts of Peek's three world view.<sup>6</sup> Throughout the chapter, we will highlight the core concepts that are critical for developing and implementing a successful collaborative CR program.

## **Overview of a CR program: Three World Integration**

Ms. A was a participant in an outpatient CR program associated with a nonprofit hospital in New England. The hospital is part of a corporate partnership that includes three other hospitals in the local area that are all affiliated with a local

medical school. The hospital administrators report to the CEO of the hospital, who reports to the CEO of the corporation and the hospital boards. This hospital is heavily invested in providing a continuum of cardiac care to the community and prides itself on its comprehensive cardiac program. It is typically listed as one of the top 100 cardiac hospitals in the country. As such, this hospital has a strong commitment to cardiac care.

The staff in CR is multidisciplinary. Nurses and exercise physiologists serve as case managers. They oversee daily exercise, coordinate educational programs, monitor patient progress, and keep the patients' physician(s) informed. A cardiologist serves as the Medical Director of the program. His responsibilities include overseeing all medical aspects of the program (i.e., the medical safety of the patients, physician coverage, education of staff and patients) and promoting the program to other physicians. A clinical psychologist (who is on-site 1 day a week) and a dietician (who is on-site one half day a week) from the Department of Behavioral Medicine are also involved in helping patients make long-term lifestyle changes. Behavioral medicine professionals perform a variety of functions at CR such as presenting educational materials to patients, meeting with patients individually, and training staff.

The Program Director is the chief administrator of the CR program. She is responsible for staffing, overseeing quality of patient care, tracking outcomes, tracking patient satisfaction, and overseeing the budget. She has two full-time administrative assistants who assist patients with administrative issues, schedule intakes and stress tests, communicate with third-party payers, and handle a variety of other day-to-day operational functions.

The Clinical Business Director is responsible for the financial viability of all cardiac programs at the hospital and reports directly to the chief financial officer of the hospital. Within the context of a hospital that prides itself on being a center of excellence for cardiac care, her job is to ensure that the CR program operates in a fiscally responsible manner. She works collaboratively with the Program Manager and the Medical Director to manage the budget and meet the goals of CR.

## **The Typical Patient Experience at CR**

Patients are generally referred to the program by their cardiologist after a cardiac event. At intake, the patient is interviewed by a clinical staff member and completes a battery of self-report psychological measures, which include the Cardiac Depression Scale,<sup>7</sup> the Taylor Manifest Anxiety Scale<sup>8</sup> (TMAS), and the Medical Outcome Study Short-Form Health Survey.<sup>9</sup> Next, a case manager is assigned. The patient usually has a cardiac stress test (either on-site or off-site) prior to beginning rehabilitation. The CR experience consists of supervised exercise sessions (three times a week for 60 min) and educational sessions (twice a week for 20 min). The lectures cover a variety of topics (e.g., stress reduction, communicating with your physician, nutrition, heart medications, exercise equipment), with the majority conducted by the behavioral medicine team. Most patients participate in the active

rehabilitation program for 12 weeks. The patient's cardiologist is kept informed by a progress note (at 6 weeks) and a discharge report. Upon completing the program, every patient is given an exit stress test, repeats the psychological test battery, and completes a patient satisfaction survey. The hospital also offers a maintenance program to patients after they complete active treatment; a large number of participants opt to participate in this program.

All patients are monitored telemetrically for the first four exercise sessions to ensure their heart rate stays within the targeted range and to allow immediate recognition of any cardiac abnormalities that may arise during exercise. The schedule of monitoring for the remainder of the program is based on a patient's relative cardiac risk. Patients experiencing any cardiac abnormalities are first evaluated by a nurse, who records vital signs and administers an electrocardiogram. The attending cardiologist then examines the patient, and significant physical findings are forwarded to the patient's cardiologist.

The clinical staff determines an initial exercise prescription for each patient and teaches the individual to monitor his or her own heart rate. The goal is for each patient to stay within the prescribe heart rate range. On the basis of the monitoring data, the case manager modifies the exercise prescription with the overall goal of safely increasing the patient's ability to exercise. Patients initially receive considerable attention, but are encouraged to become more independent as they learn to use the equipment and become comfortable with the recording procedures. Patients typically track how long they exercised on each piece of equipment, the difficulty level they achieved, their heart rate, their weight (weekly), and their daily blood sugar levels if they have diabetes. Patients also record information about exercise completed outside of CR.

As necessary, patients are scheduled for individual appointments with behavioral medicine specialists. Patients with diabetes, for example, are referred to the dietician to help create a dietary plan. If a case manager identifies significant psychological issues at intake or any other time during the course of treatment, the patient is referred to the psychologist. Such issues might include nicotine dependence, weight management, stress, anxiety, depression, or low motivation to change health behaviors. Psychological measures obtained during the initial screening help case managers identify problem areas. Patients understand that they can also request individual appointments with the psychologist at any time during the course of treatment.

## **The Case of Ms. A**

Ms. A is a 67-year-old woman with a significant cardiac history including coronary artery disease, angina, hypertension, and hypercholesterolemia. Her cardiologist referred her to CR after surgery for quadruple coronary artery bypass grafting. She retired from her accounting position 5 years ago and currently lives with her husband. She is actively involved with her two grown children and five grandchildren. At intake, Ms. A listed "the development of heart disease," "stress and heart disease," and "relaxation techniques" as her three most important concerns.

On the second day of CR, the case manager observed that Ms. A. was very anxious and suggested that she meet with the psychologist from behavioral medicine. This observation was consistent with the patient's clinical score on the TMAS.<sup>8</sup> She was scheduled for the next available appointment, which was in 2 weeks. Before she was able to meet with the psychologist, however, several issues developed on the floor. Because Ms. A's heart rate response to exercise was elevated, the case manager had to watch her carefully. At the third session of rehabilitation, Ms. A was unable to complete her prescribed number of minutes on the exercise equipment by the end of the time allotted for the session. Ms. A refused to stop exercising despite repeated requests by the case manager and an explanation that she needed to be supervised while exercising. In the next session, Ms. A violated policy by starting to warm up before checking in with staff. Both incidents were discussed with the patient and the program manager was informed. The case manager also informed the psychologist that Ms. A was very demanding and difficult to manage. The situation left several important questions unanswered. Was Ms. A's elevated heart response physical or emotional? Was Ms. A just a difficult patient or were there other issues contributing to her behavior? What was the best way for the staff to ensure this patient's safety and progress at the same time?

Ms. A was eager to meet with the psychologist because she wanted to "do whatever it took" to improve her chances for recovery and reduce her risk of a future cardiac event. During the first visit, the psychologist explained the limits of confidentiality and how it pertained to the CR program. Specifically, the psychologist explained that treatment was a collaborative effort and that her case manager would have access to notes in the CR file. Additionally, the psychologist explained that she and the case manager would discuss Ms. A's progress in an effort to maximize her health outcomes.

Ms. A provided additional relevant background information during the initial visit to the psychologist. She described a difficult childhood, a history of significant loss (an infant child), and a prior serious medical condition (breast cancer). She reported a history of worrying and reacting excessively to minor anxiety provoking situations. Ms. A exhibited a pessimistic explanatory style<sup>10</sup> and believed that the only way she could avoid additional serious complications to her health was to be hypervigilant to all symptoms. She admitted to continually asking questions of the staff and responding with impatience when they did not immediately respond. Ms. A had been very successful in her career, in part owing to her attention to detail. This same attention to detail was now causing her excessive anxiety. On the positive side, Ms. A had a very supportive husband and she understood that her inability to manage stress likely contributed to her heart disease. It was clear that Ms. A was having a difficult time adjusting to her illness and was experiencing symptoms of depression and anxiety, which were negatively affecting her functioning. Additionally, her current coping strategies were interfering with her recovery and causing difficulties in her interactions with the staff.

Ms. A attended weekly sessions with the psychologist where she received cognitive behavioral therapy concurrent with her CR. She tracked her thoughts during anxiety-provoking situations, which were then used in cognitive restructuring techniques. She learned to use relaxation strategies (i.e., diaphragmatic breathing and imagery)

when she found herself “seeing red.” Ms. A became less demanding of staff and more independent on the equipment as she began to better control her anxiety. Because the psychologist was often on-site in the CR program, she was also able to check with Ms. A on the floor while she was exercising and keep up-to-date on any problems the case manager was having with the patient’s behavior.

During her sixth week of CR, Ms. A displayed abnormal cardiac activity during exercise and was taken to the examination room, where an electrocardiogram was performed. She was seen by the attending cardiologist, who told Ms. A that her cardiologist needed to follow up and give her medical clearance before she could return to CR. After seeing her own cardiologist, she was readmitted to the hospital for cardiac catheterization. Stents were inserted to open three occluded arteries. Shortly after this procedure, Ms. A was readmitted to the hospital for emergency gallbladder surgery. Her recovery from these two medical setbacks was longer than anticipated. She was not able to return to CR for almost 6 weeks.

During Ms. A’s absence, her functional capacity deteriorated. Unfortunately, this led to increased hypervigilance regarding her physical functioning. She now wanted to be monitored daily by telemetry. She firmly believed that had she not been monitored so closely previously she would have died from a heart attack. Ms. A returned to regular appointments with the psychologist at the same time she returned to CR. Now, in addition to reinforcing her previous treatment gains, therapy focused on her catastrophic thinking and the negative effects it was having on her anxiety. Further discussion centered on acceptance of her current physical functioning and realistic examination of her current capabilities. She began to see this process as acceptance rather than “giving up,” and was therefore able to better manage the natural ups and downs of recovery.

Ms. A had become so focused on her rehabilitation that she had little time or energy for other aspects of her life. As a result, therapy began to address behavioral activation outside the rehabilitation, with particular emphasis on returning to the activities she previously enjoyed. As Ms. A began to improve, visits were tapered to a less frequent schedule. At the final therapy session, Ms. A asked for specific feedback regarding her interaction style with others. She was concerned that she was disliked by the staff because she had made their jobs difficult. In this way, therapy came full circle by examining how she previously handled anxiety-provoking situations and how her newly learned strategies were more effective for her. Her case manager noted in her discharge summary that Ms. A had reduced both her stress level and her rigidity concerning telemetry monitoring. Ms. A’s score on the anxiety measure decreased from clinically significant at intake to normal at discharge. Both the case manager and the psychologist noted that Ms. A continued to have some anxiety about her health and that this would be an important issue for her to continue to address.

In addition to the psychological improvements, Ms. A significantly reduced her cardiac risk factors as a result of her participation in CR. She experienced improvements in her physical functional capacity. Her endurance increased, allowing her to exercise for 36 min compared with 30 min at the beginning of treatment. She increased her metabolic equivalent tolerance levels, which measure her ability to

effectively consume oxygen while performing activities that place demands on the heart. For example, before rehabilitation Ms. A was only able to manage tasks such as light housework and grocery shopping. After rehabilitation, she was able to play vigorously with her grandchildren and walk briskly. She made progress in other areas as well. Her total cholesterol level decreased from 204 to 163; her low-density lipoprotein level decreased from 120 to 81; her high-density lipoprotein level increased from 63 to 67; and her triglycerides level decreased from 104 to 76. Although her risk stratification remained moderate, Ms. A left CR with a clear plan about continuing the lifestyle changes she had implemented during rehabilitation, including a regular exercise program, dietary changes, and stress and anxiety management. In the end, although it was not completely clear whether Ms. A's elevated heart rate response was strictly an anxiety response, it was apparent that her anxiety played an important role in her behaviors. A collaborative approach to treatment improved her outcomes and her interactions with hospital staff.

## **The Benefits of Collaborative Care in CR**

In addition to illustrating the general success of CR, this case highlights the importance of using a collaborative model to enhance the effectiveness of CR. Empirical evidence has accumulated to support the notion that patients benefit when behavioral medicine specialists are included in CR programs.<sup>2</sup> For Ms. A, the integrated setting created an environment where all of her needs could be met in one location and her providers could easily coordinate her care, thereby maximizing her health outcomes. In addition to improving her functional capacity, she was able to institute the necessary lifestyle changes recommended to her (e.g., dietary restrictions, exercise maintenance, stress management) and decrease her anxiety over the course of treatment.

Beyond the direct patient benefits psychologists provide, they can serve an important role in the three world system in CR. Operationally, Ms. A put a strain on the system; her case manager was forced to devote a great deal of time and energy to her at the expense of the other patients. As a result, other case managers had to help with her patients, putting a strain on all the staff and changing the experience for all patients. Indeed, some of the other patients complained about Ms. A's incessant demands. Because of the integrative capacity of CR and increased communication across the "worlds," the psychologist was able to intervene, with the ultimate result of improving the patient's functioning and increasing the ability of the staff to attend to the needs of Ms. A and all the other patients. In fact, the patient satisfaction survey revealed that Ms. A was extremely pleased with her experience. This was further evidenced by the fact that she brought presents to the staff when she completed the program and told everyone how helpful they had been.

Additionally, psychologists have a unique skill set that can facilitate communication throughout an organization. Often psychologists serve as facilitators when problems arise among staff. An ability to listen to staff concerns about patients,

other staff members, or management can help alleviate tension and promote the overall mission. They can also help foster open and respectful communication between providers. The fact that Ms. A's caseworker felt comfortable sharing her frustrations about the patient and was open to learning new ways of dealing with difficult patients is a testament to the notion that behavioral medicine is an important asset to the organization. In addition, therapy helped Ms. A improve her interactions with staff over the course of treatment, which further bolstered the team approach to dealing with high-utilizing patients.

Through collaborative care, behavioral medicine staff can also improve the quality of a CR program. For example, a behavioral medicine specialist can train staff to use empirically validated intervention techniques. One such technique to promote behavior change that is gaining support in CR settings is motivational interviewing<sup>11</sup> (MI). In our CR program, the psychologist recently introduced MI to the staff at two in-service meetings. Subsequently, the psychologist, program manager, and medical director of CR discussed the value of training the staff in MI techniques. As a direct result of this discussion, the clinical staff is now being trained in MI techniques. Our plan is to investigate the impact of this intervention on three important areas: attendance, which is vital to maximizing reimbursement; patient satisfaction, which is critical to maintaining a strong referral base; and clinical outcomes, which are required to maintain accreditation.

## **The Challenges of Collaborative Care in CR**

Ms. A was fortunate to have entered our CR program in 2005. Had she been a candidate for the program a mere 3 years earlier, there might not have been a program at the hospital for her to attend. In 2002, our CR program was on the verge of closure. The program was losing a significant amount of money each year. The more patients we saw, the more money we lost. The program was inefficient, unproductive, and expensive. For example, rather than cross-training staff members to treat both the 12-week CR patients and the maintenance patients, there were separate staffs for each program. Nurses and exercise physiologists were responsible for narrowly defined components of each program. Although this arrangement provided ample time for the staff to complete paperwork and spend time with patients, it was financially disastrous. In addition, the abundance of staff and the separation of tasks resulted in confusion and conflict. Further, the program was only open until the cardiologist left for the day at 1:00 p.m., limiting the hours of operation (a cardiologist must be present during the rehabilitation process). The Behavioral Medicine Department played a role in the system at that time, but had a limited clinical role that was disconnected from both the operational and financial realms.

It is important to emphasize that the health care professionals who designed and implemented this program did it with the very best of intentions: to provide the highest quality clinical care. On the basis of the clinical outcomes and patient satisfaction ratings, the program was a monumental success. Patients proudly wore



T-shirts announcing that they had completed the program, and many continued to visit the program long after they had completed the active phase of treatment. These patients were so passionate that when the program was threatened with closure they formed an “alliance” and began an intensive campaign to save it. This dogged persistence by the patients heavily influenced the decision to revive the program.

From a three world model perspective, it was the unidimensional attention to the clinical world (at the expense of the operational and financial worlds) that led to the demise of the program. Partly in response to the massive campaign launched by former patients, the hospital began to consider reorganizing CR by carefully balancing clinical, operational, and financial matters. Staff was reduced and demands on staff were increased, which created a multitude of challenges. Staff members were trained in both 12-week rehabilitation and maintenance programs. Although they remained specialists in their respective fields, nurses and exercise physiologists completed many of the same duties and were able to cover for each other. Collectively, these modifications resulted in increased efficiency, productivity, and teamwork, along with decreased confusion and conflict. The budget was reorganized to reflect the changes, and by all accounts these changes have improved the viability of CR without compromising clinical care. Patient satisfaction surveys are generally positive, and objective outcomes (e.g., body-mass index, weight loss, and education) typically meet or exceed expectations. Moreover, the role of the psychologist has expanded beyond just the provision of clinical care to individual patients, to include additional educational roles, group interventions, and staff training.

Communication between providers of the clinical, operational, and financial components of the program improved dramatically following the reorganization in 2003. The new program manager was more open with the clinical staff; the staff began to understand the need to reduce the number of per diem staff hired and be flexible in coverage; and the office and administrative staff gained a greater understanding of streamlining administrative processes. Clinical, operational, and financial issues are all discussed at weekly meetings that include the entire staff. CR staff understands the importance of looking for new and creative ways to improve the program (e.g., innovative offerings to patients, a new referral service in the hospital, improvement of electronic resources in an effort to enhance outreach to physicians, staff training opportunities).

One of the reasons the three world model has worked well in CR in this hospital is that the clinical staff was involved in the restructuring of the program at every stage. The staff members were fully informed and therefore trusted the operational and financial members of the team. Although challenging, it is critical to keep the lines of communication open in order to avoid confusion or lack of understanding between the three worlds. Even with all of this intervention, some of the clinical staff members still feel “out of the loop” at times. It is time-consuming to keep everyone informed, but full transparency is key to the success of the collaborative care model.

There are many clinical, operational, and financial challenges that face CR psychologists in particular. From a financial perspective, psychologists are unable to bill for services because individual charges are bundled together with payers

reimbursing for CR services. One solution is to incorporate the psychologist's salary into the CR budget, but these funds are limited because overall reimbursement for CR from payers is low. As a result, in most CR programs, psychologists are typically available at most only 1 day each week. Consequently, the psychologist must find ways to be efficient and effective in the time allotted to provide services. It can be challenging to be on location only 1 day a week while also attempting to maintain a key role in the treatment program. To maximize impact, psychologists often need to be involved by phone/e-mail on other days as necessary and play an active role in events outside normal operating hours (e.g., family nights, optional offerings to the patients, fund raisers sponsored by CR for the American Heart Association).

Another challenge facing psychologists is the task of efficiently identifying patients in need of services. In an ideal situation, every patient would have an individual appointment with the psychologist for screening, and those who need additional help would be identified and offered services. Time and financial constraints at CR preclude this approach. As a result, other approaches to identify the patients who would benefit from services are necessary. The case managers in CR can be trained to identify these patients, as Ms. A's case manager did early in her treatment process. Psychological screening measures can provide an additional source of referral information. Unfortunately, it is not uncommon for patients to have to wait for an appointment with a psychologist, as was the case for Ms. A. Alternatively, some patients in need of individual intervention are reluctant to speak with the psychologist. Discussions with the staff about how to approach reluctant patients are common, and collaborative solutions usually emerge. Finally, the team has to accept that not every patient who would benefit from psychological services will see the psychologist individually.

Creative methods of providing services for patients other than individual meetings can also help psychologists maximize their impact in CR programs. For example, a series of optional opportunities for patients were created at our CR program that included taking a supermarket tour with the dietician and attending a workshop on motivation to change conducted by the psychologist and the health educator. It is also possible to train the case managers to provide behavior change interventions, but case managers have varying degrees of skill in this area and face multiple demands that make finding time for such interventions particularly challenging. Further, the structure of CR (i.e., open, active exercise area with many patients in close proximity) creates barriers to intervention, not the least of which is protecting patient confidentiality. Finally, just scheduling specialized training for case managers can be a daunting task in a typical busy CR program.

Coordination of care between behavioral medicine and the clinical staff is an additional challenge that demands flexibility and creativity, as there is no time allocated for discussing patients. Most communication is informal. Case managers typically communicate with the psychologist about the primary patient concerns prior to his or her appointment and the psychologist typically informs the case-worker of the treatment plan subsequent to the appointment. When direct interaction is not possible, other methods need to be created, such as developing a standard referral form for case managers and/or a feedback information form for the

psychologist to use. Some information will invariably need to be communicated via phone and e-mail. Despite these challenges, the benefits of including behavioral medicine specialists in CR programs far outweigh the costs.

## Concluding Remarks

Treatment for cardiac patients continues to absorb a significant amount of health care money in the USA. From a strictly economic standpoint, CR following a cardiac event has been shown to substantially reduce long-term costs for the patient as a result of improved cardiac functioning.<sup>12–13</sup> Empirical studies illustrate that collaborative care programs are the most effective means of delivering CR services.<sup>2</sup> Moreover, CR programs must be collaborative in order to receive accreditation.<sup>5</sup> In view of this, why do so many hospitals across the country lack this service? As illustrated in this chapter, implementing a CR program that is clinically, operationally, and financially healthy is an enormous challenge. In 2002, our collaborative CR program failed. It failed because our focus was almost exclusively on clinical issues, and the financial and operational issues were largely ignored. In this chapter, we described how our organization successfully reorganized the program and presented the case of Ms. A to illustrate how the reorganized program helped to treat one particular patient. Currently, there are thousands of cardiac patients in this country who lack access to collaborative care CR programs. It is our hope that this information will inspire others to begin developing collaborative care CR programs to serve these individuals' needs.

**Acknowledgements** We would like to acknowledge the members of the CR team who generously lent their time and expertise to this endeavor. They include Arlene Gaw, Julianne DeAngelis, Loren Stabile, and Carol A. Martin.

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# **Chapter 21**

## **Collaborative Treatment in Behavioral Medicine: Treatment of a Young Single Mother with Psoriasis and Generalized Anxiety Disorder**

**Anthony R. Quintiliani**

### **Introduction**

Collaborative, integrated treatment in behavioral medicine has become a current goal of medicine and psychology. Integrated interventions by physicians and psychologists are efficient, evidence-based, successful and cost-effective. This case study examines how collaborative treatment by a physician and a psychologist in a case of psoriasis, co-occurring with anxiety, produced positive health outcomes and, at the same time, reduced use of resources and contact time. The result was a successful, cost-effective outcome.

### **Referral Process**

A 24-year-old single parent of a 7-year-old child was referred by a primary care physician for assessment and treatment of anxiety and depression comorbid with psoriasis. Flareups of the patient's skin condition impaired general functioning and the patient was very sensitive to her physical appearance. Failure of the flareups to clear often led to periods of house-bound seclusion and dysphoria. In addition, it resulted in poor attendance at college classes and limited socialization. Since the higher-education courses were designed to improve the patient's employability, house-bound behaviors and related emotional reactivity implied potentially serious consequences.

At the time of referral the patient was experiencing difficulty in social adjustment and educational achievement. Owing to early pregnancy, anxiety, emotional reactivity, learning problems, and extreme self-consciousness about her appearance, the patient dropped out of high school near the end of her senior year. She eventually completed sufficient courses to enable high-school graduation. Economically, she received support from various state agencies. At the point of referral, she had been enrolled in college business courses designed to improve her employment skills.

Mary's (not the patient's real name) developmental background, psoriasis, anxiety, dysphoria, and emotional reactivity became obvious in the course of regular primary care contact. The physician recognized that the complexity of her clinical conditions, which had both medical and psychological components, suggested the need for integrated care. Since psychological services were quite limited in the medical setting, the physician often made referrals to my psychology practice. Mary followed the recommendation, requesting an assessment appointment with me.

## Presenting Complaints

At the time of assessment there was a flare up of psoriasis. There were also symptoms of anxiety, depression, excessive alcohol use, social rejection sensitivity, difficulties in child rearing, low self-esteem, and a tendency toward histrionic emotional reactions. The patient reported that at times emotional reactivity became so strong that dyspnea and hyperventilation syndrome were evident. The patient reported that when there were psoriasis flareups, they were during times of high levels of stress, and emotional reactivity and depression occurred. Periodic dysphoric mood tended to sap her energy and impaired adaptive behaviors in both school and work. Medical treatment was palliative and basic medical care for the psoriasis had not been completely effective.

Notes from the patient's treating physician showed a diagnosis of psoriasis which was scored mild to moderate using the Psoriasis Area Severity Index. The physician also noted the possibility of mixed anxiety–depression, excessive alcohol use, and symptoms of personality disorder. The patient was advised to obtain a complete behavioral health assessment.

Upon referral, the patient received formal screening inventories: the Beck Anxiety Inventory,<sup>1</sup> the Beck Depression Inventory,<sup>2</sup> the Coopersmith Self-Esteem Scale,<sup>3</sup> and the CAGE Alcohol Screening and Michigan Alcohol Screening Test.<sup>4</sup> Only the anxiety screening and the self-esteem screening yielded significant results. Dysphoric mood appeared directly linked to excessive negative thinking, almost always following self-medication with alcohol. Although self-medication sometimes reached the level of intoxication, alcohol use did not reach the level of clinical diagnosis. Even when intermittent intoxication occurred, the patient always made arrangements for responsible child care. Her dysphoric mood did not satisfy clinical criteria for a major depressive episode or dysthymia. DSM-IV clinical interviews were completed for generalized anxiety disorder and for ruling out both alcohol abuse and major depressive disorder.

The patient's inability to tolerate psychological stress and disappointment suggested low frustration tolerance, and her rare but extreme displays of emotional reactivity suggested the possibility of hyperventilation syndrome (a common but rarely diagnosed condition associated with hyperarousal of the autonomic nervous system). The patient did not satisfy core clinical criteria for histrionic or borderline personality disorder.

## Working Diagnoses and Case Conceptualization

The working diagnoses were psoriasis, generalized anxiety disorder (which appeared to exacerbate the skin condition), and low self-esteem, with a slight tendency toward periodic reactive emotional behavior. The psoriasis exacerbated Mary's psychological conditions, and her psychological conditions may have exacerbated her medical condition. This relatively young patient presented with developmental difficulties (education, maturity, emotional needs, child-rearing challenges) suffering from both a medical condition (psoriasis) and a behavioral health condition (generalized anxiety). Furthermore, this patient's co-occurring conditions were interactive. Her psoriasis flareups exacerbated anxiety about her appearance, self-esteem, and social acceptance, and her anxiety tended toward extreme autonomic arousal. This creates conditions associated with even further exacerbation of the skin condition.<sup>5-10</sup>

These symptoms may suggest connectivity among psoriasis and the body's immune, autonomic and possibly limbic systems. Although psoriasis with depression is most commonly reported, this patient suffered primarily from anxiety. Recent data suggest that 62% of psoriasis patients reported flareups following emotional reactivity (<http://www.psoriasis.com/healthstyle/relaxation.jsp>).

From a medical perspective, psoriasis is most likely a variant of immunological dysfunction related to overproduction of skin cells in specific body areas.<sup>11</sup> Additionally, some medical professionals<sup>12</sup> suggest that there may be a relationship between psoriasis and emotional (autonomic) processes. Therefore, treating the emotional experience has autonomic, limbic, endocrine, and immunological implications, but the exact mechanisms of action and transduction processes remain unknown.<sup>13</sup>

Inflammation and irritation related to various skin wounds may take longer to heal when psychological stress exists.<sup>14</sup> It has also been theorized that repeated stimulation of negative emotional learning may sensitize the amygdala in the deep limbic system to overcome cortical control (frontal lobe), thereby causing greater levels of emotional reactivity over time. Such an outcome—potential autonomic and limbic sensitization—is not conducive to the healing of psoriasis.<sup>15-16</sup>

Opportunities for active collaboration were limited to collaborative case formulation, and the ongoing sharing of information about the patient's physical and behavioral health. This case illustrates the frequent need for medical and psychological collaboration. Medical treatment alone would have been less successful if the anxiety, emotionality, entitlement, and rejection were not treated. Psychologically untreated comorbid clinical conditions risked increases in medical time, challenges to provider patience, and greater costs associated with care. Psychological treatment of emotional symptoms alone would have been less effective; since the psoriasis played such a pivotal role in the patient's ability to function and advance educationally and occupationally. Basic improvements in psychological health would not have resulted in specific improvements in health. Furthermore, the patient was highly motivated to try whatever was necessary to improve both physical and psychological problems.

In this case the usual medical practice to screen, detect, medicate, and observe was modified to screen, detect, collaborate, and observe. Although the patient was keenly aware that benzodiazepines had been helpful historically and thought they could be helpful to her current anxiety condition, it was jointly decided that given the potential for abuse anxiolytics would not be prescribed.<sup>17-19</sup>

## Treatment Planning

Treatment planning followed several principles of working with co-occurring disorders.<sup>20</sup> Biopsychosocial implications of the disorders were evaluated and utilized in treatment. More costly and intensive medical treatments were delayed while psychological interventions were utilized. Mindfulness-based stress reduction was used to reduce anxiety, while other cognitive-behavioral interventions were utilized to enhance self-efficacy (to improve self-esteem) and reduce the emotional impact of negative thinking. Except when there were rare, intermittent flareups, the psoriasis remained relatively mild.

As the patient became skilled (empowered) in calming herself, quieting her mind, and returning to a more neutral (nondistorted) thinking mode, her psychological conditions played a less exacerbating role in her medical condition.

The concept of radical acceptance (from the dialectical behavior therapy of Linehan<sup>21</sup>) was included in the treatment plan. The rationale to include it suggests that as the patient improved her self-calming and nonevaluating skills when faced with awkward social situations and the feared stimuli (psoriasis), her emotional adjustment to negative life experience would improve. It was hoped that as the patient's skills improved, she would experience self-efficacy and motivation to use mindfulness. Various subjective self-rating tools were used as outcome measures to monitor treatment effects: such as subjective units of anxiety generated discomfort; a frequency of pleasurable events schedule; a mindfulness-based practice log; and, in addition, medical evaluations of the psoriasis.

Initially, applications of mindfulness-based treatment have been used to help relaxation while a patient is undergoing phototherapy treatment. Many patients do not enjoy the treatment, and cancellation and drop-out rates have been high. To improve patients' skills and willingness to relax themselves while using this treatment, standing meditation, breathing techniques, auditory awareness, and kinesthetic awareness (of heat and air moving around inside the light box) have been used with some success.

Patients are also taught to visualize their skin healing. This has generated reduced emotional arousal and engagement in "participatory medicine,"<sup>10(p365)</sup> thereby improving outcomes. It is thought that mindfulness-based treatment reduced patients' autonomic and limbic reactivity to medical treatment, thereby improving the effectiveness of treatment.



## Treatment

In Mary's case specific mindfulness-based breathing techniques were taught and practiced in session, and further practiced outside of sessions. Research suggests use of this form of treatment as a core skill in various dyspnea-related conditions as well as skin conditions.<sup>22-24</sup> Medical care and monitoring occurred on a monthly basis, except when psoriasis flareup required acute attention. Psychological treatment occurred usually weekly over a 5-month period.

Specific breathing techniques were utilized, including counting breaths, extending exhalations, breathing through the mouth, and rapid deep breathing. To enhance the generalizability of these self-reinforcing methods, they were regularly practiced as homework. The goal of these interventions was to reduce autonomic reactivity, anxiety, and the rare occasions when symptoms of hyperventilation occurred. Since autonomic, and possibly, limbic hyperactivity may have exacerbated psoriasis, self-calming through clinical breathing techniques were helpful in calming Mary's mind and body and it also reduced the frequency and severity of her psoriasis symptoms.

When Mary practiced her skills during emotional upset at the office and on her own, she demonstrated enhanced self-efficacy<sup>25</sup> and stress inoculation<sup>26</sup> through enhanced self-reinforcement.

Mary was taught how to use a wide range of other mindfulness-based skills, including nonevaluative observation, calm breathing, body scanning, just sitting zazen, and wise-mind attitudes. Such skills have been demonstrated to decrease anxiety and worry, and increase emotional self-regulation and distress tolerance.<sup>10, 21, 27</sup>

## Medical and Psychological Outcomes

Both medical and psychological outcomes improved over the 5-month period. There was no opportunity for psychological follow-up with the patient after treatment ended. It was assumed that if conditions had relapsed into clinical significance the physician would have made an additional referral, or that the patient would have reinitiated clinical contact. The treatment episode ended with the client returning to baseline follow-up with her physician.

## Three World View Model Revisited

In summary, medical-psychological collaboration responded to Three World issues, including:

- Mutual respect and harmony between providers;

- Coordinated interventions; and,
- Reasonable costs.

If 17 sessions of psychological treatment had been unused or ineffective, the patient would have required more costly and intrusive medical interventions such as extended methotrexate or cyclosporine treatments, and possible UV-A light with psoralen. Medical staff were freed from potential hindrances of unfocused emotional presentation.

There were other Three World adaptations. There was a common language used to describe assessment, the case formulation, and treatment. One world view did not dominate, and limited but successful collaboration occurred over time. Economic resources were used more efficiently. Carefully rationing the intensity of medical and psychological care to best meet the client's co-occurring needs limited the amount of other evaluations and consultation. Since both outcome and efficiency goals were met, fewer administrative resources were used.

If psychological services had been more available at the primary care setting, more efficiencies could have been achieved. Rapid access between the primary care physician and the psychologist could have provided time efficiencies and a more consumer-friendly service delivery model.

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## Chapter 22

# Hypnotic Amplification–Attenuation Technique for Tinnitus Management

**Arreed Barabasz and Marianne Barabasz**

This is a case that illustrates two important points for this volume. The first is that it is an example of what we have traditionally thought of as collaboration, that is, a referral for care then return to primary care. The second is that it demonstrates the use of a set of empirically validated techniques useful in many aspects of medicine but infrequently used. In this case the application is tinnitus, a vexing difficult-to-treat medical problem.

Tinnitus is the diagnostic term for the perception of sound in one or both ears in the absence of veridical external sound. It is typically described by patients as “ringing in the ears,” although some people report hissing, roaring, whistling, chirping, or clicking. Many people will experience it temporarily or intermittently. Others report experiencing tinnitus 24 h a day, 7 days a week. Its perceived volume can range from subtle to painfully shattering.

The American Tinnitus Association<sup>1</sup> estimates that over 50 million Americans experience tinnitus to some degree. Of these, about 12 million cases are severe enough to require medical and/or psychological interventions. About two million patients are so seriously debilitated that they cannot function as a normal person would.

Hypnosis has demonstrated effectiveness for numerous psychologically and medically related disorders. Despite the prevalence of tinnitus, few systematic investigations or clinical case studies of the effects of hypnosis in the treatment of this disorder have been reported. Most studies reported rely on scripted or audio-recorded hypnotic inductions which are known to be less effective than those tailored to the individual patient.<sup>2</sup> All but one of the studies reviewed failed to measure hypnotizability by an instrument with appropriate psychometric properties (e.g., the Stanford Scales). Thus, it is impossible to draw any conclusion about the specificity of hypnosis with regard to treatment outcomes.

Brattberg<sup>3</sup> employed hypnosis to treat 32 patients diagnosed with and suffering from tinnitus for an average of 5 years. All reported no response or relief from previous medical interventions. The hypnotic suggestion employed was that they would “no longer be troubled by the noise.” The first follow-up occurred between 2 months and 2 years. Twenty-two patients (69%) reported they felt better and three of the 22 reported they were “completely cured.” At a second follow-up, 10.5 months to 2.5 years later, for those who reported improvement at the first follow-up, relief from tinnitus was generally maintained. However, the criteria for improvement were not specified.

Harasymczuk<sup>4</sup> reported a case study of the treatment of persistent tinnitus employing hypnosis as an adjunct to tinnitus retraining therapy. The subject was 60-year-old married woman who had experienced bilateral tinnitus. Initially she reported being aware of it 80% of the time and rated it as 9 out of 10, with 10 being the most severe ever experienced. Following 7 months of tinnitus retraining therapy, she reported experiencing tinnitus 20% of the time and rated it as 6 out of 10. Hypnotizability was measured by the Stanford Hypnotic Clinical Scale<sup>5</sup> (SHCS) and revealed above-average capacity with a score of 4 out of a possible 5. At a 1 month follow-up, she reported awareness of tinnitus 5% of the time and severity was reported as 3 out of 10. The client also reported that she no longer feared her tinnitus.

Attias et al.<sup>6</sup> compared self-hypnosis with two control conditions: (1) presentation of a brief auditory stimulus or (2) a waiting list control in the treatment of tinnitus with young subjects. Following each of the four sessions, participants were asked to report if the tinnitus was not affected, was clearly reduced, or disappeared. Seventy-three percent of the self-hypnosis participants reported total disappearance of the tinnitus during the treatment sessions in contrast to 24% of the participants in the brief auditory stimulus group. Only the self-hypnosis group demonstrated a significant improvement at 1 week and 2 months on the Tellegen Absorption Questionnaire (TAQ) symptom profiles.

Mason and Rogerson<sup>7</sup> employed three sessions of “client centered hypnotherapy” with 41 patients with tinnitus. In the first session, participants “were encouraged to imagine a miniature of themselves wandering about their minds looking for the source of the tinnitus and to use whatever auditory and visual imagery they found most helpful to improve the full-sized person’s perception of the tinnitus.” Self hypnosis was also taught. Relaxation was taught during the next two 0.5-h sessions. The authors claimed that 28 (68%) of the participants showed some benefit.

Erika Fromm<sup>8(p6)</sup>, as clinical editor of the *International Journal of Clinical and Experimental Hypnosis*, explained that “It is important to state in clear cut, concrete form what was actually done so that others can replicate, test, or apply the procedure to their own patients”. To be useful to others in practice and to contribute to science, clinical case studies must include (1) a literature survey; (2) a clinical diagnosis; (3) hypnotizability testing data; (4) the patient’s history, including previous treatment and the referral source; (5) details of the hypnotic induction procedures used, including specific suggestions given; and (6) follow-up data on treatment outcomes, including unsuccessful as well successfully treated cases. The present case study is intended to meet these criteria with procedural detail sufficient for publication.

## The Patient

This patient was a 43-year-old married man who was employed as a commercial artist. He had been treated for depression with imipramine (Tofranil) during his senior year in college 20 years earlier. He became depressed when his long-term girlfriend, originally very dependent on him, became more independent and ended

the relationship. He had thrived on that dependence and the emotional support it had given him.

The patient's primary antihistaminic adverse side effect from the imipramine was weight gain<sup>9</sup> over the course of his 9–12 months of medication. He also experienced tinnitus in the form of ringing in both ears, which was recalled as “there but not really a worry then.” The weight gain was reversed after cessation of treatment, but the tinnitus persisted “on and off over the years.” Only recently had his tinnitus escalated to impairing his work schedule. In the past year alone, his symptoms had bothered him enough to use 1 year's worth of sick days in a period of 4 months. After repeated visits to his primary care physician, he experienced little relief from trials on alprazolam (Xanax) or from a self-hypnosis audio recording based on the procedure of Attias et al.<sup>10</sup> The physician, who had collaborated with our practice previously, discontinued the patient's medication and self-hypnosis assignment. He referred him to us for hypnotherapy while still seeing the patient for medical evaluations, including the ruling out of Meniere's disease.

## **Treatment with Hypnotherapy**

Hypnotherapy, ego-state therapy, and hypnoanalysis are primary emphases in our independent practices. We are both licensed psychologists using hypnosis for over 25 years. One is board-certified (American Board of Professional Psychology). Patients come to us for hypnotherapeutic interventions from throughout the USA. We both are faculty at an American Psychological Association accredited Ph.D. program at a university located in eastern Washington state. We have collaborative relationships with a number of medical practice groups nationally.

During his first visit, the patient met with us to provide a complete medical and psychological history. We debunked myths about hypnosis beyond the debunking already begun by his primary care physician. During this initial visit, the patient noted that he had been experiencing “almost constant” bilateral tinnitus which prevented him from getting to sleep, unless exhausted. He described periods of severe ringing for much of the day which he rated as 8 out of 10. He also described “brief but almost daily periods of intense (which he rated 10) “painful” tinnitus which impaired his concentration and coincided with anxiety about his boss's evaluations of his commercial art designs. He reported that his tinnitus “pain” had lasted from less than 1 min to nearly 1 h at a time over the previous month and noted that the self-hypnosis had done “nothing” to help. He had little expectation for any positive outcome from us but came because his primary physician really felt we “could do something” (with hypnosis) for him. He felt that he “would just give it a try” considering the debilitating problems the tinnitus was causing him with anxious mood and impaired relationships with family and friends.

We had concerns about the potential underlying psychodynamics given the association of the initial tinnitus with the break up of a 4-year relationship when his college girlfriend became more independent. His current marriage involved facing

similar issues relating to his wife's recently expressed wishes for greater independence. The tinnitus and resultant days missed from work served to awaken caring for him, as she had done in years past, including canceling her work and social plans. Thus, the patient's symptoms had helped to reestablish the control it gave him over his wife's behavior. However, given the current severity of the patient's symptoms, we agreed to work directly and immediately with suggestive hypnosis.<sup>11</sup> Moreover, at this time he was receptive to new messages from us and the collaborating physician about the importance of managing, rather than "curing," the tinnitus. Nonetheless, our expectations for a successful outcome were low (see Benham et al.<sup>12</sup> for the empirical finding showing the comparatively minor role expectation plays in hypnotic treatment outcomes).

## Procedure

Prior to using hypnosis in his second session, conducted later that same day, he was familiarized with hypnotic-like experiences to reinforce the debunking of myths about hypnosis and ameliorate potential underlying fears about the modality. The intention was also to build rapport and trust. These informal clinical tests are generally useful in screening suitable subjects for hypnosis practice, and evaluating patients for hypnotherapy. The tests not only serve to screen and evaluate, but their very administration can establish a positive psychological set and make later induction of hypnosis easier. For this patient, rapport and responsiveness was quickly established so we used only the (1) Chevreul's pendulum, (2) arm drop, and (3) hand clasp tests before administering the SHCS.<sup>5</sup>

Chevreul's pendulum test helps to reveal anxieties about hypnosis denied or left unstated in the initial interview. It is a nonthreatening demonstration of the effect of how the patient's thinking about something can affect his or her behavior without the formality of the initial hypnotic induction. The patient was seated at the table and given instructions as follows.

"Put your elbow on the desk and hold this string between your fingers so that the ball just misses touching the desk." The suggestions were continued: "Stare at the weight and concentrate all your attention on it. As you look at it you will notice that it has a tendency to move." Movements, even though initially slight, appeared quickly. Once stabilized, he was told, "You notice that the weight is beginning to swing back and forth, back and forth, back and forth." (This movement was continued until it was clear to the patient that this movement was indeed taking place.) Then a change in the direction of the movement was suggested, "Now, as you watch this weight, you will notice that the direction of movement begins to change...."

He was then asked, "Were you making the weight perform those movements or were they just happening?" "Were you aware of any movements on your own part that caused it to swing back and forth, then up and down?"

As is usually the case, he stated that he was not aware of any voluntary action on his part causing these movements to occur. He was pleasantly surprised, thus

helping to create an accepting attitude toward future positive responses. Sometimes patients mention that they tried consciously to resist the movements, but that they occurred in spite of their efforts.

Next, the arm drop test was administered. The patient was told, “I would like to test your reflexes. Would you please sit up straight in your chair and extend both arms straight out in front of you, palms down? Don’t let them touch each other. That’s right. Now close your eyes and imagine that I am giving you a bucket to hold in your right (or left) hand. Please close your fingers around the handle of the bucket.” (Note that the imagined, “bucket” is now treated by the hypnotist as a reality by asking the patient to close his or her fingers around the handle.) “Now I want you to visualize what it would be like if I were standing in front of you pouring water into your bucket from a pail of water which I am holding. Your bucket can hold over 2 gallons (81) and I am now pouring 1 quart (nearly 1 l) into the bucket. Observe the stream of water flowing into your bucket. Now, I’m pouring more and more water into your bucket. There are now 2 quarts in it, and you can feel the increase in weight. Three quarts. More and more water going into it. Four quarts, now 5 quarts, and your bucket is half filled. You are becoming increasingly aware that more and more water is being poured into your bucket. I shall continue to pour water into it. Six quarts, 7 quarts, 8 quarts, and the bucket is beginning to fill up. Notice how heavy 2 gallons of water is? Now 9 quarts and the bucket is almost full, almost full. There now. I shall pour the tenth quart into it, and the bucket is full right up to the brim. Two and a half gallons of water and the bucket is completely full.”

The following indicated the probability of hypnotic responsiveness:

1. The hand gradually lowered while suggesting that more quarts were being poured into “the bucket.” The degree of lowering of the arm is significantly related to hypnotizability. In this case the patient’s hand went all the way down until it rested on his lap. Thus, it was probable that he would show an above-average response to hypnosis.
2. If during the period of the test his hand lowered somewhat, but did not go all the way down, the inference would have been that he is responsive to hypnotic suggestions, but may either be resistant, a slow responder, or capable of reaching only a light or medium trance, not a deep one. However, in our experience, the individual who responds in this way may eventually become a very good hypnotic subject after his or her initial doubts and anxieties have been resolved and a better relationship has been established with the therapist. The slowness of response may only be his or her way of saying, “I don’t completely trust you yet, and this situation is disturbing to me.” The extent of one’s response is related to his or her hypnotizability at this point in time. Thus, if the right hand is some six or more inches below the left at the end of the test, then he or she shows a substantial degree of hypnotizability even if it has not come all the way down. If it has slowly moved downward, for at least three inches, this shows a positive response even if it is not strong. Such a subject indicates to their therapist that he or she is at least able to become hypnotically involved to some degree and with proper handling may be able to achieve an even more significant response level. Occasionally,



a participant's right hand will not drop downward at all, but he or she will manifest a considerable struggle to keep it level with the left one. There may even be slight tendencies for it to drop, followed by slight corrective movements designed to pull it up, level with the left hand again. This might be interpreted that the patient is responsive to hypnosis, but doesn't think that they should be, that they are fearful of "losing control," or the situation manifests into competition with the psychologist or one in which they must demonstrate their strong "will power." When this occurs, Barabasz and Watkins (2005) recommend that the therapist should not let it deteriorate into a struggle for "control." The patient might be approached as follows: "I noticed that you seemed to have some difficulty. It was as if the arm felt like dropping down as the bucket became heavier, but you did not want it to do so, and wished to show that you were capable of holding the bucket. You obviously are quite capable of resisting it, like I said when we were talking about what hypnosis is and I mentioned that its you, its not the hypnotist, you are always ultimately in control. But it might be interesting to see what would happen if you did not fight such tendencies; simply let happen whatever occurs naturally, don't make it happen, just let's see if it happens by itself, without interfering."

3. Perhaps the response which is most related to lack of hypnotic talent is no response whatsoever. The hand does not go down; it does not rise, and its position parallel to the other hand seems to be maintained without any effort. In this case, it is often useful to ask the patient about his or her response and their feelings concerning it with such questions as: "Could you visualize the bucket when I described it to you?" "Could you experience the water being poured into it?" Often the non-responsive patient will say, "I was not able to imagine the bucket" or "I could see the bucket, but I didn't feel as if any water was being poured into it." Further questioning might be continued as follows: "Did the bucket feel heavy?" "Did you notice any difference in the feel of your two arms?" "Do your arms feel tired now?" (This often elicits a positive response, even in the resistant subject. Holding one's arms out for a minute or more naturally creates physiological fatigue. The normal person admits it. A complete denial of feeling any fatigue suggests an individual who is very fearful of hypnosis and is determined to show that he or she can be "the Rock of Gibraltar.") If the patient admits that their arms feel tired, they may then be asked: "Which arm feels the most tired?" The response that they both feel equally tired usually indicates considerable resistance to hypnosis, either because the individual does not possess any hypnotic talent or because of fear and a strong determination not to be "controlled." When there has been no overt movement of the hand downward, but the patient states that the right arm feels more tired than the left one, he or she is showing at least to some extent, they are capable of responding, but that the influence is at a perceptual level, not at the motor level. With such a patient, the possibility of using hypnotherapy is still open.

The hand clasp test was the final informal prehypnosis test we used with this patient. The patient was instructed as follows: "Please clasp your hands tightly in front of you and look carefully at my clasped hands at the same time." The therapist demonstrated by interlacing his own fingers so that the hands gripped each other

very tightly. The suggestions to the patient were then given, both verbally by the commands of the therapist and visually, as the focus is on the clasped hands of the therapist, which were clasping tighter and tighter. “Now make those hands tighter and tighter. Imagine they are like fingers of steel encased in a block of concrete, which is shrinking or a vice that is being screwed down and locked. The hands get tighter and tighter and tighter.” The voice of the therapist rose and became ever stronger and firmer. At the same time, his own fingers dug into each other so that the muscles and blood vessels stood out. “Notice how the colors change in those fingers.” (Note the term “those fingers” rather than “your fingers” is used to facilitate dissociation of the hands from the subject as if acting on their own involuntarily.)

“That’s it, tighter, tighter, tighter. In fact, so tight that it doesn’t seem as if they could come apart. It seems as if the more you try to take them apart, the tighter they stick together. The more you try to take them apart, the tighter they stick. They are sticking so tightly they will not come apart. They will not come apart. They are tightly stuck together. Try to pull them apart. Try to pull them apart. You see, they are so tightly stuck together they cannot come apart. The harder you try to pull them apart, the tighter they stick together.” etc.

At this point, a challenge had been issued, and it was found he was unable to pull his hands apart, suggesting to us that a genuine hypnotic response may have been elicited. Then, within no more than 3–5 s, the first author released his own hands and placed them around the patient’s clasped hands moving them up and down gently and reassuringly while saying, “Your hands are relaxing, they are normal and can now come apart.” The patient was gently assisted in performing the release.

The amount of hypnotic talent of any subject may be inferred by the degree of difficulty he or she experiences in pulling the hands apart at the time of the challenge. In this test we are, of course, enlisting normal physiological function on our side. By “freezing” the tightly clasped hands together, we make it much more difficult physically to draw them apart.

Upon completion of the abovementioned tests, the SHCS<sup>5</sup> was administered in less than 20 min. The patient scored four out of the five possible points, failing only an item that can generate amnesia. He reported a cessation of the tinnitus for the latter part of the test with no perceptible change from the initial 7 out of 10 rating of the ringing after the relaxation induction phase. He was very pleased with his experiences with the tests and felt “more confident that this might help after all.” Given the patient’s high level of tinnitus perception and our wish to capitalize on the report and trust established thus far the third session was scheduled on the following day.

In this third session we planned to use the relaxation induction from the Stanford SHCS because of the patient’s positive responses to the test items that followed and because the induction emphasizes the achievement of hypnotic depth. Upon completion of the induction, the patient was asked to indicate the intensity of the tinnitus perception on the 1–10 scale we had previously used with him. He reported “it’s about a 7.” Given that the patient reported tinnitus at the end of the hypnotic induction, the first author utilized this as an opportunity to demonstrate how he could

control its perception by first amplifying the tinnitus and then reducing it. With use of ‘a concept described by Barabasz and Wakins,<sup>11</sup> the patient was instructed to “focus on the ringing and notice it is getting louder and louder, worse and worse, louder and louder still, the intensity is going higher and higher, and you can hardly stand it.” Within less than 1 min he began to grimace, as if in pain. He was then asked “to raise a finger if the ringing was much worse now than before.” He raised several fingers on his left hand almost instantly and said “its damn near a 10, I can’t stand it, it really hurts, it really hurts.” He was then told that since “you know all hypnosis is really self-hypnosis and *you* turned up the ringing, you can turn it down, go ahead and slowly turn it down, go ahead, its getting less and less, you are making it softer and softer, until it’s just still there but very tolerable.” His facial muscles immediately began to relax, his previously stiffened body visibly relaxed, and he slumped in the chair as if he had returned from running a race. “There that’s better, not bad really now.” When asked to rate the tinnitus, he said, without hesitation, “it’s a 3 at most—not that bad at all now.” Thus, the patient learned hypnosis offers new self-control where he never had it before. If you can make it worse *you* can make it better.

While he was still in hypnosis, he was then told, “It can only get less and less intense, it’s like a of July 4 rocket fired off that, of course, has to run out of fuel. It was so bright and intense but it’s out of fuel and beginning to arc, coming back down. It’s burned out, the rocket engine noise is gone. The only annoying sound is just the rush of the wind whistling by. But now it is on the outside, not the inside of your head” (this is a key point). “So now if you’re ready and want even less noise just imagine stuffing in foam earplugs. There, the wind noise gets less and less as the plugs expand, less and less, quieter still, almost quiet completely. Sure enough, you can still hear something out there but it’s on the outside now.”

The emphasis on attenuation rather than elimination is consistent with the EEG event related potential underpinnings of hypnotic states.<sup>13–17</sup> Simultaneously, attenuation allows the symptom to still function for the patient if needed for an underlying psychodynamic reason not addressed at this level of hypnotherapeutic intervention. This would allow sufficient reconstruction of the patient’s personality with the goal of eliminating the cause of the symptom. Thus, we ensure to the best of our ability that it will not reoccur at some future date which is common for therapies limited to cognitive behavioral interventions. However, in the present case the patient was able to greatly improve his functioning (severity reduced to 2–3 out of 10 and frequency decreased by “over half the time it used to be”) again over the course of four more sessions using the same protocol during the following week. The lowest long-term success rates with suggestive hypnosis are obtained when attempts are made to transfer responsibility for treatment to the patient prematurely via instructions to use self-hypnosis,<sup>11</sup> as was typically done in previous research on hypnosis for tinnitus. Therefore, we took and maintained responsibility for tinnitus attenuation until the patient spontaneously volunteered he was “Really doing it on my own now.” This occurred during the seventh session, less than 2 weeks after the initial session. When he felt ready to use hypnosis on his own. the final hypnotic suggestion of “eventually when you’re ready, the slight remaining sound

can burn out altogether” was made. The hypnotherapeutic strategies of maintaining therapist responsibility for the hypnotic intervention until the patient made the decision to take over responsibility combined with the open-ended final hypnotic suggestion may have facilitated the success of the treatment. In our opinion, these therapeutic features may have helped make up for our lack of direct attention to the dynamic issues relating to exacerbation of the patient’s symptoms.

The patient was seen for two follow-up sessions, the first of which was about 2 weeks after the seventh treatment session and the second was 2 months after that. At both meetings he reported not missing any further workdays and tinnitus ratings of “around no more than 3 out of 10 most of the time.”

Additional monthly follow-ups were conducted by telephone over the next year and quarterly over the following year. Consistent with reports received from continued collaboration with the patient’s primary care physician, it was confirmed that tinnitus was no longer a persistent or debilitating perception for the patient. Furthermore, there were no reported symptom substitutions and counseling about “home problems” was continuing with better mutual understandings.

This case illustrates that a persistent, intruding medical problem that has generated multiple medical treatment visits with no resolution was resolved in a short period of time by a psychological, hypnotic intervention that is more than a simple instruction to relax. Follow-up suggests that the effects persisted, and medical consultation had returned to a diminished level with no further episodes of acute tinnitus related complaints. It is consistent with the Three Worlds conceptualization of responding to the clinical and economic implications of a vexing case whose resolution was both clinically and administratively manageable.

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**Part VI**  
**Chronic Medical Illness**

# Chapter 23

## An Integrative Approach to Treating Obesity and Comorbid Medical Disorders

Roderick Bacho, John Myhre, and Larry C. James

### Introduction

Psychologists and other behavioral health specialists (BHS) are playing an increasingly larger role in primary care. In such settings, they routinely work with patients who require them to possess greater knowledge about the complex interactions between medical conditions, social circumstance, and psychological pathology.<sup>1-2</sup> In some economically challenged settings, the combination of poverty, poor nutrition, and limited access to comprehensive medical services has resulted in an explosion of obesity and its related medical consequences. These consequences have included increased prevalence of diabetes, heart disease, and strokes. Social and economic stressors have also taken their toll, resulting in high rates of unhealthy lifestyle choices and treatment adherence problems.<sup>3-4</sup> These socioeconomic and behavioral complications have affected medical treatment outcome for these diseases.<sup>5</sup> Nowhere is this phenomenon more evident than in rural clinics and medically underserved populations.<sup>6</sup> As a consequence, primary care providers in these settings frequently treat patients diagnosed with comorbid medical and psychological conditions. Typically, these conditions co-occur in the context of complex social issues, logistical, and cultural barriers. These barriers oftentimes adversely impact their access to care. In recent years, the addition of fellowship-trained BHS to the primary care team has resulted in improved access and improved quality of care, but there is still much left to do.<sup>7</sup>

This chapter will attempt to establish the premise that BHS can manage medically complex patients with comorbid mental health conditions in a medical setting. Furthermore, it will be asserted that BHS with additional training and clinical supervision are well situated to more completely address a patient's biopsychosocial needs than traditional medical providers alone.

Through the use of a case study, the chapter will provide a brief overview of obesity, its relationship to chronic medical illness, and the common psychological sequelae such as depression and anxiety that adversely impact the course and progression of patient care. By providing a narrative of the case, which involved a BHS managing the treatment of a morbidly obese, depressed patient with significant medical issues, the author will illustrate how close collaboration of BHS,

patients, psychiatry, and primary care physicians can deliver more efficient and effective overall care. As proposed by Sammons and Schmidt,<sup>8</sup> the author will discuss how we can use skill and knowledge sets regarding healthy lifestyle change, improved emotional self-regulation, and interpersonal skills development. We will discuss managing combined treatment modalities where both psychological and pharmacological interventions are utilized. The chapter will conclude with training implications and future directions.

## **Obesity: A “Widening” Problem**

Obesity is on the rise around the world and is currently regarded as a national epidemic whose consequences to the health of the American public may become dramatic. Results from the 1999–2002 National Health and Nutrition Examination Survey indicated that an estimated 65% of US adults are either overweight or obese.<sup>9</sup> In 2005, only four states had obesity prevalence rates less than 20% while 17 states had prevalence rates equal to or greater than 20%.<sup>10</sup>

Epidemiologists have categorized obesity as a body-mass index (BMI) greater than 30 kg/m<sup>2</sup>. However, the disease itself is in essence the process of excess fat accumulation. This excess fat can lead to multiple organ-specific pathological consequences. This is particularly the case if the individual has a tendency to accumulate the fat around the abdomen. The most simplistic approach to estimating obesity and its associated risk of medical problems is to measure a waist circumference. Risks begin with a waist circumference exceeding 80 cm in women or exceeding 94 cm in men. In addition, obese patients are at greater risk of developing serious psychological problems, such as depression or anxiety disorders as a consequence. People who are obese are also at much greater risk of later development of a variety of serious medical conditions, including hypertension, hypercholesterolemia, coronary heart disease, diabetes, and strokes.<sup>10</sup>

## **The Impact of Psychological and Socioeconomic Factors**

Psychological conditions such as depression and anxiety have been negatively associated with obesity and chronic medical illness and its management.<sup>5, 11–14</sup> The economically disadvantaged suffer a disproportionate share of the burden of disease. Large epidemiologic studies have examined the role of psychological characteristics, social factors, and behaviors in health and disease risk. Results from these studies revealed the associations between socioeconomic factors and chronic diseases. Furthermore, the data suggest that the effects of economic disadvantage are cumulative, with the greatest risk of poor mental and physical health seen among those who experienced sustained hardship over time<sup>3</sup> and those who may be of an ethnic minority status.<sup>4, 15</sup>



In some rural communities, evidence has shown that as weight increased so did the prevalence of diabetes mellitus, hypertension, hypercholesterolemia, biventricular disease, dyspepsia/gastroesophageal reflux disease, alcohol issues, asthma, depression, coronary artery disease, and eczematous dermatitis.<sup>6</sup> These findings bring to focus the growing urgency to more fully address the needs of patients suffering from obesity, comorbid medical conditions, and mental illness.

## **Treating Obesity with Multidisciplinary Teams**

Despite efforts by primary care physicians, BHS, and other allied health care professionals to improve access and quality of health care, providing such services to rural populations remains a significant challenge.<sup>7</sup>

The treatment of obesity has typically employed a focus on achieving realistic weight loss goals as well as an overall improvement in general health and well-being. Approaches such as cognitive behavioral therapy and healthy lifestyles education have been found to be helpful.<sup>16</sup> Much progress has also been made with the use of medications such as orlistat (Xenical) or sibutramine (Meridia) in treating obesity.<sup>17</sup> Moreover, psychotropic medications have been employed to deal with obesity.<sup>18-19</sup>

A holistic, integrated approach to the treatment of obesity is widely held as the best approach for long-lasting maintenance of weight loss and its associated medical benefits. Cognitive behavioral therapy and other psychological interventions,<sup>20</sup> when coupled with a good nutritional plan, physical exercise,<sup>21</sup> and, if indicated, medications with physician oversight can yield good results.<sup>22</sup> It is perhaps a sad truth then that many Americans, and especially those in economically disadvantaged or rural settings, do not have available to them the combination of medical and psychological providers to more completely address medical and psychological needs.

## **The Case of “Mr. M”**

Mr. M was a 52-year-old, single, mixed ethnicity man (Hawaiian, Puerto Rican, Filipino, Portuguese), who was referred by a primary care physician to the behavioral health services at a very busy community mental health center owing to concerns about his “morbid obesity” (BMI>80) and “irritability” in the context of multiple psychosocial stressors and multiple medical problems. His medical problems included diabetes mellitus type 2, osteoarthritis, peripheral vascular disease, degenerative disc disease, peripheral neuropathy, chronic abdominal panniculitis, and sleep apnea. His primary care physician requested that the providers at the behavioral health services evaluate his appropriateness for psychotropic medications and help the patient with developing “coping skills and behavior weight

management” and provide guidance regarding any pharmacological interventions deemed appropriate. Moreover, his medical providers described Mr. M as a recalcitrant man who no longer cared about his emotional, social, or physical well-being. He was inconsistent with his diabetes medications as well as general self-care. According to his primary care physician, he stood a very good chance of dying from his medical problems.

### *Initial Session*

“Doc...I don’t care what happens anymore and I don’t want your help.”

At the time of his first contact with the psychologist, Mr. M complained of a lifelong history of obesity dating back to his childhood. He reported that he was always a “chubby kid” and was frequently teased by schoolmates. The patient stated that his problems with arthritis in both knees began in his early 30s and that his subsequent weight gain has made it difficult for him to walk and exercise. Because of his lack of mobility and his weight problems, his work history had been largely sporadic. He reported having surgery for “intestinal blockage” in 1996 and right knee injury following a fall in 1998. He was eventually diagnosed with diabetes mellitus type 2 later that year.

With respect to family medical history, he reported that his father died in 1991 owing to stomach cancer. His mother reportedly died in 2001 following a “heart attack” and a long-standing history of heart disease. At the time of his first encounter, the patient weighed 503 lb. Pharmacologically, he reported that he was only taking 850 mg metformin (Glucophage) twice a day to help manage his diabetes and ibuprofen (Advil), as needed, for pain. He was also self-admittedly “really bad with taking medicine...I don’t like the stuff.”

In addition to his obesity and related medical problems, he reported a year-long history of near-daily irritable mood, periodic crying spells, low energy, poor concentration, and poor self-esteem in the context of increasing mobility problems, resulting in increased isolation and worsening medical problems. He reported having good libido, but has had “very few opportunities” to engage in sex. He reported episodic and fleeting thoughts of death, but no with specific plan or intent to carry them out. He has never attempted to harm himself or others. He does not exercise much but likes to go to physical therapy and he listens to Hawaiian music for stress relief.

The patient’s past psychiatric treatment history was largely unremarkable. He denied any outpatient psychiatric treatment, no history of substance abuse, and no history of self-harm or harming others. He denied any history of mania, psychoses, or cognitive deficits. When asked about his family, he denied any psychiatric problems in his family.

The patient was diagnosed with a major depressive disorder, single episode and he was deemed to be an appropriate, albeit challenging candidate for therapy. Upon close consultation with the psychiatrist, it was also deemed appropriate to initiate a

trial of psychotropic medications to help with his weight loss and assist in his mood problems. After the risks and benefits of treatment had been reviewed, and the patient had been allowed to vent some frustrations regarding his life in general, he reluctantly agreed to begin taking medication and initiating therapy.

To help with his morbid obesity, he was initially prescribed 25 mg topiramate (Topamax), one tablet, by mouth, twice a day. Topiramate was chosen because of empirical evidence that, when added to ongoing diabetes management, the drug has good overall tolerability, fairly good mood stability, and enables weight loss and glycemic control for patients with obesity and diabetes mellitus type 2.<sup>19</sup>

To address his irritable and depressed mood, he was prescribed 150 mg bupropion (Wellbutrin), twice a day. There is also evidence that has recently shown that bupropion can help with not only depressed/irritable mood, but also with weight loss.<sup>18</sup> As such, the addition of this medication was thought to further augment the effectiveness of his weight loss efforts and address his mood disturbance. Head computerized axial tomography scan, renal, liver functioning tests, and a consultation with internal medicine and cardiology departments at a local hospital revealed no significant medical contraindications to initiating a psychopharmacological regimen.

Given the patient's history of noncompliance, an early focus of treatment was to work on establishing a therapeutic rapport and develop an alliance with him over the next few sessions. During this period, therapy sessions revolved around the loss of his parents to heart and kidney diseases. The discussions also revealed that he had resigned himself to the same fate as his parents. Prior to his diagnoses of diabetes, as part of his grieving for his mother, the patient harbored thoughts of reuniting with her. He saw his diagnosis and his deteriorating health and probable death as a means, albeit passive, to join her. The patient was initially given homework assignments to track the relationship between his mood, thoughts, and eating behavior. Over time, he was able to resolve some of these thoughts. He was given a set of behavioral experiments to encourage him to increase his social network and meet other people as an incentive to change his sedentary lifestyle. He was also encouraged to begin a regular workout regimen with his physical therapist. Eventually, he became more compliant with treatment and took his medication regularly. He met weekly with his psychologist (the author), who in turn consulted regularly with the psychiatrist for medical oversight of the psychotropic medication.

### ***Success on Many Fronts***

The patient was becoming more comfortable in therapy. By the end of the first 2 months of treatment, his blood pressure decreased from 177/72 to 132/72 mmHg. More impressively, he lost over 30 lb. Prior to his involvement with a psychologist, Mr. M felt incapable of controlling how much or how often he ate. He occasionally felt unable to stop eating, or ate very fast, or ate when he was not hungry. He reported

a tendency to overindulge in sugary foods and use them in an attempt to elevate his mood. However, over time, this behavior also decreased as he was better able to identify his triggers for bingeing (e.g., catastrophic thoughts about being alone, unlovable, or rejection) and become better able to dispute these irrational thoughts or engage in alternative behavior (e.g., go for a walk, make flower garlands, or go out and take pictures). He reported significant reductions in his irritability and depressed mood and maintained a rather pleasant demeanor throughout his sessions. He noted that his sleep went from 6 to 8 h with a reduction in the frequency of “awakenings”, due to urination urgency, of more than ten per night to zero nightly. Serial laboratory studies revealed positive trends in his basic metabolic panels, complete blood count, lipid panels, and urinalyses (Tables 23.1–23.7).

After 6 months of therapy and medication, he lost nearly 100lb and reported improved mood. He reported no thoughts of death. His socialization skills also improved and he met several new friends and even signed up at a local fitness center. Knowing his psychosocial history, having a firm grounding in psychotherapy, having knowledge about psychopharmacology, and collaborating with medical specialties and primary care physicians proved to be very useful with this very medically and psychologically complicated patient. His success demonstrates the expanded role BHS can play in managing patients such as him.

**Table 23.1** Serial complete blood counts

	7/7/06	3/9/06	12/8/05	9/26/05
WBC	8.5	7.4	10.2	18.3H
RBC	5.07	4.73	5.29	5.04
HGB	13.7	12.7	14.2	13.5
HCT	42.4	39.7	44.3	42.2
MCV	83.6	84	83.7	83.8L
MCH	27.0	26.8	26.9	26.9L
MCHC	32.3	31.9	32.1	32.1
PLT	346	324	276	228
NE%	74.5	67.4	69.4	83.4H
LY%	19.9	25.7	23.9	2.8L
MO%	4.5	5.5	5.1	2.6
EO%	0.9	1	1.1	0.2
BA%	0.2	0.4	0.5	0

**Table 23.2** Serial basic metabolic panel

	7/25/06	3/28/06	9/26/05
Glucose	98	99	156
BUN	25	14	23
Creatine	1.4	1.2	1.4
Calcium	9.2	9	8.8
Na <sup>+</sup>	141	136	136
K <sup>+</sup>	4.2	3.8	4.6
Cl	108	102	103
CO <sub>2</sub>	25	23	23

**Table 23.3** Serial urinalysis

	7/18/06	7/7/06	3/14/06
U color	Yellow	Straw	Yellow
U Char	Clear	Clear	Hazy
U SpG	1.005	1.005	1.020
U pH	7	7	6
U Leu	Negative	Negative	1+
U Nit	Negative	Negative	Negative
U Pro	Negative	Negative	Negative
U Glu	Negative	Negative	50mg/dL
U Ket	Negative	Negative	Negative
U Uro	Normal	Normal	Normal
U Bil	Negative	Negative	Negative
U Bld	Negative	Negative	Trace
U WBC	None	0-1	2-5
U RBC	0-1	None	2-5
U Bact	None	None	2+
U Yst	None	None	None
U Epi	Rare	Rare	2+
U Tri	None	None	None
U Cry#	None	None	Rare
U CryT	None	None	Ca + oxalate
Amor			2+
U Cst#	None	None	None
U CstT	None	None	None

**Table 23.4** Serial lipid panels

	6/9/06	5/19/06	9/16/05
Chol	183	166	176
Trig	117	84	85
HDL	53	54	54
LDL	107	95	95
Chol/HDL	3.5	3.1	3.1

**Table 23.5** Serial bilirubin

	6/9/06	5/2/01
Bilirubin direct	0.14	0.25

**Table 23.6** Serial TSH

	6/9/06	5/2/01
TSH reflex	0.79	1.33
	0.80	

**Table 23.7** Serial A1c

	6/9/06	5/2/01
A1c	6.1	5.9

## Discussion

As is evident in the case study, effective treatment included a variety of tools and a comprehensive approach to care. The BHS utilized psychoeducation, identifying behavioral triggers for inappropriate eating patterns, and identifying underlying cognitions that effect feelings of anxiety or stress. In addition to usual and customary medical studies, these approaches have proven to be useful adjuncts to the care of obese patients. Moreover, the use of daily food diaries, exercise routines, and healthy lifestyle education are seen to be useful predictors of long-term success.

### **Changes in the Impact and Role of Food in His Life: The Physiological and Psychological**

Self-medicating with food may have played a role with Mr. M, because he would frequently report that he would consume as many as five malasadas (a Portuguese pastry), which was essentially deep-fried, sweetened bread dough. He would also reportedly consume as much as a liter of “Mountain Dew” a day on days when felt particularly badly.

When asked why he ate in the manner that he did, he would always report that “it made me feel better.”

To provide a partial physiological explanation of the role of overeating in his life, it may be important to establish that neurons releasing serotonin and norepinephrine are unique in that the amount of neurotransmitter they release is normally controlled by food intake. It has been shown that the consumption of carbohydrates leads to insulin secretion and increases serotonin release. Interestingly, the consumption of protein does not have this effect. This ability of neurons to couple neuronal signaling to food intake is a feedback loop that usually keeps carbohydrate and protein intakes more or less constant. Serotonin release and norepinephrine release are also involved in such functions as sleep onset, pain sensitivity, blood pressure regulation, and control of the mood and as such patients may learn to overeat carbohydrates (particularly snack foods, rich in carbohydrates and fats) to make themselves feel better. This tendency to self-medicate mood change using certain foods is a frequent cause of weight gain, and can also be seen in patients who become fat when exposed to stress.<sup>23</sup> Given this, the effective use of psychotropic medications clearly played a role in his movement back to health.

The use of cognitive therapy has been shown to be useful in dealing with Mr. M's underlying issues. His unrealistic expectations and lack of motivation has thwarted past efforts at weight loss. It has been well-documented that obese patients feel stigmatized by society and as such tend to withdraw from social interaction. Mr. M would report frequently that his body makes him feel ashamed to be seen in public and that he would often prefer to stay home than venture out into the community. This avoidance proved to be counterproductive in that developing a sense of social self-efficacy and acceptance from others requires active engagement in the larger

society. Also, his loss of his parents, especially his mother, played a role in his depressed thinking style. For Mr. M a main focus was to directly dispute the defeatist thinking style he exhibited and promoted efforts to increase social involvement. Increasing his social network and developing a trusting therapeutic alliance with his psychologist may also have played a major role in his improved mood and weight loss.

## **Conclusion**

In providing care to this patient, the BHS and the health care team practiced in a manner that was effective, pragmatic, and affordable. The approach in treating this patient was consistent with the Peek and Heinrich<sup>24</sup> notion that behavioral health care has to have a “three-world-view.” These three views include (1) the clinical world (clinically sound), (2) the operational world (logistically sound), and (3) the financial world (fiscally sound).

### ***Incorporating the “Three-World-View”***

From this three-world-view, the BHS treating this patient worked in a collaborative, integrated-care system in which teams of physicians, nurses, and BHS worked closely to deliver medical and behavioral health care. Medical providers benefited from the assistance BHS provided to help with the psychosocial dimensions of his care.

### ***Future Directions***

Future BHS need to familiarize themselves with the language and the culture of medical environments. Patients will present with complex biopsychosocial needs, such as those evident in the case study. To be effective with such patients in these settings, the BHS must have knowledge about basic laboratory studies, understand the medications patients are taking, but still be well grounded in assessment and treatment of psychological disorders, and the science of practice. Confidence and competence in managing these multiple layers of information represents one of biggest challenges for BHS in the current practice environment.

### ***Training Implications***

Physicians and other health care providers must be aware that there are limits to the current availability of BHS who are knowledgeable in both the areas of basic

**Table 23.8** Optimal Characteristics of the Behavioral Health Specialists  
(Adapted from McDaniel<sup>1</sup>)

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Knowledge about psychological disorder.
1. Etiology
2. Prevalence
Knowledge about behavioral intervention
1. Behavioral Theory
2. Experience with applied behavioral theory.
Knowledge about medical conditions commonly seen in primary care settings.
1. Pathophysiology
2. Basic Pharmacology
3. Basic Psychopharmacology
4. Legal and Ethical Considerations in Pharmacological interventions.
Knowledge about cultural factors
1. Multicultural competence
2. Cultural Sensitivity Training.
Knowledge about the Business of behavioral health care.
1. Billing and Finances
2. Management and Program Development

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medicine and advanced psychology, especially in rural, isolated, or medically underserved communities. Therefore, it is imperative that training future BHS must address these limitations.

Courses and practicum experiences must focus on exposing BHS to basic pathophysiology, pharmacology and advanced training in psychopharmacology, and ethical/legal issues in medications are essential in working with medically and psychologically challenging patients. It is also beneficial for training programs to have their trainees work in a variety of specialty medical clinics (e.g., cardiology, oncology, endocrinology) seeing as many and varied complex patients as possible. This should occur in addition to working in high-volume, high-demand primary care clinics consulting on various psychotropic medications and forms of brief psychological interventions to develop a proficiency in combined treatments. BHS must also have some grounding in the business of behavioral health care in order to meet the financial, management, and implementation demands of the current practice environment (Table 23.8).

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# **Chapter 24**

## **A Case of Medically Unexplained Chronic Cough**

**Jean Grenier and Marie-Hélène Chomienne**

### **The Setting**

The case presented in this chapter was referred by a family physician to the Clinical Health Psychology Service of an academic hospital in Ottawa, Ontario, Canada. The Clinical Health Psychology Service operates within the Family Medicine Unit of the hospital. The service is headed by a certified psychologist. Doctoral-level candidates in clinical psychology are also part of the staff as either residents or practicum students completing supervised clinical experiences. Patients are typically referred to the service on an outpatient basis. Inpatient consultations are also available. Collaborative practice follows the usual patterns of interprofessional collaboration with consultation requests followed by formal written feedback and informal hallway discussions.

### **The Client's Medical Status**

Mrs. Y, 66 years of age, presented at the hospital emergency room, in early 2004, complaining of progressive shortness of breath in the previous 2 weeks. She was found to have bilateral pneumonia and was admitted for treatment and oxygenotherapy as she was found to be moderately hypoxic.

Mrs. Y had a past history of hypertension, type 2 diabetes mellitus controlled with diet only. Six years earlier she had been diagnosed with heart failure, although her past history of heart attack was dubious and an echocardiogram at the time did not show any ventricular dysfunction. Uncontrolled hypertension (200/100) and the use of nonsteroidal anti-inflammatories for arthritis were thought to be the cause of that episode of heart failure.

Her past surgeries included a rectal cancer operation (1991), tonsillectomy, appendectomy and total hysterectomy.

Since the death of her husband in December 2002, a little more than 1 year prior to the hospitalization, she had been living with her son and his family and was physically active, walking regularly every day.

During her hospital stay it was clear that Mrs. Y was stressed. She was concerned about an ongoing chronic cough that had been persisting for over 1 year. The cough was constant and exhausting. She had already consulted in August 2003 and had been seen by a respirologist, a cardiologist and an internist.

Mrs. Y reported having had this cough since December 2002. She presented with some white phlegm, but no yellow or green sputum (except during the present episode of pneumonia). She had never had a similar problem. She did not complain of any loss of weight. She did not recall acid reflux. She had never smoked cigarettes and did not drink alcohol. She did not report any sensitivities to cats, dogs nor seafood. She had no past history of asthma. It appeared clearly to the attending physician that this chronic cough had started around the time of her husband's death. The course of her hospital stay focused on working up her chronic cough.

At the time different diagnoses were evoked:

1. Drug-induced cough
2. Bronchial hyperresponsiveness
3. Occult gastric reflux
4. Lymphangitic carcinomatosis
5. Stress-related cough/psychogenic cough

A number of investigations were carried out. We performed a chest CT scan which showed the presence of bilateral pneumonia but no evidence of lymphangitic carcinomatosis, no parenchymal disease, no enlarged mediastinal or hilar lymph nodes. The pulmonary function tests showed mild restrictive disease compatible with the patient's mild obesity. A metacholine challenge test excluded bronchial hyperresponsiveness. An echocardiogram did not show any signs of ischemic cardiomyopathy and ventricular function was normal, thus excluding chronic heart failure. She was seen by a gastroenterologist, who could not conclude there was clinical reflux disease. Also, the patient reported no improvement with acid-reflux treatment. Her medications for hypertension which could induce cough (beta blockers and angiotensin-converting enzyme inhibitors) were discontinued but the patient did not note any changes.

During her hospital stay, she cried often and looked as if she was experiencing some type of distress or perhaps depression. She was therefore referred to the Clinical Health Psychology Service for an assessment and clinical opinion.

## **The Psychological Assessment**

### ***Assessment Strategy***

Mrs. Y was seen on the 12th day of hospitalization by a psychologist practicing in clinical and health psychology. The only assessment strategy used was a clinical interview that lasted approximately 90 min. No psychometric data were obtained. During this clinical interview, some psychotherapeutic strategies such as guided

discovery and cognitive restructuring were utilized to help Mrs. Y make sense of her emotions and distress.

### *Psychological Status*

Mrs. Y stated feeling sad and depressed. She rated her depressed mood as being on average 6–7/10 (0 being not depressed at all and 10 being the most depressed she had ever been). She reported crying several times per week. Her appetite fluctuated. Motivation and energy were low. She had difficulty concentrating and regularly felt agitated. She confirmed having felt mildly to moderately depressed for the past 2–3 years. She had a history of having had isolated panic attacks (classic symptoms) but this never seemed to evolve into a panic disorder per se. There was no evidence of agoraphobia. She had not experienced panic attacks for years and this was not a problem for her. She did not have any suicidal ideation.

When asked to talk about what made her so sad, Mrs. Y indicated that her husband had passed away 1 year earlier and that she had difficulty accepting the events and circumstances that unfolded during the year preceding his death.

During the year prior to his death, her husband had suffered a stroke and although he had always been verbally and emotionally abusive with her, he had apparently developed post-CVA psychiatric problems which led him to become significantly verbally abusive and occasionally violent (throwing or braking objects in the house). She had always been a very active and socially engaged person, for example, leading interest groups and volunteering for various charities throughout her life. After his CVA, he had become extremely critical of her and refused to let her participate in any activity or social interactions outside the home. He also developed paranoid ideation and was convinced his wife was being unfaithful and this was the main reason he insisted she not leave the house. He frequently accused her of having affairs of a sexual nature with several men in the neighborhood. He was eventually hospitalized in a psychiatry unit and during hospitalization he became increasingly verbally abusive and physically violent. He passed away 2 weeks after being admitted in the hospital.

By the end of the assessment interview, both Mrs. Y and the psychologist collaboratively concluded that since her husband's death she had been suffering anguish over two things that seemed to interfere with her ability to grieve normally and carry on with daily living: (1) she felt guilty not having been present at the hospital at the time of her husband's death—she went home that evening thinking she would see him again the next day; and (2) she could not accept the fact that her husband died while being convinced she was being unfaithful and having sexual affairs. She was obsessed with these issues and other than contacts with her children, she was socially withdrawn, spending much of her time ruminating. She underlined that occasionally she experienced what seemed to be transient visual and auditory hallucinations of her deceased husband. She also had not reengaged in any social relationships or worthwhile activities since the year prior to her husband's death

and felt somewhat ashamed to reconnect with her social circle since she had not maintained any contacts.

Mrs. Y admitted to having a very docile and accommodating personality style. Being assertive about her needs had always been a challenge for her, especially with her husband. She was sensitive to others' opinions about her.

### ***Psychosocial History***

Mrs. Y was French Canadian and the youngest of a family of ten siblings. Her father worked in a hardware store and was described as a jovial man. He died when she was 14 years old. She enjoyed a closer relationship with her mother, whom she described as more timid and reserved.

Mrs. Y worked for a few years during early adulthood as a nurse's aid. She then stayed at home to raise her five children and eventually returned to work, managing a department store.

Mrs. Y married in her early 20s and had five children. She continued to maintain regular contacts with her children. She considered having had a good marriage. This being said, she underlined having found it quite challenging to tolerate her husband's unpredictable and volatile mood. She recalled one occasion where, during the first few years of marriage, he had tried to strangle her and she finally called the police to file a complaint of spousal abuse. She explained that her children were not aware that her husband had been emotionally abusive with her throughout their marriage as she did a good job of camouflaging his behavior whenever the children were around.

When her husband died, she moved in with her eldest son.

### ***Health***

In addition to the medical history outlined previously, Mrs. Y indicated she had never taken antidepressants or antianxiety medication. Aside from during the last year or two before her husband's death, she did not recall having suffered from depression or any type of anxiety disorder. She did not smoke or drink caffeine. She walked for 20–30 min everyday. Sleep was reported as satisfactory.

### ***Behavioral Observations***

During the initial assessment interview, Mrs. Y established rapport quite easily and answered all questions with an appropriate number of details. She was well oriented and her emotions were consistent with the content of her discourse. There were no

signs of psychotic thinking. She cried profusely when talking about her deceased husband and the events leading to his death. She coughed regularly during the 90-min interview.

### ***Diagnosis/Conceptualization***

From a psychological perspective, the working DSM-IV diagnosis was major depression, mild to moderate severity, superimposed on a dysthymic disorder. More specifically, a portion of the depression was conceptualized as most likely being secondary to unresolved grief issues. In addition, in light of the medically unexplained nature of her chronic cough and because of the timing of the onset of the cough with the distress she had experienced in relation to her husband's illness and death, it was also hypothesized that perhaps the chronic stress she had experienced and continued to experience because of unresolved grief issues may have had a role to play in the cause of her chronic cough.

### ***Recommendations***

From a psychological perspective, an integrative treatment plan drawing from both cognitive-behavioral and experiential approaches was recommended on the basis of ten to 12 weekly individual consultations as an outpatient in the Clinical Health Psychology Service of the hospital.

The treatment objectives were as follows:

1. To help Mrs. Y better manage her depression through the use of cognitive-behavioral strategies such as behavioral activation, cognitive restructuring, and problem solving. Cognitive-behavioral therapy has consistently been shown to be effective in the treatment of depression.<sup>1-3</sup>
2. To facilitate a healthier grieving process and help Mrs. Y resolve what seemed to be unfinished business in regards to her husband's death through the use of education about grief and grieving, cognitive restructuring as well as experiential techniques borrowed from Gestalt therapy such as the empty chair technique and emotional processing.

While traditional grief interventions have emphasized the expression of negative emotions associated with the loss, Mancini and Bonanno<sup>4</sup> note that current research findings suggest that clinicians should adopt a neutral, nondirective stance with regard to the content of the bereaved person's disclosures. The objective is to provide a supportive environment in which disclosure in supported and neutral guided discovery is used to help the person build meaning to their emotions and help them make sense of their experience.

3. From discussion of the case with the referring physician, it was further recommended that her response to psychological interventions be assessed after four to six treatment sessions and that the appropriateness of introducing antidepressant medication be discussed at that time.

## The Treatment

Mrs. Y was seen for a total of four individual treatment sessions as an outpatient in the Clinical Health Psychology Service.

During the first three treatment sessions, the psychologist collaborated with the patient on deciding to spend a good proportion of session time to explore the details of her experiences surrounding the last weeks of her husband's life as well as the emotional distress she had been experiencing in regards to the guilt of not having been present when her husband passed away and anguish over the fact that her husband died convinced she was being unfaithful to him. Education about the normal stages of grief<sup>5</sup> was given as a rationale to help her make sense of her emotional experience. In session, she was also guided in a very neutral way to explore her thoughts, concerns and emotions she had been experiencing in regards to her husband's death. She was invited to imagine her husband sitting in an empty chair and to openly communicate her concerns to him. As homework activity, she was also invited to write a letter to her husband, again to communicate her emotions as a means to help resolve the unfinished business with her deceased husband.

In parallel to this experiential work, behavioral activation was prioritized. Mrs. Y was encouraged to engage in pleasurable and worthwhile activities, and to reconnect with her social network. Being active and engaged in social and worthwhile activities had always been an important part of her life and she was now realizing the extent to which isolating herself and ruminating may have been contributing to her depressed mood. Cognitive restructuring strategies helped her develop healthier and more adaptive ways of interpreting various themes and issues: developing the ability to tolerate the discomfort associated with the fact she was not present at the hospital while her husband passed away; understanding that her husband's mental state had been compromised after his CVA and that this had led him to develop paranoid ideation as well as weakened ability to regulate his emotions; that even though he was deceased, she could still communicate to him how important it has been for her to ascertain she had been a loving and faithful wife; the idea that she may still experience anger towards her husband for having been a difficult person to live with and at the same time love and respect him for the positive aspects he brought to her life; the right and responsibility to reorganize her life in a healthy manner; and the importance of redefining herself in her various roles in light of this new stage of life.

## The Outcome of Treatment

Mrs. Y was seen for four sessions in the span of 8 weeks. Her psychological status gradually improved at every session: she had reconnected with friends and started doing volunteer work, her energy and motivation increased, her appetite was more regular, and she was not crying anymore. She reported being less agitated, and had decreased her tendency to ruminate. She now scheduled 30 min of “worry time” daily to worry about unpleasant things and then gave herself permission to go on with life. She also had plans and felt quite motivated to find an apartment and start living on her own instead of with her eldest son. She was particularly motivated in shopping and decorating her new apartment. At the fourth session, she indicated she felt much better and collaboratively decided with the psychologist that they were going to see each other for one last follow-up session in 1 month’s time.

At follow-up, Mrs. Y had maintained gains and did not meet diagnostic criteria for depression anymore. The problematic grief issues that were hypothesized to have been playing an important role in maintaining her depression seemed to have completely resolved. She had stopped ruminating and feeling guilty about her husband’s death. She reported she was thinking less and less about her husband and was not experiencing auditory and visual hallucinations about her deceased husband anymore. She reported basically feeling more in charge of her life. She also reported coughing less, and this was quite obvious via in-session observation. The fact that she improved significantly so rapidly after having intervened on the grieving issues supports the hypothesis that her overall depression may have indeed been intimately linked to unresolved grief more than any other aspect of her life.

In the medical follow-up of Mrs. Y, the physician clearly heard and felt a sense of relief on the part of the patient. She stated she was very satisfied with the psychological intervention and she now understood the rationale of what she had experienced in the past 2 years, especially her stressful grief reaction. Following the psychological intervention, she reported a clear decrease of her cough. The results of an esophageal pH test confirmed she had acid reflux. Esophageal pH test measures how often stomach acid flows into the lower esophagus and the degree of acidity during a 12–24-h period. The measurement of esophageal pH is of great importance in evaluating and treating acid reflux symptoms. However Mrs. Y had reported decrease in the cough symptoms before the results were known and before any treatment for acid reflux had been initiated. Most probably Mrs. Y had both components of psychogenic- and organic-related cough.

Mrs. Y is still being seen at the outpatient clinic; she rarely complains of cough. She is much more in control of her life and her emotions. She has moved out into her own apartment and is active socially once again. She has taken family decisions, concerning one of her daughters, which she thought she could never have taken prior to her psychological treatment sessions.



## The Process of Collaboration

Because both the attending physician and the psychologist were working in the same institution, communication was facilitated. There was ongoing discussion and exchange of information as to the progress of Mrs. Y. All of the medical reports as well as the psychological report and session per session progress notes were in the hospital record, and when the patient was seen as an outpatient both the physician and the psychologist wrote their notes in the outpatient chart. A portion of the interdisciplinary collaboration was done through the shared medical chart, while another portion took the form of informal hallway consultations.

## Conclusion

Considering the three worlds model of interaction between clinical, administrative and financial issues, it becomes quite obvious how this case is an excellent example of how medicine and psychology can collaborate and enhance quality of care at an affordable cost. It did not require that the patient be psychotic to be referred for a psychological assessment but it was recognized that her psychological state could be contributing to or exacerbating her medical condition (chronic cough). Therefore, an inpatient psychological consultation was done and followed up with her as an outpatient, carrying through to successful completion. From a clinical point of view, collaboration between the disciplines of medicine and psychology allowed us to achieve an excellent health outcome. The operational aspect of the collaborative program between the disciplines of psychology and medicine showed efficiency and good productivity: the services produced were efficient. On a financial level, the good functionality of the program allowed the problem to be diagnosed and resolved and to put an end to repetitive and endless costly consulting and testing. Following a 90-min assessment interview and four “1-h” psychological treatment sessions, the patient did not need to return for further medical tests nor did she necessitate the use of psychotropic medication. The collaborative program prevented both scenarios, which would have been much more costly scenarios to the health care system.

This case illustrates well how psychology and family medicine units can work collaboratively with good clinical, operational and financial outcomes. It was therefore used as a clinical vignette in the curriculum of the integrated training sessions between family medicine residents and psychology interns which have been implemented at this institution by the collaborative program.

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## **Chapter 25**

# **Walking the Tightrope Without a Net: Integrated Care for the Patient with Diabetes, Cardiovascular Disease, and Bipolar Disorder... and No Insurance**

**Parinda Khatri, Gregg Perry, and Febe Wallace**

The past two decades have brought about a transformation in the role of the nation's community health centers (CHCs). CHCs provide comprehensive health care services to communities and populations that have been designated by the federal government as "underserved." However, these changes have been ushered in due to a diminishing number of community mental health centers and growing pressure from the Health Services and Resources Administration; as a result CHCs are faced with the challenge of encompassing behavioral health within their scope of services. With the increased focus on combination of primary and behavioral health services, CHCs have had an opportunity to develop and implement innovative integrative integrated delivery systems to meet the health care needs of the community.<sup>1</sup> The movement towards integration of services has been fueled by a growing body of data indicating primary care is the most likely point of access for people with mental health disorders.<sup>2</sup> Improved medical outcomes along with improved patient and provider satisfaction have strengthened the argument for integrated service delivery models.<sup>3-7</sup>

As a hybrid community health and mental health care organization, Cherokee Health Systems (CHS) has emerged as a "safety net" for a growing population of uninsured and underinsured, many of whom face complex medical, behavioral, and social problems. CHS is a comprehensive community health care organization with 14 primary care offices in 11 counties in east Tennessee. Originally a community mental health clinic, CHS began providing primary care services in the 1980s to address the unmet health care needs of the community. With a unique combination of primary and behavioral health professionals who work together to provide collaborative care, CHS implements a clinical model of integration that involves both behaviorists embedded in primary care as well as on-site traditional mental health professionals. This structure of integration allows for increased provider communication and interaction, integrated health records (including both medical and behavioral information), shared clinical and waiting space for patients, formal multidisciplinary treatment teams, and integrated treatment planning. As a single entity, CHS is also able to streamline administrative and financial systems (i.e. consents, privacy information, billing) to maximize continuity of care for patients receiving care from multiple providers (i.e., physicians, psychologists, and psychiatrists).

The current case study illustrates the dynamics of the integration at CHS's newest clinic, named "Center City" for its inner city location. The Center City clinic serves individuals from throughout the county, due to the lack of providers willing or able to accommodate the state insurance plan, TennCare (Tennessee's waived Medicaid program) and uninsured patients. The census tracts immediately surrounding the clinic and most of the adjacent tracts are federally designated Medically Underserved Communities. The area includes increasing numbers of uninsured, who are sicker than the general population by the time they seek care. Services are fragmented for this population and access to care is extremely difficult. Providers willing to serve the uninsured are scarce and waiting periods are long. The most pressing health problems fall under the chronic disease category, and include diabetes, hypertension and heart disease, as well as substance abuse and behavioral health issues. The Center City integrated primary care team includes physicians, family nurse practitioners, primary care psychologists, a physical therapist, and a psychiatrist.

## Clinical View

J.P., a 42-year-old woman, presented to our Center City office for assistance with her multiple medical, psychiatric, and financial concerns. She lost her health insurance when she lost her job. Her COBRA insurance lapsed because she was unable financially to make the payments. Reductions in the Tennessee Medicaid program, TennCare, made her ineligible for services despite her significant medical illnesses. Prior to establishing care at CHS, she had received services at a clinic that provides care to the working uninsured population, but psychiatric and pharmacy services through this system were limited. She had heard of the integrated care approach at CHS and came in hope that we would be able to help with her complex needs.

She was initially seen by a family nurse practitioner, who obtained a thorough history and conducted a physical examination. The patient had type 1 diabetes mellitus complicated by neuropathy. Insulin pump therapy had been the most effective management of her disease, and she reported that her glucose level had been relatively stable. In the past she had been followed closely by an endocrinologist, but that provider was no longer able to see her as a self-paying patient. She demonstrated good understanding of pump management. Recent compliance with diet and exercise had been erratic due to significant depressive symptoms. She also reported that she had coronary artery disease with a history of three cardiac catheterizations but was presently asymptomatic. Other medical concerns were hypertension, carpal tunnel syndrome, possible asthma, and hypothyroidism.

The nurse practitioner also obtained a history of bipolar disorder. The patient reported that she had seen a private psychiatric nurse practitioner until 4 months prior to her presentation at our facility. She admitted to being depressed. She was not suicidal at the time of her initial clinic visit but admitted to suicidal thoughts at the time she lost her job. The depression was so overwhelming that she had trouble getting out of bed in the morning and this was a contributing factor to her job loss.

Medications on presentation included diltiazem extended release, gabapentin, oxcarbazine (Trileptal), bupropion (Wellbutrin SR), escitalopram (Lexapro), loratadine, meloxicam (Mobic), insulin (NovoLog) for the insulin pump, clopidogrel (Plavix), albuterol, levothyroxine, aspirin, enalapril, and atorvastatin (Lipitor). She admitted that she had been out of atorvastatin and bupropion for at least 1 month. She had been trying to stretch her pump supplies by using the infusion pump sets much longer than recommended.

Family history revealed alcoholism and depression but no bipolar disorder. She was a nonsmoker with no history of alcohol or other substance abuse. She admitted to very poor dietary habits, with ingestion of up to six sodas a day. Her current lifestyle was extremely sedentary. Although she possessed a master's degree in social work, her own psychiatric illness, complicated by significant medical difficulties, had made it very difficult for her to be successful in this area. She was divorced, and her only source of income was \$800 a month in alimony.

Her physical examination was remarkable for mildly dysmorphic features with elfin facies and short stature. Her body-mass index was 37.6. Blood pressure was 124/68. The results of the cardiopulmonary examination were normal. Neurological examination revealed decreased sensation in both feet with intact pulses and no skin abnormalities.

This patient clearly had significant psychiatric issues that impacted both her emotional and her medical health. At this point, the nurse practitioner asked the behavioral health consultant (BHC) to participate in the care of this complicated patient. The BHC met with J.P. for behavioral assessment and treatment planning in the examination room.

## **Behavioral Health Consultation in Primary Care**

J.P. was referred by the primary care provider for evaluation of bipolar disorder and assistance in decision making about her health care treatment. Following the medical examination, the BHC met with J.P. for behavioral assessment and treatment planning in the examination room.

J.P. described a history of depressive and mania episodes since early adulthood. She had been diagnosed with bipolar disorder and treated for medical management in the private practice sector until recently when she lost her insurance. J.P. reported she was "very depressed," and described symptoms of sad mood, low motivation, low energy, social withdrawal, and marked deactivation. She stated she spent her days and nights watching TV at home. She often did not leave the home or shower. She had withdrawn from enjoyable activities. She had lost her job due to complications related to her medical and psychiatric problems, and expressed a diminished sense of accomplishment because she was not contributing to society. She agreed if she could get a job she would feel better; however, she noted concern that her medical status would serve as an impediment to employment. J.P. denied any current or recent symptoms of mania, stating she had not

been “manic in years.” With regard to her health behaviors, J.P. admitted her diet was poor. She also reported excessive caffeine use, often over six cans of soda a day. She denied any current or previous tobacco, alcohol, or drug use. In session, she exhibited good mental status, with euthymic mood, appropriate affect, and normal speech.

In addition to her presenting depressive symptoms, J.P. was in a quandary regarding her medical care. She had been followed by a community volunteer clinic with a strong specialist referral network but was drawn to CHS because of its integration of medical and behavioral health services. As a patient in this clinic, she had access to specialists such as her cardiologist at significantly reduced fees. However, she received no behavioral services at this clinic and had recently discontinued seeing her private psychiatric prescriber due to loss of insurance. Given her complex interplay between medical and psychological conditions, J.P. indicated a strong preference for integrated approach to care in which her providers could coordinate her care.

As her decision regarding her follow-up care would guide the treatment plan, the focus of the behavioral consultation following assessment revolved around her provider of choice. Not surprisingly, J.P. had difficulty teasing apart the pros and cons of each choice on her own. With BHC guidance in problem solving however, a tentative solution was developed. J.P. desired to transition care to CHS, but wanted to maintain her specialist care. A plan was made for J.P. to individually contact her specialists and ask if they would continue to see her at the reduced rate, even if she switched primary care clinics. This plan also required some action on J.P.’s part, which was in contrast to her current state of learned helplessness. Behaviorally, J.P. was provided with psychoeducation regarding her mood disorder, with particular emphases on her current depressive state and its impact on her functioning. Given J.P.’s sedentary behavior and withdrawal from activities that provided a sense of pleasure or accomplishment, initial goals for behavioral activation and modification of health behaviors related to diabetes were developed and reviewed. J.P. appeared amenable to these initial goals. Following face-to-face consultation with the primary care provider and phone consultation with the integrated psychiatrist, a treatment plan was developed and communicated with J.P. as well. She would meet both the BHC and the primary care provider for behavioral and medical care, respectively, and return the next day to see the integrated psychiatrist for medication evaluation.

Unfortunately, J.P. slept through her scheduled appointment with the psychiatrist. Recognizing that this was due to the patient’s severe deactivation, the BHC contacted her and rescheduled for the following week. In the meantime, her case was discussed at our weekly treatment team meeting. During this weekly meeting, all of our primary care medical providers, behavioral providers, and case managers discuss complex cases and coordinate care between the providers involved. The team decided that given the insulin pump and other medical issues, J.P. would best be served by the internal medicine physician on staff. Behavioral and medical visits would be scheduled on the same days as much as possible.

## Psychiatry Consultation

The role of the integrated psychiatrist can take one of several paths. The first contact to the integrated psychiatrist is typically by phone from either the primary care provider or the BHC while the patient is still in the examination room. For relatively noncomplex cases, questions posed to the integrated psychiatrist are usually related to medication management (i.e., medication choice and starting dosage for a patient's condition). As cases become more complex, questions may include issues of diagnostic clarification and the need for stabilization by the psychiatrist. In these cases, early contact between the psychiatrist and the patient is fundamental in an integrated approach. In J.P.'s case, the patient described both a significant psychiatric history along with major medical problems and acute depressive symptoms. Given this level of complexity, the decision was made to have the patient seen by the psychiatrist at the primary site via a telemedicine connection the following day. Through the use of telemedicine equipment and interconnected clinics, one integrated psychiatrist is able to efficiently visit multiple sites in a wide geographic area.

Although J.P. missed her first scheduled appointment, she did keep her rescheduled appointment the following week. When she arrived for her appointment with the psychiatrist, much of her history and current state were already known to the clinician because of shared electronic records and verbal consultation. Clarifying questions were asked and a treatment plan was formulated to restart her on a medication regimen that had worked successfully for her in the past. It was also decided that the integrated psychiatrist would see her for up to 2 months to ensure stabilization was achieved. If all went well, the patient would then have her psychotropic medication managed by the primary care team and return to the integrated psychiatrist only in the event of destabilization. The advantages to this type of system are faster access to first-time psychiatric appointments, a greater likelihood of patient follow-up and adherence because patients are not being referred out to a mental health clinic, a true team approach that encompasses both the medical and psychiatric problems and treatment approaches, and less need to depend on decreasing psychiatric resources in the community.

## Course of Treatment

Ten days after her initial medical visit, she returned for medical follow-up and fasting laboratory work. She was introduced to the internal medicine physician, and the focus of this visit was to further assess her current medical status and plan for future care. Fortunately, her medical status was stable, with hemoglobin A1C of 6.7, negative urine microalbumin, creatinine of 1.0, triglycerides of 38, and low-density lipoprotein cholesterol of 68. Her nonbehavioral medications were adjusted to generics where possible to decrease her pharmacy cost as much as possible. Her cardiologist and her ophthalmologist agreed to continue to see her on a self-pay

basis. Her endocrinologist did not agree to continue her care. Fortunately, J.P. has a good understanding of pump management, as reflected by her laboratory results, and management of the pump will be handled by our staff internist for now. Routine appointments for medication management are scheduled to occur every 2–3 months as her medical condition dictates.

J.P. has been seen four times for behavioral follow-up in primary care thus far and twice for psychiatric consultation. Most of her appointments have been scheduled in tandem with her primary care physician, primarily to help her keep track of her appointments and save on gas money. Following each clinic visit, the primary care provider and BHC discussed J.P.'s current status, progress, and follow-up plan. The behavioral consultations focused on cognitive restructuring to address J.P.'s negative beliefs about herself, and behavioral activation to increase her experiences of mastery and pleasure as well as increase her level of social support (see Newman et al.<sup>8</sup> and Hopko et al.<sup>9</sup> for a review of cognitive and behavioral interventions utilized). Although she was able to make the outlined change in her soda intake, we agreed to hold off on further health behavior modification and focus on depression management until her mood improved. Over time, J.P. has been able to make some progress towards stabilization and improvement in her mood symptoms. With structured guidance and problem solving, she began researching job opportunities in the paper as well as applying online at the library computer. She also reengaged with one friend who needed some caregiving following surgery. She is better able to challenge her thoughts of worthlessness. Current goals for behavioral consultation include improving J.P.'s sleep hygiene and regulating her sleep/wake cycle, helping her generalize behavioral activation strategies in other areas of her life, and modifying health behaviors related to her medical condition. Given her psychiatric history and complex medical status, she will likely be monitored by the BHC in primary care for the duration of her care at CHS. Psychiatrically she has stabilized and will be monitored by the integrated psychiatrist for a period of time before transitioning her back to primary care.

## **Operational View**

The operational issues related to the case highlight the importance of integration of systems as well as delivery of clinical services. The design of CHS's integrated clinics allows for common waiting and check-in areas for medical and behavioral services, as well as shared charts. Patients do not have to negotiate separate clinic spaces and appointment schedules. This was especially important in this case as J.P. had transportation difficulties due to the price of gasoline. Additionally, her complex medical and behavioral presentation required ongoing communication and coordination between her primary care provider, psychologist, and psychiatrist. Thus, her appointments were always scheduled in tandem with her multiple providers in order to decrease the need for multiple visits to the clinic as well as to facilitate a more seamless flow of care. The clinic also houses a pharmacy



where J.P. filled most of her prescriptions after her appointments. The integrated electronic health record allowed all providers to review documentation of her health progress on multiple areas, at the same time in different offices or as needed without “hunting down a chart.” For example, the primary care provider and psychiatrist could look up medications the other had prescribed, an uncommon occurrence in fragmented care models. The ability to cross-reference medications, treatment recommendations, patient advocacy efforts, laboratory findings, and progress in treatment has reduced duplication of services and strengthened the ability of the treatment team to reinforce the overall care health plan and goals. Finally, an often underestimated factor is the significant value of familiarity and comfort in one’s “health care home.” For J.P., her designated health care home was primary care and she preferred to access her medical and behavioral services in this physical space. It was, in fact, the main reason she was drawn to the CHS clinic. Checking in with the same receptionist, seeing the same nurses, walking the same hallways, all contribute to a patient’s sense of psychological safety in getting the health care needs met.

## **Financial View**

The financial cost of obtaining health care is, unfortunately, increasingly at the forefront of patients’ decisions about their care as well as provider’s choices about clinical care options for the patient. The issue is even more pressing for the uninsured population. J.P., with her medical and psychiatric comorbidity, faces ongoing challenges in both accessing multiple providers and obtaining prescriptions and medical equipment (i.e., materials for her insulin pump.) As an integrated system, clinically, operationally, and financially, CHS was able to markedly reduce her health care costs while maintaining a high level of care. At her initial appointment, J.P. completed one set of financial paperwork which served for both medical and behavioral services. She qualified for the sliding-scale fee for medical services and also met criteria for the state’s behavioral health initiative for the uninsured. Coordination of her care allowed for reduced cost related to redundancy (i.e., from fewer visits, less repeated laboratory work). The plan for J.P. to ask her specialists to maintain the sliding fee for her proved for the most part to be successful and she was able to continue to see them at a significantly reduced cost. Specialist availability is a huge concern for those that provide care to the uninsured. Primary care providers often have to step outside their clinical comfort level to take care of problems that they would normally refer to specialists. Many specialists will not see patients without some payment at the time of visit, and this places care out of the reach of many. TennCare, the state Medicaid program, is inaccessible to many medically indigent patients due to financial cuts. This example illustrates the importance of the health care community efforts to network in providing comprehensive care to uninsured patients. It is essential that community resources work together to

expand accessibility to the uninsured. Knox County, Tennessee, provides basic medical care to homeless and very indigent patients through a program administered by the Knox County Health Department. Specialist services can be accessed through this program, but the patient in our case is not eligible due to the alimony income. Another community clinic in Knox County serves the working uninsured and has developed a panel of volunteer consultants to serve their patients. Our patient initially obtained some of her consultants through this network, and fortunately for her, some of her consultants are continuing to care for her. Although these specialists were not integrated into our system, their commitment to continuity of care for this patient contributed to an “integrated community” model of health care delivery. Recently the health care community partnered to form a program to allow the uninsured access to specialists. Specialists participate in the program by allocating a small number of their appointment slots for the uninsured. Unfortunately, J.P. is not eligible for this program under present guidelines. Although she met the income requirement, she was disqualified because she was eligible for insurance benefits under COBRA when she lost her job. This case study illustrates the all too common occurrence of a patient at risk for falling through the cracks because of financially segmented safety net programs. J.P., because of her alimony and eligibility for COBRA, failed to meet criteria for several health care initiatives designed specifically for complex cases such as hers. However, her alimony payment barely covered her living expenses and could not be stretched to cover her COBRA premiums. As such, challenges will remain if medical subspecialty assistance is needed for J.P. in the future. Our hope is that she will be stabilized behaviorally and can rejoin the working force. Finally, J.P. was able to realize marked cost savings in her prescriptions through the use of an in-house 340B pharmacy. The federal 340B Drug Pricing Program places a ceiling on the cost of prescription medications to certain entities such as Federally Qualified Health Centers, Consolidated Health Centers, and Disproportionate Share Hospitals. Many drugs are priced at 50–60% below the average wholesale price and this savings can be passed on to the patient of the entity. “A patient of the entity” is defined as a person who receives health care from a provider either employed by or who has a contractual agreement with the entity. Without such pricing, many patients would be unable to afford much needed medications. The state initiative for uninsured behavioral patients also greatly reduced her medication expenses for her psychiatric care. For the bupropion SR, gabapentin, oxcarbazepine, and citalopram, the usual and customary cost was \$663. The state behavioral initiative coverage allowed her to receive these drugs at no cost. If she had had to pay for them, the cost at our pharmacy would have been \$124. She has received sample medications for most of her medical needs, but will receive low-cost generics when her samples are used up. Our pharmacy will also assist with any applications from patient-assistance programs. The major challenge for us and J.P. will be obtaining her insulin pump supplies. Given her psychiatric status and current stability on the pump, changing to a multiple injection regimen is certainly not desirable, but may be a necessity in the future.

## Summary

The case of J.P. illustrates the challenges of managing care in a fragmented health care system. Providing care to complex medical patients with psychiatric disorders is particularly difficult even under the best of circumstances. Although navigating the health care maze is arduous for many, it is particularly so for the uninsured. Primary care providers often attempt to treat psychiatric illness because of limited behavioral care resources and a genuine desire to stabilize their patients. Communication between primary care providers, therapists, and psychiatrists is often difficult due to privacy and convenience issues. Patients under stress are frequently unable to coordinate multiple appointments and transportation. Cost is always a barrier to care. Disjointed and inadequate treatment often results. The hopeful solution is that a provider, an organization like CHS, can bring the resources that patients need under one roof. Integrating clinical, operational, and financial systems can bring the pieces of the puzzle together in a way many patients cannot. Bringing behavioral health into primary care should be a key piece in the road map to providing continued care of complex, uninsured patients in a cost-effective and successful manner.

**Acknowledgements** The authors wish to thank Dennis Freeman and Joel Hornberger for their input to this chapter.

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## Chapter 26

# Healing Through Relationships: The Impact of Collaborative Care on a Patient with Spina Bifida

Sarah Prinsloo, Jose Bayona, and Thelma Jean Goodrich

Trends indicate that hospital use in the primary care sector is significantly higher for persons with coexisting physical and mental health conditions than for those with no mental health needs.<sup>1</sup> The following case illustrates the utilization of a healthcare team as necessitated by a patient whose care was complicated by both her physical and her mental health needs. By recognizing these issues, the providers were able to address the concerns of the patient as well as the clinic and practitioners that were involved in her care. Meeting the needs of this patient meant an available healthcare team that collaborated with her about the best way to manage her care. Meeting the needs of the family physician meant the availability of a reliable referral source in the clinic to which she could refer, participate in, and get feedback from regarding mental health. The challenge to provide quality care with financial and time constraints is a huge issue in healthcare. Among the top priorities is cooperation among clinicians.<sup>2</sup> The answer, in this case, was in collaborative care that served to balance the patient's mental and physical needs as well as to decrease her multiple visits to the clinic. The format for care in this case was very much a "medical home," a clinic that was flexible enough to schedule clinic visits with the team approach in mind.

I was in my internship year of a 3-year program in marriage and family therapy when I met Kim. When I remember that year, I often think of my relationship with her. I remember the lessons she taught me about the therapeutic relationship, about my role of helper, and most importantly about the importance of collaboration. I worked as a mental health provider in a family practice clinic that serves a lower socioeconomic patient base. I was privileged to collaborate with physicians, residents, and nurses on a daily basis. Primarily the medical residents in the clinic, as in this case, referred patients for mental health care. Meetings involving the physician, the mental health provider, the patient, and the patient's family were possible and encouraged.

Kim felt comfortable asking her physician for a referral to mental health care to help her address some of the issues in her life that she felt were persistent. Of primary importance to her was the feeling of being alone, a feeling that complicated her life as she struggled to connect to others, many times unsuccessfully. Her physician asked me if I would join her in the examination room after Kim asked for help. Our initial meeting was between Kim, the medical resident, and me.

The physician and I entered the examination room together, and were met by a huge smiling face, attached to a body that was confined to a wheelchair. I remember how dirty she looked and the uneasiness I felt when she asked for a hug. I noted the way she tried to draw me in with her eyes and keep my focus, I felt, on her face. While her physician went over her medical concerns, Kim updated us both on her other priorities. These included her relationship with her mother and her seemingly never-ending quest to find a soul mate. She named both of these issues as contributing to her struggle with depression. Additionally, she had concerns about a good friend who also struggled with a physical disability. She feared the friend's demise and reflected that the same could possibly happen to her.

Kim was born with spina bifida and her struggle with medically related issues was lifelong. She was a regular at the clinic as she dealt with various health concerns related to her medical diagnosis. Along with physical concerns, she suffered with depression and her physician was particularly concerned that Kim was not caring for herself. She lived in an apartment complex for the handicapped and although she prided herself in independent living, her physician worried that this was not the best environment for her—self-care seemed so difficult. Finally, Kim admitted to not taking her medications, stating that she simply forgot.

Kim kept all of her medical appointments. In fact, she often showed up without an appointment, stating she felt she needed to “be checked.” Kim was at the clinic at least every other week and each time requested to see “her doctor,” appointment or not. The resident intuitively noted Kim's extra appointments were serving to connect Kim to other people. We scheduled a follow-up visit that included talk therapy, 1 month from the date of the referral.

My first meeting alone with Kim was pleasant but superficial. She dutifully answered the questions I asked and I remember my frustration at not getting to the heart of what I was sure would be some terrific outpouring of problems. After all, she had asked to see a mental health provider, so did that not mean there was some huge dilemma that I was going to be a part of solving? But no dilemma presented itself during that meeting, or the subsequent one. I was beginning to wonder about the purpose of her visits and my uncertainty was making me uncomfortable. I decided to present her to my supervision group, which included another master's level marriage and family therapy intern, my doctoral supervisor, who was the behavioral health specialist at the medical school, and the director of the urban family medicine department.

During supervision several things were discussed, including Kim's lack of compliance with medical recommendations and the way her physical health may have been influencing her mental health and vice versa. Then my supervisor asked me how it felt for me to be present with Kim. After I had described my frustration at her constant “visiting” and not getting to “anything significant,” my supervisor commented that my reaction to Kim could be one that many people had when dealing with her. She also encouraged me to explore what purpose these visits may be serving for Kim and why I, as her therapist, was eager for Kim to present a problem that I could help “fix.” We wondered together how it would be to connect with Kim on another level that may actually *not* focus on her physical self since so much of her life seemed to be about being handicapped.

The collaboration at lunch that day changed the way I approached Kim during our next meeting. The urban medicine department director encouraged me to use the conference room instead of a regular examination room where Kim and I struggled to turn her wheelchair around after every visit. As he pointed out, this wheelchair struggle was potentially highlighting what she already knew—that getting around was difficult. Instead of checking in to make sure she followed treatment recommendations, he thought listening to her story might give me a better idea of how her healthcare team could best serve her.

Kim did have a colorful story of hardship as she dealt with the state of her body but more than that she suffered tremendously at the loss of relationships, which she felt was in large part because of her body. She felt rejected by her father, who refused to allow her to stay in his home. She asked other family members to care for her, and all refused. She met multiple men and fell in love very easily. Consequently she was heartbroken frequently as her dreams of a wedding and moving into her own home were let down over and over again. She felt self-conscious about sex and self-conscious about asking her boyfriends to do things for her such as assist with a bath. She felt abandoned by her mother and now resented her mother's attempts to reconnect. She lost a best friend 2 months before I met her, a friend with spina bifida like herself, and she was scared to death to die. Another friend that lived in her apartment complex was struggling with complications related to a disability and Kim's conclusion was that this deterioration would also eventually happen to her. Lastly, she needed questions answered not only about the complications of her illness, but also about her future. She was scared of death, somewhat worried about pain, and wanted to know more about her prognosis. Her problems, contrary to my assumptions, were a result of fear and disconnections from people she cared about—not just about the state of her body. Her frequent medical visits served many purposes, not the least of which included providing a connection to people whom she felt cared for her. Despite her mounting medical bills, she felt the conversations with her physicians were worth her financial dilemma.

I visited with Kim's physician in the precepting room after that mental health appointment. We decided that weekly visits with a mental health care provider might decrease the frequency of her pop-in medical visits. We also agreed that the resident would participate in these visits for a few minutes, not to address additional health concerns, but just to let Kim know she was involved. Keeping the importance of connection in mind, both the physician and I presented the idea to Kim, and Kim thought it was a good plan. Kim also agreed that I would ask during every visit about her compliance with the citalopram (Celexa) prescription and other medical recommendations, and forward that information to her physician if compliance continued to be a problem. Her physician and I both learned that one of our concerns, Kim's ability to care for herself, was indeed a concern of Kim's as well and contributed to her depression since multiple family members rejected her attempts to ask them for assistance. Her physician was able to provide education about her prognosis and current state of health that we were able to incorporate into our weekly visits.

By the end of my internship year, Kim's visits to the clinic decreased to only the scheduled medical ones. The clinic accommodated the need to have her mental health appointments immediately following her medical visits, which allowed for both physician and mental health practitioner to visit her simultaneously when necessary. Kim still suffered through bouts of depression but her self-care improved. She regularly took all of her medications. She worked hard on finding the courage to seek meaningful connections that would eventually diminish her sense of isolation. This included joining a bingo group and making friends who were not handicapped. She still maintained close ties to the clinic and her treatment team but described a shift in perspective to one that allowed her to begin to trust people who were not directly involved in her healthcare. Eventually her care evolved into medical visits only.

According to Knudson-Martin,<sup>3</sup> emotions are a linking mechanism contributing to an individual's state of health. This case exemplifies a positive outcome of collaboration and the influence of a team approach to emotional issues. We learned that through sharing the complexity of her life, Kim's story of healing could include physical and mental health. Charon<sup>4</sup> speaks of the importance of a physician's ability to listen to the narratives of the patient, grasp and honor their meanings, and be moved to act on the patient's behalf. Taking into account the meanings of Kim's narratives, it was also important for the team to realize that Kim needed to connect to a world that did not focus solely on her physical self. As this case study exemplifies, the treatment team can enrich the patient's experience as well as their own by participating in collaborative care. By recognizing and addressing what *Kim* thought was important, Kim could begin to feel heard. According to Lyness,<sup>5</sup> we are who we are only when examined within our current contexts, the most important of which are our relationships with others. Those forces that keep the patient out of connection are the forces that keep her or him from growing and thriving in life.<sup>6</sup> In a safe context the person can begin to change them.<sup>6</sup> The treatment team in this case served to create this safe context so this patient's problems no longer seemed unmanageable.

When taking into account the Three Worlds model, this study emphasized the importance of clinical collaboration by expanding the patient's story of illness to include psychosocial factors that affected the patient. A team of providers not directly involved with her care was utilized via consultation meeting to brainstorm about her case and suggest alternative ways of thinking about Kim's situation. With this new knowledge the treatment team changed the way her healthcare was delivered by her physician and therapist. Specifically we increased the frequency of her visits with the focus intended to be on Kim as a person, not only on Kim the patient. The resident maintained her connection with her patient but expanded the patient's treatment network, which in turn allowed Kim to seek out, and trust in, healthy relationships in her private life. Secondly, the financial implication of the patient's repeated, and often-unscheduled visits to the clinic were compounding her desperation to find help. A few extra scheduled visits initially meant fewer visits in a matter of months. By taking a few simple steps with input from several practitioners, we hopefully allowed Kim to see that she did matter and that she was heard.

This patient's story required her physician listen from multiple perspectives. The essence of a narrative-based approach to information sharing involves the physician simultaneously attending to two narratives—one from the biomedical perspective and one from the patient's perspective.<sup>7</sup> Kim's physician utilized the resources that were available in the clinic to improve her patient's healthcare, reduce treatment costs, and ultimately help the patient heal.

Most healthcare providers, if they are lucky, remember stories of patients that had a profound impact on their education. I will always be grateful for the opportunity to know Kim as a patient and as a person.

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**Part VII**  
**Psychiatric and Comorbid Disorders in**  
**Primary Care**

## Chapter 27

# Overcoming Depression in a Strange Land: A Hmong Woman's Journey In the World of Western Medicine

**Tai J. Mendenhall, Mary T. Kelleher, Macaran A. Baird,  
and William J. Doherty**

As the world of collaborative family healthcare evolves in synchrony with advancements in medicine and medical technologies, new and emerging clinical and psychotherapeutic approaches, and macrosystemic changes in care delivery and management systems, we are continuously challenged to step outside the comfort zones of our baseline training and competence. We push ourselves to learn about and value the respective contributions of providers who represent disciplines other than our own, and to work effectively together en route to common goals as they relate to the patients and families who seek our help. But this is only part of a much larger system of care, and accordingly facilitates (and limits) our access to the confines of professional expertise that is found in textbooks.

As our efforts in medicine and mental health care extend beyond visit-based services into the comparatively less familiar territory of preventive and patient-oriented care, a call has emerged for increased partnerships between providers and patients.<sup>1-2</sup> These partnerships stand in contrast to traditional hierarchal modes of care that position providers as experts who deliver services to passive patients. Tapping the lived experience and wisdom of patients, themselves, facilitates access to understandings and insights that cannot be found in textbooks. It empowers patients and providers alike to work together as active participators in treatment, each bringing with them a unique set of knowledge and skills.<sup>2-4</sup>

The case presented here highlights these and related processes in collaborative care. It documents the clinical journey of a Hmong refugee from Thailand, who initially presented at a family medicine clinic with what conventional Western diagnostic systems would label as “depression.” The complex juxtapositions of culture relevant to the case highlight how this initially straightforward diagnosis was not actually so straightforward, and they point to the importance of engaging the patient as an active participator in treatment across time. This patient’s clinical journey through the world of Western medicine encompassed an active integration of conventional therapies that were sensitive to culture and an active collaboration between the patient and professional and lay (cultural broker) providers. And over the course of this journey, the patient did more than recover from depression. She evolved from being a recipient of services to actively “giving back” to her community, working in partnership with providers and other community members to ease the suffering of those who are hurting—and those with whom she can so well relate.

## Introduction to Case

### *The Clinical Setting*

Phalen Village Clinic is a primary care clinic and family medicine residency site operated by the University of Minnesota Medical School, Department of Family Medicine and Community Health (DFMCH). Healthcare providers include medical faculty, medical residents, behavioral medicine faculty, doctoral mental health interns, obstetrical nurses, and an ethnically diverse group of medical and nursing assistants. The metropolitan area that the clinic serves is economically and culturally diverse, and includes a large population of Hmong refugees.

The teaching and modeling of collaborative practice that is inherent within the philosophy of the DFMCH and all of its residency sites takes place across multiple systems levels. Mental health is seen as integral to medical care and precepting, and behavioral medicine faculty and preceptors are a regular presence. Medical and mental health providers share patient charts and regularly engage in formal and informal consultations, joint teaching efforts, and collaborative research and quality improvement initiatives. Hmong-speaking staff and clinical members are heavily relied upon by non-Hmong-speaking providers to interpret and provide insight and understanding into patients' medical and mental health presentations vis-à-vis cultural concerns with which Western providers are frequently unfamiliar. Care for patients with complex medical and psychosocial issues often encompasses behaviorists consulting directly with physicians during and over the course of medical visits. Other times primary care physicians participate actively in patients' psychotherapy visits in collaboration with behavioral medicine faculty or interns. External and outside resources, when appropriate, are also engaged over the course of patients' care (e.g., referrals to, and collaborative efforts with, physical therapists, clan leaders, or local shamans).

### *The Patient*

Mai (pseudonym) was a slender, quietly dignified Hmong woman of 40 years. Born in Laos as the second of eight children, she grew up during the Vietnam era at the time of the CIA's "secret war" (which ended in a holocaust of almost 50% of the Laotian Hmong population, and diaspora of another 25% who fled the country to Thailand.<sup>5</sup> At the age of four, Mai and her family were forced from their small agricultural village in the northern mountains. They later took to the jungles—for the next 10 years—as a consequence of daily bombings and strafings by the North Vietnamese, US, and (later) Pathet Lao armies. Over the course of this exodus and hiding, two of Mai's brothers were killed. Her father became seriously ill and also died. On the edge of starvation, her family finally crossed the Mekong River into Thailand, where they lived in a refugee camp until Mai married and immigrated

to the USA in 1989. She then worked in a low-paying manufacturing job until her husband developed terminal cancer and died in 1999. Mai was unable to return to work after this because of a variety of medical and mental health issues in concomitance with a lack of resources with which to ensure adequate and appropriate childcare. At the time that she first presented to the clinic for care, Mai was experiencing a variety of depressive symptoms secondary to these psychosocial stressors. She spoke very little English, and could not read or write in either language (English or Hmong). She was living in Section Eight housing with six children ranging in age from 7 to 17 years. Her principal source of income was through the government's Temporary Assistance for Needy Families (TANF).

### *Presenting Complaints and Cultural Considerations*

Mai initially presented with a number of medical complaints, including asthma, chronic pain (multiple sites—including upper back, shoulder, neck, and head), and gastroesophageal reflux disease. Emotionally, she described herself as feeling overwhelmed, markedly sad, and hopeless. She harbored frequent thoughts of suicide, and was frightened by persistent daydreams of driving her car off a cliff. She was socially isolated, lonely, and considerably irritable with her children. Her appetite was appreciably diminished, and she had lost a significant amount of weight. Insomnia was also of concern to Mai, as she was limited to 1–2h sleep per night secondary to negative ruminations about life stressors, suicidality, and physical pain. She complained of feeling continually exhausted in both a physical and a psychological sense. She described considerable problems with memory and concentration, and maintained that these deficits were significantly impacting her daily functioning.

Mai first came to the clinic after her husband's death in 1999 (phase 1 of treatment, described later). In Western culture, her presentations could have easily been presumed to be a normal response to the grief she was experiencing and its psychosocial sequelae (e.g., stress related to childcare, finances, and unwillingly becoming a single parent). Her physical complaints could easily be seen as further (somatic) symptoms secondary to these stressors. However, it was important to consider how issues related to Mai's membership in the Hmong culture contributed to this case's complexity. Mai's situation was not one that only left her financially strapped and overwhelmed. She had become a cultural leper of sorts because in the traditional Hmong community, women who have lost their husbands through death or divorce are seen as morally questionable. They are frequently shunned by the general community, and oftentimes by their own families. Mai's husband's death had cut her off from her husband's clan and family, and she could no longer turn to them for support. At the time of the marriage, she had formally left her own birth clan and family (a commonplace cultural sequence), and could thereby not be officially restored to them. Mai's experiences of isolation and loneliness thereby went beyond a simple reflection of normal isolating behaviors that are consistent with Western conceptualizations and definitions of "depression." Between the cultural

stigma, lack of clan recognition or support, and the language barrier between her and the larger, English-speaking community, Mai had few people in her life with whom she could interact or from whom she could seek help.

Mai's conflict with her 17-year-old son—which occurred several years after her initial presentation at the clinic and contributed to her return for further care (in phase 2 of treatment, described later)—could similarly not be understood in straightforward Westernized family science or psychosocial terms. In traditional Hmong culture, Mai's oldest son became the "head" of the family at the time of his father's death (when he was 12 years old). As a widow without social status, Mai was socially dependent upon her son, both in this life and in the next. In this life, Mai's son was bestowed the power to make major decisions regarding the welfare of the family, and for overseeing and disciplining his younger siblings. In the afterlife, Hmong culture maintains that parents cannot proceed to the next level of spiritual existence without a son performing conventional and requisite funeral rites. For any variety of reasons, Mai's son could very well refuse to honor his mother upon her eventual death, thereby damning her to spend eternity as a wandering ghost. Mai's powers as a parent—in manners ordinary and established within Western culture—were almost wholly absent by nature of her son's culturally prescribed power. While Western norms maintained that Mai's son's increasing want for independence and distance from his mother were developmentally appropriate, Hmong cultural norms maintained that he subsume his individual wants and needs to the larger family's good. Mai's son was considerably frustrated with struggling to deal with his very "adult" Hmong role while at the same time living in a larger social context where 17-year-olds are "kids" with comparatively limited responsibilities. Added to these problems were Mai's ongoing stressors related to existing daily in a strange land wherein she could not speak the language, where she was forced to deal with the confusing and daunting US social welfare system, and where she struggled to raise a large family alone in the context(s) of poverty.

## *Diagnoses*

At the time of Mai's initial presentation at the clinic (phase 1), her working diagnosis according to the DSM-IV<sup>6</sup> was as follows: axis I—major depressive disorder, single episode, without psychotic features (primary) (296.23); axis II—no diagnosis (V71.09); axis III—asthma, gastroesophageal reflux disease, myofascial pain disorder, chronic pain (multiple sites), and migraine headaches; axis IV—occupational and financial problems (V62.2) and acculturation problems (V62.24). Her global assessment of functioning (axis V) was initially assessed at a range of 45–50. At the time of Mai's return to the clinic (phase 2), her axis I diagnosis was changed to major depressive disorder, recurrent, severe without psychotic features (primary/296.33) and posttraumatic stress disorder, chronic (secondary/309.81). Recognition of parent–child relational problems (V61.20) was added to Mai's psychosocial struggles, delineated on axis IV.

It is important to note that for providers Mai's diagnostic codes were of limited use in understanding the overall picture of her case and designing a treatment plan because issues presented were embedded in a cultural context that the DSM-IV's axis IV categories cannot wholly portray. For the patient, these diagnoses were meaningless anyway, insofar as there is no Hmong word for "depression." The closest comparable terms to characterize Mai's presentations in the Hmong language are *nyuaj siab* (emotional upset caused by severe worry) and *lor siab* (deep, aching loneliness). Over the course of Mai's treatment, the authors of this chapter came to use a group of descriptors (pain, loss, loneliness, and worry), rather than any single term, to capture these complexities in a "diagnostic" sense. This evolution in diagnostic labeling grew from dialogue with, and suggestions from, Mai and other Hmong community members.

## Treatment and Outcomes

Evidence-based and empirically supported treatment for major depressive disorder has indicated that the use of a combination of psychopharmacology and psychotherapy methods is superior to monomodal approaches.<sup>7</sup> Consistent with this understanding, Mai's treatment has encompassed both medication and psychotherapy components. Similarly, while psychotherapy was clearly indicated in this case, it was also clear that treatment informed entirely by a single conventional Western approach in psychotherapy was not. For example, cognitive behavioral therapy has the most research-based evidence for the treatment of depression,<sup>8</sup> but many of its techniques in addressing minimization, catastrophizing, and black-and-white thinking fail to address the reality of the world that Mai inhabited and afforded limited understanding of, and cultural sensitivity to, her situation.<sup>5, 9-11</sup> Structural family therapy has demonstrated effectiveness in empowering parents struggling with out-of-control teenagers according to Western notions of family organization, but it does not inform clinical work in cultural milieus that afford sons more power than female parents.<sup>12-14</sup> Psychodynamic therapy's use of the provider as a neutral tabula rasa would also be culturally inappropriate because of Hmong patients' expectations that providers be both supportive and active/directive in treatment.<sup>15-17</sup>

An integrative therapy approach was thereby employed over the course of this case. Narrative therapy served as a guiding framework, and other supporting theories and approaches were strategically incorporated into and throughout Mai's clinical journey. Our previous work in the Hmong community has demonstrated that the use of narrative therapy and theory as a guide to treatment represents a good fit with the rich, oral and story-telling traditions of Hmong culture.<sup>18-19</sup> This approach's emphasis on cocreating patients' stories (and renarrating them), along with its thoughtful use of listening, reframes, and problem externalization are helpful in the facilitation of provider and patient understandings about presenting problems in context, and in empowering patients to "stand up to" their problems. Feminist

theories' sensitivity to power, oppression, and culture,<sup>20–22</sup> solution-focused therapy's constructive problem-solving through accessing the patient's own resources and creativity,<sup>23–25</sup> and cognitive-behavioral therapy's directives to intercede patients' self-defeating thought patterns<sup>26–27</sup> were all indicated and readily evident at different points in Mai's treatment. They carried with them common themes of narrative therapy's perspectival positioning of depression as an "enemy"—outside of the patient—to battle against and defeat.<sup>28–30</sup>

## *Treatment Phases*

Mai's treatment encompassed three phases: in the first phase (lasting 3 years), she received conventional, collaborative services from her primary care physician, a clinic psychiatrist, and mental health care practitioners who provided both individual and group therapies. The second phase of treatment (lasting 6 months) consisted of access to the physician, individual therapy with a single therapist, and the services of a local cultural broker/interpreter who helped to increase involved providers' cultural understandings and connected the patient with indicated resources. The third phase of Mai's treatment (ongoing) encompasses a novel approach which purposefully accesses the internal resources of the patient and the power of the larger community outside the clinic setting.

### **Phase 1**

Mai's initial treatment plan encompassed both medication and psychotherapeutic components. Her primary care provider began treatment with sertraline (Zoloft) for depression, zolpidem (Ambien) for sleep, ibuprofen (Motrin) and isometheptene/dichloralphenazone/acetaminophen (Midrin) for muscle tension pain, omeprazole (Prilosec) for epigastric pain, and fluticasone (Flovent) and salmeterol (Serevent) for asthma. Early results connected to mental health facets of Mai's treatment failed, however, because she discontinued use of sertraline in response to unwanted side effects and lack of rapid improvement. This is a common challenge that providers face when treating non-Western patients, including the Hmong; patients generally have difficulty tolerating slow clinical responses and initial side effects of antidepressants because they assume that medications will work immediately and relieve discomfort (rather than taking time to work or adding to discomfort by ways of side effects). These cultural beliefs are reflective of traditional patient–healer relationships, where the onus in Hmong culture is on the healer to cure the disease and payment is not given until this is accomplished to the satisfaction of the patient and the patient's family.

Mai saw a mental health provider in the clinic for several months in individual psychotherapy, and then transferred into the clinic's Hmong women's support

group. Individual therapy encompassed a variety of clinical foci, including supportive maintenance to Mai as she grieved the loss of her husband, advocacy for community resources related to food and housing, and empowering the patient to recognize depression as a problem she could fight across both individual and group contexts. The support group that Mai participated in employed a combination of cognitive-behavioral therapy strategies specific to depression, life skills education to help with cultural adjustments, and self-care techniques. Mai terminated treatment after 3 years, because of a partial remission of her depressive symptoms and belief that she had gained tools sufficient to manage her depression and function effectively in everyday life.

## Phase 2

Over the next 2 years, Mai functioned relatively well. While she continued to experience some depressive symptoms, her ability to manage these symptoms as normal “ups and downs” was effective. However, Mai’s depression later returned in full force, secondary to escalating conflict with her 17-year-old son and increasing financial strains on the family. Mai’s previous mental health provider had left the clinic when she returned for care, and was thereby referred to another clinic provider, Mary Kelleher (M.T.K.). During this time, M.T.K. had been working closely with the clinic outreach coordinator (who is also Hmong) when conducting therapy with Hmong patients. This woman is highly respected within the Hmong community, maintains a broad knowledge and familiarity of local community resources, and is known to have struggled successfully with *nyuaj siab* and *lor siab* herself using a variety of Western and traditional Hmong strategies and techniques. Patients trust her and seek her out for advice on dealing with depression, accessing resources, and making sense of Western medical treatment. The outreach coordinator was present with M.T.K. and Mai at every treatment session, and served in the capacities of multiple roles (interpreter, cultural broker, unofficial cotherapist, and patient support system). Mai later described the outreach coordinator’s participation in treatment as key to her feelings of safety, being understood, and being valued:

[She] is the reason I came to the clinic...I knew [she] had gone through this before, and I looked to [her] and told myself, I can do this, too. And [she] and the doctor would listen to me, and really understand what I had to say. I needed kindness to get well.

Over the course of this treatment phase, Mai’s physician oversaw care for her medical issues.

Early on in phase 2, Mai’s physician introduced amitriptyline (Elavil) for depression and zolpidem (again) for insomnia. Similarly to in phase 1, however, Mai quickly discontinued these medications secondary to unwanted side effects and a paucity in rapid and noticeable improvements. Ensuing collaboration between Mai’s physician and M.T.K. served to coordinate providers’ respective efforts in a manner more consistent with the aforementioned belief systems about medications



that are espoused within traditional Hmong culture. Ongoing pharmaceutical care was tailored to attend specifically to Mai's physical pain and related complaints. While this was not expressly directed toward mental health symptoms and functioning per se, Mai (and her providers) viewed this medical care as part of her overall treatment plan. Easing physical suffering was important, insofar as Mai's somatic symptoms oftentimes exacerbated her depressive symptoms.

During their first session in phase 2, M.T.K. employed the Patient Healthcare Questionnaire (PHQ-9) as a depression screen.<sup>31-32</sup> Mai's score indicated that she had relapsed into a severity of clinical symptoms consistent with her previous major depressive disorder. As therapy proceeded, Mai further revealed the harboring of pervasive fears and flashbacks since her husband's death, accompanied by flushing, tingling in her extremities, dizziness, shortness of breath, nightmares, and intrusive memories of her earlier and aforementioned experiences in Laos. It was these new data that effected Mai's providers to add posttraumatic stress disorder to Mai's aforementioned DSM-IV axis I diagnosis.

Mai, M.T.K., and the outreach coordinator then entered into a rich and messy process of cocreating Mai's therapy. At first, therapy dealt with safety issues regarding Mai's suicidality. She assured providers that she would not abandon her children through suicide, and she maintained that talking about her feelings and being listened to empathically were helpful in reducing her ideations of self-harm. As therapy unfolded and Mai continued to talk and to cry, M.T.K. listened, asked questions, and struggled to understand the patient's world with the assistance of Mai and the outreach coordinator. When M.T.K. did not understand the cultural nuances of what Mai was saying or explaining, the outreach coordinator helped to clarify particular points while at the same time conveying her empathy to Mai.

With each session, Mai appeared calmer and less overwhelmed. Much time was spent listening to Mai's story and using narrative techniques to externalize "pain, loss, worry, and loneliness" (depression's constituents) as Mai's opponents, reframe Mai's actions to underscore her competency, and encourage Mai's sense of personal empowerment. Soon she was able to speak about her problems with her son as "time-limited," which was seen by all involved as an early sign of returning hope. As therapy progressed, Mai began to take active steps outside of therapy to feel better, e.g., taking trips to a large Hmong flea market to bargain and talk with the vendors; making herself leave her apartment to take drives when she felt down; distracting herself with activities to cut off "bad thoughts" that cycled through her mind; signing up for an English class to begin learning the dominant language of her locale, as well as socializing with people, laughing, and sharing ideas. With these behaviors highlighted as effective self-care strategies, solution-focused emphases were integrated into Mai's narrative treatment to applaud her efforts and frame what she was doing as further "standing up to" her depression. Mai had also retained many of the cognitive-behavioral strategies she had learned earlier (e.g., challenging self-defeating beliefs, recognizing black-and-white thinking) and as her depression began to decrease, she was able to access these techniques again.

Mai and M.T.K. terminated individual therapy after 6 months because Mai's depression had reached a point where it was once again manageable. She understood that her depression was a recurrent condition and that her long-term plan was to

manage its lows along with the highs that life brought her. Mai worked hard to recognize and treasure each happy moment amongst the many difficult ones. She worked hard to continue doing what she had learned over the course of her journey—thereby practicing a variety of self-care activities and sequences every day. In addition to being good for her, Mai recognized her self-care as an essential and ongoing part of her functioning in order to be the best that she could be for her children. When things would overwhelm her, she would check in with the clinic's outreach coordinator to get encouragement and gauge if she needed to return, knowing that she would be welcomed back into therapy if it was ever indicated.

### Phase 3

Over the course of earlier therapies (e.g., individual, group) and informal contacts (e.g., supportive sequences with the clinic's cultural broker and interpreter), Mai was emotionally supported by a variety of people (providers, other patients, community members). She was particularly impacted by the experience of having others share with her their own stories of struggling with pain, loss, worry, loneliness, and depression and she maintained that their lived experience and wisdom in fighting the illness was a principal foundation of her learning how to incorporate effective self-care strategies and healthy cognitive patterns.

As she stabilized and grew in recovery (toward the end of phase 2), Mai harbored an increasing want to reach beyond herself and help other women in the Hmong community who suffered as she had with depression. She wanted to give others her story as a gift of hope, and to share her wisdom in similar manners to members of her community who were hurting as she once was. But she did not know how to do this beyond occasional conversations among family or friends, and could not imagine how she could ever contribute to the empowerment of others and beneficent change in her community on a large scale—particularly in light of her low social standing, lack of education, and functional illiteracy.

In 2005, Mai was approached by Tai Mendenhall (T.J.M.) to become a community leader/collaborator in a local project on depression that the authors were conducting. Guided by the Citizen Health Care model,<sup>3</sup> the purpose of the initiative was to identify novel ways to treat the high proportion of clinically depressed individuals within the Hmong community by engaging with community members as equal partners in the process. Well aware of the pervasive nature of depression across the local Hmong community and within the patient population under their care, and based on previous work by William Doherty (W.J.D.) and TJM,<sup>3, 33–37</sup> this initiative looked to partner with patients who had learned to live with, fight, and effectively manage depression.

The Citizen Health Care model outlines a way to engage patients, families, and communities as coproducers of health and healthcare.<sup>3</sup> It goes beyond the activated patient to the activated community, with professionals acquiring community organizing skills for working with individuals and families who see themselves as citizens of healthcare—builders of health in a clinic and community—rather than

just as consumers of medical services. Citizen Health Care thereby aims to engage a resource that is largely untapped in our contemporary, strained healthcare system: the knowledge, wisdom, and energy of individuals, families, and communities who face challenging health issues in their everyday lives. This is different from traditional ways of thinking about an activated patient who becomes a responsible agent for his or her own health. The idea of “citizen” refers to people becoming activated along with their neighbors and others facing similar health challenges in order to make a difference for a community. Ordinary citizens become assets in health care, coproducers of health for themselves and their communities. They are no longer simply consumers of services who look out for their own health and that of their immediate loved ones.

Community-based participatory research (CBPR) represents an action research approach that guides Citizen Health Care initiatives. CBPR emphasizes close collaboration among researchers and community participants who are directly affected by an issue to generate knowledge and solve local problems. Hierarchical differences are flattened through this partnership and all participants work together to create knowledge and effect change.<sup>36, 38–39</sup> Research is not conducted “on” people, but “with” them, as community participants take active roles in the entire research process. From conceptualizing problems and formulating solutions to solve them, to designing interventions and implementing interventions, to identifying relevant benchmarks of success and analyzing outcome data, to feeding results back into intervention designs and modifying them in accord to evaluative findings, community members work collaboratively with clinical researchers en route to a common goal(s).<sup>40–42</sup>

Mai and several other former patients and community members were purposefully identified and recruited to the Citizen Health Care project’s action-and-planning group because providers recognized them as having inspiring—and relatable—stories, as well as a strong potential to contribute and lead. As these community members engaged with medical and mental health providers at the clinic, Mai found a unique and powerful venue to reach out to other women who were struggling as she had. Today she sees this work as one of her life’s purposes, and finds this mission to be empowering across both personal and community-wide arenas. When interviewed regarding these efforts, Mai explained:

(A)ll I can do is use my experience and tell people I know it is hard, but with what I’ve gone through I have survived. I still struggle, but you make a move and change your life. If you go to the [women’s depression support] group and go to the doctor and go to therapy and let the [providers] talk all their talk, but you’re not changing yourself – you don’t learn it. You don’t use it. Then it’s not doing any good. But you have to use it...you have to want to change yourself...That’s how you overcome and you’re learning and you survive. So that’s why I want to help this way.

This path of professionally assisted but cocreated health improvement evolving toward a long-term stable—but always in the process of “recovering”—model is parallel to that established by Alcoholics Anonymous.<sup>43</sup> However, this recovery encompasses a full complement of professional collaboration and guidance, whereas Alcoholics Anonymous is almost entirely directed outside mental health professionals’ direct influence.

Personally, Mai sees her efforts in CBPR as a type of ongoing “treatment” in self-care. Not only does it give her a newfound purpose in life, but it also gives meaning to what she has experienced. This is consistent with a variety of initiatives that have recognized how the very act of helping helps, and how personal experience with a problem positions patients in a manner whereby they have something to offer others that cannot be found in a textbook. Indeed, functioning in supportive roles to others has been associated with a variety of positive outcomes, e.g., improved self-esteem, increased self-confidence and sense of self-efficacy, decreased depression, augmented role functioning, and stronger internal locus of control.<sup>44–47</sup> Unlike many Hmong patients (and others) suffering with depression, Mai no longer sees herself as cursed, trapped in tragedy and bad luck, and wishing for an “end.” She is a warrior in her own right, fighting her nemesis (depression) across both personal and community levels. And she is winning the battle.

## Discussion

At this time, most conventional treatments for patients with complex biopsychosocial problems like that which is presented here are carried out through top-down, provider-driven services.<sup>3, 34, 38</sup> While many of these approaches employ multidisciplinary teams and deliver effective care, they can also miss opportunities to engage patients as active members of the treatment team.<sup>40, 48–49</sup> Mai's journey in fighting depression—which encompassed her active involvement across individual, group, and community levels—embraced her lived experience and wisdom in synchrony with providers' textbook erudition and clinical skills.

The communities in which we work stage a myriad of individuals with complex presentations who have learned intuitively, and from professionals, important insights into the causation, treatment, and management of their medical and mental health problems. However, the journey that Mai traversed—from isolated individualism to an engaged participant in CBPR oriented to allaying the problems of depression in the wider Hmong community—is what makes her story unique.

The three phases of work which describe this patient's journey reflect a progressive lessening of reliance on the limited three worlds of healthcare (provider, administrative, and fiscal resources).<sup>50</sup> In phase 1, which was the most conventional phase of treatment, Mai was a damaged individual who passively received professional services from her physician, clinic psychiatrist, and mental health providers. Her use of healthcare resources was relatively high at that time—although not as high as if would have been had she been in an uncollaborative environment in which disparate providers offered uncoordinated treatments with duplicated administrative efforts and longer overall care duration. In phase 2, the patient presented as severely depressed and “stuck” as she was in the first phase, but she had underlying strengths and skills upon which she was drawing prior to and throughout her treatment. During this time, medical collaboration was “on tap” (i.e., to be accessed as needed and in attendance to physical presentations), and individual mental health

therapy was provided in a manner whereby the patient was pushed and empowered to recognize and access her internal resources. The clinic's cultural broker was present in each session, building bridges between the patient and her providers, and through modeling recovery by nature of her (the cultural broker's) own story of recovery and hope. Treatment was relatively brief, used fewer professionals, and drew considerably less on administrative and fiscal resources. Phase 3 saw Mai further empowering herself and giving meaning to her experience by reaching out to the larger community—to give back freely what she had learned as part of an ongoing narrative of her recovery. She also began to duplicate the role that the cultural broker had played for her. This was done within the larger community and did not use any provider, administrative, or fiscal resources. Indeed, Mai metamorphosed into a valuable and cost-free healthcare resource herself.

There existed an inverse relationship in this case between the patient's engagement in collaboration with providers and across-the-board healthcare costs: resources are used initially in appropriate ways dependent upon the patient's "stuckness," but as the system is able to engage and tap the patient's own wisdom, the use of healthcare resources goes down both for the initial patient *and for future patients*. Mai now exists as a resource to others in her community, and those who enter into treatment in the future will already have an established engagement with community resources such as Mai—who can direct them into the healthcare system earlier, help broker an understanding of Western healthcare, and provide hope and a model of recovery.

By finding ways to access the heretofore untapped resources of community members (patients), partnering with them as collaborators with equal but different knowledge and skills, and working together as concerned citizens of the community faced with a devastating personal and social problem, part of the burden of conventional treatment shifts away from traditional clinic structures and overburdened healthcare systems. At present, we are only beginning to tap the wisdom and power of patients' knowledge and lived experience as we work to enlarge our collective vision of depression and its treatment in the Hmong community. As our efforts continue to unfold and we continue to co-own and cocreate the healing process, we may find ourselves plugged into a never-diminishing resource in healthcare.

**Acknowledgements** The authors wish to thank May Lee Vang at the Phalen Village Clinic, University of Minnesota Physicians, for her always generous, insightful, and invaluable help in understanding the Hmong culture. Equal and very grateful thanks go to all of the Hmong participants in our CBPR initiative in the local St. Paul community.

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# **Chapter 28**

## **Seven Years in a Young Man's Life: Collaborative Care in Rural Vermont**

**John Matthew, William Fink, and Lauri Snetsinger**

### **Introduction**

This case report details the collaborative care, by a primary care physician (J.M.), a psychologist (W.F.), and a school/office nurse (L.S.), of a young man who, over 7 years manifested, and had recognized and treated, a complex neuropsychiatric disorder involving features of depression, anxiety, episodic or epilepsy spectrum rapidly cycling mood disorder, attention deficit disorder (ADD), and posttraumatic stress disorder (PTSD). Our combined observations, insights, skills, and knowledge, available to him in a unified health care setting, yielded, we report, clearer diagnostic formulation and more closely observed responses to therapy. This included a combination of medical and psychological treatments, and better support through several years of turmoil, distress, and development, eventuating a good result.

This case is emblematic in several respects of the sorts of neuropsychiatric problems which may appear in any primary care medical or psychology practice. These cases may involve considerable complexity, as much in primary care as in many specialty settings. Intertwined problems often only become evident as these evolve or appear over time. Primary care physicians can be well informed and comfortable prescribing and monitoring relatively sophisticated pharmacological medication for such patients.

The context is also familiar to all who are experienced in or undertake to study primary care. The preponderance of such patients present in, and most are cared for in, primary care settings. Many serious emotional disturbances in children and adolescents do not receive psychiatric or medical attention at all, and only a fraction of those who have medical care ever see a child and adolescent psychiatrist, even for a consultation. Additionally mental health services are overtaxed and underfunded, making access problematic.

The collaboration between a psychologist and a physician, assisted by an attentive nurse in the student's school, proved invaluable in this particular instance. The efforts of all contributed to our success. In this respect our practice is atypical, since most primary care practices are not fortunate to be set up to enable and encourage such a cooperative and long-term collaboration as we have. We believe that our



center's organization is a model for collaborative practice which others might profit from duplicating in their practice environments.

The consequences of not successfully addressing these disorders in children and youth are also all too familiar, with family disruption, educational failure, drug and alcohol abuse, unintended pregnancy, legal entanglements, unemployment, chronic disability, incarceration, and suicide known risks to these individuals throughout their lives. The alternatives to receiving good care often involve great human costs, heartbreak, and societal expense. These disorders arise in the lives of some individuals in all of our communities and in all of our practices every month or week, if not each day. We cannot afford to leave these disorders undetected or their victims untreated.

## **The Setting**

The Health Center, in Plainfield, Vermont, is a private, nonprofit health care organization located in a small rural village 10 miles east of Montpelier, the state capital. Montpelier, a small New England town of some 8,000 residents. The Health Center, founded in 1974, has long served persons from all segments of the diverse population of central Vermont, with a broad range of programs, including medical, dental, psychological, laboratory, pharmaceutical, dietary, physical therapy, and social services. Persons of all ages and all socioeconomic groups are welcomed, with a sliding fee scale for local residents with limited means and without insurance.

## **Our Organization and Working Relationships**

Since its inception, the Health Center has had psychologists and clinical social workers on staff providing counseling and psychotherapy to its patients, most of whom are also engaged in medical care with the Health Center's physicians and physicians' assistants. We also, for many years, have staffed a school-based clinic in the town of Cabot, of cheese-making renown, where the students and adults from the community are seen for medical care and where a nurse from the Health Center's staff is the grade K through 12 school's school nurse.

The Health Center is open 60 hours a week and currently provides care for more than 8,000 persons enrolled as active patients. Having psychological care in the same facility which houses medical and dental services diminishes barriers to having patients avail themselves of this care. Many referrals for psychological care come from members of the medical staff. Whether by reducing stigma through the endorsement of the medical staff, by saving mileage, by being convenient, or by being presented as part of our coordinated, complete, collaborative care, it seems that our patients are more apt to follow through with counseling or psychotherapy

within our organization than at separate mental health agencies or private psychology practices outside of our building.

Referrals may also come from psychologists to members of the medical staff when an individual appears to have the potential to benefit from medications. We observe similar, better likelihood of acceptance of medications, particularly among adolescents, when the psychologist endorses their use. The counselor can also encourage the patient to try the medications, help educate the individual concerning the medication, assist in monitoring for side effects, and urge the patient to report side effects, rather than stopping the medication prematurely.

Records of medical and psychological care are kept in the same chart, in separate color-coded sections, so that either provider may review the notes of the other when referrals and collaborative care are under way. This approach has broken down the silo effect so often seen in separate practices and eliminated problems with lack of record exchange. We have never had the experience of a patient not wishing to see an in-house counselor for reasons of privacy and have had very good acceptance, historically, by patients of explanations of the advantages of collaboration and of sharing the same record. Our setting also allows for informal consultations with the other member(s) of the medical-psychological team, which often prove of more benefit than letters or telephone conferences with out-of-house psychologists for comparing our insights and understandings.

## **A Success Story**

Our case report is a success story. Certainly, there are other cases in collaborative care here, as there are elsewhere, that are less successful. This case, though, illustrates the advantages of close collaboration, over time, in the sorting out of a multi-dimensional, complex situation. Like most young people with serious emotional disturbances, our young man has suffered the consequences of inherited and, probably, acquired biological disorders or propensities as well as situational, “psychodynamic” aspects of the origin, promulgation, and presentation of his biopsychosocial serious emotional disorders. Our collaboration, including the participation of the school/office nurse, has resulted, we believe, in a much more thorough understanding of our young man and a much better outcome, to date, than either of us might have achieved alone or working in the usual silos of behavioral medicine and of psychological evaluation and counseling.

## **Seven Years of Collaboration**

Our care of this young man began over 12 years ago and our medical/psychological care collaborative efforts have played out over the last seven of those 12 years. The problems he has, typical of the elaboration of complex neuropsychiatric disorders

in adolescents, evolved over time. They also came to our attention or gained our recognition over time, in the course of his development and of our various clinical encounters with him.

After several years of his evolving clinical picture and our evolving insights, we now have a young man who is doing very well with diagnoses of depression, ADD, PTSD, and epilepsy spectrum or episodic disorder with mood volatility and psychosensory symptoms, treated with four medications and ongoing psychotherapy. From a condition, when at his worst, of having an episode of screaming and lying curled up on the floor of the school corridor, he is not just stabilized, but very successful, a student at the Governor's Institute, on the local school board, and heading to college.

## **Our Patient**

Jeb is the middle of three sons of a bright woman, a nurse, who lives in rural Vermont. His father left the family before Jeb was born. The three boys were adopted by a stepfather who proved to have a very big problem with alcohol abuse and was, in time, divorced by the boys' mother and subject to a restraining order because of his behavior. Both of Jeb's brothers have neuropsychological disorders, one an episodic disorder responsive to Dilantin, and one with attention-deficit hyperactivity disorder (ADHD) of remarkable severity when he was younger, which has been substantially less of a problem in his later-teen years. His mother has depression and ADD, nicely responsive to bupropion (Wellbutrin). Our Health Center medical practice has provided his care since Jeb was 8 years old.

## **Chronology**

When he was 12.5 years old the school asked that he see W.F., our psychologist, because Jeb was not functioning well academically or socially, displaying excessive anger. This previously cooperative, obviously bright student had begun to show angry and oppositional behaviors at school. He was refusing to attend classes and not completing work. His mood had changed from positive and easygoing to angry, dysphoric, and clearly agitated at times. His mother presented the classic, "This is not my sweet old Jeb..."

The first complaints registered by Jeb were of feeling unaccepted by his classmates and a sense of grief over the loss of his former rurally set country home since his family had moved. He spoke of the hypocrisy of school authorities and bemoaned the infamy of his family name. Many of his complaints regarding public schools were normal for a young teen. Much of his behavior was easily rationalized by the therapist and the patient for a few months. He had some depressive symptoms,

but these waxed and waned and seemed to have some situational basis involving his being at a new school, leaving old friends behind, and so on.

However, about 9 months later, at 13.5 years old, when, despite accommodations, his mood and behavior deteriorated, his depression was of sufficient concern that W.F. requested a review from his primary care physician (J.M.) for depression and the possible use of medications. In our collaborative setting, a medical appointment was scheduled quickly, yielding a prompt medical review and discussion between the two clinicians. Up-to-date information on school work and behavior was also available through L.S., our school nurse. He was seen by J.M., found to be depressed, with quite a few symptoms in the old Weinberg criteria list,<sup>1-2</sup> which we still find useful. He was started on bupropion (Wellbutrin). Within a month, W.F. found him to have "less negative affect and more optimism about the future".

He took his medication irregularly, so arrangements were made to have him see the school nurse (L.S.) each school day. She kept a supply of his medication at the school-based clinic to make up doses that he missed. She also took care to see him most days at school and to inquire as to how he was doing. When his mother was at work and he was at school, he had a reliable adult ally and friend, whom he knew cared for him, giving him support and endorsing his value in his sometimes difficult situations at school and home. With this strategy in place, enabling his having a more consistent serum level of medication, this episode of depression improved. After more than 9 months of substantial benefit when he managed to take his medications consistently, when he was 14 years old he stopped taking the bupropion and was not substantially depressed for some time without medications. He remained off medications for about 2 years. Note was made of "anxiety in large places" when he had been off medication for about 6 months.

During this time depression symptoms had been increasing. "Father" issues had been talked about more and more in counseling sessions. Memories of learning farming and woodworking abounded in Jeb's presentation. "The Father" as a religious reference became prominent in Jeb's discussions. Negative transferential issues emerged and termination of treatment with W.F. was broached. But then our young man crashed.

Two years after stopping taking the bupropion, at age 16, he became agitated and withdrawn on a school field trip, isolating himself under a tree and screaming, "Leave me alone and let me talk to my father!" He was placed in an alternative-to-hospital program for an evaluation after again becoming depressed and excessively angry. In retrospect he reported the reappearance of depression some 8 months previously, after roughly 16 months off medications. In this setting he reported, or recalled, for the first time, having witnessed domestic violence as a child and having intervals of confusion. Psychological testing in this setting included the MMPI-A and the Reynolds Adolescent Depression Scale. He was judged to be depressed, without psychosis, and was restarted on bupropion.

After this evaluation and restarting medications, Jeb returned to treatment with W.F. and was more engaged and forthcoming. He made occasional references to the difficult and frightening behaviors of his (step) father, while at the same time retreating into a fantasy world of his own creation. So important was the safety of

this imaginary land that he created its own police force, a castle keep, and even its own language. This land's people lived by Old World ethics and embodied many of the positive aspects of his father. The land was isolated from the rest of the world for "safety." Jeb and his imaginary counterpart began to admit hiding from people and the hurt they can cause.

Subsequently, with Jeb as an outpatient in the medical practice, the presence of ADHD in the family led to our postulating ADD as a component of Jeb's problems. Though the bupropion that he was on has been shown to roughly equal the benefit of methylphenidate (Ritalin) for ADD or ADHD,<sup>3</sup> he still had attention problems as well as considerable social anxiety. Buspirone (Buspar), which can treat ADD or ADHD<sup>4</sup> as well as anxiety, and then methylphenidate (Ritalin) were added for treatment of social anxiety<sup>5</sup> and ADD<sup>6</sup> in the subsequent 2 months. The former aided his sleep and decreased anxiety and the latter was of help, allowing him to be "better able to organize and complete work" and "better able to sit and listen." Familiar ADHD accommodations<sup>7</sup> were added to his individual education plan at the school. Both W.F. and J.M. noted some gains from each treatment. His school performance picked up and his highly rationalized explanations of his lack of success in school despite superior intelligence faded.

Four months after his discharge from the alternative program, at 16.5 years old, while he was on bupropion, buspirone, and methylphenidate and doing better than ever, his ex-stepfather broke the restraining order and called their home. Three months later, to J.M., he reported having a 4-day interval of "really up there" in mood and energy. It was decided that W.F., who was seeing him weekly, would help monitor Jeb for possible developing bipolar symptoms. Three months later, at a consultation with a urologist, he came dressed in a full-length north African style robe with an "Arab" headdress, which he explained to the urologist he wore because it was comfortable. The urologist managed to keep his composure. During this interval he had discontinued all of his medications, hoping not to need them.

Two months later, he had restarted taking bupropion on his own and reported it again benefited his recurrent depression symptoms. With reference to an earlier serum drug level and because his weight was increasing with normal adolescent growth, his dose was increased to target the active metabolite, hydroxybupropion, in the steep portion of the dose-response curve.<sup>8</sup> While he reported the increased bupropion dose "really starting to help," he still had considerable social anxiety and rumination. These were promptly reduced by the addition of a small dose of sertraline (Zoloft).<sup>9</sup> Cognitive behavioral as well as systematic desensitization were also continued in his work with W.F. to reduce social separation.

In this interval he reported to W.F. that his ex-stepfather had showed up at his church, which scared him "into a panic." He began to recall, or to report, witnessing domestic violence as a child. Even vague reminders of his ex-stepfather began to trigger anxious responses. This bright and creative young man again retreated into his made-up world where he felt safe and in control as the powerful, benevolent ruler of the idealized realm. As emotional safety was gained through fantasy, he began to remember and share with W.F. traumatic memories of domestic violence by his ex-stepfather. Symptoms played out through triggers and traumatic dreams.

As is often the case in both psychology and medicine, more relevant information began to surface over time from examination of his family history and day-to-day behavior. Only after an acute emotional episode at school did he divulge an episode of domestic violence previously known but downplayed.

In the early fall of 2004, when he was 17 years old, he was reported by the school nurse to have had a bizarre interval of anger, shouting, and lying curled up on the floor of the school corridor. This episode lasted 1.5 hours, culminating in his being taken to the emergency room, where a very sensitive physician's assistant found him cooperative and somewhat baffled by his outburst. When Jeb, soon thereafter, saw W.F., it turned out that the school event had occurred after Jeb had seen a Marine recruiter in dress blues walking into the school. His stepfather, who had beaten his mother, was a marine who was at times in dress blues. This had triggered an emotional flashback that tipped us off to his having PTSD. Counseling with W.F. began to sort out the dimensions of this newly apparent problem. J.M. prescribed prazosin (Minipress), which can sometimes remarkably reduce PTSD flashbacks and intrusive dreams,<sup>10</sup> but Jeb did not start this medication until he had also reported to W.F., and then to J.M., hearing a woman and her children who lived across the valley meadow screaming and being beaten. Knowing this to be very unlikely to be going on in this family, J.M. persuaded him to start the Prazocin.

Several psychological techniques for treating PTSD were also employed. In short order the children were recognized to be playing and "hollering to each other" in fun across the meadow. After this, lengthy descriptions of years of domestic violence began to be described. Most of these involved frightening episodes of hearing his stepfather assault his mother, of hearing dishes crash, and of finding his mother black and blue in the morning. Finally, one episode of being beaten with the metal end of a vacuum cleaner hose was reported, with repressed affect bursting through in screams and tears.

After this catharsis, the news from his fictitious world read, "the walls have been breached, but (the ruler) lives!" The wall holding back memories of past trauma and creating a split from current life experiences had begun to crumble, no longer being necessary. In the make-believe kingdom a major philosophical/political shift was reported. The safety of the keep was no longer necessary and new technologies previously banned were admitted and being used nationally.

Jeb and W.F. discussed several specific techniques for dealing with PTSD. Eye movement desensitization and reprocessing was considered but not pursued, W.F. not having been trained in this technique. Multisensory trauma processing was employed, together with therapeutic stories, designed to evoke positive outcomes of the trauma.<sup>11</sup>

In the course of these therapies Jeb's social functioning progressively improved in both quality and quantity. He has remained on a low dose of prazosin since, with no return of the PTSD symptoms. He later reported the disappearance of "horrible" dreams, the existence of which he had kept secret until these were gone with the new medication in use. We have heard little or nothing from the imaginary kingdom since.

In this same interval his prior report of intervals of confusion, of memory gaps, and of brief high moods brought J.M. to screen for an episodic or epilepsy spectrum disorder. His chart contained records from two emergency room visits, the first from when he was 9 years old and had been an unrestrained passenger in the back seat of the family car when it was involved in a head on accident. He had hit his head on the back of the front seat in the impact, but had not been felt to have had a concussion by the emergency room physician, who had found that he had a cervical sprain. He then had been involved in a similar accident 1 year later, with a similar outcome.

He reported a good number of the symptoms of an epilepsy spectrum disorder,<sup>12</sup> including intervals of slowed thoughts, sudden intense fear, sudden intense depression, jumbled thoughts, amnesic episodes, time disorientation, unformed auditory hallucinations, sudden rage, sudden dysphoria, and *jamais vu*, and was thence begun on valproic acid,<sup>13</sup> on which, together with bupropion and sertraline, he reported his depression to be “pretty much gone,” with reduction in the psychosensory symptoms of the episodic disorder. Side effects on the valproate led to a switch to oxcarbazepine (Trileptal),<sup>14-15</sup> which, like valproic acid, has mood-stabilizing, antiseizure, and antidepressant effects.

With the oxcarbazepine at 600 mg twice a day, he reported marked reduction in his episodic/psychosensory symptoms, and his mood to be “a lot more smooth, without the sharps and speeds.” He judged himself to be “90% better,” and was more able to take his medications properly using a medication box which he stocked 2 weeks at a time.

With his medication compliance improved, he was taking his medications regularly, and his school and social situations improved. Through academic channels and through our nurse (L.S.) it was reported that his social and course work performance were moving in a positive direction. Our socially anxious and academically noncompliant young man was achieving excellent grades and entertaining peers with his standup comedy routines.

Interestingly, he then reported the long occurrence of what might be a type of synesthesia, with visualization of colors associated with thinking of the names of certain companies when he was learning about the stock market. He continued to occupy himself learning Arabic and German and some Chinese on the Internet, with learning about currency trading, and with a foreign exchange account that allowed his modeling currency trades.

As psychological and medical visits became less frequent, some symptoms of depression occurred at times. However, at 18.5 years old, he was able to handle most of his own symptoms, relate to peers on a comfortable and satisfying level, and achieve top grades in advanced academic courses. During the summer of 2006 he attended the Governor’s Institute and studied Asian cultures, which he found “awesome.” He was chosen as the student member of the school board, and has been admitted to college for the coming fall of 2007.

We discontinued bupropion because it interfered with his sleep, substituting buspirone, which has seemed to suffice for his ADD and to contribute to the control of his depression. He continues to see W.F. for supportive counseling and to take

his medications, buspirone, sertraline, oxcarbazepine, and prazosin. His most recent clinical note in the medical practice describes him as “logical, pleasant, insightful, and bright” with stable and optimistic mood, no episodic symptoms, and no PTSD events.

## Summary

Jeb's case illustrates the advantages of collaboration, over a long interval, in the care of a typically evolving complex neuropsychological disorder in a young man who, excepting his exceptional intelligence, is fairly typical in his maturation and his acceptance of the necessity of taking his medications, punctuated by intervals of forgetting or stopping his medications. The support and collaboration of his psychologist, his medical providers, and the school nurse have been essential to the better and progressive understanding of his multifaceted disorder and to its successful treatment. The potential of collaborative health care, the facility of “one stop shopping,” as Jeb calls it, and the practical gains from integrated work are clear in this case, as are the strengths of this impressive young man as he worked with us through these difficult circumstances in his life.

## Conclusion

Our organizational structure and working relationships mitigate many of the potential barriers between the clinical and operational spheres with respect to the collaborative care of our patients. In this particular instance, we had no significant interference from the financial sector, because he had Vermont Medicaid as his insurance coverage for most of the interval involved. In this latter regard, his case differed from many other situations, particularly with non-Medicaid insurances, when we have to contend with the considerable and extremely frustrating interference of utilization review and pharmacy benefits management personnel from various insurers.

The big costs in the care of a seriously emotionally disturbed individual occur when hospital care is necessary or, sadly, when drug or alcohol abuse, educational failure, incarceration, or disability result. When these outcomes are avoided, and these disorders are successfully treated in the outpatient setting, the societal and fiscal costs avoided, and the human costs averted, are very substantial. Not knowing what poor outcomes may have resulted in the absence of the care of a particular individual, we cannot say what savings offset the relatively small costs of our work with one person. But, in the aggregate, the savings—human, societal, and financial—that result from successful interventions, of the sort we describe in this case report, are incalculable.



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# Chapter 29

## Bringing the Family into Focus: Collaborative Inpatient Psychiatric Care

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### Introduction

Existing research on the collaboration between psychiatry and family therapy highlights the need for the development of “efficient collaborative models that include the breadth of biomedical and psychosocial providers with patients and their families.”<sup>1(p300)</sup> The usefulness of integrating family therapy techniques into psychiatric training programs and residencies has also been noted,<sup>2-5</sup> but relatively little has been written about the collaborative practice of integrating family therapy into an inpatient psychiatric unit.

According to researchers at Harvard Medical School, practicing psychiatrists trained in family therapy “can make unique contributions to the knowledge base and repertoire of skills of a biopsychosocial clinician that often are not provided by other components of residency training.”<sup>4(p40)</sup> However, because psychiatry residents do not spend 2 years concentrating on family therapy training, as do marriage and family therapy students, cooperation between the two disciplines is necessary for the full implementation of family therapy in psychiatric clinical practice.<sup>2</sup>

In their article on an existing joint family therapy and psychiatry training program, Walsh and Fortner<sup>6</sup> emphasized the need for family therapists to operate as separate professional entities working collaboratively with psychiatrists in behavioral health units. Another example of such a collaborative model is found at the Behavioral Health Clinic at the Sharp Healthcare Family Practice Residency in San Diego, California.<sup>7</sup> The outpatient clinic, which is staffed by a psychiatrist, a family therapist, family therapy interns, and family practice residents, utilizes its clinical team to address mental health issues within a biopsychosocial, systemic consultation model.<sup>7</sup> Although during this time the focus of the training is with primary care residents and family therapy students, the psychiatrist is directly involved in this collaborative partnership. So if medical and mental health care professionals are to provide a seamless service delivery experience, they must learn to work together on interdisciplinary teams and develop discharge plans that are realistic and effective.

In this chapter, several brief case vignettes will be presented to illustrate how a psychiatric inpatient treatment team cares for the patient and family in the hospital. They will be used to highlight the methods by which a discharge plan is developed

that can be carried out off the unit and in the hands of the patient's primary care team. Lastly, Peek's Three World model<sup>8</sup> will be applied to the reported vignettes, further emphasizing how the most effective collaborative programs are those that have carefully considered the clinical, operational, and financial worlds of health care.

## Background

The partnership between the East Carolina University (ECU) family therapy training programs and ECU's Brody School of Medicine (BSOM) psychiatry residency program began in the late 1980s. Several psychiatrists who were faculty members at the BSOM recognized that their adult psychiatry and child and adolescent psychiatry fellows needed family therapy training. This blossomed into the inclusion of master's level family therapy and doctoral level medical family therapy interns at Pitt County Memorial Hospital's Inpatient Behavioral Health Services Unit (BHU), the same unit where the BSOM's adult psychiatry residents spend a significant amount of time on rotation.

### The BHU

...is a 52-bed unit that offers comprehensive psychiatric care to patients with a wide range of emotional, social, spiritual and physical needs. They provide safe, effective care to patients even when they have difficult problems. A wide variety of treatment options is available. Because they believe that a supportive, family-oriented environment is one of the first steps to recovery, they encourage family involvement in their patients' care. Experienced staff works closely with patients to develop an individual treatment plan. Each plan includes a treatment team that consists of the patient and members of the BHU's staff. A treatment team may include the following professionals: Psychiatrist, Psychologist, Social Worker, Nursing Staff, Marriage and Family Therapist, Substance Abuse Specialist, Occupational and Recreation Therapist, and Pharmacist.<sup>9</sup>

The most recent additions to the BHU are ECU students enrolled in the medical family therapy doctoral program (MedFT). In August 2005, the first doctoral program in MedFT was initiated with its first class of students. Designed to train specialists in the science and practice of integrative care, the faculty teach their students to maintain a focus on George Engel's biopsychosocial approach,<sup>10-11</sup> the importance of systems theory, and to be inclusive of spirituality in the provision of collaborative health care. Through this program they study Peek's Three World model<sup>8</sup> and relate it to their research and applied clinical experiences.

## Case Vignettes

The case vignettes presented in this chapter will be used to illustrate how these distinct disciplines integrate and collaborate to advance inpatient psychiatric care while keeping in mind the limited time available and inevitable transition of each

one back to his/her primary care provider and outpatient mental health team. Each case will be used to illustrate how Peek's Three World model<sup>8</sup> is evident from admission to discharge in this one inpatient behavioral health care setting. All of the cases presented here were facilitated by doctoral level medical family therapists who were currently seeing cases on the BHU as part of their applied clinical experience training.

## **Admission and Referral Process**

Patients can be admitted to the BHU directly by an outpatient or consulting psychiatrist with admitting privileges, through a transfer from another hospital or health care facility, or through the emergency room. In emergency situations primary care providers can call 911 for emergency services to have a patient brought to the emergency room for a psychiatric evaluation. If the patient is willing to go to the hospital in less emergent circumstances, the primary care provider could have the patient go voluntarily to the emergency room. In nonemergent circumstances, the primary care provider can refer the patient to the local mental health provider for an evaluation. In general, if there is acute risk for patients to harm themselves or others they should not be sent unescorted to the hospital owing to potential that they may not make it there. Once the patient is present in the emergency room and has been medically cleared, the psychiatry unit is consulted to evaluate the patient for psychiatric admission.

When patients are admitted to the BHU, they are assigned to one of four treatment teams comprising an attending psychiatrist, a resident psychiatrist, a social worker, a nurse, a recreation therapist, and a pharmacist. Frequently a substance abuse specialist, a marriage and family therapist/medical family therapist, and an occupational therapist are also part of the team. The patient and the patient's family are also considered to be part of the treatment team. The treatment team collaborates to implement and develop a treatment plan with specific goals to be achieved by the patient prior to discharge. Each team meets regularly to discuss each patient's diagnosis, treatment protocol, progress, and discharge plans. Referrals to receive services from any member of the treatment team are often discussed in these meetings for appropriateness and discussion of anticipated outcomes. In this chapter we have chosen to focus on one aspect of the treatment team, the MedFT consults and the role these sessions play in the treatment and discharge planning process.

The average stay on the BHU is 5–7 days; therefore, MedFT consults are usually one-time events and happen closer to discharge rather than admission. The MedFT intern receives the referral via a confidential voicemail left by a member of the treatment team (usually the psychiatrist, psychiatric resident, or social worker). The MedFT intern may also be given referrals at any of the treatment team meetings. Sometimes the MedFT intern who is present will listen to the patients being discussed; and may offer to be of assistance if and when themes of family stress and strain are offered up as critical to patient success. Careful

observation has led us to notice that a great number of admissions are precipitated by family or relational crises.

A referral for MedFT services is then followed up by a discussion between the MedFT intern and one or more members of the treatment team. Since always locating a member of the team in person is not easy, the therapists are trained to read and interpret the chart where the orders for MedFT services are written. This is critical information as it is important for the MedFT intern to be aware of any potential risks and diagnoses being considered, as well as information about family dynamics and involved larger systems of care (e.g., outpatient therapist, case manager, psychiatrist). Since the BHU is an acute care facility, each time a patient returns a new chart is opened. Therefore, the continuity factor rests with the nurses and long-standing members of the treatment team.

Once the MedFT intern has been apprised of the referral, he or she meets the patient and confirms his or her openness to receiving MedFT services while on the unit. There are two options for receiving MedFT services on the BHU. One is the standard family therapy format with one or two therapists in the room with the patient and his/her family members and/or friends. The other is the doctoral level MedFT team where there are one or two therapists in the room with the patient and his/her family members/friends, as well as, a team of two or three other MedFT students and one American Association for Marriage and Family Therapy (AAMFT) clinical supervisor (with patient/family consent) observing live in an adjacent room via live video feed. The patient, with consent from his or her family member(s), selects the preferred session format. The patient is asked to contact (using the BHU patient phone) any family members and/or friends who he or she would like to have present for this meeting. If the patient prefers that the medical family therapist call, the therapist will ask the patient to dial the number and will have the patient sit close by while the call is being made. The transparency of the process is important to the success of each consult. It lowers the intimidation factor, reduces paranoia, and models open communication even before the session happens. Once a session time, format, and purpose have been established, the medical family therapist discontinues the conversation with the patient until all parties are present.

Typically MedFT consults are scheduled 1–2 days prior to discharge. This gives the medical family therapist and treatment team time to collaborate after the MedFT session and renegotiate any treatment or discharge plans. However, sometimes this is not how the consults unfold and they may happen shortly before the patient is released to the care of a loved one or friend. One session proved interesting as the MedFT team learned of an unexpected threat to harm, 1 hour prior to a patient's planned discharge.

A 45-year-old woman was hospitalized, by the insistence of her brother, for a major depressive episode with suicidal ideations. Upon medical stabilization, a referral was made for MedFT services. Once the family entered the MedFT session it was clear this was anything but routine. The patient's brother sat next to her and their mother chose the standalone chair across the room. The mother's solution to her daughter's "troubles" was to tell her daughter to accept Jesus into

her heart. The patient's brother challenged his mother's solution and informed the medical family therapist of a longstanding tension and resentment between his sister and mother. As the session continued, and tensions built, the daughter displayed evidence of verbal and nonverbal intolerance toward her mother's less-than-nurturing posture. When the patient was asked about her obvious frustration, she revealed a plan that shocked everyone on the team. She quickly and calmly revealed details of a plan that would involve harming her mother immediately upon her discharge from the BHU. The more the medical family therapist explored it, the more he realized that the patient's intent to harm herself also included homicidal ideations toward her mother. The plan would not have been revealed had the family not been asked to come together for the MedFT session. It was the first time the patient got the opportunity to explore her anger with her mother. Immediately upon discovering the plan, the medical family therapist sought consult from the attending psychiatrist on the unit. The discharge plans were cancelled until further review.

Three World outcome: The patient remained on the BHU for two more days. During this time, members of the treatment team worked with her until she no longer evidenced signs of being a risk to her or to others. She was prescribed an antidepressant medication and reevaluated for psychosis or symptoms of an underlying bipolar disorder. A safety plan was discussed with the family in case the patient deteriorated after discharge and directions were given to have the patient returned to the hospital if this occurred. She was encouraged to follow up with a psychiatrist and medical family therapist immediately upon discharge. Appointments were made prior to discharge. This important work would help her family to explore the depths of her pain and anger and move toward healthier attachment patterns. Follow-up with her primary care provider was encouraged as she reported not having had a medical examination in over 5 years.

Reimbursement for MedFT services is billable on the BHU under most insurances, but in this instance it is a free service as it is provided by the master's level family therapy and doctoral level MedFT interns. They provide it in exchange for clinical experience that is credited toward the completion of their degree and the obtainment of licensure in marriage and family therapy. The BHU administrators support the inclusion of family therapy sessions as a vital service. They are included as part of the process for a safe discharge and effective transition to outpatient care. Had the patient been released while being actively homicidal, the BHU would have been open to liability risks. This patient did not return to the BHU and was able to receive services in her community. Regular checkups with her primary care provider represented cost savings as underlying medical conditions could be more carefully monitored (e.g., diabetes and hypertension), protecting against emergency room visits or more serious medical complications. Collaboration between her primary care provider and outpatient mental health team helped to protect against further hospitalizations. Her psychotropic medications were more carefully and consistently observed for effectiveness by all members of the treatment team.

## Joining and Clarification of Agendas

Although joining with the patient is important, joining too long can bias the therapist or mislead the patient into thinking that the family therapist is only on his or her side. The family therapist, if sensing a need for a balanced agenda, may request a brief amount of time to meet with the family/friends face to face prior to the session. This brief meeting is to clarify goals and any hidden agendas that they may present to the team. One experience that highlighted the need for unveiling hidden agendas is as follows.

A 75-year-old African-American woman was brought to the emergency room by her daughter. Reportedly the patient was acting confused and exhibiting symptoms of depression. The admitting psychiatrist sent her to the BHU's geriatric wing for careful monitoring and intensive psychiatric care. Interestingly enough, her symptoms of confusion remitted quickly after admission and medical stabilization, consisting of adequate nutrition and rest, as well as adjustment of her psychotropic medications. After medical stabilization, the MedFT team was asked by the patient's lead psychiatrist to determine if it was safe to discharge her home and to also address the daughter's seemingly overprotective behaviors. Her daughter had called the unit several times worried that her mother's discharge home would result in a quick return to the unit. She was not confident that her mother was safe living alone and she wanted her mother discharged to her care. What was revealed to the medical family therapist in session with the daughter and her mother were the patient's concerns about losing her home. Her daughter reported that the patient's drug-addicted spouse was making poor decisions and displaying unpredictable behaviors while under the influence of methamphetamines. Chemical exposure was also a serious threat as the daughter suspected the patient's spouse was involved in the manufacturing of methamphetamines in the marital home. Upon learning this information, the medical family therapist determined that she had to return to the treatment team to work toward negotiating a safer discharge plan. The treatment team welcomed the new information and revised the discharge plan accordingly. Upon the conclusion of the MedFT session, the patient and daughter had come to the conclusion that returning back to the patient's home was not safe.

Three World outcome: The department of social services was notified to evaluate the safety of the home and to evaluate for the presence of elder abuse toward the patient from the spouse. The risk management team was consulted regarding notifying law enforcement about the families concerns owing to the potential risk to the patient if she returned to the environment as well as the risk to public health. Breaking patient confidentiality, however, was not required as the daughter, after discussing the matter with her mother, volunteered to make an anonymous call to the local sheriff to investigate her allegations of drug manufacturing. Occupational therapy and neuropsychiatric testing were done prior to discharge to evaluate the patient's ability to make decisions and to care for herself. The patient was found to have mild impairment in memory and difficulty with complicated tasks such as managing finances, cooking, and managing medications consistent with early

dementia. To provide support to the daughter in the caring for her mother, home health and case management teams were contracted. They helped with improving self-care, making appointments, and taking medications as directed. Although some of these added services added cost to her care plan, the costs were not as high as future inpatient BHU admissions and emergency room visits. An antidepressant and a cognitive enhancing medication were prescribed. Follow-up care for medication management was scheduled with an outpatient psychiatrist. Follow-up with outpatient MedFT services was also recommended to address the underlying conflict between the patient, her spouse, and her daughter. A dialogue was initiated between the team psychiatrist and the daughter regarding the possibility that guardianship may be required if the patient's cognition continued to decline or if as a result of impaired judgment she chose to return to an unsafe living situation with her spouse. Lastly, follow-up with her primary care provider was stressed as she was being seen several times a year by him for medical management. The patient's daughter stated that her mother's internist had also expressed concerns about her mother's well-being with her home environment. The more professionals observing and collaborating with the patient care team, her family, and one another about threats to safety, the more likely the patient was to be assured a safe place to live the remainder of her years.

## **Building Trust**

Although most of the patients/families who receive MedFT services are referred by the BHU psychiatrist, resident psychiatrist, and/or social worker, the MedFT team quickly learned not to undervalue what the nurses bring to the process. The nurses are intimately involved with the patients, hearing detailed stories about their family members/friends and the events precipitating their admission. It is difficult at times for the nurses to remain unbiased about the individuals that the patients claim are to blame for their current mental states. They try to understand that the patients' family members have a perspective as well, although the stories they often hear are from those who receive direct care. On one occasion, collaboration with the nursing staff led to one of our most successful MedFT sessions to date.

An entire wing of the BHU is devoted exclusively to the geriatric population. Since most of these patients have comorbid medical issues, they require a different level of care. One patient, an 85-year-old man, stood out to the nursing staff as someone who desperately needed an advocate. He reported having no living siblings and stated that he was no longer in contact with the few biological relatives that remain. The nurses were aware that a referral for MedFT services had been made and that the medical family therapist would be bringing the patient's family onto the unit. His nurses wanted to make sure that we knew the "real" story.

The patient was admitted for a major depressive episode. He had communicated suicidal ideations with an active plan and intent. He was a retiree who lost the love



of his life several decades ago. After many reportedly lonely years, he met a woman 35 years younger than him. He fell in love with her quickly and asked her to move in with him. He thought this was the answer to his prayers as the loneliness and quietness was beginning to surround him in an uncomfortable and painful way. His intentions were to marry her immediately, but when her adult son wanted to move in with her too she began pulling away emotionally and physically from the patient. While on the BHU, the patient confided in his nursing staff that he believed his girlfriend was stealing from him and giving the money to her son. He was afraid of being alone once again.

During the MedFT session, the patient's girlfriend came to realize that she was not intentionally pulling away, but that she felt pulled. She wanted to help her recently divorced son get his life back together and denied taking any money from the patient. She did not want to live with the patient right now because she was having a hard time balancing the two men in her life. The couple then renegotiated a plan for spending time together and he no longer felt afraid that she was going to leave him destitute and alone. The hard part after this session was convincing the nursing team that the girlfriend was not intentionally trying to hurt him. The patient wanted the nursing staff to give his girlfriend his checkbook so she could pay his bills that were due. They handed it over but expressed dissatisfaction and mistrust. To them, he symbolized their grandparents and parents and they deemed him in need of their protection. The medical family therapist worried that she had lost the support and confidence of a critical part of the collaborative team, the nurses. However, the following week when the team returned to the unit, the same nurses reported what happened later that night and the following days. The patient's depressive symptoms remitted quickly after the session and continued to improve over the next few days. He appeared brighter and more hopeful. His appetite returned and his girlfriend came back repeatedly after the session to visit him on the unit. She also brought receipts for all money spent and the two were seen hugging and smiling together. Occipital therapy and neuropsychological testing were conducted while the patient was on the BHU to evaluate for dementia and his ability to provide adequate self-care, including his finances. Although the results did not indicate dementia, the patient reported feeling more at ease with his wife managing his finances, just like his deceased wife had done when alive. The patient was discharged shortly thereafter and up to the time this was written, he has not returned to the unit.

**Three World outcome:** The patient was advised to follow up with MedFT outpatient care and meet with his outpatient psychiatrists for follow-up with the medication management of his depression. Outpatient care is less expensive for the patient and payer. In this instance, MedFT services are not reimbursable by Medicaid, but a local outpatient clinic exists that accepts sliding-scale fees. The family accepted a referral there to continue care with the MedFT team that they worked with on the BHU. In cases of suspected elder abuse, a referral is often made to adult protective services: this can be financial, emotional, physical, or sexual abuse. If the opinion of the team were to result in a speculation of financial abuse, the Department of Social Services could be asked to investigate the home situation directly. He was

also sent to follow-up with his primary care provider as he reported struggling with joint pain and an increasing loss of flexibility in his hands. His primary care provider would be the referral source for additional follow-up of these concerns. A collaborative model was developed between the MedFT team and the primary care provider that allowed frequent contact between providers via telephone in the beginning to help establish a suitable plan of care. This initial investment of time saved time and money later. Lapsed services may have increased the likelihood of a repeat admission, relapse of clinical depression, and an increased risk of elder abuse.

## Transition to Outpatient Care

As important as follow-up with the treatment team is to the success of the model, it is equally as important to follow up MedFT services received on the unit with outpatient MedFT care. According to the AAMFT:

Marriage and family therapists regularly practice short-term therapy; 12 sessions on average. Nearly 65.6% of the cases are completed within 20 sessions, 87.9% within 50 sessions. Marital/couples therapy (11.5 sessions) and family therapy (9 sessions) both require less time than the average individual therapy treatment experience (13 sessions). About half of the treatment provided by marriage and family therapists is one-on-one with the other half divided between marital/couple and family therapy, or a combination of treatments.<sup>12</sup>

Therefore the single-session experience that is most commonly occurring in an inpatient psychiatric unit, such as the BHU, only represents the beginning of the therapeutic process. It is where the family members come together and recognize that the diagnosis does not rest exclusively within the loved one who is admitted on the BHU but is a systemic and biopsychosocial-spiritual issue. It is a stepping stone to having the courage to do outpatient care that is commonly achieved. The following case exemplifies this process.

The couple had been together off and on for about 8 years. The husband (age 56) was a postwar veteran and suffered from acute PTSD. He would sleep with a gun on his chest and would often scream while sleeping. His wife (age 45), the patient, was suffering from depression and multiple medical issues. She had been diagnosed with fibromyalgia, chronic fatigue syndrome, depression, arthritis, and was the recipient of multiple orthopedic surgeries. The couple struggled with communication, as the husband was consistently paranoid about being hurt emotionally and/or physically by others and had a history of leaving his wife after a few months. The wife had multiple trust issues surrounding these periods of separation, as he would reportedly be gone for weeks and even months. An absence of emotional connection between the two led the wife to do something drastic to ascertain his attention: she threatened self-harm and sought admission to the BHU, a drastic step for someone who felt without option while the man she loved slipped further and further into his pain. After a tearful MedFT session, the couple began to understand the ways in which

they were not meeting one another's needs. They also saw the role that a lack of communication played in the creation of ill-conceived plots to capture one another's attention. The patient was discharged from the BHU the next day free of any plans for self-harm and a renewed commitment to learning how to better manage the distress present in her marriage.

**Three World outcome:** The patient was discharged with an appointment to her outpatient psychiatrist for medication management and an appointment to her primary care provider for continued care of her comorbid "medical issues." Individual therapy, as well as MedFT services, was also recommended. Since the patient and her spouse had such a positive experience with the medical family therapist on the BHU, they opted to schedule with the BHU for continuation of MedFT services. The husband also reported being under the care of a medical team, consisting of a psychiatrist, psychologist, and primary care provider at the local Veteran's Association Medical Facility. His continued participation in those services was encouraged.

Their participation in MedFT treatment waxed and waned. The husband articulated to the medical family therapist that he was separating from his wife out of frustration with the lack of progress in their marriage. Soon after he had left their marital home, the patient was admitted to the hospital for a near fatal suicide attempt. This was a catalyst for the couple to reengage in therapy with their MedFT service and open up the lines of communication in a way that had not been available beforehand. The wife shared that she felt unimportant and invisible to her husband and he did not think he had anything to offer her as a partner as he was dealing with his own mental health issues. Increased collaborations between all providers were carefully observed by the MedFT service. Assurances that all treatment plans coordinated well with the biopsychosocial well-being of the relational system was paramount. It was hypothesized that incompatible goals between providers and the relational system may have been one of the challenges present. This may have led to temporary increased costs of care and a lack of effective follow-through.

## **Application to the Three World Model**

As Patterson et al. noted, "The key to harmonizing disparate worlds is to display this in the same picture."<sup>13(p51)</sup> The strengths of the integrative care process highlighted in these case studies lie in the level of interdisciplinary respect that is between and among the different clinicians, administrators, and financial collaborators.

On the BHU, clinicians are able to effectively focus on the quality of care and the establishment and achievement of health goals. They innately focus their energies on being ethical, science-based, and healing-oriented while they collaborate with administrators and employees whose job it is to keep the clinicians' focus on the financial aspects of care as well. For instance, patients who are in need of a

safe place to live or more constant care, versus an extended stay in an expensive inpatient care facility, are quickly stabilized medically and then discharged to a more stable and safe living situation where intensive provision of clinical care can be continued. The purpose of the BHU is to help patients to become medically stabilized, free of immediate threats to self or other, and to assist them in the development of an outpatient aftercare plan that will help them to be able to function as well as possible in their home environments. The clinicians are responsible for making sure that the patients' mental health needs are adequately and responsibly addressed during their time-limited stay.

The administrators on the BHU are in charge of the day-to-day operation of it. They make sure that the BHU is adequately staffed and that its policies are followed. They assist in the hiring and releasing of staff and making certain that there is adequate and responsible coverage. They also maintain a watchful eye over the interdisciplinary collaborations and effective follow-through of referrals made within and outside the unit. Lastly, they ensure that all paperwork and safety protocols are followed and that the collaborative teams have the most up-to-date technology and resources (within budget) that they need to provide quality care effectively.

The financial officers make certain that there is an appropriate balance between the resources needed and expenditures. Providing inpatient psychiatric care is costly and not all patients have adequate (or any) insurance coverage. It is important that the clinicians and administrators are not only providing what is needed to run the BHU but that they also are responsible to the financial impact that their decisions have on its sustainability. They are often hidden from direct contact with the collaborative treatment teams but their messages are evident through policies on length of stay and protocols for assessing safety and moving patients to discharge.

Although studies examining the efficacy and effectiveness of this model have not yet been completed, the few cases that we have participated in just this year have resulted in powerful and cost-effective outcomes. To date, the majority of the patients we saw on the unit have not returned for inpatient services. Instead, they have sought outpatient care through a psychiatrist, family therapist, and other community services (e.g., case management team, outpatient group therapy). Unique to this inpatient service is the fact that the MedFT services being provided on the unit are free. They are provided by master's level family therapy and doctoral level MedFT interns who are providing no-cost services in exchange for experience working with this population. These interns are in the process of their training and degree completion requirements. However, if a medical family therapist/family therapist is not available for a family consult, the social worker who has been assigned to the case will often deliver this service. Family consultation is a billable service and is often part of the discharge planning process; however, the medical family therapists who performed the family consults discussed in this chapter are trained in the provision of MedFT services. Therefore, those consults are more representative of what someone trained in MedFT may do with a family in crisis.

## Conclusions

According to Charles Shuman, a BHU psychiatrist and coauthor on this chapter, including family therapists on the treatment teams has led to improvements in the formation of and adherence to patients' treatment and discharge plans. MedFT sessions can be an opportunity for family members and the patient to come up with a plan for a safe transition from hospital to home, including family support for keeping track of medications, assistance in the patient taking the medications properly, and planning regarding transportation for follow-up appointments. The sessions can also be an opportunity to identify concerns the family may have regarding the patient's illness, such as the potential for self-harm or harm to others. The family and the patient may need to develop a safety plan in case the family becomes concerned that the patient may harm himself/herself or others. The family may need to identify what the patient's expectations are for the future, as well as the patient's limitations to develop a realistic plan regarding coping with changes that may take place owing to mental illness. The family may have feelings of guilt and fear that must be addressed in order for the family to be supportive in a healthy way. Threats to a successful reintegration may include false beliefs or misperceptions that the patient/family might hold about what a mental illness is, what causes it (e.g., genetics, environment, supernatural influences), and how it needs to be treated.

There are no turf issues that threaten collaboration as the family therapists are trained to appreciate the expertise of all collaborative partners, in particular the patient and family members. Together with the family, the treatment team works to address any concerns about what may take place after discharge. Conversations such as this allow patients the opportunity to verbalize repeated or carefully guarded fears that their psychiatric illness may lead others to withdraw from them or be afraid of them. Aftercare plans that are carefully designed to return patients, and in some instance family members, to the care of their primary care provider and outpatient mental health professionals to work through these issues are routine. The goal is to work together to unite against the diagnosis using a seamless collaborative process that brings awareness to the clinical, operational, and financial pressures common to providing quality inpatient psychiatric care.

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**Part VIII**  
**Pain**

# Chapter 30

## Complexity and Collaboration

**William B. Gunn Jr. and Dominic Geffken**

Chronic low back pain and diabetes are two of the most common chronic concerns in primary care. Each is associated with increased depression/anxiety symptoms, decreased functioning, and higher general psychosocial distress.<sup>1-3</sup> These patients can be difficult for the primary care provider to refer to a mental health provider for a variety of reasons. Patients resist the referral and feel blamed for the way they feel about their medical concerns. They may also feel blamed that they are not doing everything they can to take care of themselves and feel that the medical provider does not understand the impact of illness on their life. They may even wonder if the medical provider is going to be as attentive to physical symptoms if they are “psychologized.” Finally, when pain is treated with addictive, narcotic medications, the potential for conflict and miscommunication is high. The case involving Sergio is an excellent example.

William Gunn (W.G.) is a behavioral science faculty member at the NH/Dartmouth family medicine residency program in Concord, New Hampshire. The Family Health Center is attached to the residency and provides primary healthcare to a primarily underserved population in the area. About a third of these patients are uninsured and receive free or reduced-fee services. In addition to the residency program, there is a mental health internship program where five interns a year receive supervision in psychotherapy and in providing primary mental health consultation to the physicians in the practice. Dominic Geffken (D.G.) is a family physician who provides primary care services at the Family Health Center and directs the preventive medicine program in the residency. He sees 30 patients a week for a wide variety of acute and chronic illnesses and has established a reputation for being particularly effective in working with complex patients having multiple chronic illnesses as well as psychological distress. He and W.G. share an office and have easy access to informal conversation about patients they share. In addition, they utilize a common electronic medical record and can easily communicate through this medium about the ongoing care of patients.

Sergio was a 54-year-old single man living in a rented apartment in a rural area in New Hampshire. He grew up in a metropolitan area, one of three children, the other two a set of female twins 2 years older. His father worked in construction, and valued physical prowess and a strong work ethic. He believed and taught Sergio



if you were hurt, sick, or in pain, you just worked through it. Sergio's mother stayed at home and took care of the family.

Sergio was an intelligent, compassionate, thoughtful, articulate man who enjoyed music, gardening, reading and writing poetry, and learning in all forms. It was clear from an early age that Sergio had the intellectual ability to develop a professional career. He did well academically in college and was in the first class of a "radical" law school just starting in the Northeast. He claimed he was never comfortable in the mainstream and always had been attracted to the fringe. After graduating from law school, he became the lead attorney of a legal aid agency. This work reflected his strong belief in helping the less fortunate and in ensuring everyone had a fair chance in legal proceedings. He held this job for 20 years and was proud of his accomplishments. Unfortunately, chronic pain from back injuries became such a problem that he had to stop working and apply for disability benefits.

Sergio had been married twice, each marriage producing a daughter. He had frequent contact with his younger daughter. However, he had been estranged from his older daughter for the past several years after she cut off all contact. This estrangement had been extremely difficult for Sergio. He questioned why she abandoned their relationship. He wondered how to build a bridge back to her. This "chronic emotional pain" directly related to the physical problems in Sergio's mind, and in the minds of his healthcare providers. Although he recognized the link, Sergio had never sought or received any consistent mental health treatment. This was likely due in part to his background that did not value such treatment.

Sergio had multiple complex medical problems. He had type II diabetes that required daily insulin shots. He had degenerative spinal disc disease from a falling accident in 1979. He sustained injuries that required six surgeries over 10 years. Sergio continued to work through the pain and experimented with many different pain-relief regimens for severe, chronic, low-back pain. He attempted to continue life as usual, but the combination of his search for pain relief and his diabetes took its toll with peripheral foot and joint pain as well as erectile dysfunction. Sergio took high doses of methadone, prescribed by his family physician, to control his pain.

In 1995, his primary care provider convinced Sergio to apply for disability benefit and leave the workplace. The relationship between Sergio and his primary care provider deteriorated owing to the adversarial dialogue regarding narcotic pain medications. Ultimately, the primary care provider dismissed Sergio from the practice. The physician told Sergio that the dismissal was due to his inappropriate use of narcotic pain medications. Sergio believed the fact that he owed the provider a great deal of money and was now on disability benefit played a more significant role. Sergio felt betrayed and abandoned by this dismissal and subsequently sought care at the Family Health Center.

Sergio:

It is impossible for someone who has not been through this to understand the feelings that go on when your life dramatically changes. I was a working professional with financial resources and the ability to live a comfortable middle class life.

As my medical condition deteriorated and my emotional state worsened, I went from this position to one where I lost 75% of my income and was dependent on the welfare system. I found myself begging for sympathy and support to pay the bills and hating myself for it. I did not have any family financial support and had to manage completely on my own. One of the hardest parts of this transition was dealing with the reactions of well-meaning professionals. Initially my PCP had referred me to a methadone treatment center. I had to go to a clinic that primarily treated heroin addicts and faced the condescending stares of others. Having to face the reality of poverty, my self-perception changed and my thinking and my mood became negative. In addition, I found myself completely dependent on my primary care doctor to understand my situation and prescribe the amount of pain medication that allowed me to function. I felt I had to be a “good patient” and do what I was told in order to continue to receive good treatment, particularly for my pain.

D.G. provided Sergio’s medical care at the Family Health Center. He took over care for Sergio 2 years ago, and had been managing his multiple health issues since that time. Early in their relationship, D.G. discussed the need to engage a mental health provider to assess and treat the depressive symptoms. Sergio resisted this suggestion. In 2004, he was hospitalized for cellulitis in his leg, a complication of diabetes. When the inpatient team felt Sergio was ready to leave the acute care setting of the hospital to go “home,” Sergio did not feel he could manage his own care. The inpatient team’s use of “home” meant only that he could be discharged from the hospital to a less acute environment. In contrast, Sergio’s image of “going home” was to his apartment, difficult to access in winter, and to a situation where he would be isolated and not able to take care of himself. D.G. intervened and advocated that Sergio stay in the hospital for another few days. D.G.’s decision to advocate for Sergio was not a popular intervention with the inpatient team who felt he was ready to leave the hospital. DG convinced Sergio that a consultation with a psychologist (W.G.) would be helpful.

D. G.:

I see a lot of commonality with Sergio on our views of the world. He describes going into law to work with the underdog. I feel that I went into medicine for many of the same reasons. The injustice that I have seen in the delivery of healthcare to some people and not others was one of the motivating factors that got me through medical school. I remember meeting Sergio for the first time as his new primary care provider. He was articulate about how the chronic pain had affected his life. In retrospect, I think that because Sergio described his situation in a more sophisticated way than most of the patients that come to the health center, I may have minimized how all of the situations in his life were contributing to each other. I think I gained a lot of insight into his life during the hospitalization that continued for a longer time than we expected. I remember going to Sergio’s hospital room to speak with him to see if I could understand what else was going on in his life. This is when I asked for a behavioral health consultation. I felt that Sergio needed more resources that I was able to provide on my own.

W.G. was asked to consult with Sergio, D.G., and the inpatient team. He met the patient in his hospital room and found Sergio to be initially defensive and not open to talking about his mental health issues. W.G. asked him if he would complete the full Patient Health Questionnaire<sup>3</sup> (PHQ), which he often uses as a way to begin to talk about the connections between physical and psychological pain. Sergio agreed and the results showed a man who was profoundly depressed and had several significant stressors with which he was dealing. W.G. explored how depression impacted Sergio's ability to keep a proactive focus in his life and to take care of the complications of his disease. Sergio spoke at length about the estrangement of his daughter and the loneliness he felt in general. He did have a close female friend who helped him organize his home. Sergio hoped to pursue a relationship with her in the future. However, he felt he had nothing to offer someone in a relationship because of his job loss, financial status, and physical problems such as erectile dysfunction. He no longer viewed himself as a complete man. At that time, Sergio was able to describe some limited personal goals for the future in the area of writing and gardening but felt helpless about pursuing them owing to the limitations of his health issues.

This inpatient psychological consultation resulted in a discussion with the medical team. Learning about Sergio's context helped them understand Sergio's fears of falling and being unable to take care of himself. Sergio realized that he needed to take increased responsibility for his care, and that the acute care hospital was not the best place to do that. The team worked together to implement a viable plan using visiting nurse services to relieve Sergio's anxiety about being alone. During the last 3 days of his hospital stay the plan was solidified and expanded to include hospital outpatient psychotherapy visits.

After this hospitalization, D.G. continued to see Sergio on a regular basis to monitor diabetic control and the chronic pain syndrome. Neither issue was under control. Sergio's depression and hopelessness affected his motivation and ability to follow through with the complicated regimen to control his diabetes and chronic pain. His medication list was complicated. He used both short- and long-acting insulin shots, which he had to self-administer twice a day. He was placed on sertraline (Zoloft), 200 mg a day, for depression. He was on gabapentin (Neurontin), 300 mg three times a day, to help with pain. He was on methadone, 40 mg, three tablets four times a day up to ten pills for pain. The use of these high doses of methadone worried D.G. owing to the potential lethality of the dose and the interaction with the other medications. He also felt the side effects could be affecting Sergio's quality of life in a way that Sergio could not appreciate. Both D.G. and Sergio found the medical visits frustrating because they were never able to cover all the issues both patient and provider wanted to discuss. Sergio felt that he "was at the mercy" of D.G. because he controlled access to pain medications. He believed D.G. was "in control." D.G. also felt powerless in the face of Sergio's difficulty following through on recommendations. He worried about his ability to address Sergio's pain and use of the narcotic medication in a responsible and ethical fashion.

D.G.:

I am a big believer in the mind–body connection and how a person’s physical and mental well-being are so intertwined that you cannot really separate them. In medicine we often make a false separation of the two and I try to talk to all my patients about this. Depending on the level of sophistication of the patient it may take some time for them to accept what I am talking about. In Sergio’s case, he seemed to understand this connection very well so we could have constructive dialogue about this.

The psychotherapy visits were happening concurrently. Both providers were now engaged in what has been described on the *spectrum of collaboration* as coprovision of care.<sup>4</sup> Frequent communication and the paradigm of a team approach rather than parallel delivery is a marker of this level of care.

At one point in therapy, Sergio was also able to discuss his frustration in his medical visits with D.G. While feeling that his provider was extremely caring, patient, and attentive, Sergio still felt as if the visits were only focused on the high doses of pain medication.

Sergio:

I did not feel like I could talk about the issues of what we talked about in therapy with Dr. Geffken. I knew by now that each visit would contain some discussion of the pain medication and that most of my symptoms would be attributed to the high doses of narcotics I was taking. It seemed like my body had completely turned against me and I had many symptoms that I was worried about. However, I did not feel I could bring them up. I didn’t think I controlled what we talked about in my medical visits.

It also affected my relationship with my therapist, Dr. Gunn. I knew the two of them were talking about me and, for the most part, I think that was a good thing and they had positive intentions in doing this. However, I worried, for instance, that talking to Dr. Gunn about my drug use as a teenager would somehow cause my medical doctor to not prescribe the narcotics that I needed to get through the day.

D. G.:

I think we both may have issues about the opioid pain medications that he is using. One of my goals as a physician is to alleviate suffering. I want to treat Sergio humanely and compassionately in terms of his chronic pain issues. Sergio came to me on a dose of methadone that is higher than I have seen in the past. He obviously had been using this dose for some time so I did not change it. He also had a breakthrough pain medication that is a shorter-acting opioid. Anytime a patient is on opioid pain medications it is complicated in terms of how prescriptions need to be documented and contracts need to be written. Patients can sell their medication. This is not something I have had reason to believe is going on with Sergio. The thing I do worry about is aiding a physical and/or psychological dependence on the medications. I have brought this idea up to Sergio in the past and he is open to the discussion, which is different from other patients who are able to get angry when you bring up

these issues. I worry most when I see him ask for an increased dose of the opioid medication instead of asking what other pain management modalities he could use.

One of my roles as a physician is as a teacher, trying to transform my patient's lives for the better. To do that I need to challenge their thoughts and beliefs. The tension this creates is hard for me even if it may lead to a positive outcome for the patient and our relationship. I would like to have been able to have the time to talk to Sergio about other events and frustrations in his life but felt like I had to keep focused on the medical issues such as his diabetes and chronic pain condition.

After hearing both perspectives W.G. scheduled a visit with both the patient and the physician to clarify expectations of the medical visits. They agreed to have one visit at least quarterly to review the pain medication regimen. This helped D.G. address Sergio's agenda at visits in-between narcotic medication review times. Both Sergio and D.G. reported benefiting from this joint visit.

Over the years Sergio had been to a number of pain clinics and specialists. The end result was his current medication regimen which was reasonably effective in improving his functioning. While D.G. respected previous evaluations and treatment, he wanted to explore other options and consultations. A new pain management specialist, Dr. Paul Arnstein, a nurse practitioner, started to provide consultations at the clinic 1 day a week. He met Sergio and reviewed the history and current medication list. He reassured D.G. that the pain medication regimen was appropriate. He supported the planned quarterly medication review meetings and recommended that each visit address four general questions to avoid conflict:

1. Is the medication improving Sergio's activity level and functional status?
2. Are there adverse side effects to the medication?
3. Is there aberrant behavior occurring such as abusing the medication or diverting it to others?
4. Is it controlling the pain in the way it is designed to do?

Expanding the team to include this pain specialist helped Sergio feel he was a respected member of his own pain management team.

Although Sergio found psychotherapy helpful, he had been dealing with his condition for a long time and was not open to major changes. Perhaps he felt comfortable continuing in psychotherapy because of the timing of the referral or because he and W.G. are of similar age and are both professionals (although Sergio would have disagreed that he still is a professional). Over time W.G. and Sergio developed a rapport and agreed to focus on two themes in therapy. First, Sergio agreed to seek ways to be proactive in his life while accepting his limitations. Each psychotherapy session was composed of a check-in on the medical conditions, how well he had been able to follow the treatment plan, and any adverse side effects of the medication to share with D.G. The second theme was a continual exploration of his "life goals." A strategy of "externalizing the illness" was used to help Sergio see himself apart from his disease and recognize that he could control the way he deals with situations. Sessions usually ended with "homework" which Sergio sometimes was able to accomplish. For example, he was to list the positive aspects of his life or engage in a previous pleasurable activity. However, many times he felt that he

was in too much pain and too overwhelmed by depressive symptoms to follow through on this homework. In these circumstances W.G. informed D.G. using internal electronic communication. Although the two providers shared an office and talked about the case directly, the ease of communicating by sending clinical notes and internal e-mail correspondence helped a great deal.

## Collaborative Lessons Learned

1. It is important for mental health providers to become associated with acute care hospitals. One of the most effective times to begin a collaborative effort is when a patient is hospitalized. They are often in crisis, and more aware of the impact of emotional distress on their health and their lives. Medical providers need help to address these issues because of time pressure and the need to focus on the acute medical issues.
2. D.G. and W.G. worked together to help the medical team and Sergio communicate and establish goals for discharge. Language can interfere with effective communication between providers and patients. For example, “negative” results are good and “positive” results are usually bad. “Unremarkable” is a good thing and “this won’t hurt much” increases patient anxiety. In Sergio’s case, the use of the word “home” had different meanings for the patient and the medical team. This created unnecessary conflict and confusion.
3. Conjoint visits with Sergio and frequent sharing of information with the medical provider and the mental health provider was helpful. Although Sergio was concerned about what kinds of information they would be sharing, he was glad that both were in the same building and shared an office.
4. Collaboration with a pain specialist who could outline treatment options and make recommendations was very helpful in this case. Cases involving this degree of complexity often require other specialists to provide consultation. It is most helpful to frame these consultations as expanding the treatment system or what has been called “collaborative networking” rather than sending the patient away from the primary care team.<sup>4(p146)</sup>
5. Treating chronic pain with high doses of narcotics frequently produces anxiety for medical providers who are not pain specialists.<sup>5</sup> This anxiety is often transferred to the patient. Sergio certainly felt this transferred anxiety at times. His questions about symptoms resulted in dialogue about his use of narcotics. Medical providers often wonder if they are doing the right thing for the patient because narcotic side effects often limit some of the patient’s functioning. They also worry about scrutiny from colleagues or the regulatory agencies. Talking directly about these concerns or a mediated conversation often helps mitigate them. Working collaboratively can help to alleviate this anxiety tremendously.
6. Having two primary providers spreads the responsibility and gives the patient more options to engage the system. When a complex patient has few social supports and lives alone he or she often feels more dependent and connected to the

medical system. The social support literature indicates strongly that he or she is more at risk for medical and psychological morbidity and mortality.<sup>6</sup> This can present a challenge to the medical provider to respond to this need while at the same time needing to limit the amount of time he or she can be available to patients. On several occasions, Sergio utilized the psychotherapy sessions to help communicate with D.G.

D.G. reflects on the process:

From my perspective the benefit of working with Dr. Gunn was that it gave me another professional to bounce ideas off of in treating this patient with complex medical issues. The traditional view of the physician is that you are out in the community solving patients' medical problems. This can feel very isolating, especially when you are working with patients with complex medical issues that have no specific end point of being "cured." Treating chronic conditions lends itself to a team approach to provide care to the patient.

The ability of W.G. and D.G. to easily communicate about this case was extremely helpful. They viewed the clinical issues similarly and this was helpful in providing ongoing care. The colocation of primary care and psychological services was valuable and the ability to communicate through a shared electronic record was also helpful. There were no financial barriers to working with Sergio, which helped given his case continues to involve many unpaid conversations between the providers. This case continues to evolve and be challenging to all involved. It is clear that this is the kind of situation that does not create a "fix" or ending but is one that requires ongoing flexibility between providers and a treatment plan that is clear to all involved.

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# Chapter 31

## A Bad Situation Made Worse

Daniel Bruns and Thomas J. Lynch

*Here lies the body of John O'Day  
Who died defending his right of way.  
The right was clear, his will was strong,  
but he is just as dead as if he were wrong.*

*Irish epitaph*

It has been said that even the longest journey begins with a single step. In some cases, such a journey can also begin with a single misstep.

Sarah was 39-year-old woman who had worked as an administrative assistant at a company for 8 years. One day at work, while walking between buildings, Sarah had the misfortune to slip on some ice. She twisted her left ankle and fell, landing on her left side and wrenching her lower back. This accident was not witnessed however, and when she reported her injury, her employer was skeptical that she had really injured herself at work. Her employer initially resisted filing a worker compensation claim, and suggested that she was actually injured at home. She was directed to see her personal physician. When she presented for examination by her personal physician though, she was told that this was a work-related injury, and her physician referred her to her company's occupational medicine physician. Some days later, Sarah was told that her worker's compensation claim had been approved provisionally, although she was also told that the claim was being investigated by her insurer.

Physical examination by the occupational medicine physician revealed some tenderness around the left ankle, but the radiographs found a normal left ankle. Physical examination also revealed a considerable tenderness in the musculature of the lumbar back, primarily on the left, with the patient reacting to even a light touch. Although the neurological examination was normal, radiographs revealed some minimal lumbar degenerative disk disease and a normal left ankle. Sarah denied any past history of injuries to her back or lower extremities. She reported occasional low-back pain in the past, but no lost-time injuries and no surgeries. Sarah reported being otherwise healthy, with no chronic medical conditions, and she was not taking any medication on a regular basis. She reported a family history of diabetes and heart disease on her father's side, and she was a nonsmoker.



Sarah received conservative medical care. After about 2 months, while her ankle pain appeared to have resolved, she continued to have some low-back pain. Sarah's job was sedentary in nature, though, and she was able to return to work without any medical restrictions.

About 2 years later, Sarah was injured for the second time while working for the same employer. While bending down to lift a small box off of the floor, Sarah suffered an acute onset of left low-back pain, with pain radiating into the left sacroiliac (SI) joint and down the posterior left leg below the knee into the calf. On this occasion, she presented with an antalgic gait, and left SI joint tenderness. Deep tendon reflexes were symmetrical. Sarah had fairly good trunk range of motion, with normal strength and sensation in the lower extremities, and normal heel and toe walking. FABERE test findings were abnormal on the left, implying disturbance in either the hip or the left SI joint. Straight leg raising was normal, with normal strength in the lower extremities. Sarah was diagnosed with a lumbar strain, and treatment was initiated.

Initially, Sarah was treated with rofecoxib (Vioxx), stretching, ice, heat, and work restrictions. When seen again, the patient reported continued pain and tightness, and there was no change in physical examination. At the patient's request, she underwent a course of six chiropractic visits, without significant benefit. Two weeks later Sarah reported continued low-back pain, and was referred for an MRI scan of the SI joint. This showed mild osteoarthritis in the SI joint bilaterally.

When rofecoxib failed to relieve Sarah's pain, she was prescribed tramadol (Ultram) as well. When her symptoms worsened, she was referred for an orthopedic consultation. Examination revealed decreased range of motion in her back, with more pain on passive range of motion. Repeat radiographs showed no change, and she underwent a cortisone injection of the L5-S1 and L3-L4 under fluoroscopic guidance.

When Sarah's pain persisted, she was referred for a lumbar MRI scan. This showed degenerative disk disease at L3-L4 and L4-L5, with the L3-L4 level showing bulging of the disk with left neuroforaminal encroachment. The L5-S1 level also showed a left disk bulge with a high intensity zone and moderate encroachment onto the left neuroforamen. There was no encroachment on the central canal or the left neuroforamen. The L4-L5 level was normal. The orthopedic surgeon started the patient on oxycodone and acetaminophen (Percocet) for pain, and further epidural steroid injections were administered. By this time, the patient was reporting considerable difficulty with sleeping, and amitriptylene (Elavil) was prescribed for this.

When the patient failed to improve, she underwent a lumbar laminectomy and discectomy at the L3-L4 level. Initially the patient did well following surgery; however, 3 weeks after surgery she presented at the emergency room with pain and swelling at the surgery site, and with chills and fever. She was admitted to the hospital with a staph infection, which was treated with intravenous antibiotics and drainage.

As Sarah was now showing significant evidence of depression and anxiety related to her persistent pain, she was referred for a psychological evaluation for

chronic pain secondary to her back injury. This evaluation found that she was suffering from a major depressive episode, and psychological treatment was initiated. She was also started on a trial of sertraline (Zoloft).

Sarah was referred for a surgical second opinion for her back by a fellowship-trained spine surgeon. The physical examination revealed that Sarah presented in a tense and guarded manner, and exhibited poor lumbar range of motion. Neurological examination revealed left L3–L4 radiculopathy, which corresponded with an L3–L4 disk herniation and left neuroforaminal encroachment. The surgeon advised that lumbar fusion surgery was indicated, but believed that it should be delayed until the patient's infection had fully resolved. This surgeon also interjected the opinion that the patient's back problem was caused by the first injury, and not the second. This seemingly innocuous observation led to a number of unfortunate consequences.

## **The Financial Perspective**

The question of causality made Sarah's chronic pain extraordinarily complicated from an administrative standpoint. At the time of Sarah's first work injury, she was insured by a company that we will call Riskodyne. However, by the time of her second work injury, her employer had become unhappy with Riskodyne's services, and had switched to a company we will call Caregiver Insurance. When Sarah needed to have lumbar fusion surgery, Caregiver Insurance felt that it should be paid by Riskodyne, since the recent spine surgeon's evaluation had felt that Sarah's back injury was a preexisting and unresolved condition. However, Riskodyne rejected the claim saying that Sarah had recovered from the first injury, and thus Caregiver Insurance was responsible for all costs.

During this process, Sarah was referred for four independent medical evaluations, with the intent of trying to resolve these difficulties. These evaluations concluded that the back injury was probably caused by her first workplace accident, and thus Riskodyne should pay for the fusion surgery. Despite this, Riskodyne refused to do so, and seemed to pursue a strategy of seeking to delay authorization and treatment whenever possible. Caregiver Insurance did not wish to assume responsibility for charges that it felt should be the responsibility of Riskodyne, and also would not authorize the back surgery or other treatment. Caregiver Insurance did continue to provide Sarah with ongoing disability pay while she was out of work. However, as Caregiver Insurance felt that Riskodyne was delaying care, and increasing Caregiver Insurance's disability costs, Caregiver Insurance sued Riskodyne.

This litigation left Sarah in legal limbo, and her fusion surgery was placed on hold for over 1 year. Sarah became more alarmed when one physician told her that the longer the fusion surgery was delayed, the greater the likelihood of a poor outcome and even permanent nerve damage. By this time, Sarah was suffering from chronic pain secondary to her failed back surgery. Sarah became severely depressed, and she contemplated suicide.

## Psychological Treatment

Pain has been defined by the International Association for the Study of Pain as a subjective sensory and an emotional experience that is inherently psychological in nature.<sup>1</sup> Pain is probably both the most common and most costly condition seen in primary care, with up to 80% of all physician visits involving some complaint of pain.<sup>2</sup> Chronic pain has also been identified by some studies as the leading cause of disability in working-age individuals.<sup>3</sup> Overall, chronic pain is a classic example of a biopsychosocial disorder.<sup>4-5</sup> Owing to the complex nature of chronic pain, medical treatment alone may not be effective, and multidisciplinary treatment that includes a psychological component is often needed.<sup>6</sup>

Assessing psychosocial difficulties is often challenging in the general medical setting. With a mean patient contact time of less than 11 min for primary care physicians,<sup>7</sup> this time must be divided between taking a medical history, examining the patient, making recommendations, and answering patient questions. As a result, studies have found primary care physicians overlook depression, anxiety, and other mental health conditions between 33 and 79% of the time.<sup>8</sup> Although physicians commonly order tests, what is often overlooked is that psychological testing can also be ordered.<sup>9</sup>

A recent extensive review of the literature concluded that psychometric tests are roughly equivalent to medical tests in their ability to diagnose and predict outcomes,<sup>10</sup> and are sometimes even better. For example, a recent study found that psychometric assessment was better than either MRI scans or discography in predicting future back pain disability.<sup>11</sup> In another study, psychosocial variables predicted delayed recovery correctly 91% of the time, without using any medical diagnostic information.<sup>12</sup> Other studies of psychosocial factors were similarly successful with predicting the results of lumbar surgery.<sup>13-17</sup>

Following her second injury, Sarah was referred for a psychological evaluation and treatment. During the evaluation, she was administered a Battery for Health Improvement 2 (BHI™ 2) psychological test.<sup>18</sup> This is a psychological test that is designed for the assessment of medical patients, and which can be used by psychologists or physicians. Sarah's BHI 2 responses produced a valid profile, with no indication of any intent to minimize or magnify her symptoms. She did report more difficulties with functioning than that seen in 98% of a national sample of patients. Additionally, her scores showed that she was more depressed than 96% of patients. This was important, as research has shown that surgical outcome is negatively impacted by depression.<sup>19-30</sup> Additionally, Sarah's suicidal ideation score was high. When depression gives rise to suicidal urges, it can become a life-threatening condition, and thus may become more urgent to treat than the precipitating injury. Even when the patient is not suicidal, though, patients who are depressed tolerate pain less well,<sup>31-33</sup> may have less energy available to invest in exercise or other important aspects of treatment, and are more likely to forget to take their medications.<sup>34</sup> Even minimal levels of depression have been associated with increased rates of social morbidity and service utilization.<sup>35</sup>

Sarah's BHI 2 profile revealed a score on the survivor of violence scale that was higher than that seen in 90% of patients. This indicates that she reported being the survivor of multiple traumatic experiences in life, including both physical and sexual assaults. Trauma tends to produce a survivor attitude. Emotionally traumatic events may thus lead to a long-term tendency toward heightened physiological arousal to life stressors. Additionally, when such patients later experience the onset of an injury or illness, it can sometimes reactivate old feelings of vulnerability, and increase levels of stress-related symptoms.

Patients with this profile may thus be more aware of their physical vulnerabilities, and thus react with increased self-protective behaviors. Survivors of violence may also find undressing or being medically examined to be especially aversive or threatening, and may decline medical procedures that leave them feeling physically vulnerable or exposed. What may appear to be exaggerated pain behaviors on examination may actually be expressions of distress revolving around the patient's discomfort with examination.<sup>36</sup>

Sarah's BHI 2 profile also indicated that she was reporting a higher level of somatic complaints than that seen in 94% of patients. This level of somatic preoccupation is often difficult to explain medically, and generally easier to explain as a diffuse set of stress-related symptoms or somatization. Stress in various forms has also been shown to weaken the immune system,<sup>37-39</sup> and to decrease the speed of wound healing.<sup>40-41</sup> Psychological measures assessing this type of syndrome have also been found to be predictive of a poor outcome.<sup>19, 27, 42-48</sup>

Poor surgical outcome has also been found to be associated with litigation,<sup>15, 21, 24, 26 49-50</sup> and worker's compensation insurance claims.<sup>15, 49, 50-56</sup> Often, these factors are thought to indicate the presence of secondary gain that reduces the patient's motivation to get better.<sup>57</sup> However, the BHI 2 assesses three attitudes closely related to this, job dissatisfaction, compensation focus, and entitlement. In Sarah's case, while her BHI 2 profile suggested that there was some tension between her and the company she worked for, it also showed that she was on good terms with her supervisor and coworkers, and in general she liked her job. Additionally, Sarah's BHI 2 profile suggested that she did not have an entitled attitude, and did not appear to be focused on compensation. Although litigation was obviously having a negative impact on her progress in treatment, this was not litigation that Sarah had initiated. Sarah herself did not retain an attorney until the legal circumstances she was embroiled in forced her to do so.

The BHI 2 results did reveal current home-life problems, though, as her husband had been forced to take a second job to make ends meet, and Sarah was left to do her best to parent her young children while she was severely incapacitated. Her difficulties with pain and functioning were so high, however, that she was unable to perform many household chores. This forced her husband to take on a larger share of the duties at home as well, and this led to considerable strain in their relationship. Finally, the BHI 2 results did not find any sign of characterological disorder.

In addition to psychological testing, Sarah's psychological evaluation included an interview. This interview found that Sarah had seen hardships before. Even in childhood, she had shown unusual resilience. Sarah recalled that when she was 12,

her mother married her stepfather. Both her mother and her stepfather suffered from alcoholism, and her stepfather was both physically and sexually abusive. Sarah was eventually removed from the home. She underwent psychotherapy, and she was able to recover and go on to have a well-adjusted adolescence and adulthood. At the time of her first injury, while there was no indication that she had been seriously depressed for over 20 years, she did report that she had been in psychotherapy 6 years prior to this evaluation, and that this involved dealing with the death of her stepfather. The psychologist concluded in this evaluation that Sarah's current depression was entirely attributable to her recent medical difficulties. Given the presence of a severe chronic pain condition, some have commented that it is surprising when depression does *not* occur.<sup>58</sup>

Following her second injury, Sarah was referred for psychotherapy for depression, pain, and stress management, while she went through months of hoping her surgery would be approved. Initially, psychological treatment was authorized. Another finding, however, led Riskodyne to introduce one more complication. Riskodyne sought to obtain all previous medical records, and these revealed that Sarah had been treated for depression in the past. Consequently, Riskodyne claimed that Sarah's depression was a condition that existed before her first workplace injury. Sarah reported that during the litigation between the two insurers, she underwent an aggressive cross-examination by Riskodyne's attorney. This attorney probed her about past psychological treatment, arguing that all of Sarah's depression was caused by family difficulties years ago, and that none of her depression was attributable to her physical injuries, or the complications which followed. Sarah was deeply offended by this, and could not bear the thought of being cross-examined about her abuse history. Earlier in her life, she had vowed that she would never allow anyone to victimize her again, and so she refused to answer the questions.

Riskodyne argued that since there was evidence that Sarah had been depressed in the past, it should not be obligated to pay for depression at present unless it could be proved that Sarah's depression was injury-related. To do so, Riskodyne contended that it would need to fully explore the nature of her past depression. When Sarah refused to release her mental health records, the judge allowed both Riskodyne and Caregiver Insurance to deny payment for any further psychological treatment. Sarah did have private health insurance, but it would not pay for any of this treatment, as this insurer held that the depression was obviously work-related. Sarah was unable to pay for psychological treatment herself, as she had now been out of work for months and was having serious financial problems. Sarah felt overwhelmed and powerless, and this deepened her depression.

In the months that followed, while Sarah was hoping that someone would authorize her surgery, she was extremely sedentary. She was severely depressed by this time, and suffered from extreme pain as well. Owing to her herniated lumbar disk, ambulation was extremely difficult. As a result, she generally spent 20–22 h a day reclining or lying down. During this time, she was required to spend days on end trying to respond to the interrogatories from the litigating insurers. With her depression untreated, she ate to console herself. She reported

that during this time her weight increased from 135 to 210lb, and she became extremely deconditioned. Given her orthopedic conditions and her weight, she ambulated while leaning heavily on her cane. Over the course of time, she began to have pain, numbness, and tingling in her hand, and she began developing carpal tunnel syndrome from the use of the cane. It was at this time that Sarah began having suicidal ideation.

The case managers at the psychologist and physician offices worked to get more treatment authorized for Sarah. Riskodyne would not pay for treatment of Sarah's depression. However, the case managers were able to negotiate with an adjuster at Caregiver Insurance and persuade her to authorize psychological treatment for pain management, since that was not in dispute. Eventually, Caregiver Insurance was persuaded to cover all treatment costs, so treatment could proceed and prevent a worsening of Sarah's condition. At this point, Caregiver Insurance had expanded its litigation with Riskodyne. In addition to seeking reimbursement for disability costs, which had previously been the focus of the litigation, it now sued to recover all treatment costs.

## **The Importance of a Three-World Approach**

As chronic pain is widely regarded as a biopsychosocial disorder,<sup>5,59-63</sup> understanding chronic pain requires the clinician to go beyond the biological realm, and to perform a three-dimensional assessment of biological, psychological, and social aspects of the patient's condition. It is only when the patient is viewed as a three-dimensional being that the patient's condition can be fully understood, and an effective treatment plan can be developed.

Chronic pain can be a life-altering condition, with a profound psychosocial impact. Chronic pain can lead to a cascade of social stressors, which can include job loss, disability, withdrawal from social roles within the family, and interference with hobbies and pleasurable activities. Limitations in functioning can stress the family system,<sup>64-65</sup> and lead to family conflicts if the patient is unable to perform normal family duties.<sup>66-67</sup> Overall, psychiatric conditions are common in such patients, and one study of an injured patient population found a 55% incidence of depression.<sup>68</sup>

Since chronic pain is a biopsychosocial disorder, numerous organizations have also established evidence-based standards recommending multidimensional treatment for chronic pain secondary to injury. With regard to worker's compensation, the American College of Occupational and Environmental Medicine<sup>69</sup> strongly recommends psychological evaluation and pain assessment if psychological conditions like depression are present, especially when there are any signs of delayed recovery. Similarly, the North American Spine Society suggests that an initial psychological consultation is warranted when delayed recovery is present (20-30% of patients), and active multidisciplinary treatment is warranted with chronic conditions (5-8% of patients).<sup>70</sup>

The comprehensive assessment of chronic pain requires assessing all of the biological, psychological, and social aspects of the condition, and understanding the relationship between them. By correctly assessing the nature of the biopsychosocial disorder, a more effective treatment plan can be developed. Research suggests that when the biological, psychological, and social aspects of disabling pain are all identified and adequately addressed, even complex biopsychosocial disorders can be treated successfully.<sup>6</sup>

## Treatment

Finally, almost 3 years after her second injury, Sarah underwent her lumbar fusion surgery when Caregiver Insurance agreed to pay for it and sued Riskodyne to recover their costs. Fortunately there were no infection problems, although she still had considerable difficulties with chronic pain and poor functioning.

Following this, Sarah was referred to a physician who was board-certified in pain medicine. Sarah's lower extremity pain was improved by a spinal cord stimulator, a transdermal fentanyl patch (Duragesic), duloxetine (Cymbalta), cognitive therapy for depression, relaxation training, and psychological treatment for insomnia. Sarah described her mood at this time as being primarily worried about the future. Despite the unusual and severe setbacks that Sarah has suffered, though, she remains a remarkably resilient and determined person. Despite all that has happened, she is able to joke in a good-natured way.

Sarah eventually went on to receive a permanent impairment rating. Using the AMA guides to permanent impairment, a physician rated her as having 36% impairment for her back, and 8% for her psychiatric condition, with an overall 41% impairment rating.

## Discussion

Within the business of insurance, determinations must be made as to what is covered by a particular policy. Sometimes, as in this case, determinations of apportionment must be made. In Sarah's case, should her lumbar injury be apportioned to her first injury, to her second injury, or to both? This determination would decide who must pay for the considerable expense of Sarah's treatment: Riskodyne or Caregiver Insurance. Legally, Riskodyne had the right to question this. The manner in which it did so, however, seemed ill-advised. Several of her evaluators believed that because of the delays in her care caused by Riskodyne, Sarah's postsurgical recovery was slowed, her time in rehabilitation increased, her psychological needs were exacerbated, the level of pain medications needed were increased, and her disability was worsened.

In the end, though, all of Riskodyne's protests were for naught. The judge ordered Riskodyne to pay for the cost of Sarah's treatment. Riskodyne was required to pay for the surgery, for a lengthy and intensive physical rehabilitation process afterwards, psychological treatment, interventional pain medicine treatment, disability benefits, and also to compensate Sarah for her residual impairment. Beyond the medical and disability costs, however, further costs were incurred by the litigation, and the costs in terms of human suffering must also be considered.

The hope for managed care was that it would provide good care while controlling costs. However, the danger is that when managed care becomes too narrowly focused on pursuing its own welfare, it can lose touch with the world of patient treatment. In doing so, it can make the mistake of John O'Day, whose demise was chronicled in the eulogy at the start of this chapter.

In the case of Riskodyne, its judgments fell victim to the O'Day fallacy when it stubbornly clung to its own legal rights in a manner that was at once both short-sighted and counterproductive. Sarah's condition was already an inherently complex and expensive one. Unfortunately, Riskodyne's approach to managing care resulted in both a poor outcome and far higher expenditures. Riskodyne's stubbornness did not only jeopardize the welfare of the patient, though. This same intransigence, if broadly applied, could also jeopardize the existence of Riskodyne itself, as it is hard to imagine how an insurer can financially survive when it behaves in a manner that greatly inflates its own costs, while alienating the patients, companies, and professionals whom it is supposed to serve. In contrast, Caregiver Insurance's deeper appreciation of the clinical realities of this case and pragmatic approach led to both better care and better cost containment.

With regard to Sarah, at last contact she had reported that her pain and mood had responded positively to her pain management program. Sarah continues to be a model patient, who has exhibited an unusual degree of psychological hardiness that has made her a pleasure to work with. Remarkably, despite battling with depression, insomnia, and chronic pain, she faces life with courage, and has been able to maintain a pleasant attitude and sense of humor. Despite the fact that she has been rated as being permanently and totally disabled, she remains optimistic, and continues to strive to find ways to put her life back together.

Sarah hopes to return to the workforce someday.

Riskodyne has been ordered to pay for Sarah's ongoing psychological and medical maintenance treatment costs, and will also be liable for carpal tunnel surgery should that become necessary.

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# Chapter 32

## Innovations in the Treatment of Comorbid Persistent Pain and Posttraumatic Stress Disorder

John J. Sellinger and Robert D. Kerns

The strong relationship between chronic pain and posttraumatic stress disorder (PTSD) is one that highlights the often intimate relationship that exists between medical and psychiatric conditions. It is easy to recognize the burden that these conditions place on the healthcare system, both financially and logistically. Surveys show that more than 80% of all visits to physicians are pain-related. These include 50 million annual healthcare visits, at a cost of more than \$70 billion.<sup>1</sup> Epidemiological studies have shown that chronic pain-related problems affect as much as 40% of the general population.<sup>2</sup> For PTSD, the *Diagnostic and Statistical Manual of Mental Disorders—Text Revision* reports a lifetime prevalence of roughly 8%.<sup>3</sup> In a national comorbidity study, Kessler et al.<sup>4</sup> found the lifetime prevalence of PTSD to be 7.8%, with higher rates found among women and individuals exposed to combat and sexual violence. To identify the prevalence of PTSD within a primary care setting, Samson et al.<sup>5</sup> evaluated patients who were identified by primary care providers as having symptoms of depression or anxiety. Of the 7,444 patients seen in the setting, 296 (3.9%) were determined to meet these criteria, and 114 met the criteria for PTSD. The authors acknowledged that these findings may underestimate the prevalence of PTSD in primary care settings because the initial identification of depression and anxiety was left to the discretion of the primary care provider, and such a method has historically led to underdetection of these disorders.

Even more significant than the independent prevalence rates of chronic pain and PTSD is the high coprevalence of these two conditions. Data on this coprevalence come from attempts to identify PTSD among persons seeking chronic pain treatment, as well as from attempts to identify chronic pain problems among patients diagnosed with PTSD. Rates of PTSD among persons seeking treatment for pain have been estimated to be between 9.5 and 10%.<sup>6-7</sup> The rates of pain conditions among patients with a known diagnosis of PTSD have been found to be even higher, with reported rates ranging between 45 and 80%.<sup>8-9</sup> Research has shown that the relationship between pain and PTSD is often influenced by several factors, including the extent to which a patient's pain condition is related to the traumatizing event. Geisser et al.<sup>10</sup> found that events that led to the development of both PTSD and chronic pain resulted in higher reports of pain and emotional distress than did events that resulted in pain without PTSD, or pain that is unrelated to a traumatic

event. Given the high coprevalence of pain and PTSD, as well as the known individual prevalence of each, the rates with which these conditions co-occur among patients seen in primary care settings are likely to be very high. What follows is a case example that demonstrates both the challenges and the benefits of treating comorbid pain and PTSD.

## **Patient Information**

Richard Olsen is a 58-year-old Vietnam veteran who recently retired after 25 years of employment in the private sector. His retirement was driven in large part by chronic low-back pain stemming from an injury that he sustained while doing heavy lifting at work. Richard has been married for 38 years, and he has five adult children with whom he maintains a close relationship. His marriage has been strained as a result of unemployment, limited physical mobility, and the increased caregiver burden experienced by his wife. However, despite the marital strain, Richard's wife remains an active participant in his healthcare and a significant source of support for him. As a result of his chronic low-back pain, Richard has significantly reduced his physical and social activity, and he has been spending as many as 20h per day in bed. During treatment for his lower-back pain, Richard developed radiating pain into his legs bilaterally in addition to frequent headaches. These additional pain complaints served to further limit his physical activity and to reduce his desire to socialize. As a result of Richard's mounting pain complaints, coupled with his limited responsiveness to opioid pain medications, his primary care physician referred him for an evaluation in the local Veterans Affairs (VA) Comprehensive Pain Management Center (CPMC).

## **Clinical Setting**

The CPMC is a multidisciplinary treatment clinic that is staffed by professionals from a variety of medical and allied health professions within our healthcare system, including neurology, anesthesiology, pharmacy, physical therapy, geriatric nursing, chiropractic, chaplain service, and health psychology. Consults for the CPMC come from various inpatient and outpatient service providers within the healthcare system. The initial evaluation within the CPMC is conducted by a member of the clinical health psychology staff. This evaluation includes an assessment of the patient's pain complaints, prior diagnostics and interventions, pain-coping strategies, and a full psychosocial evaluation. The initial evaluation is preceded by consultation with the referral source, other providers who are involved in the patient's care, and through a review of the existing patient medical record. Following the evaluation, the health psychologist presents the patient's case to the multidisciplinary team for review and discussion. This discussion generates

recommendations for further evaluation and/or treatment, which are then disseminated to the referral source, to the patient's primary care physician, and directly to the patient. These treatment recommendations can include follow-up with any one or more of the services represented on the multidisciplinary team (e.g., a consult with health psychology staff to assist with the development of pain-coping skills, a consult to physical therapy staff to assist with the development of a safe home exercise program). Consultation and collaboration among the various disciplines is central to the operation of the CPMC, and this collaboration extends beyond the team as the primary care physicians, other referral sources, and the patient are directly involved in the implementation of the treatment recommendations. It is this collaboration, in addition to the team's ability to generate a comprehensive and integrative treatment plan for pain management that is often beyond the scope of what could be generated and implemented by an individual provider, which attracts referrals to the CPMC from throughout our local VA network.

## **Richard's Presenting Complaint**

Upon arrival at the CPMC, Richard displayed numerous pain behaviors, including loud moaning and frequent shifting. He verbalized his pain throughout the interview, and he remained seated in a wheelchair for the duration of the evaluation. Richard's mental status at the time of evaluation was compromised, as evidenced by tangential speech, confusion, and impaired short- and long-term memory. He spoke in a loud tone of voice, and he had word-finding difficulty. Richard demonstrated emotional lability, with emotions ranging from extreme sadness and crying, to irritability, to seemingly normal affect. Owing to his difficulty with memory and concentration, Richard often relied on his wife to assist with providing information throughout the evaluation. Overall, Richard's wife was instrumental in providing prompts to keep him focused and on-task throughout the interview.

Richard identified his lower-back pain as his primary pain complaint. He reported that he injured his back approximately 4 years earlier while lifting heavy filing cabinets at work. Richard rated his back pain as 8 on a scale from 0 (no pain) to 10 (worst pain imaginable), and he described the pain as constant with sharp spasms that were exacerbated by all types of movement. He had previously undergone three surgeries to fuse vertebrae and to insert metal rods for further stabilization of his lower back. Richard also had had two additional surgeries to insert a morphine pump and a fusion stimulator to assist with pain management. However, these interventions proved to be ineffective. To complicate his recovery from these extensive interventions, Richard developed radiating pain into his buttocks and legs, and he also experienced an increase in both the frequency and the severity of his headaches.

Prior to his referral to the CPMC, Richard had several medical and allied health professionals who were independently involved in the treatment of his chronic pain. Among these professionals were a neurosurgeon, a pain medicine specialist,

a community-based primary care physician, and a primary care physician within the VA Healthcare System. At the time of his CPMC evaluation, Richard's pharmacotherapy for pain management included short-acting opioid medications (oxycodone and oxycodone–acetaminophen), long-acting opioid medication delivered through his implanted pump (hydromorphone), and medication for his headaches (butalbital/acetyl salicylic acid/caffeine). Each medication was prescribed by a different member of Richard's treatment "team," and these medications were taken in conjunction with 22 other medications that Richard was taking to manage several chronic medical conditions. These conditions included hyperlipidemia, hypertension, type II diabetes, gastroesophageal reflux disease, depression, and anxiety. A review of Richard's medical records revealed that the management of each of these medical conditions was suboptimal, due in part to Richard's poor adherence with treatment recommendations. Richard's poor adherence was exacerbated by his difficulty in managing his medication regimen, which was due in large part to his problems with memory. There was suspicion that Richard's mental status may have been due to side effects from his extensive medication regimen, resulting in a working diagnosis of substance-induced delirium. Another possible contributor to Richard's confusion about his medication regimen was the fact that his health-care providers were not in communication with one another and were at times advising Richard to change dosing and to discontinue a medication prescribed by another provider.

The psychosocial examination revealed that Richard had few adaptive coping strategies for pain. His primary strategies were primarily passive in nature and included sleeping, spending the majority of his day in bed, and isolating himself. Richard completed several paper-and-pencil measures that assess the psychosocial ramifications of chronic pain. His scores on these measures indicated a high degree of pain interference in both behavioral and emotional regulation (from the West Haven–Yale Multidimensional Pain Inventory<sup>11</sup>); significant engagement in pain behaviors such as seeking help, limited ambulation, and overt expressions of pain (from the Pain Behavior Checklist<sup>12</sup>); a high degree of overall disability in activities of daily living (from the Roland and Morris Disability Scale<sup>13</sup>); and limited use of proactive pain coping strategies (from the Chronic Pain Coping Inventory<sup>14</sup>). Richard scored particularly high on the "solicitous responses" subscale of the West Haven–Yale Multidimensional Pain Inventory, indicating that his caregivers were responding to his pain behaviors in a manner that likely fostered dependence and passive coping, rather than encouraging him to be more independent in his self-care. This contributed to the strain in Richard's marriage, as his wife was caring for him while also working and managing the household.

Richard endorsed symptoms consistent with major depressive disorder, and his Beck Depression Inventory II score reflected a severe level of current depressive symptom severity. Richard also described a long history of panic disorder, with panic attacks occurring at the rate of one per day at the time of his CPMC evaluation. Several months prior to this CPMC evaluation, Richard was evaluated in the VA outpatient mental health clinic, at which time he was diagnosed with combat-related PTSD. It was recommended that he undergo psychotherapy at that time, but

Richard refused such treatment because he preferred to maintain his long-standing avoidance of discussion about his experiences in Vietnam. During his CPMC evaluation, Richard reported ongoing intrusive thoughts and nightmares about his war experience, avoidance of television programs and movies related to war, constant hypervigilance, and exaggerated responses to innocuous stimuli that he perceived as a threat.

In discussing his chronic pain, Richard acknowledged that his pain is exacerbated when his anxiety is high, particularly during panic attacks. He also acknowledged that his pain contributes to his depressed mood, and thus to his lack of energy and motivation to engage in daily activity. He also had insight into the role of his anxiety and depression in exacerbating his pain. The health psychologist conducting the CPMC evaluation explored these connections with Richard, with particular emphasis placed on the importance of engaging in mental health treatment as an indirect treatment for his chronic pain. This discussion was guided by the tenets of the gate control theory,<sup>15</sup> which offers a framework to explain the impact of psychosocial factors on the experience of pain. Richard was initially resistant to this recommendation, but with further discussion, he agreed to initiate mental health treatment.

## **Treatment Recommendations**

Based on the information that was gathered from Richard during his CPMC evaluation, the following treatment recommendations were made by the multidisciplinary team. It was recommended that (1) Richard's ongoing pain management be centralized under his VA primary care provider to allow for greater control over his current medication regimen; (2) after full integration of Richard's pain management, a consult should be placed for Richard to be seen in the anesthesiology pain clinic for consolidation and reconsideration of his pain medication regimen; (3) a consult be placed for a neuropsychological examination to further assess Richard's impaired cognitive functioning; and (4) a consult be placed for follow-up treatment in the mental hygiene clinic for PTSD and depression. These recommendations were conveyed to Richard and to his VA primary care physician, and both were in agreement with the plan.

## **Richard's Follow-Up Care**

Following Richard's CPMC evaluation, he was adherent with the recommendation to follow up with mental health treatment to address his PTSD and depression, and he was being seen weekly for such treatment. However, he did not follow through with the recommendation to consolidate his pain management, despite his initial agreement to do so. This prompted several phone calls to the CPMC from Richard's



VA primary care physician, and it gave us an opportunity to communicate directly with some of the staff from the VA outpatient clinic where Richard was receiving his care. These discussions uncovered a great deal of staff frustration with the patient that permeated through both the clerical and the nursing staff, all of whom fielded frequent phone calls from Richard. His physician also expressed frustration with the fact that he was being asked to undertake a monumental task of managing Richard's pain while consolidating his outpatient care—all without much cooperation from Richard. The staff's concern was clearly in obtaining appropriate care for Richard's pain, but all of the players involved in Richard's care were clearly investing a disproportionate amount of time and resources without achieving the desired outcome.

While the team worked to assist the primary care physician with integration of Richard's healthcare, Richard was seen for the neuropsychological evaluation that was recommended by the CPMC team. The results of this evaluation revealed significant deficits in the areas of language and verbal memory. It was suggested that his neuropsychological profile appeared to be consistent with a vascular cause, and this opinion was guided by Richard's significant medical risk factors for vascular compromise. However, the examiner could not rule out the presumed influence of Richard's depression, anxiety, and opiate medication regimen on his testing profile, and it was suggested that with improvements in these factors, Richard might yield mild–moderate improvements in his cognitive functioning. These findings offered insight into the management of Richard's chronic pain. More specifically, the importance of taking better control over his opioid regimen was highlighted, as was the need to utilize resources and directives with the patient that were sensitive to his deficits in language and verbal memory (e.g., using written guidelines, incorporating his wife more directly into the day-to-day management of his treatment regimen).

As the health psychologist began to work with the patient's providers to develop an intervention that was consistent with the above-stated guidelines, we were contacted by the attending psychiatrist on the inpatient psychiatric unit and informed that Richard had been admitted to the unit for exacerbation of his depression and PTSD, including new suicidal ideation. While on the unit, Richard was complaining of continued pain in his lower back, which resulted in the staff having to respond to his pain complaints with the frequent use of opioid pain medications. From the psychiatrist's report, Richard's pain was central to his current presentation, and it was taxing staff resources on the unit. The inpatient providers were prescribing baclofen, ibuprofen, and oxycodone, as needed for pain management, and they were concerned with Richard's increasing requests for medication for breakthrough pain. Together with the psychiatrist, we decided that an "all-treaters" meeting was needed to allow all of Richard's providers to work collaboratively to develop a pain treatment plan that would focus on both immediate and long-term planning to assist Richard with consolidating his care (as originally recommended by the CPMC team) while he is in a controlled setting.

The all-treaters meeting included the treating and attending psychiatrists, the health psychologist, an anesthesiology pain management specialist, Richard's

outpatient mental health clinician, and his outpatient primary care physician. The treatment plan that was agreed upon by the team included (1) inpatient physical therapy and an occupational therapy evaluation to assess Richard's ability to care for his activities of daily living; (2) a pharmacy consult to assist the physicians with managing Richard's complicated medication regimen while moving toward the goal of transitioning Richard from oral analgesics to the transdermal fentanyl patch in order to decrease his reliance on oral medication, improve his cognitive status, and improve his pain control via an extended release preparation, which would also help to reduce his addictive (obsessive and excessive medication seeking) and attention-seeking pain behaviors; (3) cognitive-behavioral therapy (CBT) with a health psychologist to assist Richard with the development of pain self-management skills; and (4) staff attainment of Richard's consent to contact his outside treatment providers to obtain records and to consolidate his care under the VA Healthcare System.

## Cognitive-Behavioral Therapy for Pain Management

Richard began working with the health psychologist to encourage engagement in CBT for pain management. This intervention began with an assessment of Richard's interest in such intervention, coupled with motivational interviewing to enhance his willingness to engage in the treatment. CBT for chronic pain management is an intervention that focuses on assisting individuals with the development of personal control over pain through the use of self-management techniques. These techniques are presented in a structured manner and are centered upon modifying cognitions and behaviors that often occur in the context of chronic pain. Common thoughts that develop in response to chronic pain include thoughts of hopelessness and helplessness, and exaggerated perceptions of disability. These thoughts typically result in behaviors that further exacerbate the pain experience, including either deactivation or overexertion, social isolation, and overutilization of healthcare resources. These thoughts and behaviors often lead to affective distress, disrupted relationships, and other psychosocial stressors (e.g., unemployment). Empirical support for CBT interventions for pain management has been documented in the literature, with outcomes showing significant reductions in pain severity, disability, affective distress, and healthcare utilization.<sup>16</sup>

In Richard's case, CBT interventions to address his pain took on even greater importance in light of his PTSD diagnosis. To date, the theoretical models that have sought to explain the high comorbidity of chronic pain and PTSD have focused on the construct of anxiety sensitivity, which refers to the predisposing tendency to be fearful of becoming anxious. Participants with chronic pain and PTSD tend to score high on measures of anxiety sensitivity, which leads to an increased tendency to become fearful in the face of even subtle somatic sensations. Therefore, PTSD and chronic pain have what Asmundson et al.<sup>17</sup> refer to as a *shared vulnerability*. Sharp and Harvey<sup>18</sup> also detail a model of *mutual maintenance*, whereby the cognitive, affective, and behavioral symptoms of chronic pain maintain the cognitive, affective,

and behavioral symptoms of PTSD. In Richard's case, the distress related to his chronic pain led to social isolation, decreased activity, and limited distraction. While these factors served to exacerbate Richard's pain, they were also potential exacerbating factors for his PTSD. Therefore, these two conditions became mutually maintaining. These theoretical models clearly laid the groundwork for the application of CBT interventions to address the affective, cognitive, and behavioral aspects of Richard's chronic pain, particularly since the impairments within each of these domains was a risk factor for exacerbation of his PTSD symptoms, and vice versa. For a more extensive review of these and other explanatory models of PTSD and chronic pain comorbidity, the reader is referred to Otis et al.<sup>19</sup>

Common CBT interventions for chronic pain cover several skill modules, including relaxation training (diaphragmatic breathing, progressive muscle relaxation, visual imagery), identifying and restructuring cognitive errors, activity pacing, pleasant activity scheduling, anger management, sleep hygiene, relapse prevention, and management of pain flareups. Owing to his heightened level of anxiety and distress during his hospitalization, the first CBT skill module that was covered with Richard was relaxation training. Richard's psychiatry resident was present during all treatment sessions to learn the techniques, thus allowing for further reinforcement of such techniques on a daily basis. The relaxation training included deep breathing and visualization exercises. Richard was easily engaged during the CBT sessions, and his ratings of pain before and after sessions showed reductions of as many as eight points on the pain scale. Throughout the course of the five CBT sessions that were provided during Richard's hospitalization, he was encouraged to use the relaxation skills as a first-line treatment for pain flares, as opposed to continuing his ongoing pattern of requesting pain medications as needed. Early on in the course of treatment, Richard showed no reduction in his medication-seeking behavior. However, with the passage of time, Richard's request for breakthrough pain medications reduced from all six of his allotted daily doses of 25 mg oxycodone down to only one per day. In addition, reports from the psychiatrist and the unit staff indicated that Richard was observed utilizing the relaxation techniques frequently during the day to manage his pain flares.

In light of Richard's success with utilizing the relaxation techniques, the treating psychiatrist began to reduce his dosage of as-needed oxycodone by 5 mg daily. After 1 week, this medication was discontinued completely, and Richard was transitioned to the fentanyl 25 µg/h patch on every third day for sustained management of his pain. Richard continued to practice the relaxation techniques daily, and he kept a diary of his practice, including the effects of such practice on his pain scores. Reports from Richard's treating psychiatrist revealed that his cognitive status was improving since discontinuation of the oral narcotic agents, and Richard reported these same effects. The staff on the unit continued to report that Richard was utilizing his self-management skills to manage his pain flares, thus reducing his solicitous behavior with the staff. Within the last week of his hospitalization, Richard's pain scores were consistently below 4 on the numeric pain rating scale.

Richard's discharge plan from the hospital included continuation of the fentanyl patch for pain management, which was to be monitored by his VA primary care

physician—to whom all of Richard’s care was consolidated during his hospitalization. Richard was also scheduled for follow-up with his outpatient mental health provider for resumption of his treatment of PTSD and depression, follow-up with physical therapy staff for the development of a home exercise program, and with health psychology staff for continued CBT for chronic pain management. The focus of CBT shifted from the relaxation training, to other skills that were of importance as Richard made the transition back to daily functioning at home. Over the course of 8 weeks, Richard attended four CBT sessions and he had two follow-up telephone sessions. The skill modules that were covered included pleasant activity scheduling, activity pacing, and cognitive restructuring that was focused on helping Richard develop insight into the role that he was playing in managing his own pain. Richard’s wife attended most of these outpatient meetings, and her knowledge of the skills that were taught was helpful for Richard as he practiced these skills at home. With the passage of time, Richard reported consistent average pain scores of 0 out of 10, with occasional pain flares that he was managing with his newly learned self-management skills. Given this success, we made the determination, in conjunction with Richard’s mental health provider, that CBT for pain management was no longer necessary. Richard’s CBT treatment was terminated at that time, and 6 months after treatment he continued to report an average pain score of 0.

### **The Three-World View: The Case of Richard**

A review of Richard’s case from the perspective of the three-world view reveals several notable points in the clinical, operational, and financial domains that served to both limit and later enhance Richard’s care. Starting with Richard’s initial evaluation in the CPMC, it was readily apparent that his clinical care was disjointed and lacking in efficiency. As a result of the services that he was receiving from as many as four healthcare providers simultaneously, Richard was both overmedicated and overwhelmed by the sometimes contradictory medical advice that he was given. In addition, the frustration that was experienced by the nursing staff who handled many of Richard’s phone calls and drop-in visits likely had a negative impact upon the quality of care that he received. Overall, the clinical approach to Richard’s care was inherently flawed by the lack of communication between his providers, which ultimately reduced the effectiveness of this care and perpetuated Richard’s cycle of overusing healthcare resources.

Subsequent to Richard’s evaluation in the CPMC, several changes were made in the approach to his clinical care that ultimately led to increased effectiveness and efficiency of such care. For example, the multidisciplinary approach to pain management that was espoused by the CPMC led to the examination of the biological, psychological, and social factors that were maintaining Richard’s chronic pain. The eventual implementation of the team’s recommendations to consolidate Richard’s healthcare and to connect him with a mental health provider addressed two significant contributors to his pain. With additional feedback from clinical and administrative

staff in Richard's primary care setting, an additional plan was implemented to assist with the consolidation of his healthcare, as this was proving to be a difficult task for one provider to handle alone in light of Richard's limited cooperation. In addition, the response to Richard's hospitalization that included bringing all of Richard's providers together in one room to discuss both short-term and long-term plans for his pain management proved to be the clinical intervention that was central to Richard's eventual responsiveness to treatment. The implementation of this multidisciplinary plan, including mental health, health psychology, and medical interventions, was the synthesis of care that Richard had needed for some time.

The outcome of this collaboration led to a decrease in Richard's phone calls and visits to his physician, as well as to the elimination of his reliance on oral narcotics for breakthrough pain. His work with health psychology staff resulted in the increased use of self-management skills, including relaxation and activity pacing. A financial analysis of this outcome would reveal a significant decline in the cost of Richard's care. This decline can be measured in the number of office visits, in time spent by staff in addressing Richard's pain complaint over the phone, and in the number of unnecessary providers who were eliminated from Richard's treatment regimen. In the end, the financial benefits of the multidisciplinary plan that was implemented reduced the financial burden for not only the healthcare system, but also for Richard and his wife. This financial gain was made possible by a close multidisciplinary examination of Richard's case, which ultimately paved the way for the implementation of effective clinical interventions that work even better when implemented together. Thus, Richard's case represents a good example of how the demands of the clinical and financial worlds can be met in the delivery of effective patient care.

From an operational perspective, the care that Richard was receiving prior to this CPMC evaluation was limited by the lack of multidisciplinary resources that were available in the remote outpatient setting. As a result, the management of Richard's pain was limited to prescription pain medications, which proved to be ineffective at pain management but effective in creating an operational "logjam" resulting from frequent visits and telephone calls from Richard. These calls and visits were taxing on the operation, and resulted in mounting frustration from the patient and the staff. Realizing these limitations, Richard's primary care physician took the appropriate step of expanding the umbrella of care by placing a consult with another system that had the ability to evaluate Richard's pain more comprehensively. Although the process of implementing the recommended treatment plan was slow, the overall benefits for the operation can be measured in Richard's reduced need for direct contact with healthcare providers, reductions in time spent having to chase down outside medical records, and increased contact with the CPMC (a resource outside the local operation) that can continue to support local efforts to treat the patient, if needed.

Overall, Richard's pain management was significantly improved through the implementation of a multidisciplinary treatment plan that took a biopsychosocial approach to care. This team was able to bring about the desired outcome by first identifying the clinical, operational, and financial obstacles to patient care, and then

implementing a new plan that eliminated these obstacles while also satisfying the demands within each of these domains. We would be fooling ourselves to believe that these changes could have occurred overnight. However, slow implementation of such improvements is certainly better than no improvement at all. In short, Richard's care was restructured in such a way that he can continue to receive fully integrated care within his current primary care operation, and this care will continue to be delivered at a lower cost, and with significant reductions in the demands placed on the clinical staff.

## Conclusion

Richard's case demonstrates the importance of the multidisciplinary approach to healthcare, and the strength of this approach in identifying and treating coprevalent and cosustaining conditions. Based on the strong empirical evidence of the high coprevalence of these conditions, and modeled after the solid theoretical foundations that seek to explain this coprevalence, the treatment approach that was utilized in Richard's case was empirically supported and appropriately informed by all disciplines represented on the team. As such, this treatment was also responsive to the needs of the individuals and systems that make up the three-world view. Thus, the integration of Richard's care resulted in the delivery of an effective and efficient intervention.

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# Chapter 33

## What Goes Up Must Come Down: The Complexity of Managing Chronic Pain and Bipolar Disorder

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### Case Presentation

J.C. is a 40-year-old Caucasian woman who presented to the Kelly Family Medicine Clinic with multiple medical complaints, the most problematic being chronic myofascial pain, predominantly in her lower back, anxiety, and bipolar disorder. J.C. was well known to the military medical community owing to high utilization of primary and specialty medical care; however, a civilian, community-based psychiatrist was managing her psychiatric care.

J.C. is a high-school graduate with an unremarkable developmental history. Her psychosocial history was notable in that both of her parents were untreated alcoholics and prescription drug abusers. Her husband was discharged from active military service for diverting narcotics while working as a medical technician. Since J.C.'s husband was unemployable after leaving the military, J.C. became the primary income earner in her household, which caused both relational difficulties and personal maladjustment. J.C. held two jobs, both of which were physically demanding and both caused her bodily pain (back and legs). Within 2 months of her husband's discharge, J.C. made her first appointment with the family medicine unit regarding her pain. Several subsequent appointments were made for complaints of diffuse lower-back and leg pain before she was referred to the pain management department at Wilford Hall Medical Center. She was treated by the Pain Management Department within Wilford Hall Medical Center for approximately 18 months. Although she had no documented mechanism of injury or skeletal pathophysiology, J.C. received deep muscle injections, facet injections, radiofrequency nerve ablation intervention, and nonsteroidal anti-inflammatory and narcotic pharmacotherapy over the course of her treatment by the pain management service. During this time period, she was also taking lorazepam (Ativan), although the exact dosages were unknown as she was initially getting this medication from both her psychiatrist and her primary care provider. The only interventions that J.C. reported being effective in the treatment of her pain were long- and short-acting opioid therapy. She was taking Oxycontin and Percoset for breakthrough pain. It should be mentioned that although J.C.'s physicians recommended physical activity, work modification, and



nutritional behavior change, J.C. never initiated change of any kind. After 18 months of chronic early refills of narcotic analgesics, attempts at obtaining narcotics in other medical settings (urgent care, ambulatory primary care), and failed invasive interventions (injections/nerve blocks), J.C. was terminated from specialty care and referred back to her primary care provider. Given the fragmentation of her medical and psychiatric care, nothing was noted in her chart regarding her compliance with or response to her psychiatric medications for the bipolar or anxiety disorders.

After returning to primary care, J.C. was seen for six appointments over a 1-month period—all times with chief complaints related to her chronic pain symptoms and breakthrough pain. Four of the six appointments were acute care visits, while only two were scheduled follow-ups. This pattern of excessive utilization and medication-seeking behavior persisted for 2 years. The primary care provider noted evidence of mood swings and agitation in the patient but largely attributed these to her anxiety and opioid use. Frustrated and left with few choices, J.C.'s primary care provider looked to the behavioral health consultation service at Kelly Family Medicine Clinic for help in treating her anxiety and optimizing her chronic pain care. J.C.'s provider consulted with the psychologist on staff in the clinic and it was decided that a shared decision-making process and motivational interviewing approach would offer the best chances of engaging the patient in behavior change.

At the initial meeting with the behavioral health consultant, the patient reported having a diagnosis of bipolar disorder and that she saw a community-based, civilian psychiatrist. She agreed to sign a release of information to allow consultation with her psychiatrist. Behavior change plans were discussed and she was scheduled for a joint visit with her primary care provider and the behavioral health consultant later that week. The primary focus of that visit was to discuss a strategy to wean her off both her narcotic pain medications and discontinue her lorazepam prescription through primary care. The patient initially requested to be transferred to another provider within the clinic but use of motivational interviewing revealed her ambivalence regarding her use of medications and her desire to improve her quality of life. Treatment therefore consisted of the following goals: confronting nonadherence with narcotic medication; assessing physical and psychological dependence; psychodiagnostic clarification and coordination of services with her civilian psychiatrist; use of evidence-based bibliotherapy for chronic pain management; and initiation of a behavioral change plan including increasing physical activity, decreasing mood fluctuation, and setting boundaries with her spouse in order to facilitate narcotic abstinence and increase self-management of daily pain. Educating for both the patient and her providers, on the priority and modality of the interventions to be used, was also critical in this case.

A fixed schedule of biweekly appointments, for the first 2 months, was arranged for her with both medical and psychological providers present in the examination room. The two-provider meetings lasted approximately 15 min and were followed by 30 min of behavioral health consultation provided by a clinical psychologist. She was given a copy of Lewandowski and Kroening's *The Chronic Pain Care Workbook*.<sup>1</sup> This is a cognitive behavioral text which covers the topics delineated in Table 33.1.

**Table 33.1** Overview of *The Chronic Pain Care Workbook*

Chapter	Topics	Subtopics and self-management exercises
Chronic Pain Care Basics	Acute and chronic pain Causes and effects of chronic pain Traditional pain models	Pain myths and fallacies
The Biopsychosocial Model of Pain	The biopsychosocial model: the future of pain management Your role in managing your pain	Are you ready to change?
Your Readiness for Change and Intention to Change	Learning to be adaptable and flexible Stages of change Pain cycles and the negative feedback loop	Taking action! Rating your pain
Rating Pain, Monitoring Flare-Ups, and Setting Goals	Pain flare-ups Goals and pain management	Tracking your pain
Understanding Your Diagnosis	Why is it important to understand your diagnosis? Taking an active role in your medical care	Learning more about your diagnosis Learning how others understand your diagnosis
Fatigue and Energy Levels	Managing your energy levels Exercise and chronic pain Sleep, energy, and chronic pain Nutrition and energy Muscular discomfort and energy	How loss and grief affect energy
Medication	Medications used to treat chronic pain Preventing addiction: your best defense Establishing your trustworthiness and credibility Thoughts and coping	A closer look at opioids Getting effective pain relief from medication Helping your doctor help you: making a contract Catastrophizing
Changing Your Thoughts and Ideas About Chronic Pain		Fear of reinjury Expectation of a cure Entitlement, frustration, and anger Self-blame

(continued)

Table 33.1 (continued)

Chapter	Topics	Subtopics and self-management exercises
Pain Behaviors	Pain behaviors are a form of communication Why change your pain behaviors? Relaxation and body awareness Evaluating your activity	Future despair Social disbelief Practicing new ideas about pain You are more than your pain behaviors Getting others to talk about something besides your pain
Activity Interference and Activity Avoidance	Interference and activity avoidance	Overcoming activity interference
Emotional Pain and Suffering	Depression Anxiety Anger	Overcoming activity avoidance Using humor to relieve depression, anxiety, and anger
All in the Family: The Social Implications of Chronic Pain	Pain, the family, and the past How chronic pain can affect the family Pain management helps the whole family How chronic pain can change sex	Using pacing as a social tool How your family thinks about and reacts to your pain
Sex	Talking about sex Taking back your sex life Treatment issues	
Working with Your Doctors	A team approach to pain management Who gets good pain management?	Helping your physicians help you

After 2 months of close collaboration and use of the chronic pain self-management book, an additional few months of psychological support by the Behavioral Health Center (BHC) and consultation with her psychiatrist, J.C. was successfully weaned off both narcotic pain medication and benzodiazepines; her primary care appointments are now for routine and acute needs only and she maintains monthly appointments with her psychiatrist to monitor her medication for bipolar disorder, which includes a mood stabilizer and an antidepressant.

## **The Three-World Perspective: Clinical, Operational, and Financial**

Many healthcare systems have tried—and failed—to integrate mental and physical healthcare. Yet, there are some notable models of success, such as the military health systems, Kaiser Permanente, Intermountain Healthcare, and others. With a national emphasis being placed on healthcare quality, managing healthcare costs, and collaborative models of care, understanding what makes healthcare systems successful in delivering integrated care and merging historically fragmented disciplines creates a roadmap for other success stories. Peek's three-world view provides a conceptual framework on which to build a model of collaborative care that addresses not only clinical parameters, but operational and financial perspectives as well.

### *Clinical*

From a purely clinical perspective, this case has a divergence of potential outcomes to target. That is, from a traditional mental health perspective, management of J.C.'s bipolar symptoms, and secondarily of her anxiety, would have been the most important clinical outcomes of interest. From a traditional, nonintegrated medical viewpoint, the clinical outcomes of interest were specifically to decrease her chronic pain—or the functional impairment secondary to her chronic pain. However, in pursuit of this goal, a second problem of drug misuse and dependence was unintentionally created. Failure to take into account this patient's underlying psychiatric illness likely contributed to her misuse of medications and self-medicating her mood disturbance with narcotic pain medications. When managed in isolation, which they were for several years, the lack of synchronized care and focus on common outcomes promoted excessive prescribing of medications and myopic treatment plans.

This case highlights the problematic, yet all too common, separation of treating the mind in mental health care and the body in physical health care. Although effective control of this patient's bipolar disorder would necessarily improve her subjective complaints and distress regarding her pain levels, long-term improvement

of her chronic pain and discontinuation of narcotic medication would likely not even enter the radar screen of a traditionally trained and segregated mental health practitioner. As a result, her chronic pain would likely demonstrate no notable improvements by treating her bipolar disorder in isolation. Thus, a broader, more contextual view of clinical outcomes was warranted in this case to include not only management of her bipolar symptoms but also reduced functional impairment secondary to her chronic pain condition and misuse of narcotic and benzodiazepine medications, an outcome that likely would only be realized in an integrated system of care.

The challenge in this case was that the patient was motivated to reduce or eliminate the mood fluctuations, but she presented with no initial investment in decreasing her medication use and found the system highly unresponsive to her needs (rather than viewing her needs as unreasonable or unwarranted). Psychoeducation alone was not effective in helping this patient identify her role in this problem. As such, using the management of her bipolar disorder was a leveraging point to tap into her inherent motivation as she saw this to be the most distressing aspect of her current condition. She was educated in the relationship between her mood swings and her response to those fluctuations regarding her behavior and subsequent pain levels. Spending the additional time from the clinical perspective to consult with her managing psychiatrist was essential to getting him on board with the overall healthcare plan and elimination of certain medications. Fortunately, he was responsive to the plan. Given the treatment setting (a fully integrated military health system), the option to establish joint appointments with her physician and the behavioral health specialist allowed for optimal clinical care in this case; however, typically, financial and operational barriers (discussed later) prevent this type of collaboration more often than they encourage or permit it.

This case certainly could have taken a different turn had J.C. been unwilling to sign a release of information allowing the BHC to consult with her psychiatrist or if her psychiatrist was not responsive to the overall healthcare plan. For example, from a singular focus of mental health outcomes, this patient's continued use of lorazepam would have been acceptable as it reduced her panic and anxiety symptoms and decreased her isolation and irritability. That is, her psychiatrist could have continued to prescribe benzodiazepine medications, or other potentially addictive substances, if the narrowly defined clinical outcome of interest were simply reduction in anxiety symptoms or improved mood states. Only in collaborating with other healthcare providers did it become evident that she was duplicating prescriptions and misusing these medications.

While lofty, it is possible that had she been treated from an integrated standpoint initially, she may never have been placed on narcotic pain medications and consultation with her civilian psychiatrist may have occurred early on in her treatment plan to prevent duplications of prescription anxiolytics. At a minimum, earlier recognition would have occurred and saved the patient and her providers undue suffering as well as the system unwarranted expenses.

## *Financial*

Although the financial implications of this case are seemingly evident at first glance, the direct financial burden of J.C.'s case was *not* the impetus for collaboration. In fact, she was being managed in a large fully integrated military healthcare system where there is no exchange of money for copays and no estimate of benefits (EOB) statements or uncovered charges that emerge with each care encounter. The financial burden associated with pharmacy costs and high medical care utilization associated with J.C.'s treatment is subsumed in the large military healthcare annual budget. The costs for J.C.'s care, and for the hundreds of other cases like J.C.'s in the military health system, are ultimately transferred to US tax payers. As such, there is considerable distance between tangible and quantifiable financial costs that would have undoubtedly been evident in this case had J.C. been treated in a more traditional health system. Since neither the patient nor the direct care system was noticeably financially burdened by J.C.'s fragmented healthcare and excessive pharmacy costs, the costs that did drive change included opportunity costs and indirect costs. Every time J.C. presented for care—which was primarily medication-seeking—her insistence on being seen by the provider when she did not have an appointment left at least one, if not more than one other, less assertive patient from being seen on that day. Moreover, the hassle factor in caring for J.C. was substantial and this patient negatively impacted the emotional status of the clinic staff, nurses, and primary care provider. The “difficult patient encounter” described by Jackson and Kroenke<sup>2</sup> was impetus enough to change the course of care for this patient, even in the absence of financial pressure to do so.

Had this been a more traditional healthcare system, at any point along her care plan, adding another provider necessarily increases direct care costs in the short term and, thus, is often overlooked or discouraged in many health systems despite the potential longer-term cost offset that may occur. In this case, cost offsets were associated with adequately treating opioid dependence, recognizing and effectively treating severe mental disorders, and eliminating inappropriate and duplication of services. However, spending money to *potentially* save money in the future is a gamble few health systems are willing to take given the rapid turnover among beneficiaries in today's healthcare market and the limited evidence to demonstrate adequate cost offset and savings for collaborative care. Systems have many options for any extra dollars and chief financial officers are keenly interested in the best return on investment. Essentially they are confronted with situations in which every dollar spent may bring them X amount of savings. They are most interested in determining how to maximize X. Is it through returns on information technology; opening a new clinic; hiring more personnel of a certain type; or investing in integrated care? In the absence of hard data to support the practice of integrated care on cost offsets and in more detail return on investment analyses, the system will be slow to move on investing time, money, and personnel resources to achieve these outcomes. Thus, there is considerable need for applied research to longitudinally study the return on investment of behavioral health

services and collaborative care using long-term financial models that compare integrated care with traditional care.

### *Operational*

Behavioral health and physical medicine providers traditionally exist and work in different buildings, use different language, survive in different cultures, and operate by different incentives, seeking somewhat different outcomes. Thus, the notion of coming together for coordinating care is one leap, but collaborating to the point of joint appointments with a shared patient is nearly unheard of in most health systems (however, see Kent and Gordon<sup>3</sup>). Moreover, the financial disincentive to conduct such visits is paramount as most health systems will not allow both providers to seek reimbursement for such services. If there is not a preestablished arrangement for distribution of revenue, most likely the behavioral health provider would not be reimbursed for seeing a patient with his or her physician in a joint appointment. The military health system provides a unique opportunity to collaborate in this manner, as the primary practical cost was an opportunity cost and the investment of significant personnel services for a single patient. Nonetheless, financial barriers aside, the culture clash between traditional behavioral health and medical providers is substantial and must be addressed in advance of such joint appointments.

Understanding the goal of such visits and allowing both providers to be seen by the patient as working together and uniquely qualified and competent is critical. The primary care provider is often seeking assistance and relief from a difficult patient. However, if one provider undermines the other in the context of a joint visit, the patient will be alert to any power differential and attempt to use this in his or her favor, particularly in the case of a medication-seeking patient. Some patients may be resistant to the concept of a joint visit; presenting it as a part of routine and collaborative care within the clinic can minimize any initial resistance or confusion on behalf of the patient. It is then up to the providers involved to carry out this vision and respect each other's perspective, while working to first collaboratively define and then to achieve common outcomes. In the case of J.C., having the joint visit allowed the behavioral health provider to be aware of all discussions regarding pain levels and medication tapers in order to further reinforce this and pattern other behavioral goals and changes in concert with her medication reductions. Moreover, it allowed the behavioral health provider to be an advocate for J.C. when necessary during her office visits with her physician to further enhance his understanding of the role her bipolar disorder was playing in her medication use and pain levels. Essentially, the behavioral health provider, although initially viewed by J.C. as an intruder in her healthcare, became her liaison between her medical and psychiatric providers, her advocate, her behavior change expert, and her internal clinic resource.

Another operational barrier that often plagues clinics and providers trying to integrate has to do with space and maximizing the efficiency of running multiple examination rooms per provider and carving out space within the routine flow of patient care for a behavioral health specialist. While the assistance and expertise is

conceptually welcomed by the medical providers by and large, the operational impact of giving up an examination or procedure room for a behavioral health provider tends to create some initial stumbling blocks. From an operations standpoint, a behavioral health provider within a medical clinic will reduce efficiency and create an additional administrative burden for billing, prior authorizations, medical records, and other associated needs. Moreover, if behavioral health providers are not enrolled on the same preferred provider network panels as their physician colleagues within a clinic, additional burden can be placed upon the administrative staff to decipher whether a provider is in or out of their network. In light of the additional operational burdens and lower reimbursement rates for behavioral health services (i.e., less net revenue per provider), integrated care has large quality, improved clinical outcomes, and high patient satisfaction thresholds to overcome in order to be sustained since the operational and financial incentives to offer such services simply do not exist.

In today's consumer-driven market of healthcare, patient satisfaction continues to play a critical and expanding role. In fact, patient perceptions of quality of care often drive success indicators even more so than national benchmarks of quality of care. While the vast majority of patients will view collaborative, coordinated care as high quality and improved care, a few will be skeptical and resistant. However, improved clinical outcomes or more satisfied primary care providers will not be the sole drivers of collaborative medicine. Healthcare costs in the US are soaring at a rate that is no longer manageable or sustainable; thus, improved clinical outcomes with collaborative medicine—particularly if such outcomes come at an increased cost—will not be sustainable. The need to fund and advance applied research to demonstrate that collaborative care is operationally feasible and leads to improved clinical outcomes at no greater cost, or ideally at a medical cost offset, is at an all-time high. Over time, consumers of healthcare will begin to not only expect, but also to demand integrated and coordinated care to the extent that it is offered, they are satisfied, and that they become acculturated to this expectation. Improved health outcomes at a reasonable or even reduced cost—as in the case example of J.C.—will be icing on the cake.

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# Chapter 34

## Pediatric Burns: They Are Not Always What They Appear

Barry Nierenberg

Recent reports have indicated that in the USA alone there are approximately two million burn injuries every year, resulting in 70,000 inpatient admissions involving over 30,000 children. Estimates are that between 1,000 and 5,000 deaths per year are related to burns in children. Along with the elderly, children have the highest rates of death from thermal injuries.<sup>1</sup>

Fortunately, medical treatment has advanced over the years and it is now widely acknowledged that achieving a good clinical outcome in a patient with significant burn injuries is achievable. However, this requires early and accurate diagnosis followed by a program involving aggressive treatment. This learning came from long clinical observations that once burn injuries are allowed to progress into fixed deformities they can be difficult, challenging and expensive to treat, frequently resulting in permanent limitations in both form and function. Both inpatient and outpatient rehabilitation is now considered necessary since together they have proven to play a significant role in achieving acceptable outcomes for both adult and pediatric burn patients. Burn scars pose a problem in either functional loss or cosmesis since they frequently result in thick keloid formation on the skin and often need surgical evaluation. Even with aggressive treatment, this evaluation often leads to required reconstructive surgical intervention aimed at either restoring lost anatomic structures such as the ears, eyelids and nose or increased range of motion.<sup>1</sup>

Pain, anxiety and itching have been reported as common problems for pediatric burn survivors. In recent years, there has been a consistent trend to utilizing stronger pain and anxiolytic medications in children and adolescents surviving burn injuries, most notably benzodiazepines for anxiety and opiates for pain. One study<sup>2</sup> showed the use of acetaminophen alone in this population steadily decreasing from 50.6% of patients in 1993–1994 to only 7.3% in 2001, while the use of opiates increased from 44.8% in 1993–1994 to 81.3% of patients in 2001. Likewise, the use of benzodiazepines increased from 59.8% in 1998 to 77.5% of patients in 2001.

Although one would assume that pediatric and adolescent burn survivors would face significant long-term psychosocial difficulties due to their trauma, several studies have demonstrated that premorbid family adjustment is the best predictor. In one study,<sup>3</sup> the authors found that most dimensions of quality of life and psychological adjustment in this population were normal. Good family relationships and

younger age at burn injury were the only significant predictors of good quality of life and overall psychological adjustment was best predicted by family relationships. These authors concluded that assuming optimal burn care, most pediatric survivors go on to demonstrate an excellent quality of life. They stress, however, that given their findings, families with dysfunctional relationships and older pediatric patients at the time of injury need to be identified early, followed closely and offered psychosocial support as soon as dysfunctional family dynamics are detected. The importance of a focus on the family of pediatric burn survivors is found in the conclusions of another study.<sup>4</sup> Utilizing a number of indicators of child behavior applied to this population, they concluded that work with the family to “promote cohesion, decrease conflict, enhance stability and promote expectation of positive achievement must be a part of the rehabilitation of the burned child.”<sup>4(p425)</sup>

Many of the children presenting to hospitals with significant burn injuries are victims of abuse. The typical presentation here is a young child under 5 years old presenting with a scald injury and with evidence of physical, psychological, nutritional and/or medical neglect. It has been estimated that approximately 15% of children seen in emergency departments owing to injury have been abused with burns, comprising 22% of the physical abuse cases.<sup>5-6</sup>

As would be expected, the costs associated with the intensive, aggressive treatment are significant. In a study of over 5,959 burn patients, it was found that the average length of stay tends to rise with age with 0–2-year-olds staying an average of 9.14 days, 2–5-year-olds staying 10.82 days and 5–20-year-olds staying 11.77 days. Total charges averaged \$21,941 for the younger group, \$28,778 for the middle-aged group and over \$32,707 for the older group. Costs per day ranged from \$2,167 to \$2,421 across the groups.<sup>7</sup> To date, there are no known studies of how psychosocial factors affect costs, but clinical experience has shown that many of the cases involving significant psychosocial factors lead to longer lengths of stay and thus more expensive treatments.

One case exemplifying many of these issues and highlighting a cross-disciplinary collaborative approach involved F.G., a 15-year-old girl presenting to the emergency room with her young-looking 36-year-old mother. Both mother and daughter had significant burns and reported their injuries stemmed from a kitchen fire. This was at a large university-based county hospital with a dedicated 20 bed burn unit. The unit is staffed with an interdisciplinary team consisting of physicians, registered nurses, occupational therapists, physical therapists, two social workers and a psychologist. All disciplines do an initial screening, share their results and then meet on a weekly basis to share progress and jointly decide on a course of action for the following week.

At the emergency room, both mother and daughter stated that a shelf above their stove had collapsed while they were cooking together, resulting in an explosion when the falling material, including a bottle of cooking oil, hit the hot stovetop. Upon hearing the shelf collapse, F.G. tried to put her head down and put up her hands. This resulted in her sustaining second degree burns on her neck, face, scalp and hands, comprising 13% total body surface area (TBSA). Her mother had second-degree burns totaling 6% TBSA on her right forearm. F.G.’s older age

together with the pattern of burns being seen as consistent with the report indicated to the team that abuse was most probably not a factor in this case.

Understandably, upon presentation to the burn unit, F.G. was started on alprazolam (Xanax) for her anxiety and dextropropoxyphene (Darvon) for pain. These doses were administered so that they would reach peak effectiveness when she did her dressing changes. She was typically minimally compliant in the occupational therapy and physical therapy sessions and was quieter than other 15-year-olds seen on the unit. Mother and daughter were able to share a room and the mother was, in the opinion of the staff, attentive to her daughter and appropriately concerned for her welfare. We learned from the mother and school records that F.G. was a below-average student at school who, in the opinion of her teachers, did not put forth much effort, preferring to spend time with her friends. Mother and daughter had immigrated to the USA from Costa Rica approximately 12 years previously and the parents were divorced. Her father had not had contact with the family in many years.

During the second week F.G. remained quiet, somewhat withdrawn, and minimally cooperative in all her therapies. The psychologist found her to be depressed and suffering from PTSD. The team put in a consult to the psychiatry unit to explore the possibility of adding further psychoactive medications and she was subsequently placed on sertraline (Zoloft), 150 mg. The mother was discharged from the burn unit that week and continued to visit daily.

For the next 7 weeks, F.G. continued to make minimal progress in spite of what appeared to be adequate pain control and the institution of a behaviorally based system of rewards and praise from the staff. Finally, the decision was reached by the team that she had made as much progress as she was able on the burn unit and the decision was made to transfer her to the hospital's pediatric rehabilitation unit for further occupational therapy, physical therapy, psychology and social work intervention. It is interesting to note that the psychologist following her on the burn unit also served the pediatric rehabilitation team, so some continuity of care was possible.

A similar interdisciplinary team approach was used on the rehabilitation unit. Within the first week, a meeting was held between the team and the mother to share results and come up with a joint plan. The mother was cooperative and shared that she "just wanted her baby to get better." During the second week, F.G. was having trouble sleeping and things being a bit slow on the unit, the night nurse spent some time at her bedside. During their talk F.G. shared that the story she and her mother told regarding the fire was fabricated. At the nurse's urging, she reluctantly told her version of events.

It seems that approximately 2 years prior to the accident, the mother had begun dating a 24-year-old man. After 8 or 9 months, the mother reportedly began to feel her boyfriend was beginning to lose interest in her. She came up with a plan to invite her then 13-year-old daughter to join them in their sexual activities, which she did. Once this had occurred, F.G. reported that the boyfriend began to pay more attention to her than her mother. The mother then forbade F.G. to see him but he would reportedly pick F.G. up after school and they would spend time together talking. Once the mother learned her daughter was disobeying her, she decided to

punish her and teach her a lesson. F.G. came home from school late one day after seeing her mother's boyfriend and was told to go into the bathroom and disrobe. F.G. complied and when her mother entered she poured gasoline over her daughter's head and lit a match. Her own burns occurred when the resulting flames hit her arm. She then washed her daughter in the bathtub and they went to the hospital.

The night nurse reported this and the team had an emergency meeting early the next morning. At F.G.'s urging the boyfriend was contacted to corroborate the story. He was incarcerated for unrelated charges and confirmed F.G.'s story. The mother was jailed and subsequently convicted. At her trial, the mother testified it was not her intent to permanently hurt her daughter. The mother reported F.G. had beautiful hair and she thought that the gasoline would burn off the hair leaving her face intact.

After F.G. had told her story, the team supported her and she began to make better progress in her occupational and physical therapy. She was discharged after 8 weeks and placed in a group home, where she went on to finish high school and received vocational training. She remained in outpatient psychotherapy on and off for the next 4 years and is currently living on her own.

In terms of the Three World view,<sup>8</sup> clinically what the case represents is a successful interdisciplinary approach. It was only through the joint efforts of each of the disciplines that F.G. was able to finally share what was happening to her and then successfully complete her therapies. There are two critical points to be emphasized here. One is the initial presentation is not necessarily all that is driving the problem. The second point that follows from the first is that sometimes the psychologist's role is a subtle one, influencing the team to think and tease out the psychological story. Also in retrospect, it may be that the length of stay in the burn unit may have been influenced by the patient not being ready to tell the story. Whether anything could have changed that is, of course, unknown.

In the administrative sphere, the hospital supported time for the disciplines to meet and coordinate care for the betterment of the patient. Finally, financially, the hospital was able to bill for team meetings and once F.G. was able to share the actual story of what happened she was able to make the progress that she was unable to make previously. This arguably resulted in her facing less expensive surgical revisions after discharge. This case highlights the positive results of an interdisciplinary approach where there are shared common goals, high cooperation across disciplines and a great deal of respectful communication. No one doubted the story because it came from a night nurse who was a licensed practical nurse—all team members are valued and this contributes to better patient outcomes.

A final comment in the administrative sphere is that it was seen in this setting that there was value in supporting a psychologist as a full member of the team.

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## **Chapter 35**

# **A Man with Chronic Back Pain and Panic Attacks: A Collaborative Multisystem Intervention**

**Jose Bayona**

Mr. Santos is a 55-year-old Hispanic man who made an appointment with our clinic looking to get treatment for his chronic back pain. This was his first appointment with us.

The clinic's nurse welcomed him and proceeded to take his vital signs. Mr. Santos appeared to be in no pain but walked slowly. He seemed calm and quiet. The nurse placed the patient in the physician's office after taking the vitals signs.

The physician's office was designed to have a small living room area with a small sofa, a center table, two chairs, and two green plants. This space was called the interview room. The routine of this practice is to place the patients in the interview room, where the initial conversation between the patient and physician takes place, and, if necessary, move to any of the two adjacent examining rooms for a physical examination.<sup>1</sup> These rooms were accessible through doors connecting with the interview room. This setting has been shown to invite the patients to talk and present their concerns in a more casual and familiar language instead of utilizing or emphasizing a medical tone or language.

From my initial interview with Mr. Santos it was apparent that the patient's true concern for this visit was his impotence and dissatisfaction with the mental health service he was receiving at another facility. Mr. Santos was diagnosed with depression 2 years ago and had been treated with medication since then. He mentioned that in addition to a depressed mood he was suffering from a progressive nonfocused fear that caused him to become restless, agitated, and to possess a sense of urgency to run away without any particular purpose or goal. He was also troubled that he did not speak English. In his judgment, not speaking English impaired him from fully communicating his thoughts and feelings while in treatment for his depression. The mental health facility in which he was receiving treatment did not have translation services. Mr. Santos's daughter, Julia, became his translator during the psychiatry interviews. Julia was a 22-year-old woman living with her parents while attending a local college. He felt that his daughter's translations were not accurate, although he had no way to verify this. Mr. Santos had been experiencing impotence since he began taking medication for his depression but found no venue to convey this concern to his psychiatrist. He felt ashamed of discussing this problem with his daughter as his translator. At the end of the interview, Mr. Santos mentioned that he was aware that his back pain was related to spine osteoarthritis,

but pain had been his companion and no previous treatments had been able to help him control it. He mentioned that his pain was the main reason he was not actively seeking a job. Currently he was taking 600mg ibuprofen every 6h. His low-back pain worsened when he tried to move or lift heavy objects or work in his backyard. He added that currently his back pain was very active.

The physical evaluation revealed that Mr. Santos was in a fairly good physical health, including his vital signs, except for some low-back limited range of motion due to pain. He did not use alcohol, did not smoke cigarettes, and had no cardiovascular risk factors. Basic laboratory workup was ordered for the following visit. Emotionally, his mood and affect were adequate and he had no suicidal ideations.

At the end of our interview I presented Mr. Santos with the idea of inviting his wife to his next appointment in 2 weeks. Additionally, I told him that I work with a team of health professionals which included a counselor we call a network therapist<sup>1</sup> that helps me to be more effective for patients with problems similar to his. I asked him if he would agree to meet this person and allow her to participate in the follow-up visit. He agreed to both invitations. I briefly introduced Mr. Santos to our network therapist before we concluded the visit.

We gave the title network therapist to the position offered to a master's level social worker and family therapist. The tasks for this job are to provide individual and family therapy, and to foster collaboration among health care providers, other service providers, patients, their families or significant others, and larger community networks.

Mr. Santos and his wife, Marta, came for his follow-up visit. Our network therapist joined us as planned. We all sat in our interview room. Mr. Santos and his wife chose to sit across from each other. I asked Mr. Santos to describe his health concerns and how they have changed with time. Similarly, we asked Marta, his wife, to describe Mr. Santos's health and how this has changed with time. Their stories detailed Mr. Santos's progression into deep sadness initiated 5 year ago after of his older son died in a car accident. His sadness grew deeper when the couple moved from their country of origin to the USA 4 year ago and he started to experience episodes of agitation, sweating, and impulses to run away. He had several episodes before his family took him to a local hospital emergency room. From the emergency room he was referred to a local community mental health unit, where he was diagnosed and treated for depression and panics attacks. Mr. Santos mentioned that he was afraid to travel by any means, but particularly airplanes, which made him very anxious and agitated. He explained that this was the reason why he had not returned to his country of origin to visit with his family and friends. Marta revealed that she was angry with her husband because after leaving her country she had not been able to return to visit her family. Additionally, she felt that she could not leave her husband alone and travel to her country by herself. Other issues and conflicts were revealed during the meeting. At the end of the interview Mr. Santos mentioned his difficulties with his impotency, and Marta immediately commented that she thought he did not like her as a woman anymore. None of these issues were discussed during the individual treatment sessions with the psychiatrist.

I mentioned that impotence could be related to the medication for depression. Mr. Santos requested that I changed his prescription immediately. I responded that first I would prefer to develop an understanding from his psychiatrist and how we would work together to help him more effectively. Since Mr. Santos was planning to continue his care with his psychiatrist, I suggested that a third interview would be needed to learn the professional's perspective. Our network therapist informed Mr. Santos that she would contact his psychiatrist to coordinate a meeting among all as soon as possible. He and his wife agreed with this plan. He gave us permission to contact his psychiatrist on his behalf and signed a consent form. Additionally, an invitation was extended to Mr. Santos and his wife to have a couple's session with the network therapist to follow up on some of the concerns they had mentioned in the meeting. They thought that was a good idea and accepted this invitation.

The network therapist contacted Mr. Santos's psychiatrist and invited him to participate in a meeting to coordinate his healthcare. She mentioned that Mr. Santos made a request in our clinic for having his depression medication changed. Additionally, she mentioned he and his wife would undergo couple's therapy with her to work on some conflicts they want to resolve. Finally, the psychiatrist was informed that Mr. Santos was planning to continue his care in both clinics and had given us permission to contact him. The psychiatrist politely replied that he did not see any need to attend a meeting to coordinate the patient's healthcare although he recognized its importance. He committed to forward the request and delegate the coordination task to Mr. Santos's case manager, who was a Hispanic social worker in their clinic.

One month later Mr. Santos and his wife came for a third visit. We all met in an interview room. This time Mr. Santos and his wife sat together. Mr. Santos's case manager from the community mental health clinic, our network therapist, and I attended the meeting. The network therapist initiated the dialogue, asking each person to express his or her views of the current patient problems with particular emphasis on the role that each person could play to help, including Mr. Santos. A plan was proposed by which all psychiatric medications and side effects management would be administered at the mental health clinic. The plan included Mr. Santos continuing individual treatment with the psychiatrist and his bilingual case manager serving as his translator instead of his daughter. All agreed that we would provide general healthcare to the patient, including evaluation and treatment for his lower-back pain. It was also agreed that additional assessment for the apparent couple's conflicts would be explored in our practice during conjoined interviews with the network therapist.

The couple came for one additional session with the network therapist and did not return to the clinic for another 10 months.

Ten months later Mr. Santos and his wife came back to the clinic. I asked what had happened for him to miss the last appointment and not to have returned to the clinic in 10 months. Mr. Santos replied, with a touch of a smile, that he and his wife took time to visit friends and families in his country of origin. Marta mentioned that



her couple's sessions with our network therapist had helped them to better understand each other and openly share their emotions and thoughts. Additionally, she mentioned that Mr. Santos's chronic back pain had improved significantly, allowing him to be more "alive" again. He had not taken any medication for his back pain for several months. Sexually, he was functioning well again. Mr. Santos mentioned that the couple were thinking of moving back to their country of origin once he found a new job and saved some money. I inquired about his fear of traveling in an airplane, to which he replied, "Fears no more."

This was the last time we saw Mr. Santos and his wife.

There are several lessons we learned from providing care to Mr. Santos. First, it is helpful to make no distinctions between physical symptoms and behavioral/mental symptoms, but to work with a patient from a body/mind integration perspective. Second, many if not all symptoms have a contextual context, which is critical to understand as part of making a working diagnosis and treatment plan. Third, coordinating care with other systems, as in Mr. Santos's situation, is critical to effectively help patients like him. Frequently, patients receive services from multiple health providers and each of them approaches the health problem from a unique and narrow perspective. These narrow multiple perspectives might add confusion or leave out important information needed to effectively help the patient. This is true for patients with all kinds of health problems, independent of mental health problems. Finally, we learned the importance of people having their stories heard.<sup>2</sup> This means listening to what the story is about, how it is told and why it matters.<sup>3</sup> Equally important is the need for significant others and/or members of what we call the symptoms/problem complex to listen to these stories. Not only listening to the stories but being able to be touched by them and to respond accordingly. This situation became evident when Marta became aware of her husband's shame owing to his impotence and why he did not respond to her sexually.

We learned from Mr. Santos and his wife about the role of grief in their lives. Similarly, how migration and family isolation were affecting them. We learned the importance of communication in the primary language of the person and how difficult and potentially diminishing it is to live in a country with no knowledge of the mainstream language.

From the point of view of the Three Worlds model, a simple but significant collaboration and coordination of care made a noteworthy difference in the outcome of Mr. Santos's conditions. I can see that without it, Mr. Santos's condition would be managed as out of context and parallel conditions which could have prolonged his care and cost more if a resolution was not achieved.

In this case sickness was best regarded as a semantic network interrelating cognitive categories, personal experiences, physiologic states, and social relationships<sup>4</sup> that could better be approached collaboratively. This is different from utilizing a strictly biomedically oriented service, which strive primarily to cure illness,<sup>5-7</sup> an approach that often causes frustration both to patients and providers.<sup>8</sup>

I am glad Mr. Santos allowed us to serve him and learn all these important lessons.

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**Part IX**  
**Conclusion**

## **Chapter 36**

### **Summary**

**Dale Stafford and Rodger Kessler**

Writing this book has generated professional and personal experiences for us as editors. It has changed our professional relationship from referring colleagues to collaborators in care. It has pushed our practice to begin to confront the question of what does it mean for us to practice collaborative care. This question is being asked across all strata of our practice. We recently saw a patient together for a first appointment. There are considerable medical and psychological complexities to the case. At the conclusion, when we were discussing our plans, we concluded that we would both see the patient together for each visit for a multitude of reasons—a large shift for us, and portending a very different future. As a psychologist and a family physician, there have been other professional and personal conclusions to the journey that is this book. We will each share some of them; first D.S. and then R.K., before we conclude with an elaboration of some key points that we hope will be influenced by our efforts.

#### **Dale Stafford**

When I was in medical school and residency, it was hammered into us that we should not think of people as being two parts—a body and a mind. We were instructed that the person is one, whole, integrated self, with the psyche affecting the functioning and perception of bodily systems and the status of the body affecting how we function mentally. I took this to heart and am cognizant of that mind–body relationship. I look for those interactions, finding and wanting to treat anxiety and depression to make the whole person well, realizing that if the mind is not at ease there will be physical consequences—often the reasons that drive patients to see me.

So why then is the treatment system in which we work, split into two distinct systems, often invisible to each other? I may be able to identify that psychological dimensions are influencing or sometimes causing the symptoms that are concerning to patients, but because of my limited training, or lack of time, I have been ineffective in providing the care that the patient needs. When I am able to direct a patient into the behavioral health system it is often akin to sending the patient into a black hole.

I hope the patient will obtain the treatment needed, perhaps complementary to my prescribing, but because of the complete lack of communication from the mental health side, I often never know how, or if, help is ultimately provided

The reason I am so enthusiastic about collaborative care is that I can see how this lack of communication prevents the patient from obtaining full, coordinated treatment. This absence of collaboration is one reason why so many patients are prescribed drugs, yet are never completely treated. It is often why patients and families have dissatisfaction with and criticism of the medical system's treatment of behavioral health. While I have long been aware how this lack of coordination has adversely affected patients with behavioral health problems, it has only recently become clear to me that the same scenario exists for patients with chronic medical disease. Here, psychological function can suffer, leaving their overall medical care incomplete if it is not attended to. The cases we have read in preparing this book are like little bright lights in the darkness. They have been excellent examples of clinical thinking and practice, provide an enticing and exciting signal that collaborative care is not only possible, but it is happening, while treating really difficult cases successfully. I have been amazed at reading scenarios all too familiar to me—ones that have stumped and frustrated me, problems that have left me feeling helpless—but then read the successes generated by collaborative thinking and practice. Many of these cases would have been failures in a noncollaborative form of care. There is just no way to optimally treat these in parallel systems. Part of my clinical life is taking care of patients in the hospital. I was so impressed with Grenier and Chomienne's contribution of the woman hospitalized with the cough, receiving successful collaborative hospital care and then moving in a seamless transition to outpatient care. I cannot help thinking how such efforts, if commonplace, could shorten lengths of hospital admissions and the rates of readmissions. It highlights, for me, how incomplete and shortsighted our hospital care often is.

At the same time, reading the cases has been equally frustrating and discouraging. Knowing now what is possible, I feel an impatience to have those systems available to me, right now. Yet, I realize the many financial, administrative, philosophical and political barriers to designing and implementing them. Reviewing what we have been able to accomplish in our own practice excites me, but I recognize that every step has required time- and energy-consuming efforts.

Many of the cases discussed in this volume are the types of cases that make physicians groan or feel sick when we see them on our schedule—back pain, pelvic pain, headaches, nonorganic functional problems, among others. Such patients frustrate us; leave us feeling helpless, inadequate, or worse. We expend emotional energy and valuable time, and feel like we get nowhere. They keep coming back and we keep not helping them. Then I read the success of these cases and feel inspired and hopeful. I want more physicians—both medical and psychiatric—psychologists, administrators and teachers to read these cases. I cannot help but feel that they will be swayed as I was, and that the outcome will be the rapid growth of collaborative systems of care. Collaborative care needs to be the rule, not the exception.

## Rodger Kessler

As a psychologist I have been very lucky. I have had opportunities to work in medicine that have allowed me to think and learn and practice in ways that my training just did not prepare me for. I have a colleague in D.S. who has been open to my stumbling around, learning on the fly, and who has been open to mutually exploring ideas of patient care and medical-psychological collaboration that were not part of his training either. I work in a system that is more and more interested in the compelling nature of our efforts. There is also interest in the data that suggest we can significantly improve patient care in a resource- and cost-respectful fashion, while respecting how primary care practices, and not causing too much trouble in doing so. I continue to be more and more tolerated. Therein is the rub.

Historically, my presence in medicine has been a great example of D.S.'s earlier point—there are different distinct medical and behavioral health systems at every turn. Clinically, at the beginning, new language and behavior needed to be learned. When a physician asked me to be of assistance with a patient, I focused on a psychological description that was elegant, but did not help the physician one bit. I had to learn different ways of describing what I thought and what I did. When I got a referral for a patient with depression or substance abuse, and I asked what my colleagues would like me to do to assist their care of the patient. They had to learn to tell me about compliance or noncompliance, or too many visits for problems that did not appear to be associated with any physical findings.

A number of years ago, the PRIME MD, a method and measure for identifying psychiatric diagnoses of patients seen by primary care physicians, became available. It was seen as a great advance to identifying behavioral comorbidities in primary care, taking only 8–15 min or so of physician time to administer, resulting in a valid psychiatric diagnosis. I was sure that my colleagues would jump at the opportunity. When discussing the initiative, one of my colleagues, Lise Kowalski, responded, “Let me get this straight. You are suggesting that we spend the better part of the 15-min appointment asking questions about something that most patients were not there to discuss, leaving precious little time to get to the issues that brought the patient into the room?” I understood her point. The issue of time for screening for behavioral comorbidities remains a vexing problem in our practice to this day.

Financially, there is no model of having a psychologist in a medical office. Dedicating space for that purpose results in a significant decrease in income generated by the space. Insurers and financiers do not make distinctions between psychology in medicine and psychology in other sites. Even if I provide services to a patient with a medical issue and a medical diagnosis, we are expected to use psychiatric diagnosis and codes and be reimbursed for the same services and at the same rates as for a psychotherapy service in the community setting. Those services are frequently paid 50–60% of Medicare rates. There has been no incentive to generate outcome and cost data to evaluate whether there is clinical and financial effectiveness to collaborative or integrated models of care, because there are different medical

and behavioral health budgets and expense targets. The impact of psychology services on medical costs therefore makes no difference. Thus, outside of limited centers of academic research, there has been no system of comparing the medical and psychological clinical and cost data.

Administratively, systems are distinct and separate. In our practice setting, behavioral health is not even part of family medicine organizationally, but rather is contracted from a different department. Recording and filing of notes and assessments are different functions, with behavioral health's systems being manual and medicine's being electronic. Scheduling joint appointments between R.K. and D.S. to see patients together has been a chore and requires assistance to make it work. Everyone agrees that implementing an electronic system to screen for the presence of behavioral health related issues and providing the physician with the resulting data prior to his or her going into the room with the patient is a valuable, time-efficient method. However, after 5 years of effort, we are just now embarking on a funded 3-year project for systematic implementation.

It has been an effort to move from the tolerated to the integrated. I suspect that most of the psychologist and mental health clinician authors writing in this book would agree. Surely, though, the publication of this book, with its ideas and its cases, is a demonstration that there is reason and movement in that direction. At least in pockets, there are a variety of efforts towards collaborative care, allowing patients to have access to care not previously available. Why? It is simple really—complexity has become fashionable.

As has been suggested, psychology and substance abuse services have been largely irrelevant to medical practice for a number of reasons. Clinically, if such a problem is identified, it has become reasonably easy to treat most behavioral health problems with medication which can be prescribed by most primary care physicians. If the medication is not helpful or is rapidly discontinued, the physician may not know about that for an extended time. If specialty psychiatric care is needed, often there is little availability and if it is arranged, there is often little feedback about what was done. If there is feedback, it is usually given in a way that provided little use in the everyday care provided in primary care. If counseling or psychotherapy is needed, there is usually minimal knowledge of practitioners since they are not often part of medical staffs, and distinctions between the various credentials of practitioners are nearly impossible to discern. Also, there is little idea what type of psychological treatment is needed, and even if that is known, there is little knowledge of which practitioner does what. Even if they are referred, patients often do not go. If they do go, the physician rarely receives communication from the treating clinician about what was done and with what outcome, let alone any attempt at coordination of care.

Administratively, insurance companies have been satisfied to set aside a fixed amount of money for behavioral health services and leave it to their contracted behavioral health management company to share it out. Any questions about what was done, by whom, with what outcomes, are once again not relevant because the only focus is managing the expense of care. Innovation or improved care of medical patients is not a primary focus. What passes for coordination of care is having a

patient sign a form that says the clinician can talk to the doctor. Sometimes, the clinician signs a form that says there is communication with the doctor. If those bureaucratic tasks are done then all is well, if meaningless. That is what administratively passes for collaborative medical-psychological care in most venues, in sharp contrast to the efforts described in this volume.

In the midst of this all, insurers and medical practices have begun to notice that a significant group of patients had multiple health issues that were complex, had inadequate outcomes and cost a lot more than other patients. Thus, over the last few years there has been greater concentration on difficult to manage, expensive patients, and an increased focus on managing their care with guidelines, models, registries, practice reengineering efforts and other administrative/clinical interventions. And, of course, the funding sources and administrators who are involved in those efforts are so busy with their tasks that they surely do not have the time to even think about whether behavioral health has a part in those efforts, and the physicians and medical practices involved in the projects are busy enough dealing with the initiatives that have been prescribed for them. Besides, as a senior state health administrator involved with chronic care management recently commented, including behavioral health in the conversation is just too difficult.

However, something interesting has emerged. The literature cited in Chap. 2 has created awareness that these complex patients who have generated such a huge response from researchers, administrators and financial agents are frequently patients with behavioral health comorbidities. There is also the acknowledgement that patients who have medical-psychological comorbidities cost a huge amount more. Further, there appears to be evidence that use of evidence-based behavioral health treatments in medicine, delivered within a collaborative framework, is successful. It improves medical and psychological outcomes, treats difficult and complex cases more effectively, and often reduces medical costs. Therefore, there is an increasing awareness that there is a need for effective collaborative medical-behavioral care, and the cases in this book illustrate that complexity is best responded to with collaboration.

There are a number of additional points we would like to make from our review of this book. Collaborative care will not further develop because it is the right thing to do. At this point in its development, the efforts have been enhanced as much by the presence of bright, creative champions in the sites described in this volume as they were by systems developments that have created these opportunities. The champions are the primary drivers. While that is fortunate for us as editors, it is a necessary, but not sufficient, part of systematic growth. Peeks' Three Worlds chapter was theoretical at the beginning of this book. As we conclude the volume, it is an accurate, clear representation of the factors that enhance or detract from collaboration. When there is greater involvement and dialogue across the three worlds, the greater the opportunity for and scope of collaboration. In many ways, the clinical parts of this are easiest because they have had the focus of attention.

No less important is the administrative reengineering of organizational processes to optimize patient access to and receipt of care within a medical system designed to make that happen efficiently and effectively. Certainly, it is no accident the majority



of cases in this volume are in settings in which there is financial flexibility for billing and payment, such as in Federally Qualified Health Centers, or are in academic centers, where such exploration is considered part of the mission. The elephant in the room is the lack of a coherent financial model that incentivizes medical and behavioral health collaboration. Equally, we cannot expect that to happen until there are systems in place that allow us to evaluate whether screening increases identification or entrance into treatment or whether it generates changes in physician behavior. We need to develop methods of measuring changes in physician time and effort as a result of collaboration. Also, regular collection and comparison of outcome and cost data is requisite in this day and age, to identify the financial advantages and opportunities of such radical changes in health care delivery.

For a while, at least, we will have to accept the presence of two health care systems. The first is a separate medical and mental health model, and the other is a system of care within which there are not those separations. We still need to determine the priorities for primary care-behavioral health collaboration. It is not, and should not be, a substitute for the specialty behavioral health system. Both models though should be able to define their roles and develop ways of relating to each other that promote better patient care.

Our educational starting points and opportunities concerning the issues raised by this book are poor. Physicians need to know, and often do not know, about behavioral health practices that evidence suggests as effective as part of collaborative care of specific medical problems. In addition to effective practices, they need to be able to identify the difference in practitioners. Who can do what? We would never consider sending a patient who needs colon surgery to a vascular surgeon. We need to have that same degree of specificity when we request the involvement of a behavioral health practitioner. Conversely, there needs to be reeducation available in behavioral health. Practitioners need to know how to talk to physicians, know how they operate and know what they need. We need behavioral health collaborators and consultants, just like ones in medicine. Independent, isolated behavioral health practice has its place, but that place is not practicing in medicine. Every primary care meeting needs to include regular education in elements of collaboration with behavioral health and every behavioral health meeting needs to include education concerning the elements of working in medicine. We hope that all students preparing for their careers in medicine—whether physician, psychologist or other practitioner—have the opportunity to familiarize themselves with the potential outlined in this book, so they can select rotations, internships and residencies that emphasize collaboration.

We have presented a broad range of clinical cases from a broad range of clinical settings. The types and degrees of collaboration are quite varied. We recognize that we cannot generalize because of the variation. As is obvious, there are various models and approaches to collaborative care and we make no suggestion that any are better than any others. Rather, what has been presented are the best creative efforts of the clinicians who have been involved in these cases. Certain sites have different tolerances for different levels of collaboration. The unifying dimension is the belief and the demonstration that medical-behavioral collaboration improves

care in efficient ways. We hope that his volume and these cases might be the catalyst for more creative efforts. We hope that if the right people in the right places read the volume, then these isolated efforts can become the standard of care for all of our patients.

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