ETHIOPIA BEMONC

BASIC EMERGENCY OBSTETRIC & NEWBORN CARE (BEmONC)

LRP

Trainer's Guide

Federal Democratic Republic of Ethiopia
Ministry of Health
August, 2014

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Foreword

Ethiopia strives to attain a reduction in maternal deaths in line with the indicator set in the Millennium Development Goal #5 and has shown substantial reduction in child mortality. Ethiopia has formulated and issued strong policies, strategies and guidelines for implementation of programs related to maternal and child health, including the Health Sector Development Program (HSDP) and the Five Year National Growth and Transformation Plan (2010/11 – 2014/15).

The Federal Ministry of Health (FMOH) developed and launched the 20-year rolling Health Sector Development Program (HSDP), which has currently reached its fourth stage—HSDP IV—with some of the prime priorities being maternal health, neonatal and child health. With the implementation of the Civil Service Reform Program, considerable achievement has been made in transforming customer-based care throughout the health system. The FMOH has undertaken initiatives for measures to reduce maternal mortality through the provision of clean and safe delivery at the Health Extension Program (HEP) level, skilled delivery and emergency obstetric care at the facility level, and family planning at all levels of the health care system.

To assure uniform high quality maternal and newborn health service provision in the country, the Federal Ministry of Health recognized the need for a standardized Basic Emergency Obstetric and Newborn Care(BEmONC) training, based on a standard training curriculum and training materials, grounded in the objective realities in the country. This BEmONC Training package can be used uniformly by all Maternal and Child Health stakeholders involved in training of health workers; the training package is meant to serve as a standard guide and resource both for pre-service and in-service trainings of health professionals on BEmONC.

The Federal Ministry of Health would like to extend its compliments to those individuals and organizations that have expended their precious time and resources for the realization of this training package.

Acronyms

AMDD	Averting Maternal Death and Disability
AMTSL	Active Management of Third Stage of Labor
ANC	Ante Natal Care
APH	Ante Partum Hemorhage
ART	Anti Retroviral Therapy
ARV	Anti Retro Viral
BEmONC	Basic Emergency Obstetric & Newborn Care
CBT	Competency-based training
CCT	Controlled Cord Traction
CEmONC	Comprehensive Emergency Obstetric & Newborn Care
CPD	Cephalo Pelvic Disproportion
C/S	Cesarean Section
EDD	Expected Date of Delivery
EDHS	Ethiopian Demographic Health Survey
EOC	Emergency Obstetric Care
EmONC	Emergency Obstetric & Newborn Care
FANC	Focused antenatal care
FGC	Female Genital Cutting
FHB	Fetal Heart Beat
FP	Family Planning
GA	Gestational Age
GBV	Gender Based Violence
HELLP	Haemolysis Elevated Liver enzymes and Low Platelets
HLD	High Level Disinfection
HTC	HIV Testing and Counseling
ICPD	International Conference on Population and Development
IM	Intra Muscular
IMPAC	Integrated Management of Pregnancy and Childbirth
IMNCI	Integrated Management of Newborn and Childhood Illnessess
IP	InfectionPrevention

ITN	Insecticide Treated (bed) Nets
IUCD	Intra Uterine Contraceptive Device
IUGR	Intra Uterine Growth Restriction
IV	Intra Venous
KMC	Kangaroo Mother Care
LAM	Lactational Amenorrhoea Method
LBW	Low Birth Weight
LNMP	Last Normal Monthly Period
LRP	Learning Resource Package
MDG	Millennium Development Goal
MVA	Manual Vacuum Aspiration
PID	Pelvic Inflammatory Disease
POC	Products Of Conception
PPH	Post Partum Hemorhage
PS	Patient Safety
SBA	Skilled Birth Attendant
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TOT	Training Of Trainers
TT	Tetanus Toxoid
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VAW	Violence Against Women
WHO	World Health Organization

Acknowledgement

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Members of the technical working group that made major contributions to the development of this Basic Emergency Obstetric and Newborn Care Training Package

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APPROVAL STATEMENT OF THE MINISTRY

The Federal Ministry of health of Ethiopia has been working towards standardization and institutionalization of in-service (IST) trainings at national level. As part of this initiative the ministry developed a national in-service training directive and implementation guide for the health sector. The directive requires all in-service training materials fulfill the standards set in the implementation Guide to ensure the quality of in-service training materials. Accordingly, the ministry reviews and approves existing training materials based on the IST standardization checklist annexed on the IST implementation guide.

As part of the national IST quality control process, this Basic Emergency Obstetric and Neonatal Care (BEmONC) IST package has been reviewed based on the standardization checklist and approved by the ministry in August 2014.

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PREFACE

Most pregnancies and births are uneventful with good maternal and perinatal outcome, however, approximately 15% of all pregnant women develop potentially life-threatening complications that call for skilled care and some will require a major obstetrical intervention to survive. This training manual is a component of the **Basic Emergency Obstetric and Newborn Care (BEmONC)** learning resource package (LRP) prepared for use in Ethiopia in in-service training of doctors, midwives, health officers and/or nurses with midwifery skills who, as team members, will provide Basic Emergency Obstetric and Newborn Care (BEmONC) at health centers and district hospitals to avert maternal and newborn mortality & morbidity. Although the learning resource package is developed primarily for use in district hospital and health centers, it can also be used by the same mid level health care providers in higher level facilities to provide initial care and until consultation.

Components of the learning resource package are: ***Training manual, Facilitator's guide, Participant's Guide, power point presentations, technical videos and other relevant resources.*** There are five modules in the package and each module describes the learning objectives, learning outlines, learning materials and assessment tools. Module one is introduction to maternal and newborn health, module two on rapid initial assessment and emergency management; module three on care during pregnancy; module four on care during labor and child birth and module five on post partum maternal and newborn care. Modules 3-5 start with basic care and then cover care for life-threatening obstetric emergencies and newborn problems following a symptom-based approach.

The training manual contains updated and summarized essential technical information from the relevant references and is intended to be used as the reference manual by both the facilitators and participants. The facilitator's hand book has two parts; guide for TOT and facilitator's guide. The guide for TOT part has a 6 days curriculum for training of facilitators and programmers. The facilitator's guide part contains the course out lines, learning guides and checklists, exercises, role plays and answer keys for each module and will guide how to facilitate the training. The participant handout is intended primarily to serve for the participant and contains, learning guides and checklists, exercises, role plays and answer keys of each module.

This training is intended to be completed over three weeks period with 8 days classroom theoretical sessions & practice on model and 10 days of clinical practice in selected health facilities.

TRAINING

IN

EMERGENCY OBSTETRIC CARE

COURSE INTRODUCTION

Course Overview

The Safe Motherhood Initiative, launched in 1987, has greatly increased the attention given to the problem of maternal morbidity and has helped to improve care for pregnant women. At the same time, child survival programs have helped reduce overall infant mortality, including mortality during the newborn period. Despite these efforts, however, maternal and newborn mortality and morbidity, and stillbirth rates have remained high. Maternal and newborn morbidity and mortality in Africa remains at an unacceptably tragic level. A woman in Africa has a 1 in 16 risk of dying due to complications of pregnancy, childbirth, or the postpartum. Globally, it is estimated that 34 out of every 1000 newborns will die before it reaches one month of life.

Although most pregnancies and births are uneventful, approximately 15% of all pregnant women develop a potentially life-threatening complication that calls for skilled care and some require a major obstetrical intervention to survive. The main causes of maternal death and disability are complications arising from hemorrhage, unsafe abortion, eclampsia, sepsis and obstructed labor. This training course is, therefore, designed to train doctors, midwives, health officers and/or nurses with midwifery skills who, as team members, will provide basic EmONC at district hospitals to avert maternal death and disability.

The course follows a symptom-based approach to the management of life-threatening obstetric emergencies, as described in the reference manual recommended for the course (see *Components of the Emergency Obstetric Care Learning Resource Package* in *Overview*). The main topics in this training course and the reference manuals (MCPC, PCPNC & MNP) are arranged by symptom (e.g., vaginal bleeding in early pregnancy is how someone with unsafe abortion will present, convulsions is how a patient with eclampsia presents, shock is how someone with severe postpartum hemorrhage presents). The emphasis in this course is on rapid assessment and decision-making and clinical action steps based on clinical assessment with limited reliance on laboratory or other tests, suitable for district hospital and health centers in low resource settings.

In addition, throughout the training course emphasis is placed on recognition of and respect for the right of women to life, health, privacy and dignity.

CORE COMPETENCIES

The skilled attendant (BEmONC trained) expected to have the following core competencies:

- **COMPETENCY IN SOCIAL, EPIDEMIOLOGIC AND CULTURAL CONTEXT OF MATERNAL AND NEWBORN HEALTH**: The skilled attendant should have knowledge about social determinants and epidemiological context of maternal and newborn health and ethics that form the basis of appropriate care

- **COMPETENCY IN PRE-PREGNANCY CARE AND FAMILY PLANNING**: The skilled attendant should provide high quality, culturally sensitive health education and family planning services in order to promote healthy family life, planned pregnancies and positive parenting.
- **COMPETENCY IN CARE AND COUNSELLING DURING PREGNANCY**: The skilled attendant should provide high quality antenatal care to maximize the woman's health during pregnancy, detect early and treat any complications which may arise and refer if specialist attention is required
- **COMPETENCY IN CARE DURING LABOR AND BIRTH**: The skilled attendant should provide high quality, culturally sensitive care during labor, conduct a clean safe delivery, give immediate care to the newborn and manage emergencies effectively to prevent maternal and neonatal mortality and morbidity
- **COMPETENCY IN POSTPARTUM CARE OF WOMEN**: The skilled attendant should provide comprehensive, high quality, culturally sensitive postpartum care for women
- **COMPETENCY IN POSTNATAL NEWBORN CARE**: The skilled attendant should provide high quality postnatal care for the newborn

COURSE DESIGN

The course builds on each participant's past knowledge and takes advantage of her/his high motivation to accomplish the learning tasks in the minimum time. Training emphasizes **doing**, not just knowing, and uses **competency-based evaluation** of performance.

Specific characteristics of this course are as follows:

- During the morning of the first day, participants demonstrate their knowledge of EmOC by completing a written **Precourse Questionnaire**.
- Classroom and clinical sessions focus on key aspects of BEmOC.
- Progress in knowledge-based learning is measured during the course using a standardized written assessment **(Midcourse Questionnaire).**
- Clinical skills training builds on the participant's previous experience relevant to EmOC. For many of the skills, participants practice first with anatomic models, using learning guides that list the key steps in performing the skills/procedures for managing obstetric emergencies. In this way, they learn the standardized skills more quickly.
- Progress in learning new skills is documented using the clinical skills learning guides.
- A clinical trainer uses competency-based skills checklists to evaluate each participant's performance.

- Clinical decision-making is learned and evaluated through case studies and simulated exercises and during clinical practice with patients.
- Appropriate interpersonal skills are learned through behavior modeling, role play and evaluation during clinical practice with patients.

Successful completion of the course is based on mastery of the knowledge and skills components, as well as satisfactory overall performance in providing care for women who experience obstetric emergencies.

EVALUATION

This clinical training course is designed to produce healthcare providers (i.e., doctors, midwives, health officers and/or nurses with midwifery skills) who are qualified to provide BEmOC, as team members, at health centers and district hospitals.

Successful completion is based on the participant's achievement in three areas:

- **Knowledge** - A score of at least 85% on the **Midcourse Questionnaire**
- **Skills** - Satisfactory performance of clinical skills for managing obstetric emergencies
- **Practice** - Demonstrated ability to provide care in the clinical setting for women who experience obstetric emergencies

The participant and the trainer share responsibility for the participant becoming qualified. The evaluation methods used in the course are described briefly below:

- **Midcourse Questionnaire**. Knowledge will be assessed at the 7th day of the course. A score of 85% or more correct indicates knowledge-based mastery of the material presented during classroom sessions. For those participants scoring less than 85% on their first attempt, the clinical trainer should review the results with the participant individually and guide her/him on using the reference manual(s) to learn the required information. Participants scoring less than 85% can take the Midcourse Questionnaire again at any time during the remainder of the course.
- **Clinical Skills**. Evaluation of clinical skills will occur with models in a simulated setting and with patients at the clinical training site. In each setting, the clinical trainer will use skills checklists to evaluate each participant as they perform the skills and procedures needed to manage obstetric emergencies and interact with patients. Case studies and clinical simulations will be used to assess problem-solving and decision-making skills. Evaluation of the interpersonal communication skills of each participant may take place at any point during this period through observation of participants during role plays. Participants should be competent in performing the steps/tasks for a particular skill or procedure in a simulated setting before undertaking supervised practice at a clinical site.

- **Clinical Practice**. It is the clinical trainer's responsibility to observe each participant's overall performance in providing BEmONC during the group-based course and during the self-directed practicum. This includes observing the participant's attitude—a critical component of quality service provision—toward women who experience obstetric emergencies and toward other members of the BEmONC team. By doing this, the clinical trainer assesses how the participant uses what s/he has learned.

COURSE SYLLABUS

Course Description

This clinical training course is designed to prepare participants to manage obstetric emergencies and work effectively as members of a BEmONC team. The course begins with an 18 days block at a designated training site and focuses on the development, application and evaluation of knowledge and skills; the first 8 days take place in the classroom and then 10 days in designated clinical sites, which should be as close to the classroom as possible.

Course Goals

- To influence in a positive way the attitudes of the participant towards team work and her/his abilities to manage and provide basic emergency obstetric and newborn care services.
- To provide the participant with the knowledge and clinical skills needed to respond appropriately to obstetric and newborn emergencies.
- To provide the participant with the decision-making skills needed to respond appropriately to obstetric and newborn emergencies
- To provide the participant with the interpersonal communication skills needed to respect the right of women to life, health, privacy and dignity

Participant Learning Objectives

By the end of the training course, the participant will be able to:

- Describe maternal and newborn morbidity and mortality in Ethiopia
- Explain the goals and activities of Basic Emergency Obstetric and Newborn Care
- Describe components of 'Woman and Family Friendly Care'
- Provide focused antenatal care including preparation of an individual birth plan
- Manage normal labor and assist birth including immediate newborn care and active management of the third stage of labor
- Demonstrate ability to recognize abnormal progress of labor, give initial management and refer if necessary
- Provide appropriate care to a woman and the newborn up to 6 hours postpartum
- Explain management of common maternal and newborn life threatening conditions during postpartum period
- Describe management of malaria in pregnancy

- Describe HIV/AIDS in pregnancy
- Provide effective and appropriate counseling in the provision of maternal/newborn care

Training/Learning Methods

- Illustrated lectures and group discussions
- Case studies
- Role plays
- Simulated practice with anatomic models
- Simulations for clinical decision-making
- Guided clinical activities (providing care and performing procedures)
- Interactive training using WHO Partograph e-learning tool
- Interactive training using the WHO Partograph e-learning tool

Learning Materials

The learning materials for the course are as follows:

- **Reference manuals:**
  - ***Management Protocol on Selected obstetrics topics,*** *Federal Democratic Republic of Ethiopia, Ministry of Health,* January 2010.
  - ***Managing Complications in Pregnancy and Childbirth:*** *A Guide for Midwives and Doctors* (WHO 2000)
  - ***Pregnancy, Childbirth, Postpartum and Newborn Care:*** *A guide for essential practice* (WHO 2006)
  - ***Managing Newborn Problems (Integrated management of pregnancy and childbirth):*** *a guide for doctors, nurses, and midwives* (WHO 2004)
  - ***Infection Prevention and Patient Safety:*** *Reference manual for service providers and managers in healthcare facilities of Ethiopia, Federal Minstry of Health, Ethiopia, 2011* ***Guidelines For Prevention of Mother-to-Child Transmission of HIV In Ethiopia:*** *(Federal HIV/AIDS Prevention and Control Office Federal Ministry of Health), 2007*

- ***Other resources:***
  - ***Malaria Diagnosis And Treatment Guidelines For Health Workers In Ethiopia –*** *2nd edition, July 2004* (The Federal Ministry of Health)

- ***Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia:*** Federal Ministry of Health; June 2006
- ***(Almost) Everything You Want to Know about Using the UN Process Indicators of Emergency Obstetric Services*** **(**AMDD Workbook)
- ***Family Planning: A GLOBAL HANDBOOK FOR PROVIDERS*** (WHO), 2011
- Audiovisuals on managing complications in pregnancy and childbirth:
  - Videotapes
    - *New born resuscitation*
    - *Infection prevention*
  - Videoclips (CD**)**
    - *Labor companionship (RHL)*
    - *Breech delivery (RHL)*
    - *Vacuum extraction (RHL)*
    - *Active third stage management (RHL**)***
  - Use of Manual Vacuum Aspiration and Recommended Practices for Processing MVA Instruments (JHPIEGO Post-abortion Care Video Photoset)
- Interactive training package Partograph (WHO)

A skilled health provider is:

an accredited health professional – midwife, doctor or nurse – who has been educated and trainedto proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth andthe immediate postpartum period and in the identification, management and referral ofcomplications in women and newborns (WHO, ICM & FIGO 2004)

Participant Selection Criteria

- Participants for this course must be practicing clinicians (doctors, health officers, midwives and/or nurses with midwifery skills) who work in a hospital or health center where basic EmONC is being provided or planned.
- Participants must be actively involved in the provision of labor and childbirth care at the beginning of the course and be committed to continuing their involvement on completion of the course, including the provision of BEmONC.

- Participants preferably should be selected from health facilities capable of providing consistent institutional support for BEmONC (i.e., supplies, equipment, supervision, linkages with referral facilities, etc.).
- Participants should have the support of their supervisors or managers to achieve improved job performance after completing the course. In particular, participants should be prepared to communicate with supervisors or managers about the course and seek endorsement for training, encouragement for attendance and participation, and involvement in the transfer of new knowledge and skills to their job.

Presentation Graphics

- See appendix

Instruments and equipment:

- See the list in table

Methods of Evaluation

Participant

- Pre and Midcourse Knowledge Questionnaires
- Learning Guides and Checklists for emergency obstetric skills/procedures
- Simulations for clinical decision-making

Course

- Course evaluation (to be completed by each participant

Course Duration

- The course is composed of 8 days classroom sessions, followed by 10 days of supervised clinical practice**.**

Suggested Course Composition

- Up to 20 health professionals with mixed qualifications (5 doctors and 15 health officers, midwives and/or nurses with midwifery skills)
- Four clinical trainers (two doctors and two midwives**)**

Course schedule: See the 18 days course schedule of the training below in the table

KNOWLEDGE UPDATE AND CLINICAL SKILLS STANDARDIZATION BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE (BEmONC) - COURSE SCHEDULE (18 Days)			
DAY 1	**DAY 2**	**DAY 3**	**DAY 4**
Opening Ceremony: • Welcome & Introductions **Course Overview:** •Expectations participant/trainer • Group norms • Goals, objectives, schedule • Review of course materials **Pre-course knowledge assessment questionnaire** **Presentation and Discussion:** • Competency based training and how to use learning guides and checklists • Reduction of Maternal and Newborn Mortality in Ethiopia	**Agenda and opening activity** **Presentation and Discussion:** • Rapid initial assessment and managing emergencies: • Recognizing and managing "shock**".** **Skill demonstration:** managing shock **Illustrated lecture-discussion:** •Focused antenatal care (FANC**)** **Groupwork –** Birth preparedness & complication readiness **Skill Demonstration and practice:** Focused ANC	**Agenda and opening activity** **Video:** MVA IPAS Video **Skill Demonstration and Practice:** MVA using model, post abortion family planning counseling **Illustrated lecture-discussion:** Fever during pregnancy and labor **Illustrated lecture-discussion:** • Vaginal bleeding in later pregnancy and labor	**Agenda and opening activity** **Illustrated lecture-discussion:** best practices – care in labor **Skill Demonstration and Practice:** Assessment of woman in labor **Exercises:** Using the partograph **Video-** normal birth
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**
Presentation and Discussion: • Overview Gender based violence and Female Genital Cutting • Women friendly care. • Infection prevention **Discussion:** Review pre-course knowledge assessment questionnaire and individual & group assessment matrix **Skills revision /demonstration:** Infection prevention o Hand washing o PPE o Decontamination o Instrument handling and preparation o Sharps handling	**Role Play and discussion:** • Communicating About Complications During Pregnancy **Presentation and Discussion:** Prevention of mother to child transmission HIV (PMTCT) **Illustrated lecture-discussion:** • Vaginal bleeding in early pregnancy • Post abortion care **Case Study:** Vaginal bleeding in early pregnancy **Clinical simulation:** management of shock.	**Presentation and Discussion:** Headaches, blurred vision, convulsions, loss of consciousness, elevated BP **Case Study:** Pregnancy-induced hypertension **Skill Demonstration and practice:** Management of severe pre-eclampsia/eclampsia	**Skill Demonstration and Practice:** • Normal delivery • AMTSL • Immediate care of the newborn **CD ROM -** AMTSL **Skill practice:** Normal vaginal birth; immediate care of the newborn; AMTSL
Review of the day's activity	**Review of the day's activity**	**Review of the day's activity**	**Review of the day's activity**
Reading Assignment: module-1&2	**Reading Assignment: module-3**	**Reading Assignment: module-4**	**Reading Assignment: module-4**

BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE (BEmONC) COURSE SCHEDULE (18 Days)			
DAY 5	**DAY 6**	**DAY 7**	**DAY 8**
Agenda and opening activity Presentation, Discussion, and Videotape: Breech delivery Skill Demonstrations: Breech delivery using models Skill Practice: Participants practice breech delivery in pairs using model	Agenda and opening activity Presentation and Discussion: Vaginal bleeding after childbirth Case Studies: Vaginal bleeding after childbirth Skill Demonstrations: Bimanual compression of uterus, manual removal of placenta, aortic compression Skill Practice: Bimanual compression of uterus, manual removal of placenta using model	Agenda and opening activity Case Studies: Fever after childbirth Skill Demonstrations: Perineal repair Skill Practice: Perineal repair Skills Evaluation Using Models	Agenda and opening activity Midcourse Knowledge Assessment Questionnaire Illustrated lecture-discussion: Care of the sick newborn in post natal period Case Study: Common newborn problems Skills Evaluation Using Models
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**
Presentation and Discussion: Prolonged labor Presentation & Video: Vacuum extraction Skill Demonstrations: Vacuum extraction using models Skill Practice: Participants practice vacuum extraction in pairs using model	Presentation and Discussion: Care of the woman in the postpartum period Role Play: Post partum Care Presentation and Discussion: Fever during and after childbirth	Illustrated lecture-discussion: a) Basic newborn care b) Basic immediate postnatal care for preterm and low birth weight newborn Skill Demonstration and Practice: Newborn resuscitation	Skills Evaluation Using Models Continue Skills Evaluation Using Models Discussion: Review results of midcourse knowledge assessment questionnaire
Review of the day's activity	**Review of the day's activity**	**Review of the day's activity**	**Review of the day's activity**
Reading Assignment: module-5	**Reading Assignment: modules-5,6**	**Reading Assignment: module-6**	**Reading Assignment**: Participants who scored less than 85% on the midcourse questionnaire should study relevant sections of manual

BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE (BEmONC) (SCHEDULE 18 Days)				
DAY 9	**DAY 10**	**DAY 11**	**DAY 12**	**DAY 13**
Agenda and opening activity **Activity:** Tour of clinical facilities **Discussion:** Instructions for Clinical Practice AND ON CALL **Discussion: Review Clinical Experience Log Book**	**Agenda and opening activity** **Clinical Duty:** **Team 1: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 2: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 3: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 4: Postpartum and NB Care** • Postpartum care • Newborn	**Agenda and opening activity** **Clinical Duty:** **Team 2: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 3: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 4: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 1: Postpartum and NB Care** • Postpartum exam Newborn care	**Agenda and opening activity** **Clinical Duty:** **Team 3: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 4: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 1: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 2: Postpartum and NB Care** • Postpartum exam Newborn care	**Clinical Duty:** **Team 4: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 1: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 2: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 3: Postpartum and NB Care** • Postpartum exam Newborn care
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
Continue Skills Evaluation Using Models	**Clinical Duty Continues** **Discussion:** Lessons from clinical experience	**Clinical Duty Continues** **Clinical simulation - eclampsia**	**Clinical Duty Continues** **Discussion**: Lessons from clinical experience	**Clinical Duty Continues** **Discussion:** Lessons from clinical experience **Presentation & Discussion:** **Data collection and utilization of maternal and neonatal health service data**
Review of the day's activities	**Review of the day's activities**	**Review of the day's activities**	**Review of the day's activities**	**Review of the day's activities**
Reading Assignment: Learning Guides. Review all relevant sections training manual. Review and become familiar with Clinical Experience Log Book				

BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE (BEmONC) (SCHEDULE 18 DAYS)				
DAY 14	**DAY 15**	**DAY 16**	**DAY 17**	**DAY 18**
Clinical Duty: **Team 1: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 2: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 3: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 4: Postpartum and NB Care** • Postpartum care • Newborn	**Clinical Duty:** **Team 2: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 3: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 4: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 1: Postpartum and NB Care** • Postpartum exam Newborn care	**Clinical Duty:** **Team 3: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 4: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 1: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 2: Postpartum and NB Care** • Postpartum exam Newborn care	**Clinical Duty:** **Team 4: Emergency/High Dependency Area** • Early pregnancy bleeding • Shock • Severe PE/Eclampsia **Team 1: Admission/Labor Room** • Assessment of women in labor, use of partograph • Care of women in labor ***Team 2: Delivery Room*** • Normal delivery • Episiotomy and repair • Complicated delivery • Management of PPH • Newborn (NB) resuscitation **Team 3: Postpartum and NB Care** • Postpartum exam Newborn care	**Agenda and opening activity** **Clinical check-out with clients for any remaining participants** **Group Work:** Develop action plans **Presentations:** Action plans **Next Steps:** Log book, on-the-job learning **Course Evaluation** **Course Summary** **Closing Ceremony**
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
Clinical Duty Continues **Discussion**: Lessons from clinical experience **Discussion with Trainers:** Review individual progress with participants	**Clinical Duty Continues** **Discussion:** Lessons from clinical experience **Clinical simulation –**NB resuscitation	**Clinical Duty Continues** **Discussion:** Lessons from clinical experience	**Discussion:** Lessons from clinical experience **Discussion with Trainers:** Determine further individual learning needs of participants **Discussion:** Action plans	
Review of the day's activities	**Review of the day's activities**	**Review of the day's activities**	**Review of the day's activities**	
Reading Assignment: Review relevant sections of Manual.	**Reading Assignment: Review relevant sections of Manual.**	**Reading Assignment: Review relevant sections of Manual**	**Preparation of action plans**	

1. Time for clinical may be changed if there are clients in labor or if a clinic has specific hours of operation

2. Skill checkout can happen for participants at any point they feel ready.

3. Facilitators and participants will be on call from Day 8 of the training to take full advantage of clinical experiences.

GUIDE FOR TOT ON BEmONC

This is a training given to proficient skilled birth attendants (BSc midwives, doctors, BSc nurses and health officers) to become BEmONC trainers. The candidate trainers need to take the basic training on BEmONC as a prerequisite to take the training skills course. The training skills course focuses on essential training competencies; including planning a training course, principles of training, effective facilitation, developing and assessing competency of trainees, managing clinical practice and supporting the learner during and after training. This is done through a six-day training on training skills that involves group-based practice and feedback. Trainers then will be mentored while co-training with a master trainer.

Trainer Qualification and Requirement

Qualified trainers are required to provide quality training. A qualified BEmONC trainer is a proficient clinician with midwifery skills (midwife, doctor, health officer, or nurse) and has BEmONC TOT. The qualified BEmONC trainer has mastered the following core competencies:

- Trains healthcare providers in new BEmONC competencies, or reinforces existing ones
- Coordinates training in collaboration with other staff
- Documents and reports training activities conducted

BEST PRACTICES IN MATERNAL AND NEWBORN CARE: TECHNICAL UPDATE

COURSE SCHEDULE

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6
Opening Ceremony: • Welcome • Participant introductions and expectations **Course Overview:** • Goals, objectives, schedule • Precourse Questionnaire and group learning needs **Overview** of the national BEmONC programme **Presentation -discussion:** Approach to training	**Agenda/opening activity** **Illustrated presentation - discussion:** Maternal and Neonatal Mortality Reduction Infection Prevention **Skill demo/practice**: Infection prevention **Illustrated lecture-discussion:** GBV and FGC **Illustrated lecture-discussion:** Women-friendly Care	**Agenda/opening activity** **Role Play, Discussion and Skills Practice:** ANC **Presentation -discussion-case study:** Management of Vaginal Bleeding in Early Pregnancy, including PAC **Skill demonstration and practice:** PAC counseling and MVA	**Agenda/opening activity** **Illustrated Presentation - discussion:** Care in Labor and Childbirth, including AMTSL, Assisted Vaginal Birth, Episiotomy and Repair **Exercise:** Use of partogram **Skill demonstration and practice**: Episiotomy and Repair	**Agenda/opening activity** **Presentation -discussion:** Management of Vaginal Bleeding after Childbirth **Skill demonstration and practice**: Bimanual Compression, Manual Removal of Placenta, Aortic Compression, Repair of Laceration **Presentation -discussion:** Postpartum Care of the Mother	**Agenda/opening activity** **Illustrated Presentation - discussion:** Care of the Newborn with Problems **Skill demonstration & simulated practice:** Newborn Resuscitation
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
Presentation -discussion: Approach to training Continues **Discussion:** • Review of course materials, syllabus **Review of day's activities**	**Illustrated Presentation - discussion:** Rapid initial assesment and managing emergencies: **Recognizing and managing "shock".** **Clinical simulation :** **Presentation -discussion:** Focused Antenatal Care **Review of day's activities**	**Presentation -discussion-case study:** Management of Bleeding in Late Pregnancy **Illustrated Presentation - discussion:** Fever in Pregnancy PMTCT **Review of day's activities**	**Skill demonstration and practice:** Birth with Vacuum Extractor; AMTSL, and additional practice of Episiotomy and Repair, Newborn Assessment **Review of day's activities**	**Illustrated Presentation - discussion:** Management of Headaches, Hypertension, and Convulsions **Illustrated Presentation - discussion:** Management of Postpartum Fever **Illustrated Presentation - discussion-role play:** Immediate care of the Newborn **Review of day's activities**	**Q & A for Unanswered Questions from the Week** **Mid-course Questionnaire** **Review of questionnaire** **Closing and plans**

GUIDANCE
FOR
FACILITATORS

I. FACILITATING A BEmONC TRAINING

SECTION -1: PLANNING FOR TRAINING

Before implementing a training program, consideration must be given to the learning process, the learning environment, the preparation of teachers and classrooms, the selection and preparation of clinical sites, the availability of learning resources, the preparation of a simulated practice environment, and scheduling considerations, as outlined below.

The Learning Process

A skilled birth attendant must have the knowledge and skills essential to the provision of safe and effective pregnancy, childbirth and newborn care. It is necessary, therefore, that they participate in a learning process that facilitates the development of:

- Problem solving, critical thinking, and decision-making skills,
- Appropriate interpersonal communication skills, and
- Competency in a range of essential clinical skills for basic maternal and newborn care and for the management of common complications in pregnancy and childbirth.
- In addition, the learning process must be supported by:
    - Training programs that provide appropriate managerial and technical support,
    - Skilled classroom and clinical teachers, and
    - Teaching materials that reflect the most recent evidence based information.

Establishing a positive learning climate depends on understanding how adults learn. The teacher/trainer must have a clear understanding of what the learners need and expect. Adults who attend courses to acquire new knowledge, attitudes, and skills share the characteristics described below:

- Require learning to be **relevant**. The facilitator should offer participants learning experiences that **relate directly to their future job responsibilities**. At the beginning of the course, the objectives should be stated clearly and linked clearly to their future job performance. The facilitator should take time to explain how each learning experience relates to the successful accomplishment of the course objectives.

- Are highly **motivated** if they believe learning is relevant and will enable them to become effective healthcare providers. People bring **high levels of motivation and interest** to learning. Motivation can be increased and channelled by the clinical teacher/trainer who provides clear learning goals and objectives.
- Need **participation** and **active involvement** in the learning process. Few individuals prefer just to sit back and listen. The effective facilitator will design learning experiences that **actively involve the learners in the training process**. Examples of how the facilitator may involve participants include:
    - Allowing participants to provide input regarding schedules, activities and other events
    - Questioning and feedback
    - Brainstorming and discussions
    - Hands-on work
    - Group and individual projects
    - Classroom activities
- Desire a **variety** of learning experiences. The facilitator should use a variety of learning methods including:
    - Audiovisual aids
    - Illustrated lectures
    - Demonstrations
    - Brainstorming
    - Small group activities
    - Group discussions
    - Role plays, case studies and clinical simulations
- Desire **positive feedback**. **Participants** need to know **how they are doing**, particularly in light of the objectives and expectations of the course. Is their progress in learning clinical skills meeting the facilitators's expectations? Is their level of clinical performance meeting the standards established for the procedure? **Positive feedback provides this information.** Learning experiences should be designed to move from the known to the unknown or from simple activities to more complex ones. This progression provides positive experiences and feedback for the participant. To maintain positive feedback, the facilitator can:
    - Give verbal praise either in front of other participants or in private

- Use positive responses during questioning
- Recognize appropriate skills while coaching in a clinical setting
- Let the participants know how they are progressing toward achiving learning objectives

- Have **personal concerns**. The facilitator must recognize that many learners fear failure and embarrassment in front of their colleagues. Participants often have concerns about their ability to:
  - Fit in with the other learners
  - Get along with the facilitator
  - Understand the content of the training
  - Perform the skills being taught
- Need an **atmosphere of safety**. The facilitator should open the course with an introductory activity that will help participants feel at ease. It should communicate an atmosphere of safety so that participants do not judge one another or themselves.
- Need to be **treated as individuals**, each of whom has a unique background, experience, and learning needs. To help ensure that learners feel like individuals, the facilitator should:
  - Use participants' names as often as possible
  - Involve all participants as often as possible
  - Treat participants with respect
  - Allow participants to share information with others during classroom and clinical instruction
- Must maintain their **self-esteem**. Participants need to **maintain high self-esteem** to deal with the demands of the course. It is essential that the facilitator show respect for the learners, no matter what practices and beliefs they hold to be correct, and continually support and challenge them. This requires the facilitator to:
  - Reinforce those practices and beliefs embodied in the course content
  - Provide corrective feedback when needed, in a way that the participants can accept and use it with confidence and satisfaction
  - Provide facilitator that adds to, rather than subtracts from, their sense of competence and self-esteem
- Have **high expectations** for themselves and the participants. People tend to set **high expectations both for the facilitators and for themselves**. Strive for excellence always.

- Have **personal needs** that must be taken into consideration. All participants have **personal needs**. Taking timely breaks and providing the best possible ventilation, proper lighting, and an environment as free from distraction as possible can help to reduce tension and contribute to a positive learning atmosphere.

The Learning Environment

The learning environment should:

- incorporate an educational philosophy that encourages the development of problem-solving and critical thinking and emphasizes behaviors that respect and respond to a patient's/client's perceived needs,
- include a curriculum that reflects the essential competencies of a Skilled Birth Attendant (SBA),
- include relevant educational materials that reflect an adult learning approach,
- involve teachers who are adequately prepared to use competency-based learning methods and clinically competent to teach and serve as role models for learners,
- involve competent clinical preceptors who are able to use competency-based assessment tools,
- facilitate comprehensive, supervised clinical learning experiences that will enable the development of essential skills for basic maternal and newborn care and for the management of common complications in pregnancy and childbirth, and
- include evaluation methods that assess knowledge, skills, and attitudes.

Preparation of Classroom Facilities

Classrooms should be available for interactive presentations (e.g., illustrated lectures) and group activities. Seating in classrooms should be comfortable and lighting and ventilation adequate. At a minimum, a writing surface should be provided for each learner, and a chalkboard and/or flipchart, chalk and/or felt pens, and an overhead projector should be available in each classroom. If possible, classrooms should be within easy access of the clinical sites used for the program

Selection of Clinical Sites

Clinical sites should be assessed and selected based on the following criteria:

- **Patient/client mix and volume.** Are there sufficient patients/clients in sufficient numbers for learners to gain the clinical experience needed?

- **Equipment, supplies, and drugs.** Does the facility have the necessary equipment, supplies, and drugs, in sufficient quantities, to support the learning process?
- **Staff.** Are staff members at the site willing to accept learners and participate in the learning process? Do they use up-to-date, evidence-based practices for pregnancy, childbirth, and newborn care? Do their practices reflect the knowledge and skills described in this learning resource package (there may be a need to update their knowledge and skills)? Do they use correct infection prevention practices?
- **Transportation.** Is the site within easy access for learners and teachers? Do special transportation arrangements need to be made?
- **Other training activities.** Are there other training activities at the site that would make it difficult for learners to gain the clinical experience they need?

Availability of Learning Resources

Participants need to have access to reference materials and other learning resources for the duration of the program. Ideally, these materials and resources should be made available at a single location, and include reference manuals and other relevant printed materials; anatomic models such as a childbirth simulator, pelvic and fetal models, and a newborn resuscitation model; and supplies and equipment for practicing with the models such as gloves, drapes, etc.

Preparation of a Simulated Practice Environment

A simulated practice environment provides students with a safe environment where they can work together in small groups, watch technical videos, and practice skills with anatomic models. If a room dedicated to simulated practice is not available, a classroom or a room at a clinical practice site should be set up for this purpose.

The simulated practice environment must have the necessary supplies and equipment for the desired practice sessions. The room should be set up before participants arrive and there should be enough space and enough light for them to practice with models or participate in other planned activities. The following resources should be available:

- anatomic models,
- medical supplies such as a newborn resuscitation bag and mask, cloth sheets or drapes, cotton/gauze swabs, syringes and needles, and infection prevention supplies,
- learning materials such as the reference manuals, learning guides, and checklists,
- chairs, tables, and a place for handwashing or simulated handwashing, video cassette player and monitor, flip chart stand, paper and markers, and

- medical supplies such as a newborn resuscitation bag and mask, cloth sheets or drapes, cotton/gauze swabs, syringes and needles, and infection prevention supplies.

Scheduling Considerations

The number of participants in the program will need to be considered when scheduling classroom and clinical activities. For example, while it is possible to hold lectures for large groups of participants, clinical teaching in simulated situations and at clinical sites should be undertaken with small groups of learners. For these learning experiences, a ratio of one facilitator to four tofiveparticipants is recommended.

A schedule of activities should be developed for a particular period of time (e.g., blocks of time spent in the classroom and at clinical sites) and indicate clearly:

- where and when classroom sessions will be held and the facilitator(s) responsible for the session,
- where and when simulated clinical skills learning will take place, the responsible facilitators, and the small group composition of participants,
- where and when clinical practice will take place, the facilitators responsible, the small group composition of participants, and the transportation arrangements to and from the clinical site, and
- where and when examinations will take place and the facilitator(s) responsible.

Participant Facilitator/Preceptor Ratio

The ratio of participants to facilitators has a direct impact on the quality of learning and the ability of participants to gain the knowledge and skills required. Ratios that have lead to success in other programs are:

Classroom:

For BEmONC training, a ratio of one trainer/facilitator to four to five participants is recommended. The number of trainees needs to be 16-20 per training

- **Small group learning or discussion:** 1 facilitator for 4-5 participants (a single facilitator may oversee the work of 2–3 small groups which together have a maximum of 15–18 participants)
- **Simulated practice:** 1 facilatator to 4-5 participants who are working on models, or in a simulated setting
- **Clinical practice:** 1 facilitator or clinical preceptor for 45participants who are providing patient care.

SECTION -2: IMPLEMENTING TRAINING

2 -1: LEARNING APPROACH

Mastery Learning

The mastery learning approach assumes that all learners can master (learn) the required knowledge, attitudes or skills provided there is sufficient time and appropriate learning methods are used. The goal of mastery learning is that 100 percent of the learners will "master" the knowledge and skills on which the training is based. Mastery learning is used extensively in inservice training where the number of learners, who may be practicing clinicians, is often low. While the principles of mastery learning can be applied in preservice education, the larger number of learners presents some challenges.

Although some learners are able to acquire new knowledge or new skills immediately, others may require additional time or alternative learning methods before they are able to demonstrate mastery. Not only do people vary in their abilities to absorb new material, but individuals learn best in different ways - through written, spoken or visual means. Effective learning strategies, such as mastery learning, take these differences into account and use a variety of teaching methods.

The mastery learning approach also enables the learner to have a self-directed learning experience. This is achieved by having the teacher serve as facilitator and by changing the concept of testing and how test results are used. Moreover, the philosophy underlying the mastery learning approach is one of continual assessment of learning where the teacher regularly informs learners of their progress in learning new information and skills.

With the mastery learning approach, assessment of learning is:

- Competency-based, which means assessment is keyed to the learning objectives and emphasizes acquiring the essential skills and attitudinal concepts needed to perform a job, not just to acquiring new knowledge.
- Dynamic, because it enables learners to review continual feedback on how successful they are in meeting the course objectives.
- Less stressful, because from the outset learners, both individually and as a group, know what they are expected to learn, know where to find the information and have ample opportunity for discussion with the teacher.

Mastery learning is based on principles of adult learning. This means that learning is participatory, relevant and practical. It builds on what the learner already knows or has experienced and provides opportunities for practicing skills. Other key features of mastery learning are that it:

- uses behavior modeling,
- is competency-based, and
- incorporates humanistic learning techniques.

Behavior Modeling

Social learning theory states that when conditions are ideal, a person learns most rapidly and effectively from watching someone perform (model) a skill or activity. For modeling to be successful, however, the teacher must clearly demonstrate the skill or activity so that learners have a clear picture of the performance expected of them.

Behavior modeling, or observational learning, takes place in three stages. In the first stage, **skill acquisition**, the learner sees others perform the procedure and acquires a mental picture of the required steps. Once the mental image is acquired, the learner attempts to perform the procedure, usually with supervision. Next, the learner practices until **skill competency** is achieved and s/he feels confident performing the procedure. The final stage, **skill proficiency,** occurs with repeated practice over time.

Skill Acquisition	Knows the steps and their sequence (if necessary) to perform the required skill or activity but needs assistance
Skill Competency	Knows the steps and their sequence (if necessary) and can perform the required skill

Competency-Based Training

Competency-based training (CBT) is learning by doing**.** It focuses on the specific knowledge, attitudes and skills needed to carry out the procedure or activity. How the learner performs (i.e., a combination of knowledge, attitudes and, most important, skills) is emphasized rather than just the information learned. Competency in the new skill or activity is assessed objectively by evaluating overall performance.

To successfully accomplish CBT, the clinical skill or activity to be taught must be broken down into its essential steps. Each step is then analyzed to determine the most efficient and safe way to perform and learn it. The process is called standardization. Once a procedure, such as active management of the third stage of labor, has been standardized, competency-based learning guides and evaluation checklists can be developed to make learning the necessary steps or tasks easier and evaluating the learner's performance more objective.

An essential component of CBT is coaching, in which the classroom or clinical teacher first explains a skill or activity and then demonstrates it using an anatomic model or other training aid, such as videotape. Once the procedure has been demonstrated and discussed, the teacher then observes and interacts with learners to guide them in learning the skill or activity, monitoring their progress and helping them overcome problems.

The coaching process ensures that the learner receives feedback regarding performance:

- **Before practice** - The teacher/trainer and learners meet briefly before each practice session to review the skill/activity, including the steps/tasks that will be emphasized during the session.
- **During practice** - The teacher/trainer observes, coaches and provides feedback to the learner as s/he performs the steps/tasks outlined in the learning guide.
- **After practice** - Immediately after practice, the teacher/trainer uses the learning guide to discuss the strengths of the learner's performance and also offer specific suggestions for improvement.

Humanistic Training Techniques

The use of more humane (humanistic) techniques also contributes to better clinical learning. A major component of humanistic training is the use of anatomic models, which closely simulate the human body, and other learning aids. Working with models initially, rather than with patients/clients, allows learners to learn and practice new skills in a simulated setting rather than with patients/clients. This reduces stress for the learner as well as risk of injury and discomfort to the patient/client. Thus, effective use of models (humanistic approach) is an important factor in improving the quality of clinical training and, ultimately, service provision.

Before a learner performs a clinical procedure with a patient/client, two learning activities should occur:

- The clinical teacher/trainer should demonstrate the required skills and patient/client interactions several times using an anatomic model and appropriate videotape.
- Under the guidance of the teacher/trainer, the learner should practice the required skills and patient/client interactions using the model and actual instruments and/or equipment in a setting that is as similar as possible to the real situation.
- Only when skill competency has been demonstrated should learners have their first contact with a patient/client. This often presents challenges in a preservice education setting when there are large numbers of learners. Before any learner provides services to a patient/client, however, it is essential that the learner demonstrate skill competence in a simulated setting.

When mastery learning, which is based on adult learning principles and behavior modeling, is integrated with CBT, the result is a powerful and extremely effective method for providing clinical training. And when humanistic training techniques, such as using anatomic models and other learning aids, are incorporated, training time and costs can be reduced significantly.

Assessing Competence (see Module: Assessment Methods below)

As described in Humanistic Training Techniques (above), learners should first practice a new clinical skill using anatomic models. For interpersonal and decision–making skills, other methodologies are used. These include role plays, case studies and clinical simulations. Once learners have had adequate practice, including coaching and feedback from their teacher, and before practicing a skill with patients/clients, they are assessed using one of these methodologies.

Ideally, learners will then continue to practice these skills with patients/clients until they are able to demonstrate competency in the clinical setting. This final assessment of competency with patients/clients is necessary before they can perform a skill without supervision. Ongoing practice and assessment with patients/clients may not, however, be possible for all of the skills needed to provide high quality care during pregnancy and childbirth.

A realistic guideline to follow is that most, if not all, skills associated with normal newborn care should be assessed with patients/clients, while skills that are rarely required should be assessed using other methodologies. Nonetheless, if there are opportunities to practice these rare skills and be assessed with a patient/client, they should be taken.

2 .2: LEARNING METHODS

A variety of learning methods, which complement the learning approach described in the previous section, is included in the learning resource package. A description of each learning method is provided below.

Illustrated Lectures

Lectures should be used to present information about specific topics. The lecture content should be based on, but not necessarily limited to, the information in the recommended reference manual/text book/other written materials.

There are two important activities that should be undertaken in preparation for each lecture or interactive presentation. First, the learners should be directed to read relevant sections of the resource manual (and other resource materials, if and when used) before each lecture. Second, the teacher should prepare for lectures by becoming thoroughly familiar with technical content of a particular lecture.

During lectures, the teacher should direct questions to learners and also encourage them to ask questions at any point during the lecture. Another strategy that encourages interaction involves stopping at predetermined points during the lecture to discuss issues/information of particular importance.

Case Studies

The purpose of the case studies included in the learning resource package is to help learners practice clinical decision-making skills. The case studies can be completed in small groups or individually, in the classroom, at the clinical site or as take home assignments.

The case studies follow the clinical decision-making framework presented under Foundation Topics. Each case study has a key that contains the expected responses. The teacher should be thoroughly familiar with these responses before introducing the case studies to learners. Although the key contains the "likely" responses, other responses provided by learners during the discussion may be equally acceptable. The technical content of the case studies is taken from the recommended reference manual/text book/other written materials.

Role Plays

The purpose of the role plays included in the learning resource package is to help learners practice interpersonal communication skills. Each role play requires the participation of two or three learners, while the remaining learners are asked to observe the role play. Following completion of the role play, the teacher uses the questions provided to guide discussion.
Each role play has a key which contains the likely answers to the discussion questions. The teacher should be familiar with the answer key before using the role plays. Although the key

contains "likely" answers, other answers provided by learners during the discussion may be equally acceptable.

Skills Practice Sessions

Skills practice sessions provide learners with opportunities to observe and practice clinical skills, usually in a simulated setting. The outline for each skills practice session includes the purpose of the particular session, instructions for the teacher, and the resources needed to conduct the session, such as models, supplies, equipment, learning guides and checklists. Before conducting a skills practice session, the teacher should review the session and ensure that she/he can perform the relevant skill or activity proficiently. It will also be important to ensure that the necessary resources are available and that an appropriate site has been reserved. Although the ideal site for conducting skills practice sessions may be a learning resource centre or clinical laboratory, a classroom may also be used providing that the models and other resources for the session can be conveniently placed for demonstration and practice.

The first step in a skills practice session requires that learners review the relevant learning guide, which contains the individual steps or tasks, in sequence (if necessary), required to perform a skill or activity in a standardized way. The learning guides are designed to help learn the correct steps and the sequence in which they should be performed (skill acquisition), and measure progressive learning in small steps as the learner gains confidence and skill (skill competency).

Next, the teacher demonstrates the steps/tasks, several times if necessary, for the particular skill or activity and then has learners work in pairs or small groups to practice the steps/tasks and observe each other's performance, using the relevant learning guide. The teacher should be available throughout the session to observe the performance of learners and provide guidance. Learners should be able to perform all of the steps/tasks in the learning guide before the teacher assesses skill competency, in the simulated setting, using the relevant **checklist** (see Skill Assessments with Models under Assessment Methods). Supervised practice should then be undertaken at a clinical site before the teacher assesses skill competency with patients/clients, using the same checklist.

The time required to practice and achieve competency may vary from hours to weeks or months, depending on the complexity of the skill, the individual abilities of learners, and access to skills practice sessions. Therefore, numerous practice sessions will usually be required to ensure achievement of competency before moving into a clinical practice area.

Clinical Simulations

A clinical simulation is an activity in which the learner is presented with a carefully planned, realistic re-creation of an actual clinical situation. The learner interacts with persons and things in the environment, applies previous knowledge and skills to respond to a problem, and receives

feedback about those responses without having to be concerned about real-life consequences. The purpose of clinical simulations is to facilitate the development of clinical decision-making skills.

The clinical simulations included in the learning resource package provide learners with the opportunity to develop the skills they need to address rare or life-threatening situations. Clinical simulation may, in fact, be the only opportunity learners have to experience some rare situations and therefore may also be the only way that a teacher can assess learners' abilities to manage these situations.

Clinical simulations should be as realistic as possible. This means that the models, equipment and supplies needed for managing the particular complication involved in the simulation should be available to the learner.
Learners will need time and repeated practice to achieve competency in the management of the complex situations presented in the simulations. They should be provided with as many opportunities to participate in simulations as possible. The same simulation can be used repeatedly until the situation presented is mastered.

2.3: ESSENTIAL TEACHING SKILLS

Using Effective Presentation Skills

It is also important to use effective presentation skills. Establishing and maintaining a positive learning climate during training depend on how the clinical teacher/trainer delivers information because the **teacher/trainer sets the tone** for the course. In any course, **how** something is said may be just as important as **what** is said. Some common techniques for effective presentations are listed below:

- **Follow a plan**, which include the session objectives, introduction, body, activity, audiovisual reminders, and summary.
- **Communicate in a way that is easy to understand.** Many learners will be unfamiliar with the terms, jargon, and acronyms of a new subject. The teacher/trainer should use familiar words and expressions, explain new language, and attempt to relate to the learners during the presentation.
- **Maintain eye contact with learners.** Use eye contact to "read" faces. This is an excellent technique for establishing rapport and getting feedback on how well learners understand the content.
- **Project your voice** so that those in the back of the room can hear clearly. Vary volume, voice pitch, tone, and inflection to maintain learners' attention. Avoid using a monotone voice, which is guaranteed to put learners to sleep!
- **Avoid the use of slang or repetitive words, phrases, or gestures** that may become distracting with extended use.
- **Display enthusiasm about the topic and its importance.** Smile, move with energy, and interact with learners. The teachers/trainer's enthusiasm and excitement are contagious and directly affect the morale of the learners.
- **Move around the room.** Moving around the room helps ensure that the teacher/trainer is close to each learner at some time during the session. Learners are encouraged to interact when the clinical teacher/trainer moves toward them and maintains eye contact.
- **Use appropriate audiovisual aids** during the presentation to reinforce key content or help simplify complex concepts.
- Be sure to ask both **simple and more challenging questions**.
- **Provide positive feedback** to learners during the presentation.
- **Use learners' names as often as possible.** This will foster a positive learning climate and help keep the learners focused on the presenter.

- Display a **positive use of humor** related to the topic (e.g., humorous stories, cartoons on transparency or flipchart, cartoons for which learners are asked to create captions).
- **Provide smooth transitions between topics.** Within a given presentation, a number of separate yet related topics may be discussed. When shifts between topics are abrupt, learners may become confused and lose sight of how the different topics fit together in the bigger picture. Before moving on to the next topic, the teacher/trainer can ensure that the transition from one topic to the next is smooth by:
    - providing a brief summary;
    - asking a series of questions;
    - relating content to practice; or
    - using an application exercise (case study, role play, etc.).
- **Be an effective role model.** The teacher/trainer should be a positive role model in appearance (appropriate dress) and attitude (enthusiasm for the course), and by beginning and ending the session at the scheduled times.

2.4: CONDUCTING LEARNING ACTIVITIES

Every presentation (teaching session) should begin with an **introduction** to capture learner interest and prepare the learner for learning. After the introduction, the teacher/trainer may deliver content using an **illustrated lecture**, **demonstration**, **small group activity**, or **other learning activity**. Throughout the presentation, **questioning** techniques can be used to encourage interaction and maintain learner interest. Finally, the teacher/trainer should conclude the presentation with a **summary** of the key points or steps.

Delivering Interactive Presentations:

Introducing Presentations

The first few minutes of any presentation are critical. Learners may be thinking about other matters, wondering what the session will be like, or have little interest in the topic. The **introduction** should:

- Capture the interest of the entire group and prepare learners for the information to follow
- Make learners aware of the teacher/trainer's expectations
- Help foster a positive learning climate

The teacher/trainer can select from a number of techniques to provide variety and ensure that learners are not bored. Many introductory techniques are available, including:

- **Reviewing the session objectives.** Introducing the topic by a simple restatement of the objectives keeps the learner aware of what is expected of her/him.
- **Asking a series of questions about the topic.** The effective teacher/trainer will recognize when learners have prior knowledge concerning the course content and encourage their contributions. The teacher/trainer can ask a few key questions, allow learners to respond, discuss answers and comments, and then move into the body of the presentation.
- **Relating the topic to previously covered content.** When a number of sessions are required to cover one subject, relate each session to previously covered content. This ensures that learners understand the continuity of the sessions and how each relates to the overall topic. Where possible, link topics so that the concluding review or summary of one presentation can introduce the next topic.
- **Sharing a personal experience.** There are times when the clinical trainer can share a personal experience to create interest, emphasize a point, or make a topic more job-related. Learners enjoy hearing these stories as long as they relate to the topic and are used only when appropriate.

- **Relating the topic to real-life experiences.** This technique not only catches the learners' attention, but also facilitates learning because people learn best by "anchoring" new information to known material. The experience may be from the everyday world or relate to a specific process or piece of equipment.
- **Using a case study, clinical simulation, or other problem-solving activity.** Problem-solving activities focus attention on a specific situation related to the training topic. Working in small groups generally increases interest in the topic.
- **Using a videotape or other audiovisual aid.** Use of appropriate audiovisuals can be stimulating and generate interest in a topic.
    - **Giving a classroom demonstration.** Most clinical training courses involve equipment, instruments, and techniques that lend themselves to demonstrations, which generally increase learner interest.
    - **Using a game, role play, or simulation.** Games, role plays, and simulations generate tremendous interest through direct learner involvement and therefore are useful for introducing topics.
    - **Relating the topic to future work experiences.** Learners' interest in a topic will increase when they see a relationship between training and their work. The clinical teacher/trainer can capitalize on this by relating objectives, content, and activities of the course to real work situations.

Using Questioning Techniques

Questions can be used at anytime to:

- Introduce a topic
- Increase the effectiveness of the illustrated lecture
- Promote brainstorming
- Supplement the discussion process

Use a variety of questioning techniques to maintain interest and avoid a repetitive style.

- **Ask a question of the entire group.** The advantage of this technique is that those who wish to volunteer may do so; however, some learners may dominate while others may not participate.
- **Target the question to a specific learner by using her/his name prior to asking the question.** The learner is aware that a question is coming, can concentrate on the question, and respond accordingly. The disadvantage is that once a specific learner is targeted, other learners may not concentrate on the question.

- **State the question, pause, and then direct the question to a specific learner.** All learners must listen to the question in the event that they are asked to respond. The primary disadvantage is that the learner receiving the question may be caught off guard and have to ask the teacher/trainer to repeat the question.

The key in asking questions is to avoid a pattern. The skilled teacher/trainer uses all three of the above techniques to provide variety and maintain the learners' attention. Other techniques follow:

- **Use learners' names** during questioning. This is a powerful motivator and also helps ensure that all learners are involved.
- **Repeat a learner's correct response.** This provides positive reinforcement to the learner and ensures that the rest of the group heard the response.
- **Provide positive reinforcement for correct responses** to keep the learner involved in the topic. Positive reinforcement may take the form of praise, displaying a learner's work, using a learner as an assistant, or using positive facial expressions, nods, or other nonverbal actions.
- **When a learner's response is partially correct**, the teacher/trainer should reward the correct portion and then improve the incorrect portion or redirect a related question to that learner or to another learner.
- **When a learner's response is incorrect**, the teacher/trainer should make a noncritical response and restate the question to lead the learner to the correct response.
- **When a learner makes no attempt to respond**, the teacher/trainer may wish to follow the above procedure or redirect the question to another learner. Come back to the first learner after receiving the desired response and involve her/him in the discussion.
- **When learners ask questions**, the clinical teacher/trainer must determine an appropriate response by drawing upon personal experience and weighing the individual's needs against those of the group. If the question addresses a topic that is relevant but has not been previously discussed, the teacher/trainer can either:
    - answer the question and move on; or
    - respond with another question, thereby beginning a discussion about the topic.

Summarizing Presentations

A **summary** is used to reinforce the content of a presentation and provide a review of its main points. The summary should:

- Be brief
- Draw together the main points
- Involve the learners

Many summary techniques are available to the teacher/trainer:

- **Asking the learners for questions** gives learners an opportunity to clarify their understanding of the instructional content. This may result in a lively discussion focusing on those areas that seem to be the most troublesome.
- **Asking the learners questions** that focus on major points of the presentation helps the learners summarize what they have just heard.
- **Administering a practice exercise or test** gives learners an opportunity to demonstrate their understanding of the material. After the exercise or test, use the questions as the basis for a discussion by asking for correct answers and explaining why each answer is correct.
- **Using a game to review main points** provides some variety, when time permits. One popular game is to divide learners into two teams, give each team time to develop review questions, and then allow each team to ask questions of the other. The clinical teacher/trainer serves as moderator by judging the acceptability of questions, clarifying answers and keeping a record of team scores. This game can be highly motivational and serve as an excellent summary at the same time.

Facilitating Group Discussions

The **group discussion** is a learning method in which most of the ideas, thoughts, questions, and answers are developed by the learners. The teacher/trainer typically serves as the **facilitator** and guides the learners as the discussion develops.

Group discussion is useful:

- At the conclusion of a presentation
- After viewing a videotape
- Following a clinical demonstration or skills practice session
- After reviewing a case study or clinical simulation
- After a role play
- Any other time when learners have prior knowledge or experience related to the topic

Attempting to conduct a group discussion when learners have limited knowledge or experience with the topic often will result in little or no interaction and thus an ineffective discussion. When learners are familiar with the topic, the ensuing discussion is likely to **arouse learner interest**, **stimulate thinking**, and **encourage active participation**. This interaction affords the facilitator an opportunity to:

- Provide positive feedback

- Stress key points
- Develop critical thinking skills
- Create a positive learning climate

The facilitator must consider a number of factors when selecting group discussion as the learning strategy:

- Discussions involving **more than 15 to 20 learners** may be difficult to lead and may not give each learner an opportunity to participate.
- Discussion requires **more time** than an illustrated lecture because of extensive interaction among the learners.
- **A poorly directed discussion may move off target** and never reach the objectives established by the facilitator.

If control is not maintained, a few learners may dominate the discussion while others lose interest.

In addition to a **group discussion** that focuses on the session objectives, there are two other types of discussions that may be used in a training situation:

- **General discussion** that addresses learners' questions about a learning event (e.g., why one type of episiotomy is preferred over another)
- **Panel discussion** in which a moderator conducts a question-and-answer session between panel members and learners

Follow these key points to ensure successful group discussion:

- **Arrange seating to encourage interaction** (e.g., tables and chairs set up in a U-shape or a square or circle so that learners face each other).
- **State the topic** as part of the introduction.
- **Shift the conversation** from the facilitator to the learners
- **Act as a referee** and intercede only when necessary.

Example: "It is obvious that Alemu and Yilkal are taking two sides in this discussion. Alemu, let me see if I can clarify your position. You seem to feel that...."

- **Summarize the key points** of the discussion periodically.

Example: "Let's stop here for a minute and summarize the main points of our discussion."

- **Ensure that the discussion stays on the topic.**

- Use the contributions of each learner and provide positive reinforcement.

Example: “That is an excellent point, Roman. Thank you for sharing that with the group.”

- Minimize arguments among learners.
- Encourage all learners to get involved.
- Ensure that no single learner dominates the discussion.
- Conclude the discussion with a summary of the main ideas. The facilitator must relate the summary to the objective presented during the introduction.

Facilitating a Brainstorming Session

Brainstorming is a learning strategy that **stimulates thought and creativity** and is often used in conjunction with group discussions. The primary purpose of brainstorming is to generate a list of ideas, thoughts, or alternative solutions that focus on a specific topic or problem. This list may be used as the introduction to a topic or form the basis of a group discussion. Brainstorming requires that learners have some background related to the topic.

The following guidelines will facilitate the use of brainstorming:

- **Establish ground rules.**

Example: “During this brainstorming session we will be following two basic rules. All ideas will be accepted and Jim will write them on the flipchart. Also, at no time will we discuss or criticize any idea. Later, after we have our list of suggestions, we will go back and discuss each one. Are there any questions? If not. . . .”

- **Announce the topic or problem.**

Example: “During the next few minutes we will be brainstorming and will follow our usual rules. Our topic today is ‘Indications for caesarean section.’ I would like each of you to think of at least one indication. Maria will write these on the board so that we can discuss them later. Who would like to be first? Yes, Ilka. . . .”

- **Maintain a written record** of the ideas and suggestions on a flipchart or writing board. This will prevent repetition and keep learners focused on the topic. In addition, this written record is useful when it is time to discuss each item.
- Involve the learners and provide positive feedback in order to encourage more input.
- Review written ideas and suggestions periodically to stimulate additional ideas.
- Conclude brainstorming by reviewing all of the suggestions and clarifying those that are acceptable.

Facilitating Small Group Activities

There are many times during training that the learners will be divided into several **small groups**, which usually consist of four to six learners. Examples of small group activities include:

- **Reacting to a case study**, which may be presented in writing or orally by the teacher/trainer, or introduced through videotape or slides
- **Preparing a role play** within the small group and presenting it to the entire group as a whole
- **Dealing with a clinical situation/scenario**, such as in a **clinical simulation**, which has been presented by the clinical teacher/trainer or another learner
- **Practicing a skill** that has been demonstrated by the teacher/trainer using anatomic models

Small group activities offer many advantages including:

- Providing learners an opportunity to **learn from each other**
- **Involving** all learners
- Creating a sense of **teamwork** among members as they get to know each other
- Providing for a variety of viewpoints

When small group activities are being conducted, it is important that learners are not in the same group every time. Different ways the teacher/trainer can create small groups include:

- **Assigning** learners to groups
- Asking learners to **count off** "1, 2, 3," etc. and having all the "1s" meet together, all the "2s" meet together, etc.
- Asking learners to form their own groups
- Asking learners to **draw a group number** (or group name)

The room(s) used for small group activities should be large enough to allow different arrangements of tables, chairs, and teaching aids (models, equipment) so that individual groups can work without disturbing one another. The clinical teacher/trainer should be able to move easily about the room to visit each group. If available, consider using smaller rooms near the primary training room where small groups can go to work on their problem-solving activity, case studies, clinical simulations, or role plays. Note that it will be difficult to conduct more than one clinical simulation at the same time in the same room/area.

Activities assigned to small groups should be **challenging, interesting, and relevant**; should require **only a short time to complete**; and should be **appropriate for the background of the**

learners. Each small group may be working on the same activity or each group may be taking on a different problem, case study, clinical simulation, or role play. Regardless of the type of activity, there is usually a time limit. When this is the case, inform groups when there are 5 minutes left and when their time is up.

Instructions to the groups may be presented:

- In a handout
- On a flipchart
- On a transparency
- **Verbally** by the teacher/trainer

Instructions for small group activities typically include:

- Directions
- **Time** limit
- A **situation or problem** to discuss, resolve or role play
- **Learner roles** (if a role play)
- **Questions** for a group discussion

Once the groups have completed their activity, the clinical training facilitator will **bring them together** as a large group for a discussion of the activity. This discussion might involve:

- **Reports** from each group
- **Responses** to questions
- **Role plays** developed in each group and presented by learners in the small groups
- **Recommendations** from each group
- Discussion of the experience (if a clinical simulation)

It is important that the clinical teacher/trainer provide an effective summary discussion following small group activities. This provides closure and ensures that learners understand the point of the activity.

Conducting an Effective Clinical Demonstration

When a new clinical skill is being introduced, a variety of methods can be used to demonstrate the procedure. For example:

- Show **slides** or a **videotape** in which the steps and their sequence are demonstrated in accordance with the accepted performance standards.

- Use **anatomic models** such as the childbirth simulator to demonstrate the procedure and skills.
- Perform **role plays** in which a learner or surrogate client simulates a client and responds much as a real client would.
- Demonstrate the procedure with **clients** in the clinical setting (clinic or hospital).

Whatever methods are used to demonstrate the procedure, the clinical trainer should set up the activities using the "**whole-part-whole**" approach.

- Demonstrate the **whole procedure** from beginning to end to give the learner a visual image of the entire procedure or activity.
- **Isolate or break down the procedure** into activities (e.g., pre-operative counselling, getting the client ready, pre-operative tasks, performing the procedure, etc.) and allow practice of the individual activities of the procedure.
- Demonstrate the **whole procedure** again and then allow learners to practice the procedure from beginning to end.

When planning and giving a demonstration of a clinical procedure, either using anatomic models or with clients, if appropriate, the clinical teacher/trainer should use the following guidelines:

- Before beginning, **state the objectives** of the demonstration and point out what the learners should do (e.g., interrupt with questions, observe carefully, etc.).
- Make sure that **everyone can see** the steps involved.
- **Never** demonstrate the skill or activity incorrectly.
- Demonstrate the procedure in as **realistic** a manner as possible, using instruments and materials in a simulated clinical setting.
- Include **all steps** of the procedure in the **proper sequence** according to the approved performance standards. This includes demonstrating "nonclinical" steps such as pre- and postoperative counselling and communication with the client during surgery, use of recommended infection prevention practices, etc.
- During the demonstration, **explain to learners what is being done**, especially any difficult or hard-to-observe steps.
- **Ask questions** of learners to keep them involved.

Example: "What should I do next?" "What would happen if...?"

- **Encourage** questions and suggestions.

- **Take enough time** so that each step can be observed and understood. Remember that the objective of the demonstration is for learners to learn the skills, **not** for the clinical teacher/trainer to show her/his dexterity and speed.
- **Use equipment and instruments properly** and make sure learners clearly see how they are handled.

In addition, learners should use clinical skills **learning guide** developed specifically for the clinical procedure to observe the clinical trainer's performance during the initial demonstration. Doing this:

- Familiarizes the learner with the use of competency-based learning guides
- Reinforces the standard way of performing the procedure
- Communicates to learners that the teacher/trainer, although very experienced, is not absolutely perfect and can accept constructive feedback on her/his performance

As the role model the learners will follow, the clinical teacher/trainer must practice what s/he **demonstrates** (i.e., the approved **standard method** as detailed in the learning guide). Therefore, it is essential that the teacher/trainer use the standard method. During the demonstration, the teacher/trainer also should provide supportive behaviour and cordial, effective communication with **the client** and **staff** to reinforce the desired outcome

SECTION -3: EVALUATING TRAINING

3.1: ASSESSING COMPETENCIES

A variety of assessment methods, which complement both the learning approach and the learning methods described in the previous two sections, are included in the learning resource package. Each assessment method is described below.

Case Studies

Case studies serve as an important learning method, as described earlier. In addition, they provide an opportunity for the teacher to assess the development of clinical decision-making skills, using the case study keys as a guide. Assessment can be conducted on an individual basis or in small groups.

Role Plays

Role plays also serve as both a learning method and a method of assessment. Using the role play keys as a guide, the teacher can assess learners' understanding and development of appropriate interpersonal communication skills. Opportunities will arise during role plays for the teacher to assess the skills of the learners involved, whereas the discussions following role plays will enable the teacher to assess the attitudes and values of all learners in the context of their role as health care providers.

Clinical Simulations

As with case studies and role plays, clinical simulations serve both as a learning method and a method of assessment. Throughout the simulations, the teacher has the opportunity to assess clinical decision-making skills as well as knowledge relevant to a specific topic.

Written Tests

Each module includes a multiple-choice test, or knowledge assessment questionnaire, intended to assess factual recall at the end of the module. The items on the questionnaire are linked to the learning objectives for the module; each questionnaire has an answer sheet for learners and an answer key for teachers. A score of 85% or more correct answers indicates knowledge-based mastery of the content presented for the particular module. Students who score less than 85% on their first attempt should be given individual guidance to help them learn the required information before completing the test again.

Skill Assessments with Models and Patients/Clients

Skill assessments with models and patients/clients are conducted using skill **checklists**. The checklists in the learning resource package have been derived from the relevant learning guides. Unlike the learning guides, however, the checklists focus only on the key steps or tasks and enable assessment and documentation of the learner's overall performance of a particular skill or

activity. If a checklist is too detailed, it may distract the teacher from objectively assessing the learner's overall performance.

Using checklists in competency-based training:

- ensures that learners have mastered the clinical skills or activities, first with models and then, where possible, with patients/clients,
- ensures that all learners have their skills measured according to the same standard, and
- forms the basis for follow-up observations and evaluations.

When using checklists, it is important that the scoring is completed correctly, as follows:

- **Satisfactory**: Performs the step or task according to the standard procedure or guidelines.
- **Unsatisfactory**: Unable to perform the step or task according to the standard procedure or guidelines.
- **Not Observed**: Step, task or skill not performed by learner during evaluation by teacher.

As described in Skills Practice Sessions under Learning Methods, learners should be able to perform all of the steps/tasks for a particular skill, before the teacher assesses skill competency, in a simulated setting, using the relevant checklist. Supervised practice should then be undertaken at a clinical site before the teacher assesses skill competency with patients/clients, using the same checklist. It should be noted, however, that there may not be opportunities for all learners to practice the full range of skills required for the management of complications at a clinical site; therefore, competency should be assessed in a simulated setting.

It is important to keep in mind, however, that it will probably not be possible for learners to practice some of the additional skills with patients at a clinical site. For example, obstetric complications are not common; therefore, patients who experience complications may not be available, making it impossible for learners to undertake supervised practice in certain skills, or for skill competency to be assessed at a clinical site. For these skills, practice and assessment of competency should take place in a simulated setting. The following table provides guidelines for final assessment of skills competency.

ILLUSTRATIVE GUIDELINES FOR *FINAL* ASSESSMENT OF COMPETENCY

Skills for which *final* assessment *may* be completed using case studies, role plays or clinical simulations (patients should be used whenever possible)	**Skills for which *final* assessment *must* be completed with patients (skills should be learned to competency with models, case studies, role plays or clinical simulations first)**
ANTENATAL CARE	
Management of bleeding in early pregnancy	Antenatal history taking and examination
Management of bleeding in late pregnancy	Antenatal care, including birth preparedness
Management of shock	
Management of pre-eclampsia	
Management of eclampsia	
Postabortion care, including family planning	
Management of fever during pregnancy	
LABOR AND CHILDBIRTH CARE	
Assessing a woman in labor	Assissting breech delivery
Vacuum extraction childbirth	Use of the partograph
Management of malpresentations and malpositions	Assissting normal child birth including active management of the third stage of labor
Management of prolapsed cord	
Episiotomy and repair	
POSTPARTUM AND NEWBORN CARE	
Management of vaginal bleeding after childbirth	Postpartum history taking and examination
Bimanual compression of the uterus	Postpartum care, including breastfeeding
Manual removal of the placenta	Postpartum family planning
Compression of the abdominal aorta	Essential newborn care
Inspection and repair of perineal and cervical tears	
Management of fever after childbirth	
Neonatal resuscitation	

3.2: MIDCOURSE EVALUATION OF THE TRAINING

Table: MID COURSE EVALUATION FORM FOR TRAINING.

Please evaluate the following statements:	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. The class and clinical areas are satisfactory for your learning					
2. The facilitators communicate clearly and simply.					
3. The facilitator's methods of teaching are satisfactory.					
4. The topics covered are relevant to your work.					
5. The facilitators and trainees are interacting well together.					
6. The training is updating my knowledge and skills.					
7. Teaching aids are useful.					
8. Practice in the clinical area is important and helpful.					

Please answer the following questions. Use the back for more writing space if needed.

9. Is there anything discussed/taught in Week 1 that you do not understand? Please explain:

10. What are the skills in which you need the most support? Please explain:

3.3: END COURSE EVALUATION OF THE TRAINING

Table: End course evaluation form

Please evaluate the following statements:	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. For the work I do, the training was appropriate.					
2. Training facilities and arrangements were satisfactory.					
3. The facilitators were knowledgeable and skilled.					
4. The facilitators were fair and friendly.					
5. The training updated my knowledge and skills.					
6. Training objectives were met.					
7. Teaching aids were useful.					
8. Practice in the clinical areas was important and helpful.					

Please answer the following questions. Use the back for more writing space if needed.

9. What was the most useful part of the training course for you:

10. What part of the training course was not useful to you:

11. What suggestions do you have to improve the training course:

12. Other comments:

SECTION 4: TRAINING FOLLOW-UP

- **Instructions for follow-up of providers trained in Emergency Obstetric Care** Meet all candidates and arrange schedules
- Meet with supervisor and conduct **Supervisor Interview**
- Meet candidates individually to complete the **Participant Interview** to review:
    - progress towards commitments (*Action Plan Progress)*
    - personal gaps and challenges (*Action Plan Progress)*
    - clinical experience since training and confidence in skills (*Confidence and Experience)*
    - log books
- Administer **Knowledge Questionnaire, Case Studies** and **Individual Simulation**
- Observe **Clinical Skills** on models
- Spend at least one full day with each candidate observing clinical practice
- Conduct a **Team Activity Clinical Simulation** of shock
- Plan training event
- Evaluate training event (**Training Skill Performance measures)**
- Complete the **Followup Facility Assessment**
- Provide group feedback and individual feedback
- Discuss group plans
- Meet with supervisor

TABLE 1-1:- FACILITATOR LEARNING GUIDE

	Date				
Steps	**Rating**				
Preparation					
1. Reviews the "lesson plan" before class					
2. Assigns homework as needed					
3. Prepares all needed equipment and supplies					
4. Arranges seating in semi-circle or so participants and facilitators can see each other easily and have a place to write					
5. Arranges facilitator table so it is NOT between facilitator and learners					
6. If using equipment, checks equipment is working BEFORE class starts					
Communication					
1. Greets participants and puts them at ease					
2. Speaks clearly, loudly, and not too fast					
3. Uses simple language that is understood by all					
4. Encourages 2-way communication					
a Faces participants					
b Uses participant 's names during discussions					
c Moves around classroom during information sharing / discussions					
d Makes regular eye contact with all participants					
e Observes participants reactions (face and body language) to information and discussions to evaluate level of understanding					
f Smiles					
Positive Learning Environment					
1. Shows respect to all participants					
2. Is honest about what she/he knows or does not know					
3. Makes environment feel "safe" so participants say what they think/believe					
4. Uses patience in training					
5. Encourages ALL participants to participate actively:					
a. Asks if they have anything more they want to add					
b. Asks questions to find out what participants **KNOW** (facts)					
c. Asks questions to find out what participants **THINK** (ideas/opinions)					
d. Asks participants reasons for their answer(s) (**WHY** questions)					
6. If answer not correct, is not critical of participants, but gives hints/clues					
7. Checks frequently while teaching if participants understand. If not, repeats or reviews, or asks a learner to review the information.					
8. Encourages participants to think and problem-solve (rather than always giving participants the answer)					

	Date				
Steps	**Rating**				
Procedure					
1. Introduces topic and explains how the session will be organized					
2. Presents the content in a clear and logical way					
3. Summarizes at end. Can be done by: 1) facilitator, or 2) one participants , or 3) facilitator asks questions to all participants					
4. Uses visual aids as needed/appropriate (large enough, positioned so all can see, makes information clearer for participants , colorful)					
5. Thanks group for participation					
6. Plans correct amount of time for the class					
Observation, Evaluation and Feedback: ***When participants are doing an activity that needs observation, evaluation and feedback, the following guidelines are used by the facilitator***					
1. If clinical skill to be practiced by all learners, need to have a minimum ratio of 1 facilitator to 4 - 6 participants.					
2. Facilitator to be with the learners at all times, focusing carefully on what participants are doing and saying					
3. If learner activity is based on a skill checklist, the facilitator and observing participants follow the activity with their own skill checklist					
4. Facilitator uses notepad to record: 1) what is happening, 2) positive feedback to give to the participants , 3) areas that need strengthening, and 4) suggestions on how to improve					
5. Facilitator notes are recorded DURING the time the participants is doing the activity NOT AFTER the participants is done					
6. Provides immediate feedback:					
a. First, ask participants for comments about the activity done					
b. Then, ask the observing participants for any comments					
c. Finally, after all learners finish their comments, the facilitator:					
▪ Praises what the participants did well					
▪ Discusses areas to strengthen that were not already mentioned by participants					
▪ Gives ideas on how to do the strengthening					
6. Thanks everyone for their participation and comments					
Comments:					

II

TRAINING MODULES

MODULE-1:

INTRODUCTION TO MATERNAL AND NEWBORN HEALTH

Participant learning objective: after completing this module, participants will be able to describe the global situation of maternal and newborn mortality & morbidities, best practices in maternal and newborn care and emergency management principles.

Enabling objectives:

1. Describe the magnitude of maternal and neonatal mortality & morbidity in the developing world generally and in our country specifically.
2. Describe the current approach to reduction of maternal and neonatal mortality.
3. Describe GBV and FGC
4. Describe the prevalence and obstetric effects of GBV and FGC.
5. Describe the principles of women friendly care.
6. Describe best practices in infection prevention.
7. Describe the basic elements of rapid initial assessment and managing emergencies
8. Demonstrate steps in detection and management of shock

Learning Outline: Including day one activities

MODULE -1: INTRODUCTION TO THE HEALTH OF WOMEN AND CHILDREN			
TIME	**OBJECTIVES / ACTIVITIES**	**TRAINING/LEARNING METHODS**	**RESOURCE MATERIALS**
425 MINUTES			
10 minutes	**Activity**: Welcome the participants	Welcome by representatives from the organization(s) sponsoring the training course.	**Course Equipment**: Overhead projector, screen, flipchart with markers, computer, LCD, anatomic models, instruments and supplies (refer to Course Syllabus in the Facilitator's Hand book for details)
20 minutes	**Activity**: Facilitate introductions of the participants	Have participants divide into pairs, interview and then introduce each other by name, position and any unique characteristics. The facilitators should also be involved	
10 minutes	**Activity**: Provide an overview of the course	Review the course syllabus and schedule. Discuss the goals of the course and the participant learning objectives.	**BEmONC Participant's Handout**: Syllabus and Schedule
10 minutes	**Activity**: Review course materials	Distribute, review and discuss materials used in this course.	**Infection Prevention guideline** B**EmOC Training manual and Participant's Handout** and any materials relevant to the course
10 minutes	**Activity**: Identify participant expectations	Ask participants to share their expectations of the course and write their responses on a flipchart. Attach the flipchart page to the wall for reference throughout the course.	
40 minutes	**Activity**: Assess participants' precourse knowledge	Ask participants to turn to the Precourse Knowledge Questionnaire and answer each of the questions.	**BEmONC Facilitator's Handbook**: Precourse Knowledge Questionnaire
30 minutes	**Objective**: Approach to "Competency based training ' and how to use guidelines & checklists.	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss	**BEmONC Participant's Hand book –** overview. **Presentation Graphics**: ***Presentation -1:*** Aproach to CB training.
60 minutes	**Objective**: Current approach to reduction of maternal and neonatal mortality	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss	**BEmONC Training manual –** module -1; unit-2. **Presentation Graphics**:

MODULE -1: INTRODUCTION TO THE HEALTH OF WOMEN AND CHILDREN			
			Presentation -2: 'every pregnancy is at risk'
30 minutes	**Objective**: GBV and FGC	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss	**BEmONC Training manual –** module -1; unit-3. **Presentation Graphics**: ***Presentation -3:*** GBV & FGC
40 minutes	**Objective**: Describe women friendly care	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss	**BEmONC Training manual –** module -1; unit- 4. **Presentation Graphics**: ***Presentation -4:*** Women friendly care
60 minutes	**Objective**: Describe infection prevention principles and practices	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss infection prevention principles and practices and their application, with particular emphasis on EmOC. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to compare the principles and practices presented with those currently used at their worksites.	**BEmONC Training manual –** module -1; unit- 5. **Presentation Graphics**: ***Presentation -5:*** Universal Precautions in Infection Prevention **Infection Prevention national guideline**
105 minutes	**Activity**: Apply infection prevention practices for care during pregnancy and childbirth	**Demonstration**: The demonstration should be carried out in the classroom using the appropriate equipment. Drawing a tap on a piece of flipchart paper can simulate running water. Demonstrate each of the following practices, provide an explanation of the steps involved and encourage participants to ask questions at any point during the demonstration: • Hand washing • Decontamination 1. Sharps handling • Waste disposal Instrument handling and preparation	**BEmONC Training manual –** Module -1; unit- 5. Flipchart paper and marker Soap/antiseptic hand cleanser Nail brush Gloves Plastic apron Instruments Needles and syringes Plastic receptacles Chlorine solution
Reading Assignment: BEmONC Training manual: module-1, module -2			

MODULE-2:

RAPID INITIAL ASSESSMENT AND EMERGENCY MANAGEMENT

Participant learning objective: After completing this module, participants will be able to provide care to obstetric emergencies in an organized and effective approach. .

Enabling objectives:

- Describe how to organize the facility to respond to an obstetric emergency.
- Describe key steps in rapid initial assessment of a woman with emergency problems.
- Outline key emergency management steps for specific obstetric emergency problems.
- Describe pre-referral management to a recognized emergency situation
- Demonstrate steps in detection and management of “shock”.

Learning Outline:

MODULE -2: RAPID INITIAL ASSESSMENT AND EMERGENCY MANAGEMENT			
TIME	**OBJECTIVES/ACTIVITIES**	**TRAINING/LEARNING METHODS**	**RESOURCE MATERIALS**
90 MINUTES			
50 minutes	**Objective**: Describe the process and implementation of rapid initial assessment of the woman who presents with a complication during pregnancy **Objective**: Describe the recognition and management of shock	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to: • Review and discuss the process of rapid assessment • Review and discuss the recognition and management of shock Pause at appropriate intervals to emphasize particular points and encourage discussion, and provide a brief summary at the end of each of the above topics.	**BEmONC Training manual**: module -2; unit. **BEmONC participant's Handbook**: module -2; **Presentation Graphics**: Rapid Initial Assessment and Management of Shock
40 minutes	**Activity**: Practice adult resuscitation	**Clinical simulation:** The skill is to be simulation is to be guided by trainers and practiced by participants in a simulated setting.	**BEmONC Participant Handout:** module -2 clinical simulation 2

SKILLS PRACTICE SESSIONS

SKILLS PRACTICE SESSION 2-1: ADULT RESUSCITATION AND MANAGEMENT OF SHOCK

PURPOSE

The purpose of this activity is to enable participants to practice adult resuscitation and management of shock and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting with a fellow participant role-playing as a patient.

Participants should review Learning Guide 2-**1** before beginning the activity. The facilitator should demonstrate the initial steps/tasks in adult resuscitation and management of shock, followed by the key resuscitation steps and identification of response to the treatment. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 2-1.

Participants should be able to perform the steps/tasks in Learning Guide 2-1 before skill competency is assessed by the trainer/teacher in the simulated setting, using Checklist 2-1.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 2-1.

RESOURCES

- Equipment for starting an IV line
- Needles and syringes
- Examination gloves
- BP apparatus
- Test tubes

Learning Guide 2-1: Adult resuscitation and management of shock
Checklist 2-1: Adult resuscitation and management of shock

CHECKLIST 2:1 ADULT RESUSCITATION AND MANAGEMENT OF SHOCK

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

Participant/Student: _____Date Observed: _____

CHECKLIST FOR ADULT RESUSCITATION AND MANAGEMENT OF SHOCK (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GENERAL MANAGEMENT					
1. Shouts for help.					
2. If the woman is conscious and responsive:- • Greets the woman respectfully and with kindness. • Tells the woman (& her support person) what is going to be done, listens and respond attentively to her questions & concerns.					
3. 3. Provides continual emotional support and reassurance.					
4. Assesses the women according to the ABC(Airway, Breathithing and Circulation) rule					
IMMEDIATE MANAGEMENT					
1. Checks the woman's vital signs					
2. Turns the woman onto her side and ensures that her airway is open, beginning resuscitation measures if needed.					
3. Gives oxygen at 6–8 L/minute					
4. Covers the woman with a blanket and elevates the woman's legs					
BLOOD COLLECTION, FLUID REPLACEMENT AND BLADDER CATHETERIZATION					
1. Washes hands thoroughly and dry. Puts on gloves.					
2. Inserts 16- or 18-gauge needle or cannula into the vein.					
3. Draws blood for hemoglobin, cross-matching & bedside clotting test					
4. Detachs syringe and connects IV tubing securely and begins IV infusion of 1 L normal saline or Ringer's lactate.					

CHECKLIST FOR ADULT RESUSCITATION AND MANAGEMENT OF SHOCK (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
5. Infuses 1 L in 15–20 minutes.					
6. Places the blood drawn into a labeled test tube for hemoglobin and cross-matching.					
7. Places 2 mL of blood into a small glass test tube and does a bedside clotting test					
8. Disposes of waste materials in a leakproof container or plastic bag.					
9. Decontaminates needles and syringes					
10. Removes gloves properly and uses antiseptic handrub or washes hands thoroughly and dries them.					
BLADDER CATHETERIZATION					
1. Puts on new examination or high-level disinfected surgical gloves					
2. Explains to the woman and cleans the external genitalia.					
3. Catheterizes and measures and records the urine amount.					
4. Secures catheter and to urine drainage bag.					
5. Removes gloves properly and uses antiseptic handrub or washes hands thoroughly and dries them.					
REASSESSMENT AND FURTHER MANAGEMENT					
1. Reassesses the woman's response to IV fluids within 15 minutes					
2. If the woman's condition improves adjusts IV infusion to 1 L in 6 hours and continues management for underlying cause of shock.					
3. If the woman's condition fails to improve: • Infuses normal saline rapidly until her condition improves. • Continues oxygen at 6–8 L/minute. • Continues to monitor vital signs every 15 minutes and intake and output every hour. • Arranges for additional laboratory tests.					
4. Checks for bleeding. If heavy bleeding is seen, takes steps to stop the bleeding and transfuse blood, if necessary.					
5. Performs the necessary steps to determine cause of shock					
6. Records all vital signs fluids and any drugs given.					
7. Makes arrangements for referal to higher level of care if required.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CLINICAL SIMULATION 2.1: MANAGEMENT OF SHOCK (HYPOVOLEMIC OR SEPTIC SHOCK)

Purpose: The purpose of this activity is to provide a simulated experience for participant/ students to practice problem-solving and decision-making skills in the management of hypovolemic or septic shock, with emphasis on thinking quickly and reacting (intervening) rapidly.

Instructions: The activity should be carried out in the most realistic setting possible, such as the labor and delivery area of a health center, clinic or maternity center, where equipment and supplies are available for emergency interventions.

- One participant should play the role of patient and a second participant the role of skilled provider. Other participant may be called on to assist the provider.
- The facilitator will give the participant/student playing the role of provider information about the patient's condition and ask pertinent questions, as indicated in the left-hand column of the chart next page.
- The participant will be expected to think quickly and react (intervene) rapidly when the facilitator provides information and asks questions. Key reactions/responses expected from the participant are provided in the right-hand column of the chart on the next page.
- Procedures such as starting an IV and giving oxygen should be role played, using the appropriate equipment.
- Initially, the facilitator and participant will discuss what is happening during the simulation in order to develop problem-solving and decision-making skills. The italicized questions in the simulation are for this purpose. Further discussion may take place after the simulation is completed.
- As the participant's skills become stronger, the focus of the simulation should shift to providing appropriate care for the life-threatening emergency situation in a quick, efficient and effective manner. All discussion and questioning should take place after the simulation is over.

***Resources**: Sphygmomanometer, stethoscope, equipment for starting an IV infusion, syringes and vials, oxygen cylinder, mask and tubing, bladder catheterization equipment, new examination or high-level disinfected surgical gloves.*

SCENARIO 1 **(Information provided and questions asked by the facilitator)**	***KEY REACTIONS/RESPONSES*** **(Expected from participant)**
1. Alemitu is a 36-year-old multigravida who has five children. Her husband, who tells you that she gave birth at home with the help of a family member, has carried her into the health center. The family member told him that the placenta delivered easily and completely immediately after birth, but Alemitu has been bleeding "too much" since then. The family tried numerous things to help Alemitu before bringing her to the health center, but she continues to bleed "too much." • What do you do?	• **Shout** for help to urgently mobilize all available personnel • Evaluate Alemitu immediately for shock, including vital signs (temperature, pulse, blood pressure and respiration rate), level of consciousness, color and skin temperature • Tell Alemitu (and her husband) what is going to be done, listen to her and respond attentively to their questions and concerns. • Turns Alemitu on her side, if unconscious or semi-conscious, and keeps the airway open
2. On examination, you find that Alemitu's blood pressure is 84/50 mm Hg, pulse 120 beats/ minute, respiration rate 34 breaths/minute, temperature 37º C. Her skin is cold and clammy. • What do you think is wrong with Alemitu? • What will you do now?	• State that Alemitu is in shock • Ask one of the staff that responded to your shout for help to start an IV infusion, using a large-bore cannula and normal saline or Ringer's lactate at a rate of 1 L in 15–20 minutes • While starting the IV, collect blood for appropriate tests (hemoglobin, blood typing and cross matching, and bedside clotting test for coagulopathy) • Start oxygen at 6–8 L/minute • Catheterize bladder • Look for the cause of shock (hypovolemic or septic) by palpating the uterus for firmness and tenderness, assessing the amount of blood loss • Cover Alemitu to keep her warm • Elevate legs
*Discussion Question 1****: How do you know when a woman is in shock?***	***Expected Responses****: Pulse greater than 110 beats/ minute; systolic blood pressure less than 90 mm Hg; cold, clammy skin; pallor; respiration rate greater than 30 breaths/minute; anxious and confused or unconscious*

SCENARIO 1 **(Information provided and questions asked by the facilitator)**	***KEY REACTIONS/RESPONSES*** **(Expected from participant)**
*Discussion Question 2**: If a peripheral vein cannot be cannulated, what should be done?***	***Expected Response**: A venous cut-down should be performed.*
3. On further examination, you find that Alemitu's uterus is soft and not contracted, but not tender. Her clothing from the waist down is blood- soaked. • What are Alemitu's main problems? • What are the causes of her shock and bleeding? • What will you do next?	• State that Alemitu reportedly lost "too much" blood after childbirth and considerable blood loss is evident on her clothes • State that Alemitu's uterus is soft and not contracted, but not tender; she has no fever • Determine that Alemitu's shock is due to postpartum hemorrhage, atonic uterus • Massage Alemitu's uterus to stimulate a contraction • Start a second IV infusion and gives 20 units oxytocin in 1 L of fluid at 60 drops/minute
4. After 15 minutes, the uterus is firm, bleeding has stopped, but Alemitu's blood pressure is still 88/ 60 mm Hg, pulse116 beats/minute, respiration rate 32 breaths/minute. • **What will you do now?**	• Give another liter of fluid to ensure 2 L are infused within an hour of starting treatment • Continue to give oxygen at 6–8 L/minute • Continue to check that uterus remains contracted • Continue to monitor blood pressure and pulse
5. After another 15 minutes, the uterus is still firm, there is no further bleeding, Alemitu's blood pressure is 100/60 mm Hg, pulse 90 beats/ minute, respiration rate 24 breaths/minute. • What will you do now?	• Adjusts rate of IV infusion to 1 L in 6 hours • Continue to check to ensure that uterus remains contracted • Continue to monitor blood pressure and pulse • Check that urine output is 30 mL/hour or more
6. Alemitu's condition has stabilized. Twenty-four hours later, her hemoglobin is 6.5 g/dL. • What will you do now?	• Begin ferrous fumarate 120 mg by mouth PLUS folic acid 400 µg by mouth daily, and advise Alemitu that she will need to take this for 3 months

SCENARIO 2 **(Information provided and questions asked by the facilitator)**	***KEY REACTIONS/RESPONSES*** **(Expected from participant)**
1. Lemlem is 26 years old and gave birth at home to her second child, with the help of her neighbor. The family reports that Lemlem has had a fever since yesterday, was very restless during the night and is very drowsy this morning. She was carried into the health center by her husband and neighbor. • What do you do?	• **Shout** for help • Evaluate Lemlem immediately for shock, including vital signs (temperature, blood pressure, pulse and respiration rate), level of consciousness, color and skin temperature • Tell Lemlem (and her husband and neighbor) what is going to be done, listen to them and respond attentively to their questions and concerns • Turn Lemlem on her side, if unconscious or semi-conscious, and keep the airway open
2. On examination, you find that Lemlem's blood pressure is 80/50 mm Hg, pulse 136 beats/minute; respiration rate 34 breaths/minute; temperature 39.4º C. She is confused and drowsy. • What do you think is wrong with Lemlem? • What will you do now?	• State that Lemlem is in shock • Ask one of the staff that responded to your shout for help to start an IV infusion, using a large-bore cannula and normal saline or Ringer's lactate at a rate of 1 L in 15–20 minutes • Collect blood for appropriate tests (hemoglobin, blood typing and cross match, and tests for coagulopathy), while starting the IV • Start oxygen at 6–8 L/minute • Catheterizes bladder • Look for the cause of the shock (hypovolemic or septic) by palpating the uterus for firmness and tenderness • Cover Lemlem to keep her warm • Elevate legs

3. On further examination, you find that Lemlem's uterus is tender and that she has foul-smelling lochia. Upon questioning, the neighbor admits that herbs were inserted into Lemlem's vagina during labor. • What are Lemlem's main problems? • What are the causes of her shock and why? • What will you do next?	• State that Lemlem has a fever, a tender uterus and foul-smelling lochia • Determine that Lemlem's shock is due to infection resulting from unclean labor and childbirth practices • Gives penicillin G 2 million units OR ampicillin 2 g IV (and repeats every 6 hours) PLUS gentamicin 5 mg/kg body weight IV (and repeats every 24 hours) PLUS metronidazole 500 mg IV (and repeats every 8 hours)
4. After 6 hours, Lemlem's blood pressure is 100/60 mm Hg, pulse 100 beats/minute, respiration rate 24 breaths/minute, temperature 38º C. She is easily roused and is oriented. • **What will you do now?**	• Adjust rate of IV infusion to 1 L in 6 hours • Continue to monitor blood pressure, pulse and temperature • Check that urine output is 30 mL/hour or more • Continue to administer antibiotics

MODULE-3:

PREGNANCY CARE

Participant learning objective: After completing this module, participants will be able to describe the evidence based aproaches in the care of women during pregnancy to help decrease the existing high maternal and perinatal mortality & morbidity in our country.

Enabling objectives

1. Describe focused antenatal care.
2. Provide focused antenatal care to the pregnant woman.
3. Identify and provide care to pregnant women with diseases and complications.
4. Recognize an emergency situation during pregnancy which requires immediate treatment and urgent referral to a higher level health facility.
5. Describe pre-referral management to a recognized emergency situation.

Learning Outline

MODULE -3: PREGNANCY CARE			
TIME	**OBJECTIVES/ACTIVITIES**	**TRAINING/LEARNING METHODS**	**RESOURCE MATERIALS**
670 MINUTES			
10 minutes	Introduction Module learning objectives	Brain storming Volunteer reading	**BEmONC Training manual**: module -3
110 minutes	**Objective**: Describe :- • The new FOCUSED antenatal care model. • Counseling on birth spacing and family planning • Giving preventive measures • Developing a birth and emergency plan ANC for PMTCT	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to explain and discuss **Group discussion**: Divide participants into groups of three or four. Allow approximately 20 minutes for the groups to read and discuss on anemia in pregnancy, and PMTCT, then discuss on any questions, doubts or comments. Allow participants to work on PMTCT case study	**BEmONC Training manual**: Module -3; unit -2 **Presentation Graphics**: ***Presentation -7:*** Focused ANC. ***Presentation -8:*** PMTCT.
30 minutes	**Activity**: Provide opportunity for learners to appreciate the importance of good interpersonal communication skills when providing care for a woman with an obstetric complication.	**Role play**: Select three learners, take a few minutes to prepare for the activity by reading the background information. The remaining learners, who will observe the role play, should at the same time read the background information.	**BEmONC Participant's Hand book –** module -3; unit- 2, role play 3.1. communicating about complications during pregnancy
50 minutes	**Objective**: Describe best practices for identifying and managing vaginal bleeding in early pregnancy.	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss bleeding in early pregnancy. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to cite the possible causes of bleeding in early and describe the way in which they manage each of these. If there are differences between the recommended "best practices" for management and current practices at their worksites, discuss the reasons for this.	**BEmONC Participant's Hand book –** module -3; unit- 3.2, **Presentation Graphics**: ***Presentation -9:*** Vaginal Bleeding in Early Pregnancy;

10 minutes	**Activity**: Case study on vaginal bleeding in early pregnancy	**Case Study:** Introduce participants to case studies in general. Divide participants into groups of three or four. Allow approximately 10 minutes for the groups to work on the case study, and then allow five to ten minutes for one participant from each group to report back to the class as a whole. Use the case study answer keys to guide discussion.	**BEmONC Facilitator's Handbook and Participant's handout**: module -3; unit- 3, case study 3-1 **Case Studies**: Vaginal Bleeding in Early Pregnancy and Answer Keys
40 minutes	**Objective**: Describe best practices for post abortion care.	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss post abortion care **Video:** show and discuss post-abortion care photoset.	**BEmONC Training manual: module 3; Unit 3.3 Presentation Graphics**: ***Presentation -9:*** Vaginal Bleeding in Early Pregnancy **Video:** postabortion care photoset
60 minutes	**Activity**: Demonstrate manual vacuum aspiration **and Postabortion** Family Planning Counseling.	**Skill Demonstration**: The skill is to be demonstrated by trainers in a simulated setting using the relevant model, learning guides and checklists, as described in Skills Practice Session: Postabortion Care (Manual Vacuum Aspiration [MVA]) and Postabortion Family Planning Counseling.	**BEmONC Facilitator's Handbook and Participant's handout**: **Skills practice sessions 3-2** (Learning Guides and Checklists for Postabortion Care (MVA) and Postabortion Family Planning Counseling),
110 minutes	**Activity**: Practice manual vacuum aspiration **and Postabortion** Family Planning Counseling.	**Skill Practice**: The skill is to be practiced by participants in a simulated setting using the relevant model, learning guides and checklists, as described in Skills Practice Session: Postabortion Care (Manual Vacuum Aspiration [MVA]) and Postabortion Family Planning Counseling.	**BEmONC Facilitator's Handbook and Participant's handout**: **skills practice sessions 2-2** (Learning Guides and Checklists for Postabortion Care (Manual Vacuum Aspiration [MVA])

			and Postabortion Family Planning Counseling).
60 minutes	**Objective**: Describe :- • Vaginal bleeding in later pregnancy and labor • Abdominal pain in early pregnancy • Abdominal pain in later pregnancy and after childbirth • Pre-labor rupture of membranes	**Group discussion:** Divide participants into groups of three or four. Allow 5 to 10 minutes/topic for the groups to read and discuss on vagina bleeding in later pregnancy, abdominal pain in pregnancy and after child birth and pre labor rupture of membranes. Then allow for participants to ask or comment on the content. Discuss any questions or clarify doupts.	**BEmONC Training manual**: module -3; unit 3.4. ***Presentation -9:*** Vaginal Bleeding in late Pregnancy
30 minutes	**Objective**: Describe best practices for identifying and managing pregnancy-induced hypertension	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss: • Best practices for identifying and managing hypertension, pre-eclampsia, eclampsia • Strategies for controlling hypertension • Strategies for preventing and treating convulsions, with particular emphasis on the use of magnesium sulphate Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants if there are differences between the management described and current practices. Is there a need to change current practices? If so, how?	**BEmONC Training manual**: module - 3; unit 3.5. **Presentation Graphics**: ***Presentation -11:*** Headache, Blurred Vision, Convulsions, Loss of Consciousness or Elevated Blood Pressure
60 minutes	**Activity**: Case study on pregnancy-induced hypertension	**Case Study**: Use the case study on pregnancy-induced hypertension (severe pre-eclampsia). Divide participants into groups of three or four. Allow approximately 20 minutes for the groups to work on the case study, and then allow five to ten minutes for one participant from each group to report back to the class as a whole. Use the case study answer key to guide discussion.	**BEmONC Facilitator's Handbook and Participant's handout**: **Case Studies 3-2, 3-3 and 3-4**: Pregnancy-induced Hypertension (Severe Pre-eclampsia) and Answer Key

60 minutes	**Activity**: management of severe preeclampsia / eclampsia.	**Skill Demonstration and practice:** Management of severe pre-eclampsia/eclampsia	**BEmONC Facilitator's Handbook and Participant's handout**: **Skill Practice session 3-4**: Management of severe pre-eclampsia/eclampsia
40 minutes	**Objective**: Describe best practices for identifying and managing fever during pregnancy	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss causes prevention and management of fever during pregnancy	**BEmONC Training manual**: Module -3, Unit 3.6. **Presentation Graphics**: ***Presentation -12:*** Fever during pregnancy
Reading Assignment: BEmONC Training manual: module -3 & 4;			

SKILLS PRACTICE SESSIONS

SKILLS PRACTICE SESSION 3-1: Antenatal Care

PURPOSE

The purpose of this activity is to enable participants to practice those skills necessary to provide antenatal care, and to achieve competency in these skills.

INSTRUCTIONS

This activity should be conducted in a simulated setting. Participants should review Learning Guide for Antenatal Care before beginning the activity.1 The facilitator should demonstrate the steps/tasks in each learning guide one at a time. Under the guidance of the facilitator, participants should then work in groups of three and practice the steps/tasks in the Learning Guide for Antenatal Care and observe each other's performance; while one participant simulates her role as a pregnant client, another participant performs the skill, and the third participant should use the Learning Guide to observe performance. Participants should then rotate roles. Participants should be able to perform the steps/tasks before skills competency is assessed using the Checklist for Antenatal Care.

RESOURCES

- Childbirth model
- Stethoscope
- Syphgmomanometer
- Simulated tablets
- Table for client or model
- Sheets for draping
- 0.5% chlorine solution and receptacle for decontamination
- Leakproof container or plastic bag
- Learning Guide for Antenatal Care
- Checklist for Antenatal Care

[1] Content of Malaria and Other Causes of Fever in Pregnancy, as well as PMTCT content should be incorporated into this skills practice session.

CHECKLIST 3-1: ANTENATAL ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT/STUDENT _____Date Observed _____

CHECKLIST FOR ANTENATAL ASSESSMENT AND CARE (Some of the following steps/tasks should be performed simultaneously				
STEP/TASK	**CASES**			
GETTING READY				
1. Prepares the necessary equipment				
2. Greets the woman respectfully & with kindness, introduce yourself and offer her a seat.				
3. Does a quick check followed by rapid initial assessment for danger signs.				
4. Responds immediately in the event of any of the danger signs or any other urgent problem(s).				
5. Tells the woman what is going to be done and encourage her to ask questions				
6. Provides continual emotional support and reassurance, as possible				
HISTORY (ASK/CHECK RECORD)				
FIRST VISIT				
Personal Information				
1. Asks her name, age, marital status, address and phone number.				
Present Pregnancy (First Visit)				
2. Asks about her menstrual history including Last Normal Monthly Period (LNMP), calculate the EDD and gestational age correctly.				
3. Asks how many previous pregnancies (gravida), child births (Para) including abortions she has had.				
4. Asks the woman about social support (financial, moral, and physical), also other problems or concerns related to her pregnancy.				
5. Asks if the woman has felt the fetus move. If Yes, asks the woman when the fetus first moved and whether she has felt it move in the last day.				
6. Asks if the current pregnancy was planned? Wanted? Supported?				

CHECKLIST FOR ANTENATAL ASSESSMENT AND CARE (Some of the following steps/tasks should be performed simultaneously				
STEP/TASK	**CASES**			
Contraceptive History (Fist Visit)				
7. Inquires about history of family planning method use and satisfaction (if used)				
8. Asks her the number of children she plans to have in the future.				
Daily Habits and Lifestyle (First Visit)				
9. Asks the woman:- • for workload and if she get enough sleep/rest? • What she usually eat in a day? • If she sleeps under ITN every day • Do you smoke, drink alcohol or use any other addictive substances? • Who do you live with? • if she has experienced threats, violence or injury.				
Past Obstetric History (First Visit)				
10. Asks if the woman had any problem during a previous pregnancy or during/following childbirth?				
11. Asks if the woman had any problems breastfeeding (if multipara)? And; asks if the woman is currently breastfeeding.				
Medical History (First Visit)				
12. Asks if the woman had any allergies.				
13. Asks if the woman had been tested for HIV and syphylis? • If Yes, asks if she know the result. • If results were positive for syphilis was treatment provided.				
14. Inquires about history of:- • any chronic illnesses or conditions. • hospital admission or any surgery • taking any drugs/medications				
15. Asks if the woman had tetanus toxoid (TT) immunizations? If Yes, finds out how many doses and when the last dose was.				
16. Discusses with the woman and her companion about birth preparedness and emergency readiness plan.				
Interim History (Return Visits)				
17. Revises the chart				
18. Asks if the woman • had any problems since her last visit or at present? • had changed her address or lifestyle since last visit and reviews the birth preparedness and emergency readiness plan, if needed				

CHECKLIST FOR ANTENATAL ASSESSMENT AND CARE (Some of the following steps/tasks should be performed simultaneously				
STEP/TASK	**CASES**			
• is taking drugs/medications (if prescribed) properly • any reactions to or side effects from immunizations or drugs/medications				
19. Record all the information in the woman's card/chart				
PHYSICAL EXAMINATION (LOOK/LISTEN/FEEL)				
Assessment of General Well-Being (Every Visit)				
1. Observes gait and movements, facial expression, general cleanliness and skin for lesions & bruises.				
2. Explains to the woman before conducting the examination what is going to done and each step of the examination responding to her concerns.				
3. Measures body weight (height taken once on the first visit) and vital signs, • If diastolic BP is >90 mm Hg., asks her if she has severe headache, blurred vision or epigastric pain, and check urine for protein.				
4. Ensures that the bladder is empty her before physical examination begins,				
5. Ensures her privacy and confidentiality through out the examination.				
6. Asks the woman to lie on the examination bed, while helping her on the bed and place a pillow under her head and neck.				
7. Washes hands thoroughly with soap and water and dry them.				
8.Conducts head to toe assessment, checks the woman's conjunctiva and palms for pallor for anaemia, face and hands for oedema				
9. Inspects the breasts (i.e. contours, skin, nipples, abnormalities) and responds accordingly in the event of any breast problem				
Abdominal Examination (Every Visit)				
10. Asks the woman to uncover her abdomen and lie on her back with her knees slightly bent.				
11. Inspects abdomen for surgical scars and for size & shape of the abdomen at the same time asking for fetal movement if more than 20 weeks of gestation				
Fetal Lie and Presentation (After 36 weeks)				
Fundal Palpation				
12. Measures fundal height gently palpating the abdomen and using the finger method or measuring tape.				
13. Carries out lateral palpation to determine the side of the fetal back				
14. Turning and facing the woman's feet carries out pelvic palpation determine the presentation observing the woman's face for signs of pain.				
Fetal Heart Beat				
15. Listens to the fetal heart rate with fetal stethoscope and counts beats for a full minute, while feeling the woman's pulse at wrist simultaneously.				

CHECKLIST FOR ANTENATAL ASSESSMENT AND CARE (Some of the following steps/tasks should be performed simultaneously				
STEP/TASK	**CASES**			
Vaginal Examination (First Visit/As Needed)				
16. Asks the woman to uncover her genital area and covers or drapes her to preserve privacy and prepares her for examination.				
17. Washes hands thoroughly with soap and water and dry them				
18. Puts new examination gloves on both hands.				
19. Touches the inside of the woman's thigh before touching genital area.				
20. Looks at perineum, noting scars, lesions, inflammation, or cracks in skin.				
22. Separates labia majora with two fingers, check labia minora, clitoris, urethral opening and vaginal opening, noting signs of female genital cutting, sores, ulcers, warts, nits, lice, blood or foul-smelling discharge, urine, or stool coming from vaginal opening.				
23. Palpates the labia minora: • Looks for swelling, discharge, tenderness, ulcers and fistulas; • Feels for irregularities and nodules.				
24. Checks Skene's gland for discharge and tenderness:				
25. Checks Bartholin's glands for discharge and tenderness:				
26. Holding the labia open and asking the woman to bear down checks for abnormal discharge and bulging of anterior or posterior vaginal walls.				
27. Immerses both gloved hands in 0.5% chlorine solution and removes gloves by turning them inside out.				
28. Washes hands thoroughly with soap and water and drirs them.				
29. Helps the woman off the examination table.				
30. Records all relevant findings on the woman's record/antenatal card				
Laboratory Testing				
1. Determines the hemoglobin (1st visit, at about 28 weeks, and as needed): • If hemoglobin is less than 7 g/dL, refers woman to hospital • If hemoglobin is 7-11 g/dL, gives iron/folate 1 tablet twice daily				
2. Determines BG & Rh, VDRL, and urinalysis (glucose, protein, infection)				
3. Provides HIV testing and counseling using the national guideline, or refers woman to VCT services for HIV test, if she volunteers:				
CARE PROVISION **Note:** Individualize care considering all information gathered during assessment.				
1. Explains and discusses with the woman about danger signs during pregnancy and that she should report to a health facility in the event of any of the signs.				
2. Provides advice and counseling about diet and nutrition:				

CHECKLIST FOR ANTENATAL ASSESSMENT AND CARE (Some of the following steps/tasks should be performed simultaneously				
STEP/TASK	**CASES**			
3. Develops a birth preparedness and emergency readiness plan with the woman and her companion if present.				
4. Provides advice and counseling about: • Use of potentially harmful substances • Prevention of infection/hygiene • Rest and activity • Sexual relations and safer sex • Sleeping under ITN • Early and exclusive breast feeding				
5. Offers HIV testing & counseling service. If her test result turned out positive • Starts her on HAART • Discuss on infant feeding options • Discuss on test result disclosure to her partner and partener testing				
Immunizations and Other Prophylaxis				
6. Gives tetanus toxoid (TT) based on woman's need.				
7. Dispenses sufficient supply of 1 iron/folate tablet daily until next visit and counsel the woman about precautions, possible side effects and management.				
8. Dispenses preventive medications based on region/population-specific need.				
Return Visits				
9. Schedules the next antenatal visit making sure the woman knows when and where to come.				
10. Completes all information in the woman's record/antenatal card				
11.Thank the woman and her family member for coming				

SKILLS PRACTICE SESSION 3-2:

POSTABORTION CARE (MANUAL VACUUM ASPIRATION [MVA]) AND POSTABORTION FAMILY PLANNING COUNSELING

PURPOSE

The purpose of this activity is to enable participants to practice manual vacuum aspiration, achieve competency in the skills required and develop skills in postabortion family planning counseling.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate models. Participants should review Learning Guide 3.2.1 and Learning Guide 3.2.2 before beginning the activity. The facilitator should demonstrate the preliminary steps (medical evaluation, explaining the procedure, pelvic examination), followed by the steps in the MVA procedure. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 3.2.1.

The facilitator should then demonstrate the steps/tasks in providing postabortion family planning counseling. Under the guidance of the facilitator, participants should then work in groups of three to practice the steps/tasks and observe each other's performance; one participant/student should take the role of the postabortion woman, the second should practice counseling skills, and the third should observe performance using Learning Guide 3.2.2. Participants should then reverse roles until each has had an opportunity to practice counseling skills. Participants should be able to perform the steps/tasks in Learning Guide 3.2.1 and Learning Guide 3.2.2 before skill competency is assessed by the facilitator in the simulated setting, using Checklist 3.2.1 and Checklist 3.2.2. Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 3.2.1 and Checklist 3.2.2

RESOURCES

The following equipment or representations thereof:

- Pelvic model
- High-level disinfected or sterile surgical gloves
- Personal protective barriers

[2] If patients are not available at clinical sites for participant/students to practice postabortion care in relation to obstetric emergencies, the skills should be taught, practiced and assessed in a simulated setting.

- MVA syringes and cannula
- Vaginal speculum
- Single-toothed tenaculum or vulsellum forceps
- Learning Guide 3.2.1: Postabortion Care (Manual Vacuum Aspiration [MVA])
- Learning Guide 3.2.2: Postabortion Family Planning Counseling
- Checklist 3.2.1: Postabortion Care (Manual Vacuum Aspiration [MVA])
- Checklist 3.2.2: Postabortion Family Planning Counseling

SKILLS PRACTICE SESSION 3-2.1:

CHECKLIST 3.2.1: POSTABORTION CARE (MANUAL VACUUM ASPIRATION [MVA])

(To be used by the **Trainer/teacher** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT/STUDENT _____ Date Observed _____

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INITIAL ASSESSMENT					
1. Greets woman respectfully and with kindness.					
2. Assesses patient for shock or complications.					
MEDICAL EVALUATION					
1. Takes a reproductive history and perform physical examination and laboratory tests.					
2. Gives her information about her condition.					
3. Discusses her reproductive goals.					
GETTING READY					
1. Tells the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provides continual emotional support and reassurance, as feasible.					
3. Asks about allergies to antiseptics and anesthetics.					

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Gives pethedine 100mg and/or Diazepam 10mg or Diclophenac 75 mg IM as appropriate to the woman before the procedure..					
5. Determines that required sterile or high-level disinfected instruments and cannula are present.					
6. Checks that patient has recently emptied her bladder and washed her perineal area.					
7. Puts on personal protective barriers.					
8. Washes hands thoroughly and puts on high-level disinfected or sterile surgical gloves.					
9. Arranges sterile or high-level disinfected instruments on sterile tray or in high-level disinfected container.					
10. Checks MVA syringe and charges it (establish vacuum). Ensure that appropriate size cannula and adapters are available.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Give Oxytoxin and antibiotics IV if there is an indication					
2. Cleans the genitalia and drapes the woman					
3. Performs bimanual examination.					
4. Inserts speculum.					
5. Applies antiseptic to cervix and vagina two times.					
6. Removes any products of conception (POC) and checks for any cervical tears.					
MVA PROCEDURE					
1. Explains each step of the procedure prior to performing it.					
2. Puts single-toothed tenaculum or vulsellum forceps on anterior lip of cervix.					
3. Administers paracervical block (if necessary).					
4. Applies traction on cervix.					
5. Dilates the cervix (if needed).					
6. Inserts the cannula gently through the cervix into the uterine cavity.					

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
7. Attaches the prepared syringe to the cannula.					
8. Evacuates contents of the uterus.					
9. When signs of completion are present, withdraws cannula and MVA syringe. Empties contents of MVA syringe into a strainer.					
10. Removes forceps or tenaculum and speculum.					
11. Performs bimanual examination.					
12. . If uterus is still soft or bleeding persists, repeats steps 5–10					
13. Inspects tissue removed from uterus to ensure complete evacuation					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Before removing gloves, disposes of waste materials in a leakproof container or plastic bag.					
2. Flushes MVA syringe & cannula with 0.5% chlorine solution and disposes needle & syringe in a puncture proof container or safety box					
3. Decontaminates gloves in 0.5% chlorine solution and disposes in leakproof container					
4. Washes hands thoroughly.					
5. Checks for bleeding and ensure cramping has decreased before discharge.					
6. Instructs patient regarding post abortion care.					
7. Discusses reproductive goals and, as appropriate, provides family planning.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION 3-2.2:

CHECKLIST 3-2.2: POSTABORTION FAMILY PLANNING COUNSELING

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT/STUDENT _____ Date Observed _____

CHECKLIST FOR POSTABORTION FAMILY PLANNING COUNSELING						
STEP/TASK	**CASES**					
INITIAL INTERVIEW						
1. Treats woman respectfully and with kindness.						
2. Assesses whether counseling is appropriate at this time (if not, arrange for counseling at another time).						
3. Assures necessary privacy.						
4. Obtains biographic information (name, address, etc.).						
5. Asks about her previous experience with contraception. Provides general information about family planning.						
6. Gives the woman information about the contraceptive choices available and the benefits and limitations of each.						
7. Discusses woman's needs, concerns and fears. Helps her begin to choose an appropriate method.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
SCREENING						
1. Screens woman carefully to make sure there is no medical condition that would be a problem (complete Screening Checklist).						
2. Performs physical examination, if indicated. (Nonmedical counselors must refer woman for further evaluation.)						
3. Discusses what to do if the woman experiences any side effect/problem						
4. Provides followup visit instructions and ensures woman that she can return to the same clinic at any time.						
5. Asks the woman to repeat instructions and answers any questions.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						

SKILLS PRACTICE SESSION 3-3: MANAGEMENT OF SEVERE PRE-ECLAMPSIA/ECLAMPSIA

PURPOSE

The purpose of this activity is to enable participants to practice management of severe pre-eclampsia and eclampsia and achieve competency in the skills required. The main emphasis in the activity is on the preparation and use of anticonvulsant drugs.

INSTRUCTIONS

This activity should be conducted in a simulated setting with a fellow participant role-playing as a patient.

Participants should review Learning Guide 3-**3** before beginning the activity. The facilitator should demonstrate the initial steps/tasks in the management of severe pre-eclampsia/eclampsia, followed by the preparation and administration of magnesium sulfate. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 3-3.

The facilitator should then demonstrate the use of diazepam, with particular emphasis on rectal infusion. Under the guidance of the facilitator, participants should then work in pairs, using Learning Guide 3-3 to observe each other's performance.

Participants should be able to perform the steps/tasks in Learning Guide 3-3 before skill competency is assessed by the trainer/teacher in the simulated setting, using Checklist 3-3.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 3-3.

RESOURCES

- Equipment for starting an IV line
- Needles and syringes
- Magnesium sulfate
- Diazepam
- Examination gloves

Learning Guide 3-3: Management of Severe Pre-Eclampsia/Eclampsia
Checklist 3-3: Management of Severe Pre-Eclampsia/Eclampsia

CHECKLIST 3.3: MANAGEMENT OF SEVERE PRE-ECLAMPSIA/ECLAMPSIA

(To be used by the facilitator at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

Participant/Student: _____Date Observed: _____

CHECKLIST FOR MANAGEMENT OF SEVERE PRE-ECLAMPSIA/ECLAMPSIA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Greets the woman respectfully and with kindness.					
2. Tells the woman (and her support person) what is going to be done and encourage her to ask.					
3. Listens to her and respond attentively					
4. Provide continual emotional support and reassurance					
IMMEDIATE MANAGEMENT Note: different steps could be carried out simultaneously					
1. **SHOUTS FOR HELP**					
2. Turn the woman onto her left side					
3. Ensures airway is open: • Begins resuscitation measures if necessary					
4. Gives oxygen at 4–6 L per minute by mask or cannulae.					
5. Establishes an IV line and give normal saline or Ringer's lactate					
7. Checks vital signs					
INITIATE ANTICONVULSIVE THERAPY (MAGNESIUM SULPHATE) ***NOTE: Give only the loading doses as below and refer urgently to a higher facility. Provide supportive care until referral is arranged.***					

CHECKLIST FOR MANAGEMENT OF SEVERE PRE-ECLAMPSIA/ECLAMPSIA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Administering Loading Dose of Magnesium Sulphate					
8. Wash hands thoroughly with soap and water and dry.					
9. Tells the woman that she may experience a feeling of warmth when magnesium sulphate is given.					
10. Draws up 4 grams of magnesium sulphate (20 ml of 20% solution).					
11. Gives by IV injection SLOWLY over 5 minutes.					
12. Draw up 10 grams of magnesium sulphate (20ml of 50% solution) with 1 ml of 2% lignocaine in the same syringe.					
13. Give 5 grams (10 ml) by DEEP IM injection in upper outer quadrant of one buttock, replace the needle and inject the remaining 5 grams by DEEP IM injection into the other buttock.					
14. If disposing of needle and syringe, place in puncture proof container.					
15.Wash hands thoroughly with soap and water and dry.					
16. If convulsions recur AFTER 15 minutes give 2 grams of magnesium sulphate (10 ml of 20% solution or 4ml of 50% solution) IV injection SLOWLY over 5 minutes.					
17.Record drug administration and findings on the woman's record					
Administering Maintenance Dose of Magnesium Sulphate					
18. Give 5 grams of magnesium sulphate (10 mL of 50% solution), together with 1 mL of 2% lignocaine in the same syringe, by DEEP IM injection into alternate buttocks					
19. Before repeat administration check respiratory rate, patellar reflexes and urinary output. WITHHOLD or DELAY drug if necessary.					
20.If respiratory arrest occurs assist ventilation and gives calcium gluconate 1 g (10 ml of 10% solution) by IV injection SLOWLY until respiration begins.					
ANTICONVULSIVE THERAPY (DIAZEPAM) Note: **Diazepam should be used ONLY if magnesium sulphate is not available.**					
Administering Loading Dose of Diazepam					
1. Wash hands thoroughly with soap and water and dry.					
2. Draw up 10 mg of diazepam and give by IV injection SLOWLY over 2 minutes.					
3. Dispose of needle and syringe in puncture-proof container.					
4. Wash hands thoroughly with soap and water and dry.					
5. If convulsions recur, repeat loading dose.					
Administering Maintenance Dose of Diazepam					

CHECKLIST FOR MANAGEMENT OF SEVERE PRE-ECLAMPSIA/ECLAMPSIA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Give 40 mg of diazepam in 500 mL of IV fluid at a rate that keeps the woman sedated but rousable.					
7. If respiratory depression occurs assist ventilation, if necessary					
Administering Diazepam Rectally (when IV access is not possible)					
8. Wash hands thoroughly with soap and water and dry.					
9. Draw up 20 mg of diazepam in a 10 mL syringe and remove the needle from the syringe.					
10. Lubricate the barrel of the syringe and insert the syringe into the rectum to half its length.					
11. Discharge the contents of the syringe into the rectum and leave the syringe in place and hold the buttocks together for 10 minutes.					
12. If convulsions are not controlled within 10 minutes, administers an additional 10 mg of diazepam per hour.					
13. Record drug administration and findings on the woman's records.					
CONTROL BLOOD PRESSURE (ANTI-HYPERTENSIVE THERAPY) **Note:** The goal is to keep the diastolic pressure between 90 and 100 mm Hg					
14. If the diastolic pressure is 110 mm Hg or more: • Give hydralazine 5 mg IV slowly (3-4 minutes). • If hydralazine is not available, give labetolol 10 mg IV o OR Nifedipine 5mg under the tongue					
15. If diastolic blood pressure remains > 90 mmHg, repeat the dose at 30 minute intervals until diastolic BP is around 90mmHg					
16. Record drug administration and findings on the woman's records.					

ROLE PLAY 3.1: COMMUNICATING ABOUT COMPLICATIONS DURING PREGNANCY ANSWER KEY

DISCUSSION QUESTIONS

1. How did the doctor explain the procedure and the associated risks to Mamitu and her husband?

2. What nonverbal behaviors did the doctor use to encourage interaction among her/himself, Mamitu and her husband?

3. How did the doctor ensure that Mamitu and her husband understood what s/he had told them?

ANSWERS

The following answers should be used by the teacher to guide discussion after the role play:

1. The doctor should have spoken in a calm and reassuring manner, using terminology that Mamitu and her husband would easily understand.

2. Supportive nonverbal behaviors, such as nodding or smiling, should have been used to let Mamitu and her husband know that they were being listened to and understood.

3. To ensure that Mamitu and her husband understood the explanation provided, the doctor should have asked Mamitu and/or her husband to repeat the key points, OR asked questions whose answers would allow them to clearly demonstrate their understanding of key points.

CASE STUDY 3.1: VAGINAL BLEEDING IN EARLY PREGNANCY

ANSWER KEY

CASE STUDY

Derartu is 28 years old. She is 12 weeks pregnant when she presents at the health center complaining of light vaginal bleeding. This is Derartu's first pregnancy. It is a planned pregnancy, and she has been well until now.

ASSESSMENT (History, Physical Examination, Screening Procedures/Laboratory Tests)

1. What will you include in your initial assessment of Derartu, and why?
   - Derartu should be greeted respectfully and with kindness.
   - She should be told what is going to be done and listened to carefully. In addition, her questions should be answered in a calm and reassuring manner.
   - A rapid assessment should be done to check for the following signs to determine if she is in shock and in need of emergency treatment/resuscitation: rapid, weak pulse; systolic blood pressure less than 90 mm Hg; pallor; sweatiness or cold, clammy skin; rapid breathing; confusion.
2. What particular aspects of Derartu's physical examination will help you make a diagnosis or identify her problems/needs, and why?
   - An abdominal examination should be done to check for tenderness and to determine the size, consistency and position of the uterus. A pelvic examination should be done to check for tenderness and to determine whether the cervix is closed, whether there is any tissue protruding from the cervix and the amount of bleeding.
3. What causes of bleeding do you need to rule out?
   - Abortion (threatened, inevitable, complete, incomplete)
   - Ectopic pregnancy
   - Molar pregnancy

DIAGNOSIS (Identification of Problems/Needs)

You have completed your assessment of Derartu, and your main findings include the following:

- Derartu's temperature is 36.8º C, her pulse rate is 82 beats/minute and her blood pressure is 110/70 mm Hg.
- She has no skin pallor or sweating.
- She has slight lower abdominal cramping/pain and light vaginal bleeding.
- Her uterine size is equal to dates, she has no uterine tenderness and no cervical motion tenderness, and the cervix is closed.

4. Based on these findings, what is Derartu's diagnosis, and why?

- Derartu's symptoms and signs (e.g., light bleeding, closed cervix, uterus corresponds to dates) are consistent with threatened abortion.

CARE PROVISION (Planning and Intervention)

5. Based on your diagnosis, what is your plan of care for Derartu, and why?
   - No medical treatment is necessary at this point.
   - Derartu should be advised to avoid strenuous activity and sexual intercourse.
   - She should be given emotional support and reassurance. Counseling about rest, nutrition and danger signs in pregnancy should be provided, with particular emphasis on vaginal bleeding.
   - If bleeding stops, Derartu should be followed up at the antenatal clinic.
   - If bleeding continues, she should be advised to return for further assessment.

EVALUATION

- Derartu returns to the health center in 3 days.
- She reports that the bleeding became heavier last night, and that since then she has been having cramping and lower abdominal pain.
- She has not passed any products of conception, her uterus corresponds to dates and her cervix is now dilated.
- She has no signs or symptoms of shock.
- Derartu is very upset about the possibility of miscarrying.

6. Based on these findings, what is your continuing plan of care for Derartu, and why?
   - Derartu's signs and symptoms are now consistent with those of inevitable abortion.
   - She should be counseled about the potential outcome for her pregnancy and given emotional support and reassurance.
   - Because she is less than 16 weeks pregnant, arrangements should be made for evacuation of the uterus, using manual vacuum aspiration.
   - If evacuation is not immediately possible, ergometrine 0.2 mg IM should be given and, if necessary, repeated after 15 minutes; OR misoprostol 400 µg should be given by mouth and, if necessary, repeated once after 4 hours.
   - Arrangements should then be made for evacuation of the uterus as soon as possible.
   - Provide emotional support and reassurance to Derartu, explain what to expect, listen to her carefully and respond to any fears or concerns she may have.
   - After the evacuation procedure, Derartu should be reassured about the chances of a subsequent successful pregnancy and encouraged to delay the next pregnancy until she has completely recovered.
   - Counseling about suitable family planning methods should be provided.

- Derartu should be advised to return for immediate attention if she has:
  - Prolonged cramping (more than a few days)
  - Prolonged bleeding (more than 2 weeks)
  - Severe or increased pain
  - Fever, chills or malaise
  - Fainting
- Identify any other reproductive health services (e.g., tetanus prophylaxis or tetanus booster, treatment of STIs, cervical cancer screening) that Derartu may need.

REFERENCES

BEmONC training manual module-3

CASE STUDY 3.2: ELEVATED BLOOD PRESSURE

DURING PREGNANCY ANSWER KEY

CASE STUDY

Shewit is 34 years old. She is 18 weeks pregnant. She attended the antenatal clinic 1 week ago, when it was found that her diastolic blood pressure was 100 mm Hg on two readings taken 4 hours apart. Shewit reports that she has had high blood pressure for years, which has not been treated with antihypertensive drugs. She does not know what her blood pressure was before she became pregnant. She moved to the district 6 months ago and her medical record is not available. She has come back to the antenatal clinic, as requested, 1 week later for follow up.

ASSESSMENT: (History, Physical Examination, Screening Procedures/Laboratory Tests)

1. What will you include in your initial assessment of Shewit, and why?

Shewit should be greeted respectfully and with kindness.

She should be told what is going to be done and listened to carefully. In addition, her questions should be answered in a calm and reassuring manner.

She should be asked how she is feeling and whether she has had headache, visual disturbance or upper abdominal pain since the last visit. Her blood pressure should be taken and her urine should be tested for protein (proteinuria up to 2+, together with a diastolic blood pressure of 90–110 mm Hg before 20 weeks, is characteristic of superimposed mild pre-eclampsia).

Shewit's medical record should be obtained to check her history of hypertension.

2. What particular aspects of Shewit's physical examination will help you make a diagnosis, and why?

The most important examinations are measurement of blood pressure and urine protein estimation.

An abdominal examination should be done to check fetal growth and condition (in cases of pre-eclampsia/eclampsia reduced placental function may lead to low birth weight; there is an increased risk of hypoxia in both the antenatal and intranatal periods, and an increased risk of abruptio placentae).

3. What screening procedures/laboratory tests will you include (if available) in your assessment of Shewit, and why?

As mentioned above, urine should be checked for protein.

DIAGNOSIS: (IDENTIFICATION OF PROBLEMS/NEEDS)

You have completed your assessment of Shewit and your main findings include the following:

Shewit's diastolic blood pressure is 100 mm Hg. Her urine is negative for protein. She is feeling well and has no adverse symptoms (headache, visual disturbance or upper abdominal pain). Uterine size is consistent with dates. It has not been possible to obtain Shewit's medical record.

4. Based on these findings, what is Shewit's diagnosis, and why?

Shewit's symptoms and signs (e.g., diastolic blood pressure of 90 mm Hg or more before 20 weeks gestation and, in Shewit's case, a history of hypertension) are consistent with chronic hypertension.

CARE PROVISION: (PLANNING AND INTERVENTION)

5. Based on your diagnosis, what is your plan of care for Shewit, and why?

Shewit should be counseled about the danger signs in pregnancy, with particular emphasis on those related to pre-eclampsia and eclampsia (severe headache, blurred vision, and convulsions or loss of consciousness) and the need to seek help immediately if any of these occur.

Shewit should be asked to return to the clinic in 1 week to have her blood pressure, urine and fetal condition monitored.

She should be encouraged to express her concerns, listened to carefully and provided reassurance.

In the meantime, an attempt should be made to obtain her medical record.

Shewit's management should not, at this stage, include the use of antihypertensive drugs. (High levels of blood pressure maintain renal and placental perfusion in chronic hypertension. Reducing blood pressure will result in diminished perfusion—blood pressure should not be lowered below its pre-pregnancy level. There is no evidence that aggressive treatment to lower the blood pressure to normal levels improves either fetal or maternal outcome.)

Basic antenatal care (early detection and treatment of problems, prophylactic interventions, birth plan development/revision, plan for infant feeding) should be provided, as needed.

EVALUATION:

Shewit returns to the antenatal clinic in 1 week. She feels well and has no adverse symptoms. Her diastolic blood pressure is 100 mm Hg. Her medical record has been obtained and her pre-pregnancy blood pressure is noted as 140/100 mm Hg.

6. Based on these findings, what is your continuing plan of care for Shewit, and why?

Shewit should be asked to return to the clinic every 2 weeks to have her blood pressure, urine and fetal condition monitored.

She should be provided counseling about danger signs, again with particular emphasis on those related to pre-eclampsia/eclampsia.

She should be encouraged to express her concerns, listened to carefully and provided reassurance.

If Shewit's diastolic blood pressure increases to 110 mm Hg or more, or her systolic blood pressure increases to 160 mm Hg or more, she should be treated with antihypertensive drugs.

If she develops proteinuria, superimposed pre-eclampsia should be considered and she should be managed accordingly.

Basic antenatal care should continue to be provided, as needed.

If there are no complications, Shewit should be delivered at term.

CASE STUDY 3.3: PREGNANCY-INDUCED HYPERTENSION

ANSWER KEY

CASE STUDY

Fatuma is 16 years old. She is 30 weeks pregnant and has attended the antenatal clinic three times. All findings were within normal limits until her last antenatal visit 1 week ago. At that visit it was found that her blood pressure was 130/90 mm Hg. Her urine was negative for protein. The fetal heart sounds were normal, the fetus was active and uterine size was consistent with dates. She has come to the clinic today, as requested, for followup.

ASSESSMENT:
(History, Physical Examination, Screening Procedures/Laboratory Tests)

1. What will you include in your initial assessment of Fatuma, and why?

Fatuma should be greeted respectfully and with kindness.

She should be told what is going to be done and listened to carefully. In addition, her questions should be answered in a calm and reassuring manner.

Fatuma should be asked how she is feeling and whether she has had headache, blurred vision or upper abdominal pain since her last clinic visit.

She should be asked whether fetal activity has changed since her last visit.

Her blood pressure should be checked and her urine tested for protein (the presence of proteinuria, together with a diastolic blood pressure greater than 90 mm Hg, is indicative of pre-eclampsia).

2. What particular aspects of Fatuma's physical examination will help you make a diagnosis, and why?

Blood pressure should be measured.

An abdominal examination should be done to check fetal growth and to listen for fetal heart sounds (in cases of pre-eclampsia/eclampsia reduced placental function may lead to low birth weight; there is an increased risk of hypoxia in both the antenatal and intranatal periods, and an increased risk of abruptio placentae).

3. What screening procedures/laboratory tests will you include (if available) in your assessment of Fatuma, and why?

As mentioned above, urine should be checked for protein.

DIAGNOSIS: (Identification of Problems/Needs)

You have completed your assessment of Fatuma and your main findings include the following:

Fatuma's blood pressure is 130/90 mm Hg, and she has proteinuria 1+.
She has no adverse symptoms (headache, visual disturbance, upper abdominal pain, convulsions or loss of consciousness.
The fetus is active and fetal heart sounds are normal. Uterine size is consistent with dates.

4. Based on these findings, what is Fatuma's diagnosis, and why?

Fatuma's signs and symptoms (e.g., diastolic blood pressure 90–110 mm Hg after 20 weeks gestation and proteinuria up to 2+) are consistent with mild pre-eclampsia.

CARE PROVISION
(Planning and Intervention)

5. Based on your diagnosis, what is your plan of care for Fatuma, and why?

Fatuma should be provided reassurance and counseled about the danger signs related to severe pre-eclampsia and eclampsia (severe headache, blurred vision, upper abdominal pain, and convulsions or loss of consciousness) and the need to seek help immediately if any of these occur. She should be advised of the possible consequences of pregnancy-induced hypertension.

She should be encouraged to take additional periods of rest and to eat a normal diet (salt restriction should be discouraged as this does not prevent pregnancy-induced hypertension).

Fatuma should be asked to return to the clinic twice weekly to have her blood pressure, urine and fetal condition monitored.

Fatuma's management should not include the use of anticonvulsives, antihypertensives, sedatives or tranquilizers (these should not be given unless the blood pressure or urinary protein level increases).

Basic antenatal care (early detection and treatment of problems, prophylactic interventions, birth plan development/revision, plan for newborn feeding) should be provided, as needed.

She should be advised to plan for childbirth in the hospital.

EVALUATION

Fatuma attends antenatal clinic on a twice-weekly basis, as requested. Her blood pressure remains the same; she continues to have proteinuria 1+. Fetal growth is normal. Four weeks later, however, her blood pressure is 130/90 mm Hg and she has proteinuria 2+. Fatuma has not suffered headache, blurred vision, upper abdominal pain, convulsions or loss of consciousness and says that she feels well. However, she finds it very tiring to have to travel to the clinic by bus twice weekly for followup and wants to come only once a week.

6. Based on these findings, what is your continuing plan of care for Fatuma, and why?

Fatuma needs to be monitored on a twice-weekly basis, especially since her diastolic blood pressure and proteinuria have increased. Since this will be difficult on an outpatient basis because travel to the clinic twice weekly is making Fatuma very tired, she should be admitted to the district hospital.

The need for close followup should be explained to Fatuma In relation to this, she should be encouraged to express her concerns, listened to carefully, and provided emotional support and reassurance.

Her care in hospital should be as follows:

Normal diet

Blood pressure monitored twice daily

Urine tested for protein daily

Fetal condition monitored twice daily

No anticonvulsants, antihypertensives, sedatives or tranquilizers

If Fatuma's blood pressure returns to normal or her condition is stable, she could be discharged, providing arrangements can be made for twice-weekly followup (e.g., it may be possible for her to attend antenatal clinic once a week and be monitored at home once a week by a community midwife).

If her condition remains unchanged, she should remain in the hospital and be monitored as described above.

Basic antenatal care should continue to be provided, as needed.

If Fatuma develops signs of fetal growth restriction, early childbirth should be considered.

If fetal and maternal conditions are stable, she should be allowed to go into spontaneous labor and may deliver vaginally without the need for vacuum extraction or forceps.

CASE STUDY 3.4: PREGNANCY-INDUCED HYPERTENSION
ANSWER KEY

CASE STUDY

Zermechit is 23 years old. She is 37 weeks pregnant and has attended the antenatal clinic four times. No abnormal findings were detected during antenatal visits, the last of which was 1 week ago. Zermechit has been counseled about danger signs in pregnancy and what to do about them. Her husband has brought her to the emergency department of the district hospital because she developed a severe headache and blurred vision this morning.

ASSESSMENT
(History, Physical Examination, Screening Procedures/Laboratory Tests)

1. What will you include in your initial assessment of Zermechit, and why?

Zermechit and her husband should be greeted respectfully and with kindness.

They should be told what is going to be done and listened to carefully. In addition, their questions should be answered in a calm and reassuring manner.

A rapid assessment should be done to check level of consciousness and blood pressure. Temperature and respiration rate should also be checked. Zermechit should be asked how she is feeling, when headache and blurred vision began, whether she has had upper abdominal pain and whether there has been a decrease in urinary output during the past 24 hours.

Zermechit's urine should be tested for protein.

2. What particular aspects of Zermechit's physical examination will help you make a diagnosis or identify her problems/needs, and why?

Zermechit should be checked for elevated blood pressure and protein in her urine (the presence of proteinuria, together with a diastolic blood pressure greater than 90 mm Hg, is indicative of pre-eclampsia).

An abdominal examination should be done to check fetal condition and to listen for fetal heart sounds (in cases of pre-eclampsia/eclampsia reduced placental function may lead to low birth weight; there is an increased risk of hypoxia in both the antenatal and intranatal periods, and an increased risk of abruptio placentae).

Note that a diagnosis should be made rapidly, within a few minutes.

3. What screening procedures/laboratory tests will you include (if available) in your assessment of Zermechit, and why?

As mentioned above, urine should be checked for protein.

DIAGNOSIS:
(Identification of Problems/Needs)

You have completed your assessment of Zermechit and your main findings include the following:

Zermechit's blood pressure is 160/110 mm Hg, and she has proteinuria 3+.
She has a severe headache that started 3 hours ago. Her vision became blurred 2 hours after the onset of headache. She has no upper abdominal pain and has not suffered convulsions or loss of consciousness. Her reflexes are normal.
The fetus is active and fetal heart sounds are normal. Uterine size is consistent with dates.

4. Based on these findings, what is Zermechit's diagnosis, and why?

Zermechit's symptoms and signs (e.g., diastolic blood pressure 110 mm Hg or more after 20 weeks gestation and proteinuria up to 3+) are consistent with severe pre-eclampsia.

CARE PROVISION
(Planning and Intervention)

5. Based on your diagnosis, what is your plan of care for Zermechit**, and why?**

An antihypertensive drug should be given to lower the diastolic blood pressure and keep it between 90 mm Hg and 100 mm Hg to prevent cerebral hemorrhage. Hydralazine is the drug of choice; however, if this is not available, labetolol can be used.

Anticonvulsive therapy should be started. Magnesium sulfate is the drug of choice for preventing and treating convulsions in severe pre-eclampsia and eclampsia; however, if it is not available, diazepam may be used.

Equipment to respond to a convulsion (airway, suction, mask and bag, oxygen) should be available at her bedside.

Zermechit should not be left alone if she has a convulsion.

An IV of normal saline or Ringer's lactate should be started to administer IV drugs.

An indwelling catheter should be inserted to monitor urine output and proteinuria (magnesium sulfate should be withheld if the urine output falls below 30 mL/hour over 4 hours).

A strict record of intake and output should be kept to ensure that there is no fluid overload.

Vital signs (blood pressure and respiration rate, in particular), reflexes and fetal heart rate should be monitored hourly (magnesium sulfate should be withheld if the respiration rate falls below 16 breaths/minute or if patellar reflexes are absent).

Auscultate the lung bases hourly for rales indicating pulmonary edema.

A bedside clotting test should be done to rule out coagulopathy (coagulopathy can be triggered by eclampsia).

The steps taken to manage the complication should be explained to Zermechit and her husband. In addition, they should be encouraged to express their concerns, listened to carefully, and provided emotional support and reassurance.

EVALUATION

Two hours following the initiation of treatment, Zermechit's diastolic blood pressure is 100 mm Hg. She has not had a convulsion, but still has a headache. She does not have coagulopathy. During the past 2 hours, however, Zermechit's urinary output has dropped to 20 mL/hour. The fetal heart rate has ranged between 120 and 140 beats/minute.

6. Based on these findings, what is your continuing plan of care for Zermechit, and why?

Do not repeat the dose of magnesium sulfate until the urine output is greater than 30 mL/hour.

Plans should be made to deliver Zermechit:

If the cervix is favorable (soft, thin, partly dilated), membranes should be ruptured and labor should be induced using oxytocin or prostaglandins.

If vaginal delivery is not anticipated within 24 hours, if there are fetal heart abnormalities (less than 100 or more than 180 beats/minute), or if the cervix is unfavorable, Zermechit should be delivered by cesarean section.

The steps taken for continuing management of the complication should be explained to Zermechit and her husband. In addition, they should be encouraged to express their concerns, listened to carefully, and provided continuing emotional support and reassurance.

After childbirth:

Anticonvulsive therapy should be continued for 24 hours.

Antihypertensive drugs should be continued if Zermechit's diastolic blood pressure is 110 mm Hg or more, and her urinary output should continue to be monitored.

CLINICAL SIMULATION 3.1: MANAGEMENT OF HEADACHE, BLURRED VISION, CONVULSIONS OR LOSS OF CONSCIOUSNESS, ELEVATED BLOOD PRESSURE

Purpose: The purpose of this activity is to provide a simulated experience for participant to practice problem-solving and decision-making skills in the management of headache, blurred vision, convulsions or loss of consciousness, elevated blood pressure, with emphasis on thinking quickly and reacting (intervening) rapidly.

Instructions: The activity should be carried out in the most realistic setting possible, such as the labor and delivery area of a health center, clinic or maternity center, where equipment and supplies are available for emergency interventions.

- One participant should play the role of patient and a second participant the role of skilled provider. Other participant/students may be called on to assist the provider.
- The facilitator will give the participant playing the role of provider information about the patient's condition and ask pertinent questions, as indicated in the left-hand column of the chart on the next page.
- The participant will be expected to think quickly and react (intervene) rapidly when the facilitator provides information and asks questions. Key reactions/responses expected from the participant/student are provided in the right-hand column of the chart on the next page.
- Procedures such as starting an IV and giving oxygen should be role-played, using the appropriate equipment.
- Initially, the facilitator and participant/student will discuss what is happening during the simulation in order to develop problem-solving and decision-making skills. The italicized questions in the simulation are for this purpose. Further discussion may take place after the simulation is completed.
- As the participant's skills become stronger, the focus of the simulation should shift to providing appropriate care for the life-threatening emergency situation in a quick, efficient and effective manner. All discussion and questioning should take place after the simulation is over.

***Resources**: Sphygmomanometer, stethoscope, equipment for starting an IV infusion, syringes and vials, oxygen cylinder, mask and tubing, equipment for bladder catheterization, reflex hammer (or similar device), high-level disinfected or sterile surgical gloves.*

SCENARIO - 1 **(Information provided and questions asked by the facilitator)**	***KEY REACTIONS/RESPONSES*** **(Expected from participant)**
1. Ayantu is 16 years old and is 37 weeks pregnant. This is her first pregnancy. She has presented to the labor unit with contractions and says that she has had a bad headache all day. She also says that she cannot see properly. While she is getting up from the examination table she falls back onto the pillow and begins to have a convulsion. • What will you do?	• **Shout** for help to urgently mobilize all available personnel • Check airway to ensure that it is open, and turn Ayantu onto her left side • Protect her from injuries (fall) but does not attempt to restrain her • Have one of the staff members who responded to you shout for help take Ayantu's vital signs (temperature, pulse, blood pressure and respiration rate) and check her level of consciousness, color and temperature of skin • Have another staff member start oxygen at 4–6 L/minute • Prepare and give magnesium sulfate 20% solution, 4 g IV over 5 minutes • Follow promptly with 10 g of 50% magnesium sulfate solution, 5 g in each buttock deep IM injection with 1 mL of 2% lignocaine in the same syringe • At the same time, explain to the family what is happening and talk to the woman as appropriate
Discussion Question 1*: What would you do if there was no magnesium sulfate in the health center?*	***Expected Response****: Use diazepam 10 mg slowly over 2 minutes.*
2. After 5 minutes, Ayantu is no longer convulsing. Her diastolic blood pressure is 110 mm Hg and her respiration rate is 20 breaths/minute. • What is Ayantu's problem? • What will you do next? • What should the aim be with respect to controlling Ayantu's blood pressure? • What other care does Ayantu require now?	• State that Ayantu's symptoms and signs are consistent with eclampsia • Give hydralazine 5 mg IV slowly every 5 minutes until diastolic blood pressure is lowered to between 90–100 mm Hg • State that the aim should be to keep Ayantu's diastolic blood pressure between 90 mm Hg and 100 mm Hg to prevent cerebral hemorhage • Have one of the staff assisting with the emergency insert an indwelling catheter to monitor urinary output and proteinuria • Have a second staff member start an IV infusion of normal saline or Ringer's lactate and draw blood to assess clotting status using a bedside clotting test • Maintain a strict fluid balance chart

SCENARIO 1 (continuation)	***KEY REACTIONS/RESPONSES (continuation)***
***Discussion Question 2**: Would you give additional hydralazine after the first dose?*	***Expected Response**: Repeat hourly as needed, or give 12.5 mg IM every 2 hours as needed.*
3. After another 15 minutes, Ayantu's blood pressure is 94 mm Hg and her respiration rate is 16 breaths/minute. • What will you do now?	• Stay with Ayantu continuously and monitor blood pressure, pulse, respiration rate, patella reflexes and fetal heart • Check whether Ayantu has had any further contractions
4. It is now 1 hour since treatment was started for Ayantu. She is sleeping but is easily roused. Her blood pressure is now 90 mm Hg and her respiration rate is still 16 breaths/minute. She has had several more contractions, each lasting less than 20 seconds. • What will you do now?	• Continue to monitor blood pressure, pulse, respiration rate, reflexes and fetal heart • Monitor urine output and IV fluid intake • Monitor for the development of pulmonary edema by auscultating lung bases for rales • Assess Ayantu's cervix to determine whether it is favorable or unfavorable
5. It is now 2 hours since treatment was started for Ayantu. Her blood pressure is still 90 mm Hg and her respiration rate is still 16 breaths/minute. All other observations are within expected range. She continues to sleep and rouses when she has a contraction. Contractions are occurring more frequently but still last less than 20 seconds. Ayantu's cervix is 100% effaced and 3 cm dilated. There are no fetal heart abnormalities. • What will you do now? • When should childbirth occur?	• Continue to monitor Ayantu as indicated above • State that membranes should be ruptured using an amniotic hook or a Kocher clamp and labor induced using oxytocin or prostaglandins • State that childbirth should occur within 12 hours of the onset of Ayantu's convulsions
Scenario 2 (Information provided and questions asked by the facilitator)	***KEY REACTIONS/RESPONSES* (Expected from participant)**
1. Hana is 20 years old. She is 38 weeks pregnant. This is her second pregnancy. Her mother-in-law has brought Hana to the health center this morning because she has had a severe headache and blurred vision for the past 6 hours. Hana. says she feels very ill. • What will you do?	• **Shout** for help to urgently mobilize all available personnel • Place Hana on the examination table on her left side • Make a rapid evaluation of Hana's condition, including vital signs (temperature, pulse, blood pressure, and respiration rate), level of consciousness, color and temperature of skin • Simultaneously ask about the history of Hana 's present illness

Scenario 2 (continuation)	***KEY REACTIONS/RESPONSES* (continuation)**
2. Hana's diastolic blood pressure is 96 mm Hg, her pulse 100 beats/minute and respiration rate 20 breaths/minute. She has hyper-reflexia. Her mother-in-law tells you that Hana has had no symptoms or signs of the onset of labor. • What is Hana's problem? • What will you do now? • What is your main concern at the moment?	• State that Hana's symptoms and signs are consistent with severe pre-eclampsia • Have one of the staff who responded to your shout for help start oxygen at 4–6 L/minute • Prepare and give magnesium sulfate 20% solution, 4 g IV over 5 minutes • Follow promptly with 10 g of 50% magnesium sulfate solution, 5 g in each buttock deep IM injection with 1 mL of 2% lignocaine in the same syringe • At the same time, tell Hana (and her mother-in-law) what is going to be done, listen to them and respond attentively to their questions and concerns • State that the main concern at the moment is to prevent Hana from convulsing
3. After 15 minutes, Hana is resting quietly. She still has a headache and hyper-reflexia. • What will you do now? • What will you do during the next hour?	• Have one of the staff assisting with the emergency insert an indwelling catheter to monitor urinary output and proteinuria • Start an IV infusion of normal saline or Ringer's lactate • Listen to the fetal heart • State that during the next hour will continue to monitor vital signs, reflexes and fetal heart, and maintain a strict fluid balance chart
4. It is now 1 hour since treatment for Hana was started. Her diastolic blood pressure is still 96 mm Hg, pulse 100 beats/minute and respiration rate 20 breaths/minute. She still has hyper-reflexia. You detect that the fetal heart rate is 80. • What is your main concern now? • What will you do now?	• State that main concern now is fetal heart abnormality • State that Hana should be prepared to go the operating room for cesarean section • Tell Hana (and her mother-in-law) what is happening, listen to their concerns and provide reassurance

MODULE-4:

CHILD BIRTH CARE (LABOR, DELIVERY & IMMEDIATE POST PARTUM)

Participant learning objective: After completing this module, participants will be able to describe the continuum of care, the care during child birth (labor, delivery and immediate postpartum) to save the lives of mothers and babies and promote overall health. It introduces the basic components in the provision of care to the mother and the newborn and the additional cares required for selected common problems to decrease maternal and perinatal morbidity and mortality.

Enabling objectives

1. Provide basic care to the woman and the fetus during labor.
2. Provide basic care to the woman and the fetus during delivery.
3. Provide basic care to the woman and the newborn in the immediate postpartum period.
4. Detect and provide care for complications during labor.
5. Detect and provide care for complications during delivery.
6. Detect and provide care for complications to the woman in the immediate postpartum period.
7. Recognize an emergency situation during labor, delivery and immediate postpartum period which requires immediate treatment and, in most cases, urgent referral to a higher level health facility.
8. Describe steps in rapid initial assessment and emergency management of a sick neonate delivered in the health facility.
9. Provide pre-referral management to a recognized emergency situation.

Training outline:

MODULE -4: CHILD BIRTH CARE (LABOR, DELIVERY AND IMMEDIATE POST PARTUM)			
TIME	**OBJECTIVES / ACTIVITIES**	**TRAINING/LEARNING METHODS**	**RESOURCE MATERIALS**
		1550 MINUTES	
10 minutes	• **Introduction** • **Module learning objectives**	– **Brainstorming** – **Volunteer reading**	**BEmONC training manual:** Module -4
120 minutes	**Objective**: Describe best practices for basic care during labor and childbirth	**Illustrated Lecture and Discussion**: – Use PPT presentation – 13 to review and discuss best practices for care during labor, with particular emphasis on supportive care. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants about the supportive care provided by them for women in labor. Is there a need for change? If so, why and how? – Use the relevant presentation slides to review and discuss: • The components of the partograph • How to plot progress in labor • How to identify normal labor • How to identify unsatisfactory progress in labor, prolonged active phase and obstructed labor Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants if they have been using the partograph. How has its use affected care during labor? Have they experienced problems using it? How have the problems been resolved?	**BEmONC Training manual**: Module -4; Unit – 2 (2.1 to 2.5). **Presentation Graphics**: ***Presentation -13:*** Basic care during labor and child birth
120 minutes	**Activity**: Practice using the partograph	– **Exercise**: Follow the directions in the Exercise, Using the Partograph. Trainers should keep in mind that some participants may be able to use the partograph more proficiently than others. Progress should therefore be monitored closely to make sure that participants are able to complete the various steps involved in the exercise. Participants who experience difficulties should be provided additional help during the exercise.	**BEmONC Facilitator hand book and Participant handout: Exercise 4-1**: Using the Partograph and Answer Key Partograph forms Poster-size laminated partograph and markers
90 minutes	**Objective**: Describe best practices for care during second stage of labor, active management of the	**Illustrated Lecture and Discussion**: Use the relevant slides from the presentation graphics on normal labor and childbirth and use them to review and discuss: • Assessing descent, dilatation, position • Managing second stage • Episiotomy	**BEmONC Training manual**: Module -4; Unit -2 (2.6, 2.7 & 2.8) . **Presentation Graphics**: ***Presentation -13:*** Basic

	third stage and immediate postpartum care	• Active management of third stage • Immediate care of the newborn • Immediate postpartum care of the mother – Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants about management of third stage. Do they use active management? If not, why?	care during labor and child birth
30 minutes	**Activity**: Video show on AMSTL and companionship of labor.	**Video show and discussion:** • AMSTL – Companionship in labor	**Video clips:** • RHL video clip – AMTSL RHL video clip – companionship in labor
30 minutes	**Activity**: Case studies on child birth assessment and care	**Case Studies**: Use the case studies on on child birth assessment and care. Divide participants into groups of three or four. Allow approximately 20 minutes for the groups to work on the case study, then allow five minutes for one participant from each group to report back to the class as a whole. Use the case study answer keys to guide discussion.	**BEmONC Facilitator hand book and Participant handout:** **Case Study 4-1**: Childbirth Assessment and Care (support in labor) **Case Study 4-2**: Child birth Assessment and Care (support in child birth)
20 minutes	**Activity**: Case studies on unsatisfactory progress in labor	**Case Studies**: Use the case studies on unsatisfactory progress in labor. Divide participants into groups of three or four. Allow approximately 15 minutes for the groups to work on the case study, then allow five minutes for one participant from one of the groups to report back to the class as a whole. Use the case study answer keys to guide discussion.	**BEmONC Facilitator hand book and Participant handout:** **Case Study 4-3,** Unsatisfactory progress in labor and Answer Keys
180 minutes	**Activity**: Practice clean and safe childbirth	**Skill Demonstration and Practice**: The skill is to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant models, learning guide and checklist, as described in Skills Practice Session: Conducting a Childbirth. – Participants who do not have an opportunity to practice the skill during this session should do so arranging opportunities to practice with the models in the evening or on the weekend.	**BEmONC Facilitator hand book and Participant handout:** **Skill Practice session 4-1**: Asssessment of a woman in labor (Learning Guide and Checklist) **Skill Practice session 4-2**: Assisting normal Childbirth (Learning Guide and Checklist)
180 minutes	**Activity**: Skill Demonstration and Practice on newborn resuscitation:	**Skill Demonstration and Practice**: - Show video on new born resuscitation - The skill is to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant model, learning guide and checklist, as described in Skills Practice Session: Newborn Resuscitation.	**BEmONC Facilitator's Handbook and Participant's Handout**: Module -4: Unit 2-10. **Skill Practice session 4-3**: Newborn Resuscitation

MODULE -4: CHILD BIRTH CARE (LABOR, DELIVERY AND IMMEDIATE POST PARTUM)			
		Participants who do not have an opportunity to practice the skill during this session should do so after the break or, opportunities to practice with the model could be provided in the evening or on the weekend.	(Learning Guide and Checklist) • Manikin with complete essential newborn care kits • Essential newborn care steps enlargement (laminated) Flip chart and parkers
120 minutes	• Basic immediate postnatal newborn care – Unit learning objectives – Immediate newborn care (8step procedure) – Assess the newborn for birth weight and gestational age Assess newborn for feeding problem and low birth weight	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss prevention of infection, thermal protection, basic newborn resuscitation, breastfeeding and best practices for promoting newborn health. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to share their experiences with respect to newborn resuscitation. If there are differences between the recommended "best practices" for newborn resuscitation and current practices at their worksites, discuss the reasons for this. Is there a need to change current practices? If so, how?	**BEmONC Training manual – M**odule -4: Unit 2-12 **Presentation Graphics**: • ***Presentation -14:*** Immediate newborn care • Video clip (CD) on Newborn essential care and breastfeeding • Video clip on Kangaroo mother care for preterm newborn
	Breastfeeding	Brainstorm and group discussion Show videos on breast feeding	
	Ongoing supportive care for the newborn	Brainstorm and group discussion	
	Assessment and classification of common birth injuries and malformation in newborns	• Illustration with slide presentation	
	Basic immediate postnatal care for preterm and low birth weight newborn	• Illustration with slide presentation Show videos on kangaroo care	
30 minutes	**Objective**: Describe best practices for care during unsatisfactory progress of labor	**Illustrated Lecture and Discussion**: Use the relevant the presentation graphics on abnormal labor and use them to review and discuss: • Types of abnormal progress • How to recognize abnormal progress of labor • Managing abnormal progress of labor Pause at appropriate intervals to emphasize particular points and encourage discussion.	**BEmONC Training manual**: Module -4; Unit -3 (3.2). **Presentation Graphics**: ***Presentation -15:*** Unsatisfactory progress of labor

MODULE -4: CHILD BIRTH CARE (LABOR, DELIVERY AND IMMEDIATE POST PARTUM)			
60 minutes	**Objective**: Describe best practices for managing vaginal bleeding after childbirth	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss best practices for managing vaginal bleeding after childbirth. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to cite the possible causes of vaginal bleeding after childbirth and describe the way in which they manage each of these. If there are differences between the recommended "best practices" for management and current practices at their worksites, discuss the reasons for this. Is there a need to change current practices? If so, how?	**BEmONC participant handbook**: module 4; unit 3 (3.6, 3.7 & 3.8) **Presentation Graphics**: ***Presentation -16:*** Vaginal Bleeding After Childbirth
120 minutes	**Activity**: Practice manual removal of placenta, bimanual compression of the uterus and abdominal aortic compression	**Skill Demonstration and Practice**: The skills are to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant models, learning guides and checklists, as described in Skills Practice Session: Bimanual Compression of the Uterus, Skills Practice Session: Compression of the Abdominal Aorta and Skills Practice Session: Manual Removal of Placenta. Participants who do not have an opportunity to practice the skill during this session should do so in the next session (Session 12) or during Session 17 or 18 on Day 9; alternatively, opportunities to practice with the models could be provided in the evening or on the weekend.	**BEmONC Facilitator hand book and Participant handout:** Module 4; **Skill Practice sessions 4-4**: Bimanual Compression of the Uterus: Learning Guide and Checklist **Skill Practice session 4-5**: Compression of the Abdominal Aorta: Learning Guide and Checklist **Skill Practice session 4-6**: Manual Removal of Placenta: Learning Guide and Checklist
30 minutes	**Objective**: Describe the diagnosis and management of genital tract lacerations	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to present and discuss the diagnosis and management of genital tract lacerations. Ask participants to share their experiences with respect to lacerations. How did they manage? What was the challenge?	**BEmONC Training manual:** Module 4; unit 3 (3.8). **Presentation Graphics**: ***Presentation -17:*** Inspection and Repair of Vaginal, Periurethral and Cervical Tears
100 minutes	**Activity**: Practice – Episiotomy and repair – Repair of 1st & 2nd degree vaginal / perineal tear and – Repair of cervical tears	**Skill Demonstration and Practice**: The skill is to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant learning aid, learning guide and checklist, as described in Skills Practice Session: Episiotomy and repair, Repair of 1st & 2nd degree vaginal/perineal tear and Skills Practice Session: Repair of Cervical Tears. Participants who do not have an opportunity to practice during this session should do so during opportunities arranged practice sessions in the evening or on the	**BEmONC Facilitator hand book and Participant handout:** **Skill Practice session 4-7.1**: Episiotomy and repair: Learning Guide and Checklist **Skill Practice session 4-7.2**: Repair of 1st & 2nd degree vaginal/perineal

		weekend.	tear: Learning Guide and Checklist **Skill Practice 4-7.3**: Repair of Cervical Tears: Learning Guide and Checklist
30 minutes	**Objective**: Describe the diagnosis and management of breech presentation	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics and the videotape on breech delivery to present and discuss the diagnosis and management of breech presentation. Ask participants to share their experiences with respect to breech delivery. How did they manage? What was the outcome for mother and newborn? **Show video** on breech delivery.	**BEmONC Training manual:** Module 4; unit 3 (3.9). **Presentation Graphics**: ***Presentation -18:*** Assisted breech delivery **Videotape**: Malpresentation and Vaginal Breech Delivery
110 minutes	**Activity**: Practice breech delivery	**Skill Demonstration and Practice**: The skill is to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant model, learning guide and checklist, as described in Skills Practice Session 3-10: Breech Delivery. Participants who do not have an opportunity to practice the skill during this session should do so in the afternoon practice session.	**BEmONC Facilitator hand book and Participant handout:** **Skill Demonstration and Practice**: skills practice session **4-8** Breech Delivery: Learning Guide and Checklist
60 minutes	**Objective**: Describe the procedure of vacuum extraction	**Illustrated Lecture and Discussion**: Use thepresentation graphic and videotape on vacuum extraction to present and discuss the procedure. Describe the conditions for vacuum extraction and the equipment used for the procedure. Ask participants to share their experiences with respect to vacuum extraction. Have they used the procedure or observed someone else using it? What was the outcome for mother and newborn? Show video on vacuum extraction.	**BEmONC participant handout:** Module 4; unit 3 (3.10). **Presentation Graphics**: ***Presentation -19:*** Vacuum Extractor Assisted Delivery **Videotape**: Vacuum Delivery: Reducing Risk
110 minutes	**Activity**: Practice vacuum extraction delivery	**Skill Demonstration and Practice**: The skill is to be demonstrated by trainers and practiced by participants in a simulated setting using the relevant model, learning guide and checklist, as described in the Skills Practice Session**.** Participants who do not have an opportunity to practice the skill during this session should do so later in the afternoon practice session.	**BEmONC Facilitator hand book and Participant handout:** **Skills practice session 4-9**: Vacuum Extraction: Learning Guide and Checklist

SKILLS PRACTICE S ESSION 4-1: ASSESSMENT OF THE WOMAN IN LABOR

PURPOSE

The purpose of this activity is to enable participants to practice assessment of the woman in labor, including history and physical examination, and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting using the appropriate pelvic and fetal models. Participants should review Learning Guide 4.1 before beginning the activity.

The facilitator should demonstrate the steps/tasks in taking a **history** from the woman in labor for participants. Under the guidance of the facilitator, participants should then work in groups of three to practice the steps/tasks and observe each other's performance; while one participant takes a history from another, the third participant should use the relevant section of Learning Guide 4.1 to observe performance. Participants should then reverse roles until each has had an opportunity to take a history and be observed. Participants should be able to perform the steps/tasks relevant to taking a history from the woman in labor before progressing to physical examination of the woman in labor.

The facilitator should demonstrate the steps/tasks in **physical examination** of the woman in labor for participants. Under the guidance of the facilitator, participants should then work in pairs and, using the childbirth simulator, practice the steps/tasks and observe each other's performance; while one participant does the physical examination, the second participant should use the relevant section of Learning Guide 4.1 to observe performance. Participants should then reverse roles. Participants should be able to perform all of the steps/tasks in Learning Guide 4.1 before skills competency is assessed in the simulated setting by the facilitator, using Checklist 4.1.

Finally, following supervised practice at a clinical site, the facilitator should assess the skills competency of each participant using Checklist 4.1.

RESOURCES

- Childbirth simulator
- Sphygmomanometer and stethoscope
- Fetal stethoscope
- Examination gloves
- 0.5% chlorine solution and receptacle for decontamination
- Leakproof container or plastic bag

The BEmONC
Learning Guide 4.1: Assessment of the Woman in Labor
Checklist 4.1: Assessment of the Woman in Labor

CHECKLIST 4.1: ASSESSMENT OF THE WOMAN IN LABOR

(To be used by the **Trainer** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____Date Observed _____

CHECKLIST FOR ASSESSMENT OF THE WOMAN IN LABOR (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Greets the woman respectfully and with kindness.					
3. Tells the woman (and her support person) what is going to be done, listens to her attentively, and responds to her questions and concerns.					
4. Provides continual emotional support and reassurance, as possible.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
HISTORY **(Asks the following questions if the information is not available on the woman's ANC record)**					
Personal Identification					
1. What is your name, age, address, and phone number?					
Present Pregnancy					
2. How many previous pregnancies and births have you had?					
3. Do you have a complication readiness plan if there are any problems during labor or childbirth?					
4. Are you having a particular problem at present?					
5. Have you received care from another caregiver?					

CHECKLIST FOR ASSESSMENT OF THE WOMAN IN LABOR (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. When is your baby due?					
7. Did you receive antenatal care during this pregnancy?					
8. Have you had any (other) problems during this pregnancy?					
Present Labor/Childbirth					
9. Have your membranes ruptured/waters broken?					
10. Have regular contractions started?					
11. How often are you having contractions and how long does each one last?					
12. Have you felt the baby move in the past 24 hours?					
13. Have you taken any alcohol, drugs, herbs, or other preparations in the last 24 hours?					
14. When did you last eat or drink?					
Obstetric History					
15. Have you had a cesarean section, ruptured uterus, or any surgery to the uterus during a previous childbirth?					
16. Have you had any other complications during a previous pregnancy, childbirth, or postpartum/newborn period?					
17. Have you had any previous problems breastfeeding?					
Medical History					
18. Do you have any allergies?					
19. Have you been tested for HIV?					
20. Have you had anemia recently?					
21. Have you been tested for syphilis?					
22. Have you had any chronic illness/condition, such as tuberculosis, hepatitis, heart disease, diabetes, or other serious chronic disease?					
23. Have you ever been in hospital or had surgery/an operation?					
24. Are you taking any drugs/medications?					
25. Have you had a complete series of five tetanus toxoid (TT) immunizations?					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PHYSICAL EXAMINATION					

CHECKLIST FOR ASSESSMENT OF THE WOMAN IN LABOR (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Assessment of General Well-Being					
1. Observes gait and movements, and behavior and vocalizations.					
2. Checks skin, noting lesions or bruises.					
3. Checks conjunctiva for pallor.					
Vital Signs Measurements					
4. Have the woman remain seated or lying down, ensuring that she is comfortable and relaxed, and observe breathing and measure blood pressure, temperature, and pulse.					
Visual Inspection of Breasts (This part of the examination should only be performed if the woman is in the latent [or early active] phase of the first stage of labor and is not in acute distress.)					
5. Explains to the woman the next steps in the physical examination and obtains her consent to proceed.					
6. Asks the woman to empty her bladder.					
7. Asks the woman to uncover her body from the waist up, have her remain seated with her arms at her sides, and checks her breasts, noting any abnormalities.					
Abdominal Examination					
8. Asks the woman to uncover her stomach and lie on her back with her knees slightly bent.					
9. Checks the surface of the abdomen and the shape of the uterus, and measure fundal height.					
10. Makes sure hands are clean and warm.					
11. Stands at the woman's side, facing her head, make sure she is not having a contraction, and determines fetal lie and presentation.					
12. Determines descent through abdominal palpation.					
13. Between contractions, listens to fetal heart for a full minute.					
14. Palpates contractions from beginning of a contraction to end of contraction and on to beginning of next contraction.					
Genital and Vaginal Examination					
15. Asks the woman to uncover her genital area, covers or drapes her to preserve privacy and respect modesty, and asks her to separate her legs while keeping her knees slightly bent.					
16. Turns on light and directs it toward genital area.					

CHECKLIST FOR ASSESSMENT OF THE WOMAN IN LABOR (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
17. Washes hands thoroughly and puts new examination or high-level disinfected gloves on both hands.					
18. Inspects the labia, clitoris, and perineum and palpates the labia minora, noting any abnormalities.					
19. Assesses dilatation of cervix, membranes, and presenting part.					
21. Immerses both gloved hands briefly in a container filled with 0.5% chlorine solution; then removes gloves by turning them inside out and places in a plastic bag or leakproof, covered waste container					
22. Washes hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION 4-2: ASSISTING IN NORMAL BIRTH

PURPOSE

The purpose of this activity is to enable participants to practice conducting assisting in normal birth and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the childbirth simulator.

Participants should review Learning Guide 4.2 before beginning the activity. The facilitator should demonstrate the steps/tasks in **assisting the birth** (up to but not including active management of third stage). Under the guidance of the facilitator, participants should then work in pairs and, using the childbirth simulator, practice the steps/tasks and observe each other's performance; while one participant assists the birth, the second participant should use the relevant section of Learning Guide 4.2 to observe performance. Participants should then reverse roles. Participants should be able to perform the steps/tasks relevant to assisting the birth before progressing to active management of third stage, examination of placenta, and inspection of vagina and perineum.

The facilitator should demonstrate the steps/tasks in **active management of third stage**, as well as the following steps of **examination of the placenta and inspection of the vagina and perineum for tears**. Under the guidance of the facilitator, participants should then work in pairs and, using the childbirth simulator, practice the steps/tasks and observe each other's performance; while one participant performs active management of third stage, examination of the placenta, and inspection of the vagina and perineum for tears, the second participant should use the relevant section of Learning Guide 4.2 to observe performance. Participants should then reverse roles. Participants should be able to perform all of the steps/tasks in Learning Guide 4.2 before skills competency is assessed in the simulated setting by the facilitator, using Checklist 4.2.

Finally, following supervised practice at a clinical site, the facilitator should assess the skills competency of each participant, using Checklist 4.2.

RESOURCES

- Childbirth simulator
- High-level disinfected or surgical gloves
- Personal protective barriers
- Delivery kit/pack
- 0.5% chlorine solution and receptacle for decontamination
- Leakproof container or plastic bag
- The BEmONC
- Learning Guide 4.2: Assisting in Normal Birth
- Checklist 4.2: Assisting in Normal Birth

CHECKLIST 4.2: ASSISTING NORMAL BIRTH (INCLUDING IMMEDIATE NEWBORN CARE AND ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOR)

(To be used by the facilitator at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

Participant/Student: _____Date Observed: _____

CHECKLIST FOR ASSISTING NORMAL BIRTH (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Washes hands and prepares the necessary equipment.					
2. Encourages the woman to adopt the position of choice and continue spontaneous bearing down efforts.					
3. Tells the woman what is going to be done, listens to her, and responds					
4. Provides continual emotional support and reassurance					
5. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
ASSISTING THE BIRTH					
6. Washes hands thoroughly, and puts on 2 pairs of sterile surgical gloves.					
7. Cleans the woman's perineum and places one drape under the woman's buttocks and one over her abdomen - ask woman to pant or give only small pushes with contractions.					
8. Controls the birth of the head with the fingers of one hand to maintain flexion, allow natural stretching of the perineal tissue, and prevents tears, and use the other hand to support the perineum.					

CHECKLIST FOR ASSISTING NORMAL BIRTH (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
9. Wipes mucous or membranes with gauze if needed from baby's eyes and mouth					
10. Feels around the baby's neck for the cord and respond appropriately if the cord is present.					
11. Allows the baby's head to turn spontaneously and, with the hands on either side of the baby's head, delivers the anterior shoulder.					
12. When the arm fold is seen, guides the head upward as the posterior shoulder is born over the perineum and lifts the baby's head anteriorly to deliver the posterior shoulder.					
13. Supports the rest of the baby's body with both hand as it slides out and places the baby on the mother's abdomen.					
14. Clamps the cord at about 3 cm from the umbilicus and applies second clamp 2cm apart, ties securely between clamps and cuts with sterile scissors or blade					
15. Notes the time and sex of the baby and tells the mother.					
16. Thoroughly dries the baby and assess breathing. If baby does not breathe immediately, begins resuscitative measures (see **Checklist-Newborn Resuscitation**).					
17. Removes wet towel and ensures that the baby is kept warm, using skin-to-skin contact on the mother's chest. Covers the baby with a cloth or blanket, including the head (with hat if possible).					
18. Palpates the mother's abdomen to rule out the presence of additional baby (ies) and proceeds with active management of the third stage.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
ACTIVE MANAGEMENT OF THIRD STAGE OF LABOR					
1. If no additional baby, gives oxytocin 10 units IM within one minute of birth					
2. Changes gloves or removes top pair.					
3. Clamps the cord close to the perineum using sponge forceps and waits for a uterine contraction.					
4. Applies counter traction in an upward direction to stabilize the uterus.					
5. At the same time with the other hand, pulls with a firm, steady tension on the cord in a downward direction					

CHECKLIST FOR ASSISTING NORMAL BIRTH (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Delivers placenta with both hands, gently turning the entire placenta and lifting it up and down					
7. Immediately after placenta delivers, massages uterus until firm.					
8. Examines the placenta, membranes, and cord and disposes into bucket lined with plastic bag or as culturally appropriate.					
9. Examines the vulva, perineum and vagina for lacerations/tears and carries out appropriate repair as needed.					
10. Cleanses perineum and area beneath the woman and applies a pad or cloth to vulva.					
11. Assists the mother to a comfortable position for continued breastfeeding and bonding with her newborn					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Disposes of contaminated items in a plastic bag or leakproof, covered waste container.					
2. Decontaminates instruments by placing in a container filled with 0.5% chlorine solution for 10 minutes.					
3. Decontaminates needle and syringe, hold the needle under the surface of a 0.5% chlorine solution, fills the syringe, and pushes out (flush) three times; then places in a puncture-resistant sharps container.					
4. Immerses both gloves in 0.5% chlorine solution and removes gloves by turning them inside out.					
5. Washes hands					
6. Records all information on record including estimated blood loss.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
IMMEDIATE POST PARTUM AND NEWBORN CARE					
Immediate care of newborn:					

CHECKLIST FOR ASSISTING NORMAL BIRTH (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
7. After the baby has breastfed: • Checks baby's temperature every 15 minutes for 1 hour by touching his/her chest. • Identifies the baby • Weighs the baby and record • Performs eye care • Gives Vit K Im • Checks the cord • Ensures the baby is dressed warmly and with the mother • Explains to mother importance of delayed bathing and not to apply anything to the skin or cord					
Care of the mother:					
8.Monitors the woman every 15 minutes in the first hour after complete delivery of the placenta checking: • Uterine tone • Vaginal bleeding • Blood pressure • Pulse • Hydration					
1. Encourages the woman to pass urine					
2. Encourages the woman to eat and drink.					
3. Encourages the woman to stay in the facility for at least 6 hours					
4. Records the information on the woman's clinical record.					

SKILLS PRACTICE SESSION 4-3: NEWBORN RESUSCITATION (HBB)

PURPOSE

The purpose of this activity is to enable participants to practice newborn resuscitation using a bag and mask and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate model.

Participants should review Learning Guide 4.3 before beginning the activity.

The facilitator should demonstrate the steps/tasks in the procedure of newborn resuscitation using a bag and mask. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 4.3.

Participants should be able to perform the steps/tasks in Learning Guide 4.3, before skill competency is assessed by the facilitator in the simulated setting, using Checklist 4.3.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 4.3.

Note: **Practice at a clinical site will depend on the availability of cases; if practice at a clinical site is not possible, the skill should be taught, practiced and assessed in a simulated setting, as described above.**

RESOURCES

- Table
- Newborn resuscitation model
- Cloth or baby blanket to wrap model
- Suction apparatus
- Self-inflating bag (newborn)
- Infant face masks, size 0 and size 1
- Clock
- The BEmONC
- Learning Guide 4.3: Newborn Resuscitation
- Checklist 4.3: Newborn Resuscitation

CHECKLIST 4.3: HELPING A BABY BREATHE/ NEWBORN RESUSCITATION

(To be used by the **Trainer** at the end of the course)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

Participant/Student: _____ Date Observed:_____

CHECKLIST FOR NEWBORN RESUSCITATION *(Some of the following steps/tasks should be performed simultaneously)*					
STEP/TASK	**CASES**				
GETTING READY					
1. Dries the baby, remove the wet cloth, and wraps the baby in a dry, warm cloth.					
2. Places the baby on his/her back on a clean, warms surface and keeps covered except for the face and chest.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
RESUSCITATION USING BAG AND MASK					
3. Positions the head in a slightly extended position to open the airway.					
4. Clears the airway by suctioning **the mouth** first and **then the nose**: • Introduces catheter into the baby's mouth for approximately 3cm and suctions while withdrawing catheter; • Introduces catheter into each nostril and suctions while withdrawing catheter					
5. Places the mask on the baby's face so that it covers the chin, mouth and nose.					
6. Squeezes the bag with two fingers only or with the whole hand, depending on the size of the bag.					
7. Checks the seal by ventilating two or three times and observing the rise of the chest.					

CHECKLIST FOR NEWBORN RESUSCITATION *(Some of the following steps/tasks should be performed simultaneously)*					
STEP/TASK	**CASES**				
8. If the baby's chest is rising, ventilates at a rate of 40 breaths per minute, and observes the chest for an easy rise and fall.					
9. If the baby's chest is not rising, determines why, rectify problem and continue to ventilate.					
10. Ventilates for 1 minute and then stops and quickly assesses the baby for spontaneous breathing and color; if breathing is normal, stop ventilating, and provide routine newborn care					
11. If the baby's heart rate is normal but breathing is less than 30 breaths per minute or irregular, continues to ventilate for 3-5 minutes until the baby is breathing well; stops ventilating and monitors baby with mother.					
12 .If breathing is not normal, and the heart rate is normal or slow manages accordingly (calls for help and improves ventilation; continues ventilation with oxygen if available)					
1. If the baby is not breathing regularly after 20 minutes of ventilation, continues ventilation with oxygen, organizes transfer and refers baby to a tertiary care centre, if possible.					
2. If there is no gasping or breathing at all after 20 minutes of ventilation stops ventilating, provides emotional support to mother and family.					
CARE AFTER SUCCESSFUL RESUSCITATION					
3. Keeps the baby skin-to-skin with the mother until the baby's condition is stable.					
4. Monitors the baby's respiratory rate and observes for other signs of illness.					
5. Provides reassurance to the mother.					
POST-RESUSCITATION TASKS					
6. Soaks suction catheters and mask in 0.5% chlorine solution for 10 minutes for decontamination.					
7. Wipes exposed surfaces of the bag with a gauze pad soaked in 0.5% chlorine solution or 60-90% alcohol and rinses immediately.					
8. Washes hands thoroughly with soap and water and dries with a clean, dry cloth (or air dry).					
9. Completes records with details of resuscitation and condition of newborn					

SKILLS PRACTICE SESSION 4-4 & 4.5: BIMANUAL COMPRESSION OF THE UTERUS, AORTIC COMPRESSION

PURPOSE

The purpose of this activity is to enable participants to practice those psychomotor skills necessary to manage bleeding after childbirth and to achieve competency in these skills.

INSTRUCTIONS

This activity should be conducted in a simulated setting. Participants should review Learning Guides for: Bimanual Compression (4-4) and Aortic Compression (4-5) before beginning the activity.

The facilitator should demonstrate the steps/tasks in each learning guide one at a time. Under the guidance of the facilitator, participants should then work in pairs and practice the steps/tasks in each individual Learning Guide and observe each other's performance; while one participant performs the skill, the second participant should use the relevant section of each Learning Guide to observe performance. Participants should then reverse roles. Participants should be able to perform the steps/tasks relevant each skill before skills competency is assessed in a simulated setting

RESOURCES

- Childbirth simulator
- Delivery instrument kit
- Needles and syringes
- High-level disinfected or surgical gloves
- Gauntlet gloves
- Personal protective barriers
- 0.5% chlorine solution and receptacle for decontamination
- Leakproof container or plastic bag
- Learning Guides 4-4: Bimanual Compression,
- Learning Guides 4-5: Aortic Compression,
- Checklist 4-4: Bimanual Compression,
- Checklist 4-5: Aortic Compression,

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CHECKLIST 4:4: BIMANUAL COMPRESSION OF THE UTERUS

(To be used by the **Trainer** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____Date Observed _____

CHECKLIST FOR BIMANUAL COMPRESSION OF THE UTERUS (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tells the woman what is going to be done, listens to her, and responds attentively to her questions and concerns.					
2. Provides continual emotional support and reassurance, as feasible.					
3. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
BIMANUAL COMPRESSION					
1. Washes hands and puts on high-level disinfected or sterile gloves.					
2. Cleans the vulva and perineum with antiseptic solution.					
3. Inserts fist into anterior vaginal fornix and applies pressure against anterior wall of uterus.					
4. Places the other hand on the abdomen behind the uterus, presses the hand deeply into the abdomen, and applies pressure against the posterior wall of the uterus.					
5. Maintains compression until bleeding is controlled and the uterus contracts.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR BIMANUAL COMPRESSION OF THE UTERUS (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
POST-PROCEDURE TASKS					
1. Immerses both gloved hands briefly in a container filled with 0.5% chlorine solution; then removes gloves by turning them inside out and places in a plastic bag or leak proof, covered waste container					
2. Washes hands thoroughly.					
3. Monitors vaginal bleeding, takes the woman's vital signs and makes sure that the uterus is firmly contracted.					
4. Completes documentation					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST 4.5: COMPRESSION OF THE ABDOMINAL AORTA

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____Date Observed _____

CHECKLIST FOR COMPRESSION OF THE ABDOMINAL AORTA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tells the woman what is going to be done, listen to her, and respond attentively to her questions and concerns.					
2. Provides continual emotional support and reassurance, as feasible.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
COMPRESSION OF THE ABDOMINAL AORTA					
1. Places a closed fist just above the umbilicus and slightly to the left.					
2. Applies downward pressure over the abdominal aorta directly through the abdominal wall.					
3. With the other hand, palpates the femoral pulse to check the adequacy of compression.					
4. Maintains compression until bleeding is controlled.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Monitors vaginal bleeding, take the woman's vital signs, and ensures the uterus is firmly contracted.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION 4-6: MANUAL REMOVAL OF PLACENTA

PURPOSE

The purpose of this activity is to enable participants to practice manual removal of the placenta and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate models.

Participants should review Learning Guide 4.6 before beginning the activity.

The facilitator should demonstrate the steps/tasks in the procedure of manual removal of the placenta for participants. Under the guidance of the trainer, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 4.6.

Participants should be able to perform the steps/tasks in Learning Guide 4.6 before skill competency is assessed by the facilitator in the simulated setting, using Checklist 4.6.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 4.6.

Note: If patients are not available at clinical sites for participants to practice the procedure of manual removal of the placenta, the skills should be taught, practiced, and assessed in a simulated setting.

RESOURCES

- Childbirth simulator
- High-level disinfected or sterile surgical gloves
- Personal protective barriers
- Receptacle for placenta

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Learning Guide 4.6: Manual Removal of Placenta

Checklist 4.6: Manual Removal of Placenta

CHECKLIST 4:6: MANUAL REMOVAL OF PLACENTA

(To be used by the **Trainer** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____Date Observed _____

CHECKLIST FOR MANUAL REMOVAL OF PLACENTA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Tells the woman what is going to be done, listen to her, and respond attentively to her questions and concerns.					
3. Provides continual emotional support and reassurance, as feasible.					
4. Asks the woman to empty her bladder or inserts a catheter.					
5. Gives anesthesia or analgesia such as pethedine and diazepam IV slowly or ketamine					
6. Gives prophylactic antibiotics.					
7. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
MANUAL REMOVAL OF PLACENTA					
1. Washes hands and forearms thoroughly and puts on high-level disinfected or sterile surgical gloves (use elbow-length gloves, if available).					
2. Cleans the vulvas and perineum and drapes the woman					
3. Holds the umbilical cord with a clamp and pulls the cord gently.					

CHECKLIST FOR MANUAL REMOVAL OF PLACENTA (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Inserts the other hand into the uterine cavity and locates the placenta.					
5. Provides counter-traction abdominally.					
6. Detachs the placenta by slowly working around the placental bed until the whole placenta is separated from the uterine wall.					
7. Withdraws the hand from the uterus, bringing the placenta with it while continuing to provide counter-traction abdominally.					
8. Ensures that all placental tissue has been removed.					
9. Gives oxytocin in IV fluid.					
10. Have an assistant massage the fundus to encourage a tonic uterine contraction.					
11. If there is continued heavy bleeding, gives ergometrine by IM injection, or give prostaglandins.					
12. Examines the uterine surface of the placenta to ensure that it is complete.					
13. Examines the woman carefully and repairs any tears to the cervix or vagina, or repairs episiotomy.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
2. Immerses both gloved hands briefly in a container filled with 0.5% chlorine solution; then remove gloves by turning them inside out and places in a plastic bag or leakproof, covered waste container					
3. Washes hands thoroughly.					
4. Monitors vaginal bleeding, take the woman's vital signs, and ensure that the uterus is firmly contracted.					
5. Completes documentation					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION 4.7: EPISIOTOMY AND REPAIR OF GENITAL TRACT LACERATIONS

PURPOSE

The purpose of this activity is to enable participants to practice episiotomy and repair and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate models.

Participants should review the Learning Guide 4.7 before beginning the activity.

The facilitator should demonstrate the steps/tasks in the procedure of episiotomy and repair, repair of cervical tears and repair of 1st & 2nd degree vaginal and perineal tears for participants. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 4.7.

Participants should be able to perform the steps/tasks in Learning Guide 4.7 before skill competency is assessed in the simulated setting by the trainer, using Checklist 4.7.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 4.7.

Note: If patients are not available at clinical sites for participants to practice episiotomy and repair, repair of cervical tears and repair of 1st & 2nd degree vaginal and perineal tears, the skills should be taught, practiced, and assessed in the simulated setting.

RESOURCES

- Pelvic model or "foam block" to simulate a vagina and cervix
- High-level disinfected or sterile surgical gloves
- Personal protective barriers
- Examination light
- Vaginal speculum
- Ring or sponge forceps
- Local anesthetic
- Suture materials
- Needle and syringe

The BEmONC training manual module-4
Learning Guide & Checklist 4.7.1: Episiotomy and Repair
Learning Guide & Checklist 4.7.2: Repair of cervical tears
Learning Guide & Checklist 4.7.3: Repair of 1st & 2nd degree vaginal and perineal tears

CHECKLIST 4.7.1: EPISIOTOMY AND REPAIR

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

Participant/Student: _____Date Observed: _____

CHECKLIST FOR EPISIOTOMY AND REPAIR *(Some of the following steps/tasks should be performed simultaneously)*					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Tells the woman what is going to be done and encourages her to ask questions.					
1. Listens to what the woman has to say.					
2. Makes sure that the woman has no allergies to lignocaine or related drugs.					
3. Provide emotional support and reassurance, as feasible.					
ADMINISTERING LOCAL ANESTHETIC					
4. Washes hands and puts on sterile gloves					
5. Cleanses perineum with antiseptic solution and places drape under the woman's buttocks and over her abdomen.					
6. Draws 10 ml of 0.5% or 1% lignocaine into a syringe.					
7. Places two fingers into vagina along proposed incision line.					
8. Inserts needle beneath skin for 4–5 cm following same line.					
9. Draws back the plunger of syringe to make sure that needle is not in a blood vessel: • If blood is returned in syringe, remove needle, rechecks position carefully, and try again;					

CHECKLIST FOR EPISIOTOMY AND REPAIR *(Some of the following steps/tasks should be performed simultaneously)*					
STEP/TASK	**CASES**				
• if no blood is withdrawn, continues as follows.					
10. Injects lignocaine into vaginal mucosa, beneath skin of perineum and deeply into perineal muscle.					
11. Waits two minutes and then pinches incision site with forceps.					
12. If the woman feels the pinch, waits two more minutes and then retests.					
MAKING THE EPISIOTOMY					
1.Waits to perform episiotomy until: • Perineum is thinned out • 3–4 cm of the baby's head is visible during a contraction					
2. Places two fingers between the baby's head and the perineum.					
3.Inserts open blade of scissors between perineum and two fingers: • Cuts the perineum about 3 cm in a mediolateral direction (45º angle to the midline toward a point midway between ischial tuberosity and anus).					
4. If birth of head does not follow immediately, applies pressure to episiotomy site between contractions, using a piece of gauze, to minimize bleeding.					
5. Controls birth of head and shoulders to avoid extension of the episiotomy.					
REPAIRING THE EPISIOTOMY					
6. Asks the woman to position her buttocks toward lower end of bed or table (use stirrups if available).					
7. Asks an assistant to direct a strong light onto the woman's perineum.					
8. Gently cleans area around episiotomy with antiseptic solution.					
3. Using 2/0 suture, inserts suture needle just above (1 cm) the apex of the vaginal cut.					
4. Uses a continuous suture from apex downward to level of vaginal opening.					
5. At opening of vagina, brings together cut edges.					
6. Brings needle under vaginal opening and out through incision and tie.					
7. Uses interrupted or continuous sutures to repair perineal muscle, working from top of perineal incision downward.					
8. Uses interrupted or continuous subcuticular sutures to bring skin edges together.					

CHECKLIST FOR EPISIOTOMY AND REPAIR *(Some of the following steps/tasks should be performed simultaneously)*					
STEP/TASK	**CASES**				
9. Washes perineal area with antiseptic, pat dry, and places a sterile sanitary pad over the vulva and perineum.					
16. Explains to the woman how to keep the area clean and dries and to return for postpartum care.					
17.Gives analgesic where necessary					
POST-PROCEDURE TASKS					
18. Disposes of waste materials (e.g., blood-contaminated swabs) in a leakproof container or plastic bag.					
19. Decontaminates instruments by placing in a plastic container filled with 0.5% chlorine solution for 10 minutes.					
20.Disposes of needle and syringe in a puncture proof container					
21.Immerses both gloved hands in 0.5% chlorine solution and remove gloves by turning them inside out, dispose in leak proof container					
22. Washes hands thoroughly with soap and water and dries with clean, dry cloth or air dry.					
23. Records procedure on woman's record.					

CHECKLIST 4.7.2: REPAIR OF CERVICAL TEARS

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____ Date Observed _____

CHECKLIST FOR REPAIR OF CERVICAL TEARS (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Tells the woman what is going to be done, listens to her, and responds attentively to her questions and concerns.					
3. Provides continual emotional support and reassurance, as feasible.					
4. Have the woman empty her bladder or insert a catheter.					
5. Gives anesthesia, if necessary.					
6. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
REPAIR OF CERVICAL TEARS					
1. Washes hands thoroughly and puts on high-level disinfected or sterile surgical gloves.					
2. Cleans the vagina and cervix with an antiseptic solution.					
3. Grasps both sides of the cervix using ring or sponge forceps (one forceps for each side of tear).					
4. Places the first suture at the top of the tear and closes it with a continuous suture, including the whole thickness of the cervix each time the suture needle is inserted.					
5. If a long section of the rim of the cervix is tattered, under-runs it with a continuous suture.					
6. If the apex is difficult to reach and ligate, grasps it with forceps and leaves them in place for eight hours.					

CHECKLIST FOR REPAIR OF CERVICAL TEARS (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Before removing gloves, disposes of waste materials in a leakproof container or plastic bag.					
2. Places all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Immerses both gloved hands in 0.5% chlorine solution. Removes gloves by turning them inside out: • If disposing of gloves, places them in a leakproof container or plastic bag; • If reusing surgical gloves, submerges them in 0.5% chlorine solution for 10 minutes for decontamination.					
4. Washes hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST 4.7.3: REPAIR OF 1st AND 2nd DEGREE VAGINAL AND PERINEAL TEARS

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT_____ Date Observed_____

CHECKLIST FOR REPAIR OF 1st AND 2nd DEGREE TEARS (Some of the following steps/tasks should be performed simultaneously.)				
STEP/TASK	**CASES**			
GETTING READY				
1. Prepares the necessary equipment.				
2. Tells the woman what is going to be done and encourage her to ask questions.				
3. Listens to what the woman has to say.				
4. Makes sure that the woman has no allergies to lidocaine or related drugs.				
5. Provides emotional support and reassurance, as feasible.				
SKILL/ACTIVITY PERFORMED SATISFACTORILY				
REPAIRING THE TEARS				
1. Cleanses perineum with antiseptic solution.				
2. Administers local anesthetic.				
3. Uses a continuous suture from apex of tear downward to repair vaginal tear(s)				
4. At opening of vagina, brings together torn edges.				
5. Brings needle under vaginal opening and out through the tear and tie.				
6. Uses interrupted sutures to repair perineal muscle, working from top of perineal tear downward.				
7. Uses interrupted or subcuticular sutures to bring together skin edges.				
8. Washes perineal area and cover with a sterile sanitary pad.				

CHECKLIST FOR REPAIR OF 1st AND 2nd DEGREE TEARS (Some of the following steps/tasks should be performed simultaneously.)				
STEP/TASK	**CASES**			
SKILL/ACTIVITY PERFORMED SATISFACTORILY				
POST-PROCEDURE TASKS				
1. Before removing gloves, disposes of waste materials in a leakproof container or plastic bag.				
2. Decontaminates instruments by placing in a plastic container filled with 0.5% chlorine solution for 10 minutes.				
3. Decontaminates or disposes of syringe and needle: • If reusing needle or syringe, fills syringe (with needle attached) with 0.5% chlorine solution and submerges in solution for 10 minutes for decontamination; • If disposing of needle and syringe, flushes needle and syringe with 0.5% chlorine solution three times, then places in a puncture proof container.				
4. Immerses both gloved hands in 0.5% chlorine solution and remove gloves by turning them inside out: • If disposing of gloves, places in leakproof container or plastic bag; • If reusing surgical gloves, submerges in 0.5% chlorine solution for 10 minutes to decontaminate.				
5. Washes hands thoroughly.				
6. Records procedure on woman's record.				
SKILL/ACTIVITY PERFORMED SATISFACTORILY				

SKILLS PRACTICE SESSION 4-8: BREECH DELIVERY

PURPOSE

The purpose of this activity is to enable participant/students to practice breech delivery and achieve competence in the procedure

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate models.
Participants should review Learning Guide 4.8 before beginning the activity

The facilitator should demonstrate the steps/tasks in the procedure of breech delivery for participant. Under the guidance of the facilitator, participant should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 4.8

Participants should be able to perform the steps/tasks in Learning Guide 4.8 before skill competency is assessed by the facilitator in the simulated setting, using Checklist 4.8.
Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 4.8.

RESOURCES

- Childbirth simulator
- High-level disinfected or sterile surgical gloves
- Personal protective barriers
- Learning Guide 4.8: Breech Delivery
- Checklist 4.8: Breech Delivery

CHECKLIST 4.8: BREECH DELIVERY

(To be used by the **Trainer/teacher** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT/STUDENT _____ Date Observed _____

CHECKLIST FOR BREECH DELIVERY (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Tells the woman (and her support person) what is going to be done, listens to her and respond attentively to her questions and concerns.					
3. Provides continual emotional support and reassurance, as feasible.					
4. Ensures that the conditions for breech delivery are present.					
5. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Washes hands thoroughly and puts on high-level disinfected or sterile surgical gloves.					
2. Cleans the vulva with antiseptic solution.					
3. Puts sterile drap under the women's buttock and one on her abdomen					
4. Catheterizes the bladder, if necessary.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
BREECH DELIVERY					
Delivery of the Buttocks and Legs					
1. When the buttocks have entered the vagina and the cervix is fully dilated, tells the woman she can bear down with contractions.					
2. Performs an episiotomy, if necessary.					

CHECKLIST FOR BREECH DELIVERY (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Lets the buttocks deliver until the lower back and shoulder blades are seen.					
4. Gently holds the buttocks in one hand.					
5. If the legs do not deliver spontaneously, delivers one leg at a time.					
6. Holds the baby by the hips.					
Delivery of the Arms					
7. If the arms are felt on the chest, allows them to disengage spontaneously.					
8. If the arms are stretched above the head or folded around the neck, uses Lovset's maneuver.					
9. If the baby's body cannot be turned to deliver the arm that is anterior first, delivers the arm that is posterior.					
Delivery of the Head					
10. Delivers the head using the Mauriceau Smellie Veit maneuver.					
11. Assesses the baby's condition for breathing and completes the delivery as in normal birth					
12. Following delivery, checks the birth canal for tears and repairs, if necessary. Repairs the episiotomy, if one was performed.					
13. Provides immediate postpartum and newborn care, as required.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Places all instruments in 0.5% chlorine solution for decontamination.					
3. Removes gloves and discards them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
4. Washes hands thoroughly.					
5. Documents all relevant information					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION 4-9: VACUUM EXTRACTION

PURPOSE

The purpose of this activity is to enable participant/students to practice vacuum extraction and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using the appropriate models. Participants should review Learning Guide 4.9 before beginning the activity. The facilitator should demonstrate the steps/task in the procedure of vacuum extraction for participants. Under the guidance of the facilitator, participants should then work in pairs to practice the steps/tasks and observe each other's performance, using Learning Guide 4.9.

Participant should be able to perform the steps/tasks in Learning Guide 4.9 before skill competency is assessed by the facilitator in the simulated setting, using Checklist 4.9.

Finally, following supervised practice at a clinical site, the facilitator should assess the skill competency of each participant, using Checklist 4.9.

RESOURCES

- Childbirth simulator
- High-level disinfected or sterile surgical gloves
- Personal protective barriers
- Vacuum extractor
- Learning Guide 4.9: Vacuum Extraction
- Checklist 4.9: Vacuum Extraction

CHECKLIST 4:9: VACUUM EXTRACTION

(To be used by the **Trainer/teacher** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT/STUDENT_____ Date Observed _____

CHECKLIST FOR VACUUM EXTRACTION (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	***CASES***				
GETTING READY					
1. Prepares the necessary equipment.					
2. Tells the woman what is going to be done, listens to her and responds attentively to her questions and concerns.					
3. Provides continual emotional support and reassurance, as feasible.					
4. Ensures that the conditions for vacuum extraction are present.					
5. Makes sure an assistant is available.					
6. Puts on personal protective barriers.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Washes hands thoroughly and puts on high-level disinfected or sterile surgical gloves.					
2. Cleans the vulva with antiseptic solution.					
3. Places one sterile drape under the women's buttock one over the women abdomen					
4. Catheterizes the bladder, if necessary.					
5. Checks all connections on the vacuum extractor and test the vacuum.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
VACUUM EXTRACTION					

CHECKLIST FOR VACUUM EXTRACTION (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	***CASES***				
1. Assesses the position of the fetal head and identifies the posterior fontanels.					
2. Applies the largest cup that will fit.					
3. Performs episiotomy if necessary for placement of the cup.					
4. Checks the application and ensures that there is no maternal soft tissue within the rim of the cup.					
5. Have assistant create a vacuum of negative pressure and checks the application of the cup.					
6. Increases the vacuum to the maximum and then applies traction. Correct the tilt or deflexion of the head.					
7. With each contraction, applies traction in a line perpendicular to the plane of the cup rim and assesses potential slippage and descent of the vertex.					
8. Between each contraction, checks -fetal heart rate (by assistant) -application of the cup.					
9. Continues the "guiding" pulls for a maximum of 30 minutes. Releases the vacuum when the head has been delivered.					
10. Checks the birth canal for tears following delivery, and repairs if necessary. Repairs the episiotomy, if one was performed.					
11. Provides immediate postpartum and newborn care, as required.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POST-PROCEDURE TASKS					
1. Before removing gloves, disposes of waste materials in a leak proof container or plastic bag.					
2. Places all instruments in 0.5% chlorine solution for decontamination					
3. Removes gloves and discard them in a leak proof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
4. Washes hands thoroughly.					
5. Completes documentation					

ROLE PLAY 4.1: REASSURING THE WOMAN IN LABOR
ANSWER KEY

DISCUSSION QUESTIONS

1. How did the SBA demonstrate respect and kindness during her interaction with Merima?

2. How did the SBA provide emotional support and reassurance to Merima?

3. What non-verbal behaviors did the SBA use to encourage interaction between herself and Merima?

ANSWERS

The following answers should be used by the facilitator to guide discussion after the role play. Although these are "likely" answers, other answers provided by participants during the discussion may be equally acceptable.

1. The SBA should speak in calm, reassuring manner and hold Merima's hand or rub her back until the contraction has finished.

2. When Merima's contraction has finished, the SBA should make her as comfortable as possible and explain that she is having labor pains and what is likely to happen next. Helping Merima understand what is happening should help to reassure her and reduce her anxiety. Merima should be encouraged to ask questions and the SBA should use the same calm, reassuring manner to answer them.

3. Supportive nonverbal behaviors, such as nodding and smiling, should be used to let Merima know that she is being listened to and understood.

ROLE PLAY 4.2: PARENT EDUCATION AND SUPPORT FOR CARE OF THE NEWBORN ANSWER KEY

DIRECTIONS

The facilitator will select two participants to perform the following roles: healthcare provider and mother of newborn. The two participants taking part in the role play should take a few minutes to prepare for the activity by reading the background information provided below. The remaining participants, who will observe the role play, should at the same time read the background information.

The purpose of the role play is to provide an opportunity for participants to develop/practice effective interpersonal skills.

PARTICIPANT ROLES

Healthcare provider: The healthcare provider is experienced in the care of newborn babies and has good interpersonal communication skills.

Mother: The mother is from a village in a poor agricultural area; she is 27 years old and illiterate. This is her fourth baby.

SITUATION

Sosina gave birth to a healthy term baby 10 hours ago. The healthcare provider has noticed that the clothing Sosina has for her baby is not clean. She has also noticed that Sosina has wrapped a piece of unclean cloth tightly around the baby's abdomen, covering the cord stump.

FOCUS OF THE ROLE PLAY

The focus of the role play is the interpersonal interaction between the healthcare provider and the mother and the appropriateness of the health messages discussed with her.

DISCUSSION QUESTIONS

1. How did the healthcare provider demonstrate respect and kindness during her interaction with Sosina?

a. She addressed her by name and introduced herself.
b. She made certain that Sosina was seated and comfortable.
c. She did not criticize or scold but rather gave gentle but firm advice/counsel on care of her newborn.

d. She spoke in a calm reassuring manner, using simple, clear, and locally understood language and terminology.
e. She encouraged Sosina to ask questions and listened to carefully
f. The healthcare provider avoided interrupting Sosina while she was speaking and used the same calm, reassuring manner to answer her questions.
g. Supportive nonverbal behaviors, such as nodding and smiling, were used to let Sosina know that she is being listened to and understood. It is very important not to express judgment about Sosina's care of her baby
h. The healthcare provider showed interest, concern, and friendliness.
i. She listened to Sosina's questions and concerns and responded directly and politely.

2. What key health messages related to hygiene and cord care did the healthcare provider discuss with Sosina?

a. She explained that the baby will be less likely to develop skin infections and other problems if kept clean – since a baby does not have well developed immune system (way to fight infection.)
b. She suggested that everyone who handles or touches the baby should wash her/his hands prior to handling the baby
c. She suggested that the baby be cleaned and dried after each time it's nappy or diaper or cloth is soiled
d. She should keep the cord dry when bathing the baby
e. No dressings or substances of any kind should be put on the cord. Also, after the cord falls off, the umbilicus should be kept clean and free from dressings or other substances
f. If there is swelling, redness or pus from the cord, she could seek help from the care provider immediately.

3. What did the healthcare provider do to ensure that Sosina understood the health messages?

She ask if she understood the message.

She ask her to repeat the message.

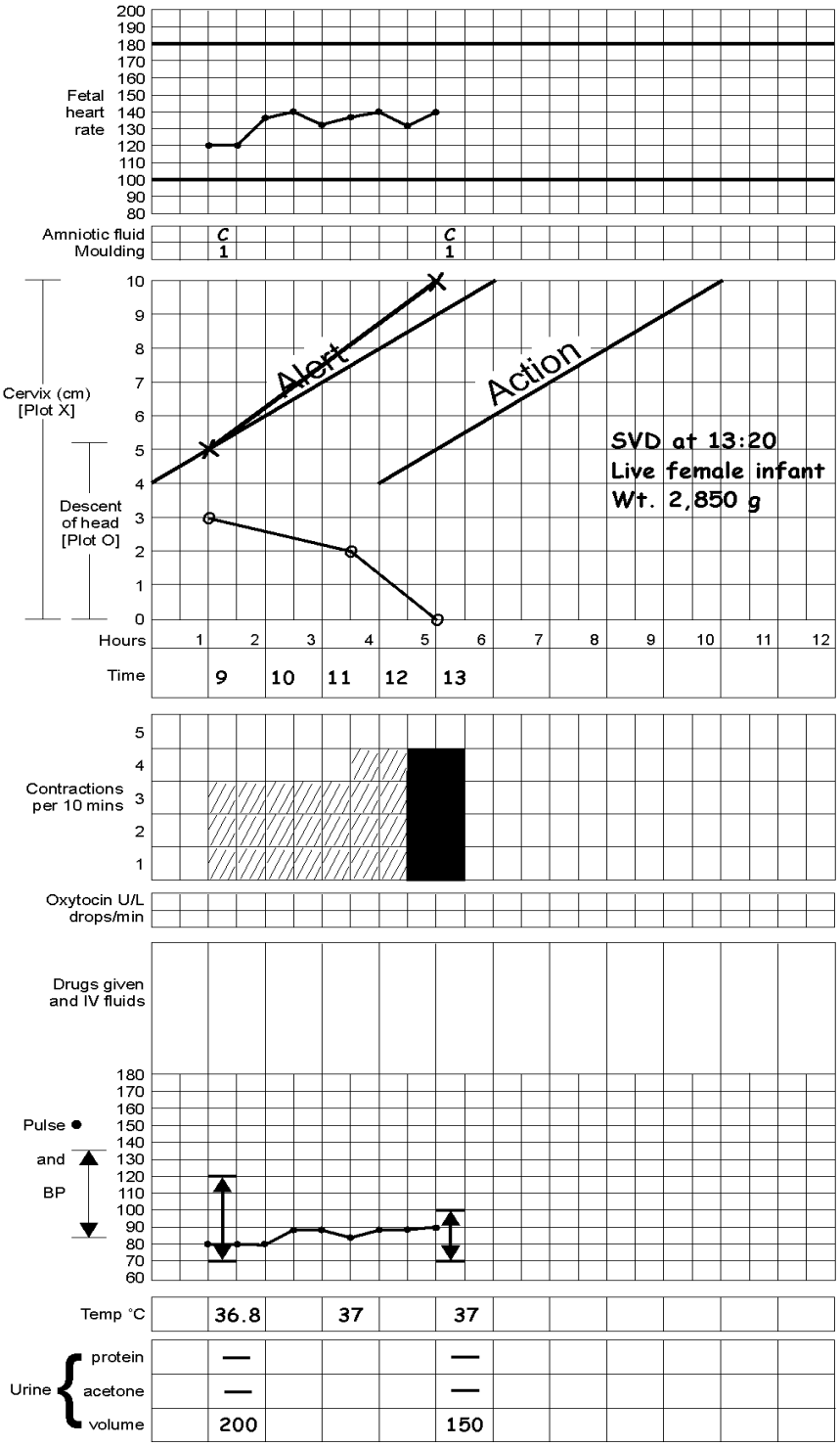
She gave positive reinforcement when she gave the correct answer.

EXERCISE 4.1: USING THE PARTOGRAPH ANSWER KEY

CASE – 1

Name **Mrs. A** Gravida **3** Para **2+0** Hospital number **7886**

Date of admission **12.9.2003** Time of admission **5:00 A.M.** Ruptured membranes **04:00** hours



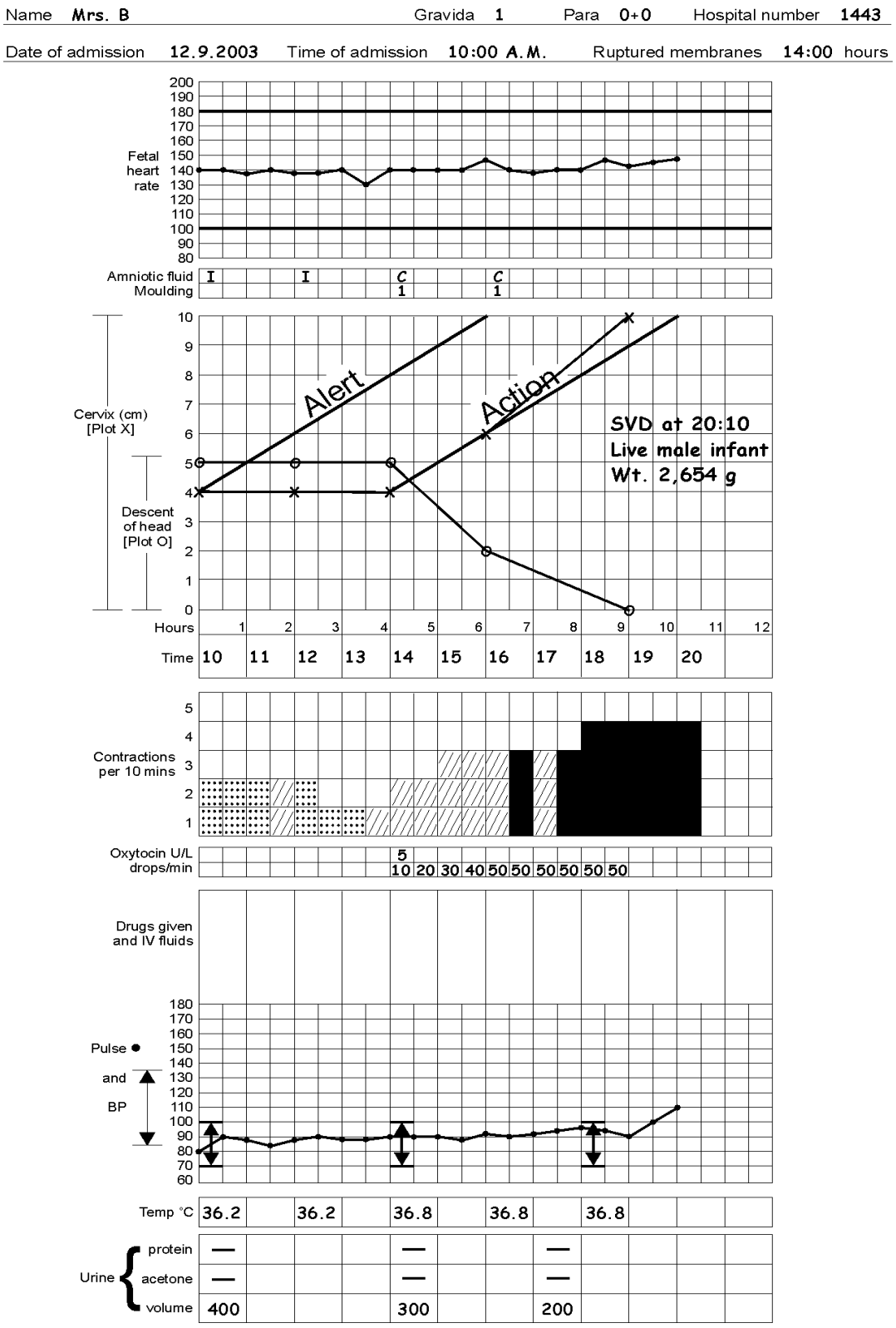
- Step 1—see partograph

- Step 2—see partograph
  - Steps: Inform Saba and her family of the findings and what to expect; encourage her to ask questions; provide her comfort measures, hydration, and nutrition
  - Advice: Assume position of choice; drink plenty of fluids and eat as desired
  - Expect at 13.00: Progress to at least 9 cm dilation

- Step 3—see partograph
  - Steps: Prepare for birth
  - Advice: Push only when urge to push
  - Expect: Spontaneous vaginal birth

- Step 4
  - 1st stage of active labor: 5 hours (4 hrs plotted [09.00 to 13.00] plus estimated 1 hour for dilation from 4–5 cm)
  - 2nd stage of active labor: 20 minutes

CASE 2



- Step 1—see partograph

- Diagnosis: Active labor
- Action: Inform Debritu and her family about findings and what to expect; give continual opportunity to ask questions; encourage Debritu to walk around and to drink and eat as desired

- Step 2—see partograph
  - Diagnosis: Prolonged active Phase; less than 3 contractions per 10 minutes, each lasting less than 40 seconds; good fetal and maternal condition
  - Action: The facilitator should take the opportunity to open a discussion about using oxytocin for augmenting labor based on the clinical setting. For instance, is the woman being cared for at a health post that is 4 hours away from a district hospital where an oxytocin drip can be started? Or if she is being cared for in a district hospital, can other measures be used (such as hydration, ambulation) before oxytocin is started?

- Step 3
  - Diagnosis: Prolonged active Phase; less than 3 contractions per 10 minutes, each lasting less than 40 seconds; good maternal and fetal condition
  - Action: Augment labor with oxytocin and artificial rupture of membranes; inform Debritu and her family of the findings and what to expect; reassure; answer questions; encourage drinks; encourage Debritu to assume position of choice

- Step 4
  - Steps: Continue to augment labor (maintain oxytocin infusion rate at 50 dpm), provide comfort (psychological and physical); encourage drinks and nutrition

- Step 5—see partograph

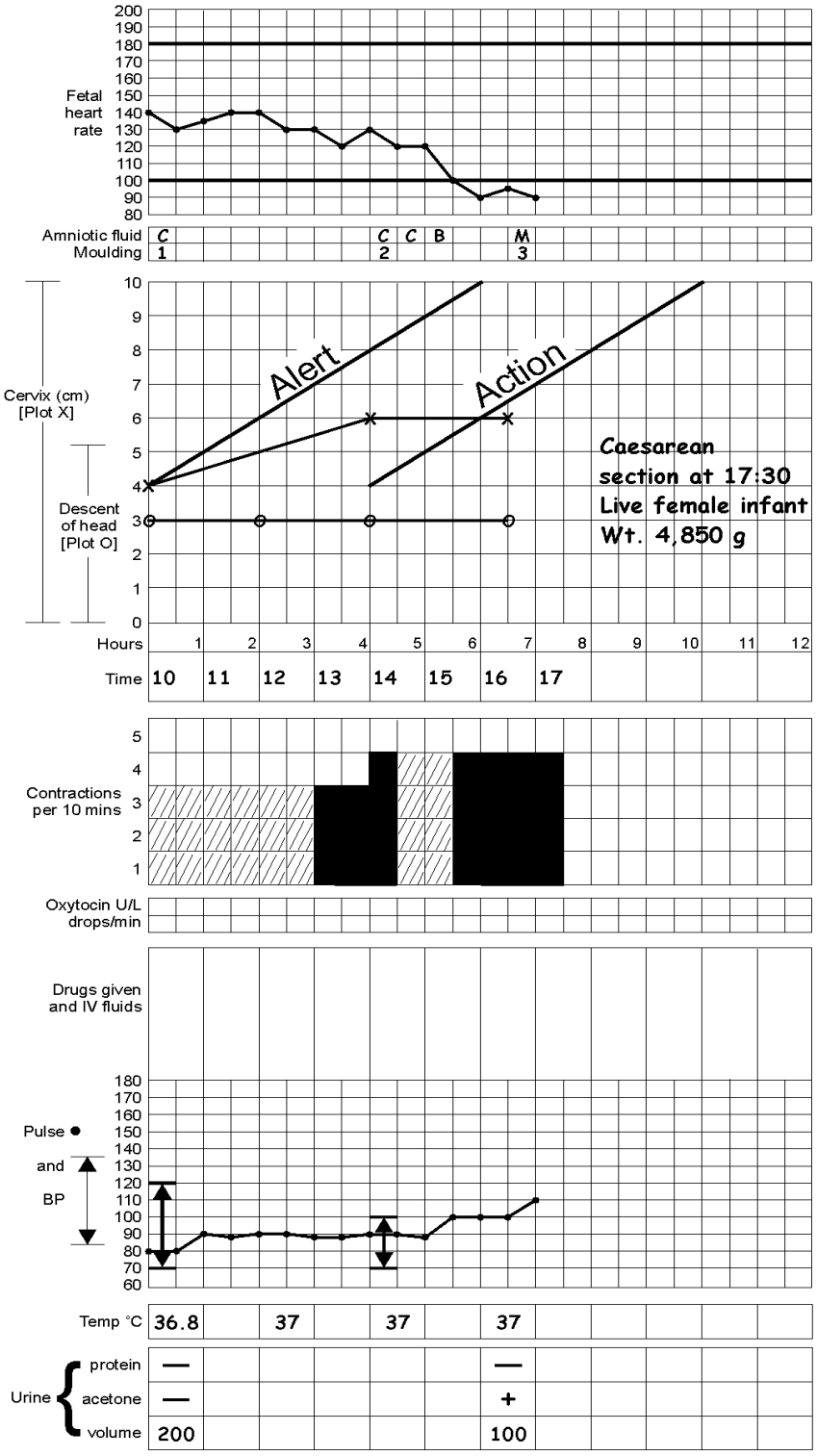
- Step 6—see partograph

- Step 7
  - 1st stage of labor: 9 hours
  - 2nd stage of labor: 1 hour 10 minutes
  - Why augment: Less than 3 contractions in 10 minutes, each lasting less than 40 seconds (lack of progress)

CASE 3

Name **Mrs. C** Gravida **4** Para **3+0** Hospital number **6639**

Date of admission **12.9.2003** Time of admission **10:00 A.M.** Ruptured membranes **09:00** hours



- Step 1—see partograph
- Step 2—see partograph
- Step 3—see partograph
- Step 4—see partograph
  - Final diagnosis: Obstructed labor with fetal head 3/5 palpable above the symphysis pubis
  - Cesarean section because Amina is already in secondary arrest of dilatation and descent despite at least 3 contractions in 10 minutes, each lasting more than 40 seconds
  - 15.00 action: Continue emotional and physical support, including hydration (because Amina and her family may become discouraged with lack of progress and emotionally and physically exhausted); continue attentive monitoring of maternal and fetal condition; have crossed alert line; blood-stained amniotic fluid
  - Decision to perform caesarean section: Correct because fetal condition deteriorating, failure to progress despite at least 3 contractions in 10 minutes, each lasting more than 40 seconds, acetone in urine, rising maternal pulse
  - Problems expected in newborn: asphyxia, meconium aspiration

Q: What is the final diagnosis?

Q: What action was indicated at 14.00, and why?

Q: What action was indicated at 15.00, and why?

Q: At 17.00, a decision was taken to do a cesarean section, and this was rapidly done. Was this a correct action?

Q: What problems may be expected in the newborn?

CASE STUDY 4.1: CHILDBIRTH ASSESSMENT AND CARE (SUPPORT IN LABOR) ANSWER KEY

DIRECTIONS

Read and analyse this case study individually. When the others in your group have finished reading it, answer the case study questions. Consider the steps in clinical decision-making as you answer the questions. The other groups in the room are working on the same or a similar case study. When all groups have finished, we will discuss the case studies and the answers each group developed.

CLIENT PROFILE

Wosene is 30 years of age. She attended the antenatal clinic 2 weeks ago and has now come to the hospital with her mother-in-law because labor pains started 3 hours ago. Wosene reports that the pains start in her back and move forward, last 20 seconds, and occur about every 8 minutes. Wosene appears very anxious.

PRE-ASSESSMENT

1. Before beginning your assessment, what should you do for and ask Wosene?

Wosene should be greeted respectfully and with kindness and offered a seat to help her feel comfortable and welcome, establish rapport, and build trust. A good relationship helps to ensure that the client will adhere to the care plan and return for continued care.

Ascertain, from other staff or from records, whether or not Wosene has had a Quick Check. If she has not, you should conduct a Quick Check now. The Quick Check detects signs/symptoms of life-threatening complications and of advanced labor (e.g., strong regular contractions, urge to push, fluid leaking from vagina, grunting or moaning) so that a woman receives the urgent care she requires before receiving routine assessment/care.

ASSSESSMENT
(Information Gathering Through History, Physical Examination, And Testing)

2. What history will you include in your assessment of Wosene and why?

If she is not in advanced labor, you should take a complete history (i.e., personal information, estimated date of childbirth/menstrual history, history of present pregnancy and labor childbirth, obstetric history, medical history) to guide further assessment and help individualize care provision. Some responses may help determine **whether she is in labor as well as stage/phase of labor**, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

When asking about the history of the current labor, note whether her contractions are increasing in intensity, frequency, and duration.

When asking about her living situation, previous labors and childbirths, and the current pregnancy, note any stressful experiences that may explain her extreme anxiety.

3. What physical examination will you include in your assessment of Wosene and why?

- If she is not in advanced labor, you should perform a complete physical examination (i.e., well-being, vital signs, breasts, abdomen [fundal height, lie, presentation, fetal heart rate], genital examination, and cervical examination) to guide further assessment and help individualize care provision. Some findings may help **determine whether she is in labor as well as stage/phase of labor**, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.
- Assessment of general well-being, including gait and movements, behavior and vocalizations, help to assess her degree of anxiety.
- Wosene's respirations, blood pressure, temperature, and pulse should be measured to rule out any physical problems or abnormalities that might explain her feelings of anxiety.
- During abdominal examination special attention should be given to:
    - Fundal height, which will helps confirm gestational age or indicate size-date discrepancy
    - Descent of the presenting part, which would help in evaluating progress of labor
    - Fetal heart tones, which will help indicate fetal condition
    - Frequency and duration of contractions to determine quality of contractions and help determine stage/phase of labor, as well as evaluate progress of labor
- Cervical examination should include assessment of:
    - Dilation of the cervix to help determine stage and phase of labor, as well as evaluate progress of labor
    - Membranes and amniotic fluid to determine whether the membranes have ruptured and to help assess fetal condition
    - Presentation to determine if there is any abnormality that will affect the birth
    - Molding to help determine fetal condition and indicate possible obstruction of labor (fetal-pelvic disproportion)

4. What laboratory tests will you include in your assessment of Wosene and why?

You should conduct all routine laboratory tests if available and as needed (i.e., RPR for syphilis, HIV [if she does not "opt out"], and Rh factor and blood group) to guide further assessment and help individualize care provision. Some findings may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

DIAGNOSIS
(interpreting information to identify problems/needs)

You have completed your assessment of Wosene and your main findings include the following:

HISTORY:

Wosene is 39 weeks pregnant.

This is her second pregnancy.

Her first pregnancy and birth were uncomplicated, although she repeatedly states that labor was more painful than she had expected.

She confirms that labor started 3 hours ago and that contractions seem to be growing increasingly longer and more frequent.

All other aspects of her history are normal or without significance.

Physical Examination:

Wosene kneels to the floor and cries out with each contraction.

On measurement of vital signs: Respirations are 18 per minute, BP is 120/82, Pulse is 88 beats per minute, temperature is 37.8º C.

On abdominal examination:

Fundal height is 33 cm
Presenting part is four-fifths above the pelvic brim
Fetal heart tones are124 beats per minute
Contractions are irregular every 8-10 minutes and last 14-18 seconds

On cervical examination:

Dilation of the cervix is 3 cm
Membranes are intact
Presentation is vertex and there is no molding

Her physical exam reveals no abnormal findings.

Testing:

Blood group is O Positive, RPR is negative, and blood was taken for HIV testing.

a. Based on these findings, what is Wosene's diagnosis (problem/need) and why?

Wosene is in the latent phase of the first stage of labor.

She is anxious and agitated during contractions, possibly because she remembers her first labor and delivery as being more painful than she had anticipated.

CARE PROVISION (implementing plan of care and interventions)

b. Based on your diagnosis (problem/need identification), what is your plan of care for Wosene and why?

- A supportive, encouraging atmosphere that is respectful of Wosene's wishes should be established to help allay anxiety and provide emotional support.
- Wosene should receive ongoing assessment (e.g., vital signs, fetal heart tones, descent, contractions) as needed, at least every 4 hours, to ensure that any problems or abnormalities in the condition of mother or baby or progress of labor are detected early for immediate attention; and to provide reassurance to Wosene and her family that her care is continuous.
- A partograph should be started when she reaches 4 cm.
- She should receive ongoing supportive care:
- Her mother-in-law should be encouraged to stay with her to help allay anxiety and provide continuous emotional support.
- She should be given a back rub or massage and be taught to breath out more slowly than usual during contractions and relax with each breath—this should help to relieve her anxiety.
- Wosene should be allowed to remain active, as she desires; rest and sleep should also be encouraged as she desires so that she will be well rested when active labor begins.
- Food should be encouraged as tolerated and no restrictions should be placed on intake as long as Wosene has no nausea and/or vomiting. She should be provided with nutritious drinks to maintain hydration (2 liters of oral fluids/24 hours minimum) and to meet caloric/energy needs.
- Wosene should be encouraged to empty her bladder every 2 hours and empty her bowels as needed for her comfort, to prevent urinary retention and to allow descent of the fetal head. She should not be given an enema as this does not prevent soiling or infection and is uncomfortable and unpleasant for the mother.
- To maintain cleanliness, Wosene should be encouraged to bathe before active labor begins; the genital area should be cleansed before each examination to prevent introduction/entry of organisms into the vagina.

EVALUATION

Wosene continues to have regular contractions; by 2 hours after admission, she is having 2 contractions in 10 minutes, each lasting 20–40 seconds.

Maternal pulse remains between 80 and 88 beats per minute; fetal heart rate remains between 150 and 160 beats per minute.

Wosene's level of anxiety remains high and she continues to become agitated during contractions.

c. Based on these findings, what is your continuing plan of care for Wosene and why?

Care should continue as outlined above for reasons given above.

Breathing techniques should be explained again to Wosene, emphasizing the importance of breathing out more slowly than usual and relaxing with each expiration to encourage relaxation and conservation of energy.

Praise, reassurance, and encouragement should be given to Wosene to allay anxiety and provide the extra emotional support that is needed as labor progresses.

Information on the process of labor and her progress should be provided to Wosene to help allay anxiety and provide some feeling of "control" and participation in her labor.

Care must be taken to ensure that a birth companion is always with Wosene so that she is not left alone.

CASE STUDY 4.2: CHILDBIRTH ASSESSMENT AND CARE (SUPPORT IN CHILDBIRTH) ANSWER KEY

DIRECTIONS

Read and analyse this case study individually. When the others in your group have finished reading it, answer the case study questions. Consider the steps in clinical decision-making as you answer the questions. The other groups in the room are working on the same or a similar case study. When all groups have finished, we will discuss the case studies and the answers each group developed.

CLIENT PROFILE

Beletech is 25 years of age. Her mother-in-law has brought her to the hospital and reports that she has been in labor for 8 hours and that her membranes ruptured 3 hours ago. You greet Beletech and her mother-in-law respectfully and with kindness. On arrival at the hospital, she had a strong contraction lasting 45 seconds. Because she is showing signs of labor, you complete the Quick Check to detect signs/symptoms of life-threatening complications and, finding none, quickly proceed to physical examination to determine whether birth is imminent. Although Beletech is not pushing, you find that she has a bulging, thin perineum.

ASSSESSMENT

(information gathering through history, physical examination, and testing)

1. What history will you include in your assessment of Beletech and why?

Because there are signs of advanced labor, there is no time to do a complete history. Beletech Mrs. B's antenatal records should be quickly checked for history of present pregnancy, as well as obstetric and medical histories, with particular attention to problems and treatments.

2. What physical examination will you include in your assessment of Beletech and why?

- You should perform the following elements of examination to guide further assessment and help individualize care provision. Some findings may **help determine stage/phase of labor**, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.
- Beletech's respirations, blood pressure, temperature, and pulse should be measured to ensure normalcy/normal progress, and detect abnormal signs/symptoms
- Abdominal examination including assessment of:
    - Surface of abdomen for presence of scars, which might indicate a previous C-section or other uterine surgery
    - Uterine shape, which may indicate lie and/or uterine abnormality

- Fundal height, which will helps confirm gestational age or indicate size-date discrepancy
- Fetal parts (and movement), which may indicate multiple pregnancy
- Fetal lie and presentation, which, if abnormal, would indicate the need for urgent referral/transfer
- Descent of the presenting part, which would help in evaluating progress of labor
- Fetal heart tones, which will help indicate fetal condition
- Bladder, which may indicate urinary retention
- Frequency and duration of contractions to determine quality of contractions and help determine stage/phase of labor, as well as evaluate progress of labor

♦ Genital examination including vaginal opening, skin, labia, and vaginal secretions to rule out infection; any fetal part or cord protruding from vaginal opening, which would require immediate attention; female genital cutting or any other abnormality that might affect the birth.

♦ Cervical examination including assessment of:

- Dilation of the cervix to help determine stage and phase of labor, as well as evaluate progress of labor
- Membranes and amniotic fluid to determine whether the membranes have ruptured and to help assess fetal condition
- Presentation to determine if there is any abnormality that will affect the birth
- Molding to help determine fetal condition and indicate possible obstruction of labor (fetal-pelvic disproportion)

1. What laboratory tests will you include in your assessment of Beletech and why?

You should rapidly draw blood to send to laboratory for RPR for syphilis, HIV [if she does not "opt out"], and blood group and Rh factor, if available, to guide further assessment and help individualize care provision. Some findings may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

DIAGNOSIS (INTERPRETING INFORMATION TO IDENTIFY PROBLEMS/NEEDS)

You have completed your assessment of Beletech and your main findings include the following:

History:

Beletech is at term.

This is her fourth pregnancy.

Her previous pregnancies/deliveries were uncomplicated.

All other aspects of her history are normal or without significance.

Physical Examination:

Vital signs are as follows: Respirations are 20 per minute, BP is 130/82, Pulse is 88 beats per minute, and Temperature is 37.8°C.

On abdominal examination:

No scars are noted and uterus is oval-shaped

Fundal height is 34 cm

One set of fetal parts are palpable

Fetus is longitudinal in lie and cephalic presentation

Presenting part is not palpable above the symphysis

Fetal heart tones are 148 per minute

Bladder is not palpable

Contractions are 3 per 10 minutes, 40-50 seconds in duration each

On genital and cervical examination:

Her cervix is 10 cm dilated and fully effaced

Presentation is vertex and the fetal head is on the perineum

Visible amniotic fluid is clear

All other aspects of her physical examination are within normal range.

TESTING:

Test results not yet back at this stage

2. Based on these findings, what is Beletech's diagnosis (problem/need) and why?

Beletech has reached the second stage of labor, indicated by full dilatation and effacement of the cervix.

CARE PROVISION (implementing plan of care and interventions)

3. Based on your diagnosis (problem/need identification), what is your plan of care for Beletech and why?

- Beletech must not be left alone.
- She should receive ongoing assessment (e.g., maternal pulse and contractions every 30 minutes, fetal heart rate every 5 minutes) to ensure that any problems or abnormalities in the condition of mother or baby or progress of labor are detected early for immediate attention.
- She should receive ongoing supportive care:

- A supportive, encouraging atmosphere that is respectful of Beletech's wishes should be established to provide emotional support.
- Beletech should be made comfortable and encouraged to adopt a position for pushing that is comfortable for her and aids in the descent of the fetus: semi-sitting/reclining, squatting, hands and knees, or lying on side.
- Beletech should be encouraged to follow her own tendency to push: the intensity of her contractions should regulate her efforts to push. She should be encouraged not to hold her breath or push hard for a long time, pushing for 5-10 seconds and then taking several breaths before pushing again helps to ensure that the baby gets plenty of oxygen.
- After each contraction, Beletech should be encouraged to take a deep breath and let it out slowly, relaxing her entire body. She should be praised, encouraged, and reassured regarding her progress.
- She should be offered cool, sweetened fluids between contractions.

EVALUATION

- Beletech has 3 contractions every 10 minutes, each lasting more than 40 seconds.
- After 15 minutes, she begins pushing spontaneously with each contraction.
- After another 15 minutes, she has a spontaneous vertex birth of a baby boy.
- The baby breathes immediately at birth.
- The third stage of labor has not yet been completed.

4. Based on these findings, what is your continuing plan of care for Beletech and why?

- Immediate newborn care should be provided:
- Thoroughly dry baby and cover in clean, warm cloth.
- Clamp/tie and cut cord.
- Place baby in skin-to-skin contact on the mother's abdomen; encourage breastfeeding.

Once Beletech's abdomen is palpated to rule out the presence of an additional baby, the placenta should be delivered using active management of third stage of labor:

- Administer oxytocin 10 units IM.
- Perform controlled cord traction.
- Deliver and examine the placenta
- Placenta, cord, and membranes should be checked for completeness.

- Massage the uterus through the abdomen until firmly contracted (Beletech should also be shown how to massage her fundus to maintain the contraction).
- Examine the vagina and perineum for lacerations or tears.
- Beletech should be made comfortable (e.g., cleanse perineum, change bed linens).
- She and the baby should receive ongoing assessment every 15 minutes for first 2 hours following birth (e.g., mother: blood pressure, pulse, fundus [for firmness], and vaginal bleeding; newborn: respiration, warmth, color to ensure that any problems or abnormalities in the condition of mother or baby are detected early for immediate attention.

CASE STUDY 4.3: UNSATISFACTORY PROGRESS OF LABOR

CASE STUDY

Gifti is an 18-year-old primigravida. She was admitted to the health center in active labor at 10:00 am; the fetal head was palpable at 5/5 above the symphysis pubis; the cervix was 4 cm dilated; contractions were two in 10 minutes, each lasting less than 20 seconds. Membranes ruptured spontaneously at 12:00 pm, and amniotic fluid was clear. It is now 2:00 pm, and the fetal head is still 5/5 palpable above the symphysis pubis; the cervix is still 4 cm dilated and is now to the right of the alert line on Gifti's partograph; contractions continue at a rate of two in 10 minutes, lasting less than 20 seconds.

ASSESSMENT *(History, Physical Examination, Screening Procedures/Laboratory Tests)*

1. What will you include in your initial assessment of Gifti, and why?
    - Gifti should be told what is going to be done and listened to carefully. In addition, her questions should be answered in a calm and reassuring manner.
    - An assessment should be made to rule out cephalopelvic disproportion (secondary arrest of cervical dilation and descent of presenting part in the presence of good contractions) and obstruction (secondary arrest of cervical dilation and descent of presenting part with large caput, third degree molding, cervix poorly applied to the presenting part, edematous cervix, ballooning of lower uterine segment, formation of retraction band, maternal and fetal distress).
    - Gifti's emotional response to labor should also be assessed to determine her level of anxiety and tolerance of pain.
    - Her temperature, pulse, respiration rate and blood pressure should be recorded.
    - The fetal heart rate should also be recorded.
2. What particular aspects of Gifti's physical examination will help you make a diagnosis or identify her problems/needs, and why?
    - Abdominal and vaginal examinations should be done to rule out cephalopelvic disproportion, as described above, and effectiveness of contractions should be assessed.
3. What screening procedures/laboratory tests will you include (if available) in your assessment of Gifti, and why?
    - None at this point.

DIAGNOSIS (Identification of Problems/Needs)

You have completed your assessment of Gifti and your main findings include the following:

Gifti has no signs or symptoms of cephalopelvic disproportion or obstruction. Her vital signs are within normal range, as is the fetal heart rate. She is not dehydrated. She has a high level of anxiety, however, and is finding it difficult to relax between contractions. On assessment, the cervix is found to be favorable.

4. Based on these findings, what is Gifti's diagnosis, and why?

- Gifti's symptoms and signs (e.g., less than three contractions in 10 minutes, each lasting less than 40 seconds) are consistent with inadequate uterine activity.
- In addition, Gifti has a high level of anxiety, making it difficult for her to relax between contractions.

CARE PROVISION (Planning and Intervention)

5. Based on your diagnosis, what is your plan of care for Gifti, and why?

- Augmentation of labor should be started. Because Gifti's cervix is favorable, oxytocin should be used for augmentation as follows:
- An IV infusion of dextrose or normal saline should be started and oxytocin 2.5 units in 500 mL of dextrose or normal saline should be infused at 10 drops/minute.
- The rate of infusion should be increased by 10 drops/minute every 30 minutes (up to a maximum of 60 drops/minute) until there are three contractions in 10 minutes, each lasting more than 40 seconds, and this rate should be maintained until the birth is completed.
- Gifti should not be left alone during augmentation of labor. She should be made as comfortable as possible, and a supportive, encouraging atmosphere, respectful of her wishes, should be provided.
- All procedures should be explained to Gifti, and all findings should be discussed with her.
- Ongoing observations should include: maternal pulse, fetal heart rate and contractions half hourly, blood pressure and temperature every 4 hours, urine for protein and acetone every 24 hours, vaginal examination every 2 hours (cervical dilation, descent of presenting part, amniotic fluid and molding), preceded by abdominal examination (descent of presenting part).
- Observations should be recorded on the partograph.

EVALUATION

At 6:00 pm, Gifti is having three contractions in 10 minutes, each lasting more than 40 seconds. Her partograph recordings show that her vital signs are normal, the fetal heart rate is within normal range, the cervix is 9 cm dilated, and the fetal head is 1/5 above the symphysis pubis.

6. Based on these findings, what is your continuing plan of care for Gifti, and why?

- Oxytocin infusion and close observation should continue to ensure that Gifti's labor continues to progress to full dilation of the cervix with continuing descent of the fetal head. The aim should be to avoid crossing the action line on the partograph. Arrangements should be in place for immediate intervention (cesarean section) should this happen. In Gifti's case, this would mean allowing sufficient time for transfer from the health center to the district hospital.
- Gifti should be encouraged to adopt her position of choice during labor and for childbirth when she reaches late (expulsive) second stage.
- When the head is visible, she should be encouraged to follow her own tendency to push; the intensity of her contractions should regulate her efforts to push. She should be given praise, encouragement and reassurance regarding her progress.
- If the expulsive phase is prolonged, vacuum extraction or forceps should be used to deliver the baby.
- Active management of the third stage should be carried out to reduce postpartum blood loss.
- Immediate postpartum care should be provided for Gifti, including continuing emotional support and reassurance.
- If her newborn requires special care, this should be provided. Otherwise, routine newborn care should be provided, including leaving the newborn in skin-to-skin contact with Gifti and encouraging her to breastfeed her newborn as soon as she feels able to, when the newborn shows interest.

MODULE -5:

POSTPARTUM MATERNAL (UP - TO 6 WEEKS) AND NEWBORN CARE

Participant learning objective: After completing this module, participants will be able to describethe aims and standards of postpartum care for both the mother and the newborn, based on the needs, evidences and challenges. It offers guidance on the way postpartum care could be organized. With respect to clinical problems, attention is focused on primary care, directed at the prevention, early diagnosis and treatment of disease and complications, and at referral to hospital if necessary. It introduces the basic components in the provision of care to the neonate who was born either in the institution or at home in the postnatal period.

Enabling objectives

1. Provide basic care to the woman in post-partum period.
2. Detect and provide care for diseases and complications in the post-partum period.
3. Recognize an emergency situation in the women during the postpartum period which requires immediate treatment and, in most cases, urgent referral to a higher level health facility.
4. Provide basic care to the neonate who presented to the health facility in the postnatal period.
5. Describe steps in rapid initial assessment and emergency management of a sick neonate presenting to the health facility.
6. Detect and provide care for sick neonates presenting to the health facility during the postnatal period.

Learning Outline:

MODULE -5: POSTPARTUM MATERNAL (UP - TO 6 WEEKS) AND NEWBORN CARE			
TIME	**OBJECTIVES / ACTIVITIES**	**TRAINING/LEARNING METHODS**	**RESOURCE MATERIALS**
		330 MINUTES	
10 minutes	Introduction Module objectives	Brain storming Volunteer reading.	**BEmONC Training manual**: **module -5**:Unit - 1
100 minutes	**Objective**: Describe the essential elements of and best practices for postpartum care	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss the essential elements of and best practices for postpartum care. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants if there are differences between the management described and current practices at their worksites. Is there a need to change current practices? If so, how?	**BEmONC Training manual**: Module -5; Unit - 2. **Presentation Graphics**: **Presentation -20:** Basic care during postpartum period
60 minutes	**Objective**: Describe best practices for managing - fever during and after childbirth - Late PPH	**Illustrated Lecture and Discussion**: Use the relevant presentation graphics to review and discuss the best practices for managing fever after childbirth, strategies to prevent infection, and prophylactic and therapeutic use of antibiotics. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to cite the possible causes of fever after childbirth, and the obstetric, medical and health service factors affecting postpartum sepsis. What do they do to prevent postpartum sepsis? If there are differences between the recommended "best practices" for management and current practices at their worksites, discuss the reasons for this. Is there a need to change current practices? If so, how?	**BEmONC Training manual**: Module -5 ; Unit -3. **Presentation Graphics**: **Presentation -21:** Fever After Childbirth
20 minutes	**Activity**: Case studies on postpartum care and fever after childbirth	**Case Studies**: Use the case studies on fever after childbirth. Divide participants into groups of three or four. The groups can be given different case studies or they can all work on the same one. Allow approximately 10 minutes for the groups to work on the case study, then allow five minutes for one participant from each group to report back to the class as a whole. Use the case study answer keys to guide discussion.	**BEmONC Facilitator's Handbook and Participant's Handout:** **Case Studies**: Case study **5.1:** Postpartum Assessment & Care Case study **5.2**: Fever after Childbirth

120 minutes	• Learning objectives • Organizing care of the sick or small newborn • Rapid assessmen and immediate management of the newborn with signs of emergency • Further assessment and management Follow-up care for the sick newborn	• Reading by participant • Illustrative with slide presentation • Slide presentation and discussion • Slide presentation and discussion • Brain storm and group discussion	**BEmONC Training manual** **Participant's Hand out – M**odule -5; units - 4. **Presentation Graphics**: **Presentation -22:** Care of the Newborn with Problems **Others**: • Video clip (CD) on Newborn resuscitation and breastfeeding • Manikin with complete resuscitation kits • NBR algorithm (laminated) • Flip chart and parkers
20 minutes	Case study	CASE STUDY - 5.3: Common newborn problems. CASE STUDY - 5.4: Common newborn problems.	**BEmONC Facilitator's Handbook and Participant's Handout**: Module -5 Case studies .

SKILLS PRACTICE SESSIONS

SKILLS PRACTICE SESSION - 5.1: POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE

PURPOSE

The purpose of this activity is to enable participants to practice assessment of the woman during the postpartum period, including history and physical examination, and achieve competency in the skills required.

INSTRUCTIONS

The first part of this activity (history and physical examination) should be conducted in a simulated setting using the appropriate model(s). The provision of postpartum care should then be practiced in a postpartum clinic or postpartum ward.

Participants should review the Learning Guide 5.1 before beginning the activity. The facilitator should demonstrate the steps/tasks in taking a postpartum **history** for participants. Under the guidance of the facilitator, participants should then work in groups of three to practice the steps/tasks and observe each other's performance; while one participant takes a history from another, the third participant should use the relevant section of Learning Guide 5.1 to observe performance. Participants should then reverse roles until each has had an opportunity to take a history and be observed. Participants should be able to perform the steps/tasks relevant to taking a postpartum history before progressing to physical examination.

The facilitator should demonstrate the steps/tasks in **physical examination** of the postpartum woman for participants. Under the guidance of the facilitator, participants should then work in pairs and, using the appropriate model(s), practice the steps/tasks and observe each other's performance; while one participant does the physical examination, the second participant should use the relevant section of Learning Guide 5.1 to observe performance. Participants should then reverse roles. Participants should be able to perform the steps/tasks for postpartum history and physical examination before skills competency is assessed in the simulated setting by the facilitator, using Checklist 5.1.

The provision of postpartum care should be demonstrated in a postpartum clinic or ward and participants should then be supervised in the practice of postpartum assessment and care. Finally, following supervised practice at a clinical site, the facilitator should assess the skills competency of each participant using Checklist 5.1.

RESOURCES

- Pelvic model
- Sphygmomanometer and stethoscope
- Examination gloves
- 0.5% chlorine solution and receptacle for decontamination
- Leakproof container or plastic bag
- Postpartum record
- Learning Guide 5.1: Postpartum Assessment (History and Physical Examination) and Care
- Checklist 5.1: Postpartum Assessment (History and Physical Examination) and Care

CHECKLIST 5-1: POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. Needs Improvement: Step or task not performed correctly or out of sequence (if necessary) or is omitted

2. Competently Performed: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently

3. Not Observed: Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____Date Observed _____

CHECKLIST FOR POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE **(Some of the following steps/tasks should be performed simultaneously.)**					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
2. Greets the woman respectfully and with kindness.					
3. Tells the woman (and her support person) what is going to be done, listens to her attentively, and responds to her questions and concerns.					
4. Provides continual emotional support and reassurance, as possible.					
Skill/activity performed satisfactorily					
HISTORY **(Ask the following questions if the information is not available on the woman's record.)**					
Personal Information **(Every Visit for items followed with an "*"; First Visit for other items)**					
1. What is your name and age, and the name of your baby?					
2. What is your address and your phone number?					
3. Do you have access to reliable transportation?					
4. What sources of income/financial support do you/your family have?					
5. How many times have you been pregnant and how many children have you had?					
6. How many of your children are still living?					
7. Are you having a particular problem at present?*					
8. Have you received care from another caregiver?*					

CHECKLIST FOR POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Daily Habits and Lifestyle **(Every Visit for items followed with an "*"; First Visit for other items)**					
9. Do you work outside the home?*					
10. Do you walk long distances, carry heavy loads, or do physical labor?*					
11. Do you get enough sleep/rest?*					
12. What do you normally eat in a day?*					
13. Do you eat any substances such as dirt or clay?					
14. Do you smoke, drink alcohol, or use any other possibly harmful substances?					
15. Who do you live with?					
16. Has anyone ever prevented you from seeing family or friends, stopped you from leaving your home, or threatened your life?					
17. Have you ever been injured, hit, or forced to have sex by someone?					
18. Are you frightened of anyone?					
Present Pregnancy and Childbirth (First Visit)					
19. When did you have your baby?					
20. Where did you have your baby and who attended the birth?					
21. Did you have any vaginal bleeding during this pregnancy?					
22. Did you have any complications during this childbirth?					
23. Were there any complications with the baby?					
Present Postpartum Period (Every Visit)					
24. Have you had any heavy bleeding since you gave birth?					
25. What color is your vaginal discharge and how often do you need to change your pad/cloth?					
26. Have you had any problems with bowel or bladder function?					
27. Do you feel good about your baby and your ability to take care of her/him?					
28. Is your family adjusting to the baby?					
29. Do you feel that breastfeeding is going well?					
Previous Postpartum History (First Visit)					
30. Have you breastfed a baby before?					
31. Did you have any complications following previous childbirths?					

CHECKLIST FOR POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Contraceptive History (First Visit)					
32. How many more children do you plan to have?					
33. Have you used a family planning method before?					
34. Are you going to use family planning in the future?					
Medical History **(Every Visit for items followed with an "*"; First Visit for other items)**					
35. Do you have any allergies?					
36. Have you been tested for HIV?					
37. Have you had anemia recently?					
38. Have you been tested for syphilis?					
39. Have you had any chronic illness/condition, such as tuberculosis, hepatitis, heart disease, diabetes, or any other chronic illness?					
40. Have you ever been in hospital or had surgery/an operation?					
41. Are you taking any drugs/medications, including traditional/local preparations, herbal remedies, over-the-counter drugs, vitamins, and dietary supplements?*					
42. Have you had a complete series of five tetanus toxoid immunizations?					
43. When did you have your last booster of tetanus toxoid?					
Interim History (Return Visits)					
44. Do you have a problem at present?					
45. Have you had any problems since your last visit?					
46. Has your address or phone number changed since your last visit?					
47. Have your daily habits or lifestyle (workload, rest, dietary intake) changed since your last visit?					
48. Have you received care from another caregiver since your last visit?					
49. Have you taken drugs/medications prescribed and followed the advice/recommendations (plan of care) provided at your last visit?					
50. Have you had any reactions to or side effects from immunizations or drugs/medications given at your last visit?					
Skill/activity performed satisfactorily					
PHYSICAL EXAMINATION					
1. Observe gait and movements, and behavior and facial expressions.					

CHECKLIST FOR POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
2. Observes general hygiene, noting visible dirt and odor.					
3. Checks skin, noting lesions and bruises.					
4. Checks conjunctive for pallor.					
5. Have the woman remain seated and relaxed, and measure her blood pressure, temperature, and pulse.					
6. Explains the next steps in the physical examination to the woman and obtains her consent to proceed.					
7. Asks the woman to empty her bladder.					
8. Washes hands thoroughly.					
9. Ask the woman to uncover her body from the waist up, have her lie comfortably on her back, and examines her breasts, noting any abnormalities.					
10. Asks the woman to uncover her stomach and lie on her back with her knees slightly bent.					
11. Looks for old or new incisions on the abdomen, and gently palpates abdomen between umbilicus and symphysis pubis, noting size and firmness of uterus, and checks whether bladder is palpable above the symphysis pubis.					
12. Examines the woman's legs, noting any calf pain.					
13. Asks the woman to uncover her genital area, covers or drapes her to preserve privacy and modesty, and asks her to separate her legs.					
14. Turns on the light and directs it toward genital area.					
15. Washes hands thoroughly and puts new examination or high-level disinfected gloves on both hands.					
16. Inspects/examines labia, clitoris, and perineum, noting lochia, scars, bruising, and skin integrity.					
17. Immerses both gloved hands briefly in a container filled with 0.5% chlorine solution; then remove gloves by turning them inside out: • If disposing of gloves (examination gloves and surgical gloves that will not be reused), places in a plastic bag or leakproof, covered waste container; • If reusing surgical gloves, submerge in 0.5% chlorine solution for 20 minutes for decontamination.					
18. Washes hands thoroughly.					

CHECKLIST FOR POSTPARTUM ASSESSMENT (HISTORY AND PHYSICAL EXAMINATION) AND CARE (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Skill/activity performed satisfactorily					
CARE PROVISION **Note:** Individualize the woman's care by considering all information gathered during assessment.					
1. If the woman does not know her HIV status or has not been tested fro HIV, provides HIV counseling.					
2. Based on the woman's breastfeeding history, provides information about breast feeding and breast care.					
3. Reviews the woman's complication readiness plan with her (or develop one if she does not have one.					
4. Encourages family involvement with the newborn and assists the family to identify challenges/obstacles and devise strategies for overcoming them.					
5. Introduces the concepts of birthspacing and family planning.					
6. Provides advice and counseling about diet and nutrition.					
7. Provides advice and counseling about self-care.					
8. Gives tetanus toxoid (TT) based on woman's need.					
9. Dispenses sufficient supply of iron/folate until next visit and counsels the woman about taking the pills.					
10. Dispenses other medications based on need.					
11. Schedules the next antenatal visit.					
Skill/activity performed satisfactorily					

SKILLS PRACTICE SESSION – 5-2: ASSESSMENT OF THE NEWBORN

PURPOSE

The purpose of this activity is to enable participants to practice newborn assessment, including history and physical examination, and achieve competency in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated setting, using an appropriate model.

Participants should review Learning Guide 5-2, before beginning the activity.

The facilitator should demonstrate the steps/tasks in taking a newborn **history** for participants. Under the guidance of the facilitator, participants should then work in groups of three to practice the steps/tasks and observe each other's performance; while one participant takes a history from another, the third participant should use the relevant section of Learning Guide 5-2 to observe performance. Participants should then reverse roles until each has had an opportunity to take a history and be observed. Participants should be able to perform the steps/tasks relevant to taking a newborn history before progressing to physical examination of the newborn.

The facilitator should demonstrate the steps/tasks in physical examination of the newborn for participants. Under the guidance of the facilitator, participants should then work in pairs and, using the newborn doll, practice the steps/tasks and observe each other's performance; while one participant does the physical examination, the second participant should use the relevant section of Learning Guide 5-2 to observe performance. Participants should then reverse roles. Participants should be able to perform the steps/tasks in taking a newborn history and doing a newborn physical examination, as outlined Learning Guide 6, before skills competency is assessed in the simulated setting by the trainer, using Checklist 5-2.

Finally, following supervised practice at a clinical site, the facilitator should assess the skills competency of each participant using Checklist 5-2, including breastfeeding and mother-baby bonding.

Note: Observation of breastfeeding and mother-baby bonding should be practiced and assessed at the clinical site, under the guidance of the facilitator.

RESOURCES

- Newborn doll
- Cloth or baby blanket to wrap doll
- Baby weigh scale
- Thermometer
- Newborn record
- Learning Guide 5-2: Assessment of the Newborn
- Checklist 5-2: Assessment of the Newborn

CHECKLIST – 5-2: ASSESSMENT OF THE NEWBORN

(To be used by the **Facilitator** at the end of the module)

Rate the performance of each step or task observed using the following rating scale:

1. **Needs Improvement**: Step or task not performed correctly or out of sequence (if necessary) or is omitted
2. **Competently Performed**: Step or task performed correctly in proper sequence (if necessary) but participant/student does not progress from step to step efficiently
3. **Not Observed:** Step, task or skill not performed by participant during evaluation by trainer.

PARTICIPANT _____ ***Date Observed*** _____

CHECKLIST FOR ASSESSMENT OF THE NEWBORN (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepares the necessary equipment.					
1. Tells the mother what you are going to do, encourages her to ask questions, and listens to what she has to say.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
HISTORY **(Ask the following questions if the information is not available on the mother's/baby's record.)**					
Personal Information (First Visit)					
1. What is your name, address, and phone number?					
2. What is the name and sex of your baby?					
3. When was your baby born?					
4. Do you have access to reliable transportation?					
5. What sources of income/financial support do you/your family have?					
6. How many times have you been pregnant and how many children have you had?					
7. Is your baby having a particular problem at present?					
8. Has your baby received care from another caregiver?					
The Birth (First Visit)					
9. Where was your baby born and who attended the birth?					
10. Did you have an infection (in the uterus) or fever during labor or birth?					
11. Did your bag of water break more than 18 hours before the birth?					

CHECKLIST FOR ASSESSMENT OF THE NEWBORN (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
12. Were there any complications during the birth that may have caused injury to the baby?					
13. Did the baby need resuscitation (help to breathe) at birth?					
14. How much did the baby weigh at birth?					
Medical History (First Visit)					
15. Do you have diabetes?					
16. Have you had any infectious diseases such as hepatitis B, HIV, syphilis, or TB?					
17. Does the baby have a congenital malformation (a deformity at birth)?					
18. Has the baby received newborn immunizations such as for polio, TB, and hepatitis B?					
Newborn Period (Every Visit)					
19. Do you feel good about your baby and your ability to take care of her/him?					
20. Is your family adjusting to the baby?					
21. Do you feel that breastfeeding is going well?					
22. How often does the baby feed?					
23. Does the baby seem satisfied after feeding?					
24. How often does the baby urinate?					
25. Has the baby passed the first stool?					
26. When was the last time the baby passed stool? What was the color/consistency?					
Interim History (Return Visits)					
27. Is your baby having a problem at present? Has s/he had any problem since the last visit?					
28. Has your baby received care from another caregiver since the last visit?					
29. Have there been any changes in your address or phone number since the last visit?					
30. Have there been any changes in the baby's habits or behaviors since the last visit?					
31. Have you been able to care for the baby as discussed at the last visit?					
32. Has the baby had any reactions or side effects from immunizations, drugs/medications, or any care provided since the last visit?					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR ASSESSMENT OF THE NEWBORN (Some of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
EXAMINING THE NEWBORN					
Assessment of Overall Appearance/Well-Being (Every Visit)					
1. Tells the mother what you are going to do, encourages her to ask questions, and listens to what she has to say.					
2. Washes hands thoroughly and puts on clean examination gloves, if necessary.					
3. Places the baby on a clean, warm surface or examine her/him in the mother's arms.					
4. Weighs the baby.					
5. Measures respiratory rate and temperature.					
6. Observes color, movements and posture, level of alertness and muscle tone, and skin, noting any abnormalities.					
7. Examines head, face and mouth, eyes, noting any abnormalities.					
8. Examines chest, abdomen and cord, and external genitalia, noting any abnormalities.					
9. Examines back and limbs, noting any abnormalities.					
10. Immerses both gloved hands in 0.5% chlorine solution: • Removes gloves by turning them inside out; • If disposing of gloves, places in leakproof container or plastic bag; • If reusing gloves, submerges in 0.5% chlorine solution for 10 minutes to decontaminate.					
11. Washes hands thoroughly with soap and water and dries them with a clean, dry cloth or allow them to air dry.					
Breastfeeding (Every Visit)					
12. Helps the woman feel relaxed and confident throughout the observation.					
1. Looks for signs of good positioning and attachment					
2. Looks for signs of effective suckling.					
3. Looks for signs of finishing breastfeed.					
Mother-Baby Bonding (Every Visit)					
4. Looks for signs of bonding.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CASE STUDY 5.1: POSTPARTUM ASSESSMENT AND CARE (FAMILY PLANNING) ANSWER KEY

DIRECTIONS

Read and analyse this case study individually. When the others in your group have finished reading it, answer the case study questions. Consider the steps in clinical decision-making as you answer the questions. The other groups in the room are working on the same or a similar case study. When all groups have finished, we will discuss the case studies and the answers each group developed.

CLIENT PROFILE

Lili gave birth 2 weeks ago. Her pregnancy, labor, and birth were uncomplicated. This is her first postpartum clinic visit. Lili has one other child, who is three years of age. She does not want to become pregnant again for at least 2 years. Lili left her baby at home with her mother-in-law, but reports that the baby is well and had a routine check-up by the SBA when the baby was one week old.

PRE-ASSESSMENT

1. Before beginning your assessment, what should you do for and ask Lili?

Lili should be greeted respectfully and with kindness and offered a seat to help her feel comfortable and welcome, establish rapport, and build trust. A good relationship helps to ensure that the client will adhere to the care plan and return for continued care.

Ascertain, from other staff or from records, whether or not Lili has had a Quick Check. If she has not, you should conduct a Quick Check now. The Quick Check detects signs/symptoms of life-threatening complications so that a woman receives the urgent care she requires before receiving routine assessment/care.

ASSSESSMENT (Information gathering through history, physical examination, and testing)

2. What history will you include in your assessment of Lili and why?

Because this is Lili's first postpartum visit, you should take a complete history (i.e., personal information, daily habits and lifestyle, history of present pregnancy and labor childbirth, present postpartum period, obstetric history, including breastfeeding history, contraceptive history/plans, medical history) to guide further assessment and help individualize care provision. Some responses may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

Information about how the baby is doing should also be obtained, with particular emphasis on feeding—this could have an impact on return of fertility, about which she has expressed concerns.

Special attention should be given to her contraceptive history/plans

3. What physical examination will you include in your assessment of Lili and why?

Because this is Lili's first postpartum visit, you should perform a complete physical examination (i.e., general well-being, vital signs, breast inspection and palpation, abdomen [uterus/involution, bladder], leg examination, and genital examination [lochia, perineum]) to guide further assessment and help individualize care provision. Some findings may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

4. What laboratory tests will you include in your assessment of Lili and why?

You should conduct an HIV test if available and as needed (if status is unknown and she does not "opt out"), to guide further assessment and help individualize care provision. A positive result would indicate a special need/condition that requires additional care.

DIAGNOSIS
(INTERPRETING INFORMATION TO IDENTIFY PROBLEMS/NEEDS)

You have completed your assessment of Lili and your main findings include the following:

HISTORY:

Lili is feeling well.

Lili reports no complications or problems during this pregnancy, labor/childbirth, or postpartum period. Her medical history is not significant: she is taking no medications, nor does she have any chronic conditions or illnesses.

Lili's first child is well and was breastfed for 6 months.

She is exclusively breastfeeding her baby, giving no supplements, and intends to do so for at least 6 months.

She wants to know whether she should start using contraception now, as she does not want to become pregnant again for at least 2 years.

All other aspects of her history are normal or without significance.

PHYSICAL EXAMINATION:

Lili's general appearance is healthy.

Vital signs are as follows: BP is 120/76, Pulse is 78 beats per minute, Temp. is 37.6°C.

Her breasts appear normal.

Her abdominal exam is without significant findings and involution is proceeding normally.

Her lochia is a pale, creamy brown in color

All other aspects of her physical examination are within normal range.

TESTING:

HIV test is negative.

5. Based on these findings, what is Lili's diagnosis (problem/need) and why?

Lili needs advice/counseling about family planning. Because she intends to fully breastfeed her baby for at least 6 months, she is using LAM (exclusively breastfeeding, infant is <6months & she is amenorrheic) and does not need another method of family planning until one of the 3 criteria is no longer valid. She needs to know where she can go when she is no longer using LAM even though she may continue to breastfeed, she can no longer depend on LAM for contraception and will need to transition to another modern method.

CARE PROVISION
(Implementing plan of care and interventions)

6. Based on your diagnosis (problem/need identification), what is your plan of care for Lili and why?

Lili should receive basic care provision (i.e., breastfeeding and breast care, complication readiness plan, nutritional support, support for mother-baby-family relationships, self-care and other healthy practices, HIV counseling, immunizations, and other preventive measures, as well as about newborn care), which will help support and maintain a healthy postpartum/newborn period. The following special emphasis should also be given:

- Lili should be counseled about lactational amenorrhea (LAM), as it is effective for women who are exclusively or nearly exclusively breastfeeding, have not had return of menses, and are less than 6 months postpartum.
- The meaning of "on demand" and "exclusive" breastfeeding should be explained to Lili: that is, feeding the baby whenever s/he desires (at least every 4 hours during the day and every 6 hours at night) and not giving the baby any other food or fluids
- Lili should be advised that another method of contraception should be chosen if any of the following occur:
    - Menses resume

- Baby does not breastfeed frequently enough (at least every 4 hours during the day and every 6 hours at night)
- Regular supplementary feedings (replacing a breastfeeding meal) are added to the baby's diet
- The baby is 6 months of age

- Lili should be counseled about other contraceptive options that may be used when LAM is no longer an appropriate method. She should be counseled that she can use any progestin only contraceptive, condoms, or IUCD even while she is breastfeeding, and that she can use combined oral contraceptives after the baby is 6 months old.
- Lili should be asked to come back for a follow-up visit at 6 weeks postpartum, but told that she can return before then if she has a problem or concern. She should be counseled to bring her newborn to her 6-week checkup or earlier if needed.

EVALUATION

- Lili returns to the clinic at 6 weeks postpartum.
- She is well.
- She tells you that she is still breastfeeding exclusively/on demand and her menses have not returned.
- She also says she has decided to return to work, on a part-time basis, when her baby is 4 months of age, and will only be partially breastfeeding from then on.
- She asks whether she should start taking a contraceptive.
- Based on these findings, what is your continuing plan of care for Lili and why?
- Lili should be provided family planning counseling, including the availability and accessibility of family planning services and methods, to enable her to make an informed choice about a method of contraception. She needs to know about methods that are compatible with breastfeeding. For hormonal methods, she may use progestin only methods which include depo provera 150mg IM q 3 months, 104mg sub-cutaneously q 3 months, implants (Jadelle, Norplant or Implanon or progestin-only pills. She also could use an IUCD. She may also have her partner use a condom.

METHOD	HOW IT WORKS	EFFICACY	SIDE EFFECTS	PROBLEMS
Progest inject.	Makes mucus plug in cervix, eggs don't ripen	97%	May have irregular periods or no periods, may cause weight gain	May experience symptoms of menopause
Progestin only pills	Same as above	92%, easy to forget to take	Irregular periods	Must be taken @ same time daily
Implants	Same as above	99.95%	Irregular periods	Insertion must be done at facility. Removal difficulties 1.0%
IUCD	Creates hostile environment for sperm	99.2%	May have heavier periods with cramps	If conception occurs could be ectopic, need to check strings after period. Insertion at facility
Condoms	Physical barrier dual protection against pregnancy and STI/HIV	85%	May reduce pleasure must be used while man has an erection	Need partner participation
withdrawal	Ejaculate released outside of vagina	73%	May reduce pleasure	Dependent on partner

Source: Trussell J. Contraceptive efficacy. In Hatcher RA, Trussell J, Stewart F, Nelson A, Cates W, Guest F, Kowal D. *Contraceptive Technology: Eighteenth Revised Edition*. New York NY: Ardent Media, 2004

CASE STUDY 5.2: FEVER AFTER CHILDBIRTH

ANSWER KEY

CASE STUDY

W/O Bosena is a 35-year-old para three mother who gave birth at home 48 hours ago. Her pregnancy was term and her birth was attended by a trained birth attendant (TBA). Labor lasted 2 days and the TBA inserted herbs into W/O Bosena's vagina to help speed up the birth. The baby breathed spontaneously and appears healthy. W/O Bosena's mother-in-law has brought her to the health center today because she has had fever and chills for the past 24 hours.

ASSESSMENT (History, Physical Examination, Screening Procedures/Laboratory Tests)

1. What will you include in your initial assessment of W/O Bosena, and why?
    - W/O Bosena and her mother-in-law should be greeted respectfully and with kindness.
    - They should be told what is going to be done and listened to carefully. In addition, their questions should be answered in a calm and reassuring manner.
    - A rapid assessment should be done to determine the degree of illness: W/O Bosena's temperature, pulse, respiration rate and blood pressure should be taken and she should be asked whether she has felt weak and lethargic or whether she has had frequent, painful urination, abdominal pain or foul-smelling vaginal discharge. Determine whether she is from a malarial area.
    - The following information should also be obtained about the birth: when the membranes ruptured, problems delivering the placenta, whether it was complete and whether there was excessive bleeding following the birth.
    - Because herbs were inserted into W/O Bosena's vagina during labor, tetanus vaccination status should be checked.
2. What particular aspects of W/O Bosena's physical examination will help you make a diagnosis or identify her problems/needs, and why?
    - W/O Bosena's abdomen should be checked for tenderness and her vulva should be checked for purulent discharge (lower abdominal pain, tender uterus, and purulent, foul-smelling lochia are symptoms and signs of metritis). Her legs should be checked for calf muscle tenderness, which may indicate deep vein thrombosis.
    - W/O Bosena's perineum, vagina and cervix should be examined carefully for tears, particularly since labor was prolonged and because foreign substances were inserted into the vagina.
3. What screening procedures/laboratory tests will you include (if available) in your assessment of W/O Bosena, and why?
    - None at this point.

DIAGNOSIS (Identification of Problems/Needs)

You have completed your assessment of W/O Bosena and your main findings include the following:

- W/O Bosena's temperature is 39.8º C, her pulse rate is 136 beats/minute, her blood pressure is 70/40 mm Hg and her respiration rate is 24 breaths/minute.
- She is pale and lethargic and slightly confused.
- She has lower abdominal pain, her uterus is soft and tender, and she has foul-smelling vaginal discharge.
- It is not known whether the placenta was complete.
- W/O Bosena is fully immunized against tetanus.

4. Based on these findings, what is W/O Bosena's diagnosis, and why?

    - W/O Bosena's symptoms and signs (e.g., fever, together with signs of shock [rapid pulse, confusion], and lower abdominal pain, uterine tenderness, and foul-smelling vaginal discharge) are consistent with metritis.

CARE PROVISION (Planning and Intervention)

5. Based on your diagnosis, what is your plan of care for W/O Bosena, and why?
    - W/O Bosena should be treated for shock immediately:
        - Position her on her side.
        - Ensure that her airway is open.
        - Give her oxygen at 6–8 L/minute by mask or cannula.
        - Keep her warm.
        - Elevate her legs.
        - Monitor her pulse, blood pressure, respiration and temperature.
        - Start an IV using a large bore needle for rapid infusion of fluids (1 L of normal saline or Ringer's lactate in 15–20 minutes).
        - Monitor her intake and output (an indwelling catheter should be inserted to monitor urinary output).
    - Blood should be drawn for hemoglobin and cross-matching and blood for transfusion should be made available, if necessary.

- The following combination of antibiotics should be given: ampicillin 2 g IV every 6 hours; plus gentamicin 5 mg/kg of body weight IV every 24 hours; plus metronidazole 500 mg IV every 8 hours.
- If retained placental fragments are suspected, a digital exploration of the uterus should be performed to remove clots and large pieces of tissue. If necessary, ovum forceps or a large

curette should be used.

- Uterine involution and lochia should be monitored for improvement.
- Because W/O Bosena's childbirth was unhygienic, a booster of tetanus toxoid 0.5 mL IM should be given.
- The steps taken to manage the complication should be explained to W/O Bosena, she should be encouraged to express her concerns, listened to carefully, and provided emotional support and reassurance.

EVALUATION

Thirty-six hours after initiation of treatment, you find the following:

- W/O Bosena's temperature is 38º C, her pulse rate is 96 beats/minute, her blood pressure is 110/70 mm Hg and her respiration rate is 20 breaths/minute.
- She is less pale and no longer confused.

6. Based on these findings, what is your continuing plan of care for W/O Bosena, and why?
    - IV antibiotics should be continued until W/O Bosena has been fever-free for 48 hours. Oral antibiotics should not be necessary after stopping the IV antibiotics.
    - Her vital signs, intake and output, and uterine involution should continue to be monitored.
    - IV fluids should be continued to maintain hydration until W/O Bosena is well enough to take adequate fluid and nourishment by mouth.
    - The steps taken for continuing management of the complication should be explained to W/O Bosena and her mother-in-law, they should be encouraged to express their concerns, listened to carefully, and provided continuing emotional support and reassurance.
    - Arrangements should be made to talk with the TBA who attended the birth and provide community education about clean birth practices.

CASE STUDY - 5.3: COMMON NEWBORN PROBLEMS

DIRECTIONS

Read and analyze this case study individually. When the others in your group have finished reading it, answer the case study questions. Consider the steps in clinical decision-making as you answer the questions. The other groups in the room are working on the same or a similar case study. When all groups have finished, we will discuss the case studies and the answers each group developed.

CLIENT PROFILE

Biritu is 30 years of age and gave birth to her third baby at home 5 days ago. Her pregnancy, labor, and birth were uncomplicated. Biritu noticed yesterday that her baby's cord stump had an offensive smell. She has brought Baby Alemayehu to the health center for the first time today because she is concerned that the cord may be infected.

PRE-ASSESSMENT

1. Before beginning your assessment, what should you do for and ask Biritu and Baby Alemayehu?
2. ASSSESSMENT (information gathering through history, physical examination, and testing)
3. What history will you include in your assessment of Baby Alemayehu and why?
4. What physical examination will you include in your assessment of Baby Alemayehu and why?
5. What laboratory tests will you include in your assessment of Baby Alemayehu and why?

DIAGNOSIS (interpreting information to identify problems/needs)

You have completed your assessment of Baby Alemayehu and your main findings include the following:

Quick Check:

No danger signs or other significant findings except for foul smelling cord.

RIA:

No significant findings or need for resuscitation.

History:

- Baby weighed 3 kg at birth
- Biritu reports that she had no infection during pregnancy, labor, or birth. There were no other complications for her or her baby at labor or birth.
- The birth was attended by a doctor in a primary healthcare center.
- Baby Alemayehu is reportedly breastfeeding well.

- Biritu denies covering cord or putting any substance on the cord.
- All other aspects of her history are normal or without significance.

Physical Examination:

- Baby Alemayehu weighs 3 kg.
- Vital signs are as follows: Respirations are 40 per minute, Temperature is 37.0°C.
- Baby Alemayehu has a moist cord stump that has an offensive smell.
- None of the following are observed: draining pus, redness and swelling of the skin extending more than 1 cm beyond umbilicus, skin lesions, red hard surrounding skin, or distended abdomen.
- You observe that Baby Alemayehu is breastfeeding well
- All other aspects of her physical examination are within normal range.

1. Based on these findings, what is Baby Alemayehu's diagnosis (problem/need) and why?

CARE PROVISION (implementing plan of care and interventions)

2. Based on your diagnosis (problem/need identification), what is your plan of care for Baby Alemayehu and why?

EVALUATION

- Biritu and Baby Alemayehu return to the clinic the next day because her mother-in-law has instructed her to not continue the treatment, not wash the cord, and keep the cord bound with a piece of cloth.
- You find that the cord stump and umbilicus have improved only slightly.
- There are no other significant findings or signs of sepsis. The baby continues to feed well and have normal temperature. There is no draining pus, redness and swelling of the skin extending more than 1 cm beyond umbilicus, skin lesions, red hard surrounding skin, or distended abdomen.

1. Based on these findings, what is your continuing plan of care for Biritu and why?

REFERENCES

BEmONC training manual—Module -5:

CASE STUDY - 5.4: COMMON NEWBORN PROBLEMS

DIRECTIONS

Read and analyze this case study individually. When the others in your group have finished reading it, answer the case study questions. Consider the steps in clinical decision-making as you answer the questions. The other groups in the room are working on the same or a similar case study. When all groups have finished, we will discuss the case studies and the answers each group developed.

CLIENT PROFILE

Tiberih is 20 years of age and gave birth to her first baby at home 12 days ago. Both she and Baby F were seen at the health center 6 days after the birth. No problems were detected at that time. Tiberih lives in a small hut in a local village and does not have easy access to clean water. She has come to the health center today because her baby has a skin rash and she is concerned about this.

PRE-ASSESSMENT

1. Before beginning your assessment, what should you do for and ask Tiberih and Baby Kiros?

ASSSESSMENT (information gathering through history, physical examination, and testing)

2. What history will you include in your assessment of Baby Kiros and why?
3. What physical examination will you include in your assessment of Baby Kiros and why?
4. What laboratory tests will you include in your assessment of Baby Kiros and why?

DIAGNOSIS (interpreting information to identify problems/needs)

You have completed your assessment of Baby Kiros and your main findings include the following:

History:

- Record review reveals that Tiberih has no running water in her home and must carry water for household use from a river that is known to be polluted.
- Tiberih reports that the rash began 3 days ago.
- She denies putting any substance on the baby's skin.
- She reports that the baby is feeding well.
- All other aspects of the baby's history are normal or without significance.

Physical Examination:

- Baby Kiros's temperature is 37.0°C.
- Baby Kiros has 7–8 skin pustules on her left arm and upper chest. There is no localized swelling or redness, fluctuant lesions, generalized edema, or rash on palms or soles.
- The baby is wearing soiled clothing and is wrapped in a soiled cloth.
- The baby is breastfeeding well and shows no other signs of systemic sepsis as mentioned above.
- All other aspects of her physical examination are within normal range.

5. Based on these findings, what is Baby Kiros's diagnosis (problem/need) and why?

CARE PROVISION (implementing plan of care and interventions)

6. Based on your diagnosis (problem/need identification), what is your plan of care for Baby Kiros and why?

EVALUATION

- Tiberih returns to the clinic in 2 days.
- You find that the skin pustules have improved and the baby is wearing clean clothes.
- Tiberih reports that she is boiling water that is used for drinking and for bathing the baby.

7. Based on these findings, what is your continuing plan of care for Baby Kiros and why?

APPENDIX: 1

DOCUMENT AND EQUIPMENT LIST

BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE TRAINING

Standard Training Equipment

- White board or chalk board
- White board markers or chalk
- White board eraser
- Overhead projector
- Transparency pens
- LCD for powerpoint (if available, otherwise can photocopy powerpoint)
- VCR
- Name tags
- Pencils/pens
- Paper
- Pencil Erasers
- Pencil sharpners
- Masking tape
- Cello tape
- Flip charts and stand
- Markers to write on flip charts
- Ruler
- Stapler
- Folders for each participant

Table 2-1:- Standard Training Documents and Equipments

Documents/Manuals	Numbers Needed		
	Participants	**Facilitators**	**Total**
First Day Orientation and Final Day			
Registration Form	1 per participant		
Participant's Administrative Documents (Handout)	1 per	1 per facilitator	
Pre / Post Test	1 per	0	
Pre / Post Test Key	0	1 per	
Learning Resource Package			
< Participants Handout	1 per	1 per	
< Facilitators Handbook	0	1 per	
< Training manual	1 per	1 per	
Manual: Basic Maternal and Newborn Care	1 per	1 per	
Manual: Managing Complications in Pregnancy and Childbirth	1 per	1 per	

Documents/Manuals	Numbers Needed		
	Participants	Facilitators	Total
Manual: PCPNC	1 per	1 per	
Flip Chart of Participant's Skills Record	0	1 - Will prepare when together	1
Partograph			
Partograph forms (front and back page)	80	10	90
Partograph forms (front only)	70	10	80
Spirits or alcohol (to clean transparencies) bottle	0	1	1
Transparency – Partograph front page	20	10	
Transparency – Partograph back page	10	10	
Partograph			
Giant partograph		2	2
Transparency pens (can erase)	0	6	6
Stage 1, 2, 3 Labor			
Pillows	2 per team	0	8
Sheets	3 per team	0	12
Newborn model and placenta	1 per team		
Cloth pelvic model	1 per team		
Delivery Kits	1 per team		
Adult Sphygmonanometer	1 per team		
Adult stethoscope	1 per team		
Fetoscope	1 per team		
Chart: Squatting Position for Labor			1
Chart: Postions for Laboring Out of Bed			1
Cervical dilation display			1
Mom support kit – 4 (includes a fan, wash cloth, drinking glass)	1 per team		
Delivery Kits	1 per team		
< Instrument tray			
< Cord scissors			
< Foley catheter			
< Hemostats (2) to clamp cord or cord clamps			
< Sponge forceps (2)			
Apron	1 per team		
Head covers	1 per team		
Masks	1 per team		
Gloves Sterile	1 per team		
Gloves Non-sterile	1 per team		

Documents/Manuals	Numbers Needed		
	Participants	Facilitators	Total
Baby Hats	1 per team		
Barrier goggles	1 per team		
Gauze 4” x 4” squares in giant package non-sterile and not individually wrapped	4 gauze per team		
Baby Blankets Needs to be large enough to easily wrap baby so baby is completely covered... about 1 meter x 1 meter.	3 per team		
Oxytocin vials	1 per team		
Syringe and needle (3cc syringe with 20 or 21 gauge needle)	1 per team		
Episiotomy			
Sponges of upholstery quality – should not tear easily when thread pulled through. Size 8” x 4” x 4”	1 per	2	
Suture Needles: Reusable round body 1/2 circle suture needles either with suture already attached or with an “eye” so suture can be pulled through eye.	50		50
Rolls/spools regular sewing thread (good quality so goes through practice sponge easily)… if suture needles do not have suture attached	10 rolls/spools		10 rolls/spools
Chart: Suturing for episiotomy and lacerations			1
Episiotomy Kits	1 per 2 persons		
10 cc syringe with 1 1/2" needle (pretend filled with .5% lidocaine)	1 per		
PP Care			
Centimeter measuring tape	1 per		1 per
BP cuff	1 per team		
Stethoscope	1 per team		
Gloves	1 per team		
Pillows	2 per team		
Sheets	3 per team		
Hemorrhage			
Soft Pelvis and Placenta models	1 per team		
Delivery Kit	1 per team		
Pillows and Sheets			Mentioned above
Sock (that can stretch to put infant into and to practice cervical laceration repair)	1 per		
Suture needles and thread			Mentioned above
Oxytocin, syringe and needle			Mentioned

Documents/Manuals	Numbers Needed		
	Participants	Facilitators	Total
			above
Episiotomy Set			Mentioned above
Infection Prevention			
Plastic Buckets			6 large
Large steamer pot with lid (for steaming/ boiling			2
Chlorine bottle			2
Heavy Cleaning Gloves			2
Toothbrush			2
Scissors	Mentioned above		1
Hemostat			1
Syringe and needle			1
Examination or sterile gloves			1
Apron			1
Foley Catheter			1
Instrument tray			1
Dish Soap			1 bottles
Video: Infection Prevention			1
Infant Resuscitation			
Baby Annie Resuscitation Model	1 per team		
Baby Blankets	3 per team		
Neonatal Ambu Bag	1 per team		
Neonatal masks (Size 0 and Size 1)			
Manikin Face shields	1 per		
Oxygen tubing	1 per team		
Newborn suction tubes	1 per team		
Baby hats	1 per team		
Gloves	1 per team		
Shock – Rapid Assessment and Management			
Stethoscope	2		
BP Cuff	2		
Pillows	4		
Sheets	6		
Placenta Model	2		
IV fluids and IV set	2		
Gloves	2		
Foley Catheter	2		

Documents/Manuals	Numbers Needed		
	Participants	Facilitators	Total
Simulated material to serve purpose of oxygen cylinder	2		
Breastfeeding			
Knee High nylons	2 per		
Rubber bands (neutral color)	2 per		
Sewing needles – need 22	1 per		
Thread – white or tan color – 2 large rolls			
Office scissors			3 - 4
Stuffing for breasts (cotton wool or synthetic pillow stuffing)		Need enough to stuff 44 individual breasts (22 pair)	
Strip of cloth about 4 inches (13 cm) wide by 5 feet (1 ½ meters) long – need 22. A couple of sheets can be cut into strips	1 per		2 – 3 sheets
Marking pen permanent – brown – 5			5
Kangaroo Baby Care			
Baby Models	4		
Cloths to wrap baby and mom together	4		
Baby Hats	4		
Pregnancy Calculator			
Pregnancy Calculators	1 per	1 per	
Participant Exercise Handout			Mentioned above
Hypertensive Disorders			
Focused Antenatal Care			
Centimeter measuring tape	1 per		Mentioned above
BP cuff	1 per team		
Stethoscope	1 per team		
Gloves	1 per team		
Pillows and Sheets			Mentioned above
Pregnancy calculators	1 per		Mentioned above

APPENDIX: 2
PRECOURSE QUESTIONNAIRE

PRECOURSE KNOWLEDGE ASSESSMENT QUESTIONNAIRE

HOW THE RESULTS WILL BE USED

The main objective of the **Precourse Knowledge Assessment Questionnaire** is to assist both the **trainer** and the **participant** as they begin their work together in the course by assessing what the participants, individually and as a group, know about the course topics. This allows the trainer to identify topics which may need additional emphasis during the course. Providing the results of the precourse assessment to the participants enables them to focus on their individual learning needs. In addition, the questions alert participants to the content that will be presented in the course.

The questions are presented in the true-false format. A special form, the **Individual and Group Assessment Matrix**, is provided to record the scores of all course participants. Using this form, the trainer and participants can quickly chart the number of correct answers for each of the questions. By examining the data in the matrix, the group members can easily determine their collective strengths and weaknesses and jointly plan with the trainer how to best use the course time to achieve the desired learning objectives.

For the trainer, the questionnaire results will identify particular topics that may need additional emphasis during the learning sessions. Conversely, for those categories where 85% or more of participants answer the questions correctly, the trainer may elect to use some of the allotted time for other purposes.

PRECOURSE KNOWLEDGE QUESTIONNAIRE

Instructions: In the space provided, print a capital **T** if the statement is **true** or a capital **F** if the statement is **false**.

Management of shock; rapid initial assessment

1. Rapid initial assessment should be carried out on all women of childbearing age who present with a problem. _____
2. A woman who suffers shock as a result of an obstetric emergency may have a fast, weak pulse. _____
3. A woman who has an unruptured ectopic pregnancy usually presents with collapse and weakness. _____

Bleeding during pregnancy and labor

4. Management of inevitable abortion when the pregnancy is greater than 16 weeks usually involves administration of ergometrine. _____
5. Manual vacuum aspiration (MVA) is an effective method for treatment of incomplete abortion if the uterine size is not greater than 12 weeks. _____
6. Assessment of a woman who presents with vaginal bleeding after 28 weeks of pregnancy should include vaginal examination. _____
7. If bleeding is heavy in the case of abruptio placentae and the cervix is fully dilated, delivery could be assisted by vacuum extraction. _____

Bleeding after childbirth

8. Postpartum hemorrhage is defined as any degree of bleeding after childbirth. _____
9. Continuous slow bleeding or sudden bleeding after childbirth requires early and aggressive intervention. _____
10. Absent fetal movements and fetal heart sounds, together with intra-abdominal and/or vaginal bleeding and severe abdominal pain, suggest ruptured uterus. _____

Management of third stage of labor

11. Active management of the third stage of labor should be practiced only on women who have a history of postpartum hemorrhage. _____

12. If a retained placenta is undelivered after 30 minutes of oxytocin administration and controlled cord traction and the uterus is contracted, controlled cord traction and fundal pressure should be attempted. _____

13. If the cervix is dilated in the case of delayed (secondary) postpartum hemorrhage, dilatation and curettage should be performed to evacuate the uterus. _____

Headaches, blurred vision, convulsions, loss of consciousness or elevated blood pressure

14. Hypertension in pregnancy can be associated with protein in the urine. _____

15. The presenting signs and symptoms of eclampsia include convulsions, diastolic blood pressure of 90 mm Hg or more after 20 weeks gestation and proteinuria of 2+ or more. _____

16. A pregnant woman who is convulsing should be protected from injury by moving objects away from her. _____

17. The management of mild pre-eclampsia should include sedatives and tranquilizers. _____

18. The drug of choice for preventing and treating convulsions in severe pre-eclampsia and eclampsia is diazepam. _____

Partograph

19. Cervical dilatation plotted to the right of the alert line on the partograph indicates unsatisfactory progress of labor. _____

normal labor and childbirth

20. Finding diagnostic of cephalopelvic disproportion is secondary arrest of descent of the head in the presence of good contractions. _____

21. If the active phase of labor is prolonged, delivery should be by cesarean section. _____

22. It is recommended to first perform artificial rupture of membranes (if the membranes are intact) for induction of labor, except in patients with HIV. _____

23. Conditions for vacuum extraction are fetal head at least at 0 station or not more than 2/5 above the symphysis pubis and a fully dilated cervix. _____

24. Abdominal palpation to assess descent of the fetal head is equivalent to assessing descent using the station on vaginal examination. _____

25. A head that is felt in the flank on abdominal examination indicates a shoulder presentation or transverse lie. _____

26. When the fetal head is well flexed with occiput anterior or occiput transverse (in early labor), normal childbirth should be anticipated. _____

27. If labor is prolonged in the case of a breech presentation, a cesarean section should be performed. _____

Fever during and after childbirth

28. Breast pain and tenderness 3 to 4 weeks after childbirth is usually due to breast engorgement. _____

29. Lower abdominal pain and uterine tenderness, together with foul-smelling lochia, are characteristic of metritis. _____

Newborn resuscitation

30. When using a bag and mask to resuscitate a newborn, the newborn's neck must be slightly extended to open the airway. _____

APPENDIX: 3

PRECOURSE KNOWLEDGE QUESTIONNAIRE ANSWER KEY

MANAGEMENT OF SHOCK; RAPID INITIAL ASSESSMENT

1. Rapid initial assessment should be carried out on all women of childbearing age who present with a problem. **TRUE**
2. A woman who suffers shock as a result of an obstetric emergency may have a fast, weak pulse. **TRUE**
3. A woman who has an unruptured ectopic pregnancy usually presents with collapse and weakness. **FALSE**

BLEEDING DURING PREGNANCY AND LABOR

4. Management of inevitable abortion when the pregnancy is greater than 16 weeks usually involves administration of ergometrine **FALSE**
5. Manual vacuum aspiration (MVA) is an effective method for treatment of incomplete abortion if the uterine size is not greater than 12 weeks. **TRUE**
6. Assessment of a woman who presents with vaginal bleeding after 28 weeks of pregnancy should include vaginal examination. **FALSE**
7. If bleeding is heavy in the case of abruptio placentae and the cervix is fully dilated, delivery could be assisted by vacuum extraction. **TRUE**

BLEEDING AFTER CHILDBIRTH

8. Postpartum hemorrhage is defined as any degree of bleeding after childbirth. **FALSE**
9. Continuous slow bleeding or sudden bleeding after childbirth requires early and aggressive intervention. **TRUE**
10. Absent fetal movements and fetal heart sounds, together with intra-abdominal and/or vaginal bleeding and severe abdominal pain, suggest ruptured uterus. **TRUE**

MANAGEMENT OF THIRD STAGE OF LABOR

11. Active management of the third stage of labor should be practiced only on women who have a history of postpartum hemorrhage. **FALSE**
12. If a retained placenta is undelivered after 30 minutes of oxytocin administration and the uterus is contracted, controlled cord traction and fundal pressure should be attempted. **FALSE**

13. If the cervix is dilated in the case of delayed (secondary) postpartum hemorrhage, dilatation and curettage should be performed to evacuate the uterus. **FALSE**

HEADACHES, BLURRED VISION, CONVULSIONS, LOSS OF CONSCIOUSNESS OR ELEVATED BLOOD PRESSURE

14. Hypertension in pregnancy can be associated with protein in the urine. **TRUE**
15. The presenting signs and symptoms of eclampsia include convulsions, diastolic blood pressure of 90 mm Hg or more after 20 weeks gestation and proteinuria of 2+ or more. **TRUE**
16. A pregnant woman who is convulsing should be protected from injury by moving objects away from her. **TRUE**
17. The management of mild pre-eclampsia should include sedatives and tranquilizers. **FALSE**
18. The drug of choice for preventing and treating convulsions in severe pre-eclampsia and eclampsia is diazepam. **FALSE**

PARTOGRAPH

19. Cervical dilation plotted to the right of the alert line on the partograph indicates unsatisfactory progress of labor. **TRUE**

NORMAL LABOR AND CHILDBIRTH

20. Findings diagnostic of cephalopelvic disproportion are secondary arrest of descent of the head in the presence of good contractions. **TRUE**
21. If the active phase of labor is prolonged, delivery should be by cesarean section. **FALSE**
22. External rotation of the fetal head indicates that the shoulders are stuck behind the symphysis pubis. **FALSE**
23. Conditions for vacuum extraction are fetal head at least at 0 station or not more than 2/5 above the symphysis pubis and a fully dilated cervix. **TRUE**
24. Abdominal palpation to assess descent of the fetal head is equivalent to assessing descent using the station on vaginal examination. **TRUE**
25. A head that is felt in the flank on abdominal examination indicates a shoulder presentation or transverse lie. **TRUE**
26. When the fetal head is well flexed with occiput anterior or occiput transverse (in early labor), normal childbirth should be anticipated. **TRUE**

27. If labor is prolonged in the case of a breech presentation, a cesarean section should be performed. **TRUE**

FEVER DURING AND AFTER CHILDBIRTH

28. Breast pain, tenderness and fever 3 to 4 weeks after childbirth is usually due to breast engorgement. **FALSE**

29. Lower abdominal pain and uterine tenderness, together with foul-smelling lochia, are characteristic of metritis. **TRUE**

NEWBORN RESUSCITATION

30. When using a bag and mask to resuscitate a newborn, the newborn's neck must be slightly extended to open the airway. **TRUE**

APPENDIX: 4

INDIVIDUAL AND GROUP ASSESSMENT MATRIX

COURSE:_____ **DATES:**_____

TRAINER(S):_____

Question Number	CORRECT ANSWERS (Participants)																							CATEGORIES
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1																									MANAGEMENT OF SHOCK; RAPID INITIAL ASSESSMENT
2																									
3																									
4																									BLEEDING DURING PREGNANCY AND LABOR
5																									
6																									
7																									
8																									BLEEDING AFTER CHILDBIRTH
9																									
10																									
11																									MANAGEMENT OF THIRD STAGE OF LABOR
12																									
13																									

Question Number	CORRECT ANSWERS (Participants)																							CATEGORIES
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
14																									HEADACHES, BLURRED VISION, CONVULSIONS, LOSS OF CONSCIOUSNESS OR ELEVATED BLOOD PRESSURE
15																									
16																									
17																									
18																									
19																									PARTOGRAPH
20																									NORMAL LABOR AND CHILDBIRTH
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									FEVER DURING AND AFTER CHILDBIRTH
29																									
30																									NEWBORN RESUSCITATION

APPENDIX: 5

MIDCOURSE KNOWLEDGE ASSESSMENT QUESTIONNAIRE

Instruction: Circle the correct answer from the choices given for each question

INFECTION PREVENTION PRACTICES

1. Infection can be transmitted from clients to health care workers through
   A. Contaminated needles or other sharps instruments that pierce the health worker's skin
   B. Splashes in the health care worker's eye of contaminated blood or body fluids
   C. Broken skin that is exposed to contaminated blood and body fluids
   D. All of the above

2. The single-most practical procedure for preventing the spread of infection is
   A. Wearing gloves
   B. Wearing a mask
   C. Hand washing
   D. Cleaning skin with alcohol before injections

VAGINAL BLEEDING IN EARLY PREGNANCY

3. The MVA procedure is complete when
   A. the wall of the uterus feels smooth
   B. the vacuum in the syringe decreases
   C. red or pink foam and no more tissue is visible in the cannula
   D. the uterus relaxes

RAPID INITIAL ASSESSMENT AND MANAGEMENT OF SHOCK

4. Rapid initial assessment should be carried out
   A. only on women who present with abdominal pain and vaginal bleeding
   B. only on women who present with abdominal pain
   C. only on women who present with vaginal bleeding
   D. on all women of childbearing age who present with a problem

5. A woman who suffers shock as a result of an obstetric emergency may have
   A. A weak, fast pulse
   B. High blood pressure
   C. Normal breathing
   D. A good urine output

CHILDBIRTH CARE

6. The partograph is a record of
    A. labor for women who experience problems
    B. the main observations made during labor
    C. only maternal well-being
    D. only fetal well-being

7. Plotting on the partograph should begin
    A. in the active phase of the first stage of labor
    B. in the latent phase
    C. when the cervix reaches full dilatation
    D. when the woman is admitted to the labor ward

8. Before applying controlled cord traction during active management of the third stage of labor
    A. oxytocin is administered intramuscularly and the attendant waits for the uterus to contract
    B. the woman's bladder is catheterized
    C. pressure is applied to the fundus
    D. all of the above

9. Active management of the third stage of labor is believed to
    A. reduce blood loss
    B. shorten the third stage of labor
    C. minimize the time at which the woman is at risk of hemorrhage
    D. all of the above

UNSATISFACTORY PROGRESS OF LABOR

10. Cervical dilation plotted to the right of the alert line on the partograph indicates
    A. satisfactory progress of labor
    B. unsatisfactory progress of labor
    C. the end of the latent phase
    D. the end of the active phase

11. Conditions for vacuum extraction are
    A. a term fetus, vertex presentation
    B. a fully dilated cervix
    C. fetal head at least at 0 station or not more than 2/5 above symphysis pubis
    D. all of the above

MALPRESENTATION AND MALPOSITION

12. External rotation of the fetal head indicates that the shoulders are:
    A. in the anterior diameter of the pelvic outlet
    B. in the posterior diameter of the pelvic outlet
    C. in the antero-posterior diameter of the pelvic outlet
    D. stuck behind the symphysis pubis

13. In a breech presentation, the fetal heart beat
    A. can usually be heard at a location higher than expected for a vertex presentation
    B. can usually be heard at a location lower than expected for vertex presentation
    C. can usually be heard in the same location as for a vertex presentation
    D. is not able to be heard

14. The presence of meconium is common with breech labor and is
    A. always a sign of fetal distress
    B. not a sign of fetal distress if the fetal heart rate is normal
    C. an indication for cesarean section
    D. an indication for breech extraction

HEADACHE, BLURRED VISION, CONVULSIONS OR LOSS OF CONSCIOUSNESS, ELEVATED BLOOD PRESSURE

15. Diastolic blood pressure 90 mm Hg or more before 20 weeks of gestation is a sign of:
    A. mild pre-eclampsia
    B. chronic hypertension
    C. superimposed mild pre-eclampsia
    D. pregnancy-induced hypertension

16. Eclamptic fits may occur in the
    A. antepartum period only
    B. intrapartum period only
    C. postpartum period only
    D. antepartum, intrapartum or postpartum periods

17. The loading dose of magnesium sulfate is given via
    A. IV over 5 minutes, followed by deep IM injection into each buttock
    B. IV over 5 minutes, followed by deep IM injection into one buttock
    C. IM injections
    D. IV bolus, followed by deep IM injection into each buttock

18. An antihypertensive drug should be given for hypertension in severe pre-eclampsia or eclampsia if diastolic blood pressure is
    A. between 100 and 110 mm Hg
    B. 110 mm hg or more
    C. 115 mm Hg or more
    D. 120 mm Hg or more

VAGINAL BLEEDING AFTER CHILDBIRTH

19. Immediate postpartum hemorrhage can be due to
    A. atonic uterus
    B. trauma to the genital tract
    C. retained placenta
    D. all of the above

20. Tears of the cervix, vagina or perineum should be suspected when there is immediate postpartum hemorrhage and
    A. a complete placenta and a contracted uterus
    B. an incomplete placenta and a contracted uterus
    C. a complete placenta and an atonic uterus
    D. an incomplete placenta and an atonic uterus

21. Prostaglandins should not be given
    A. per vaginum
    B. by IM injection
    C. by IV
    D. by mouth

22. Postpartum hemorrhage is defined as
    A. vaginal bleeding of any amount after childbirth
    B. sudden bleeding after childbirth
    C. vaginal bleeding in excess of 300 mL after childbirth
    D. vaginal bleeding in excess of 500 mL after childbirth

23. If manual removal of the placenta is performed
    A. give ergometrine prior to the procedure
    B. give antibiotics 24 hours after the procedure
    C. place one hand in the uterus and use the other hand to apply traction on the cord
    D. place one hand in the uterus and one hand on the abdomen to provide counter traction on the uterine fundus

24. For repair of vaginal and perineal tears, local anesthetic should be infiltrated
    A. beneath the vaginal mucosa
    B. beneath the skin of the perineum
    C. deeply into the perineal muscle
    D. all of the above

FEVER

25. Factors that may predispose to postpartum infection
    A. Prolonged labor and prolonged rupture of membranes
    B. Frequent passing urine
    C. Not wearing gloves while palpating the abdomen
    D. Giving plenty of drinks during labor

26. General management of the woman who develops a fever after childbirth includes
    A. bed rest
    B. adequate hydration by mouth or IV
    C. use of a fan or sponging with tepid water
    D. all of the above

27. The treatment of metritis should include
    A. IV ampicillin or IV gentamicin or IV metronidazole
    B. iv ampicillin, plus iv gentamicin and iv metronidazole
    C. a combination of oral antibiotics
    D. a broad spectrum oral antibiotic

NEWBORN

28. The correct rate for ventilating a newborn is:
    A. 20 breaths per minute
    B. 30 breaths per minute
    C. 40 breaths per minute
    D. 80 breaths per minute

29. To help prevent heat loss, the newborn should be
    A. Dried thoroughly immediately after birth
    B. Dried thoroughly after the cord has been cut
    C. Dried thoroughly and covered with a clean cloth immediately after birth
    D. Covered with a clean, dry cloth after the cord has been cut

30. Newborn cord care involves
    A. Applying a dry dressing to the cord stump
    B. Swabbing the cord stump with alcohol and applying a dry dressing
    C. Keep the cord stump dry without putting any substance on it
    D. Covered with antiseptic soaked wet gauze

APPENDIX: 6

MIDCOURSE KNOWLEDGE ASSESSMENT QUESTIONNAIRE

ANSWER KEY

INFECTION PREVENTION PRACTICES

1. Infection can be transmitted from clients to health care workers through
   A. Contaminated needles or other sharps instruments that pierce the health worker's skin
   B. Splashes in the health care worker's eye of contaminated blood or body fluids
   C. Broken skin that is exposed to contaminated blood and body fluids
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2. The single-most practical procedure for preventing the spread of infection is
   A. Wearing gloves
   B. Wearing a mask
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VAGINAL BLEEDING IN EARLY PREGNANCY

3. The MVA procedure is complete when
   A. the wall of the uterus feels smooth
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   C. Normal breathing
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6. The partograph is a record of
   A. labor for women who experience problems
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   B. the woman's bladder is catheterized
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   D. all of the above

9. Active management of the third stage of labor is believed to
   A. reduce blood loss
   B. shorten the third stage of labor
   C. minimize the time at which the woman is at risk of hemorrhage
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   A. satisfactory progress of labor
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    B. in the posterior diameter of the pelvic outlet
    C. in the antero-posterior diameter of the pelvic outlet
    D. stuck behind the symphysis pubis

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HEADACHE, BLURRED VISION, CONVULSIONS OR LOSS OF CONSCIOUSNESS, ELEVATED BLOOD PRESSURE

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    A. antepartum period only
    B. intrapartum period only
    C. postpartum period only
    D. antepartum, intrapartum or postpartum periods

17. The loading dose of magnesium sulfate is given via
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    D. IV bolus, followed by deep IM injection into each buttock

18. An antihypertensive drug should be given for hypertension in severe pre-eclampsia or eclampsia if diastolic blood pressure is
    A. between 100 and 110 mm Hg
    B. 110 mm hg or more
    C. 115 mm Hg or more
    D. 120 mm Hg or more

VAGINAL BLEEDING AFTER CHILDBIRTH

19. Immediate postpartum hemorrhage can be due to
    A. atonic uterus
    B. trauma to the genital tract
    C. retained placenta
    D. all of the above

20. Tears of the cervix, vagina or perineum should be suspected when there is immediate postpartum hemorrhage and
    A. a complete placenta and a contracted uterus
    B. an incomplete placenta and a contracted uterus
    C. a complete placenta and an atonic uterus
    D. an incomplete placenta and an atonic uterus

21. Prostaglandins should not be given
    A. per vaginum
    B. by IM injection
    C. by IV
    D. by mouth

22. Postpartum hemorrhage is defined as
    A. vaginal bleeding of any amount after childbirth
    B. sudden bleeding after childbirth
    C. vaginal bleeding in excess of 300 mL after childbirth
    D. **vaginal bleeding in excess of 500 mL after childbirth**

23. If manual removal of the placenta is performed
    A. give ergometrine prior to the procedure
    B. give antibiotics 24 hours after the procedure
    C. place one hand in the uterus and use the other hand to apply traction on the cord
    D. place one hand in the uterus and one hand on the abdomen to provide counter traction on the uterine fundus

24. For repair of vaginal and perineal tears, local anesthetic should be infiltrated
    A. beneath the vaginal mucosa
    B. beneath the skin of the perineum
    C. deeply into the perineal muscle
    D. all of the above

FEVER

25. Factors that may predispose to postpartum infection
    A. Prolonged labor and prolonged rupture of membranes
    B. Frequent passing urine
    C. Not wearing gloves before palpating the abdomen
    D. Giving plenty of drinks during labor

26. General management of the woman who develops a fever after childbirth includes
    A. bed rest
    B. adequate hydration by mouth or IV
    C. use of a fan or sponging with tepid water
    D. all of the above

27. The treatment of metritis should include
    A. IV ampicillin or IV gentamicin or IV metronidazole
    B. iv ampicillin, plus iv gentamicin and iv metronidazole
    C. a combination of oral antibiotics
    D. a broad spectrum oral antibiotic

NEWBORN

28. The correct rate for ventilating a newborn is:
    A. 20 breaths per minute
    B. 30 breaths per minute
    C. 40 breaths per minute
    D. 80 breaths per minute

29. To help prevent heat loss, the newborn should be
    A. Dried thoroughly immediately after birth
    B. Dried thoroughly after the cord has been cut
    C. Dried thoroughly and covered with a clean cloth immediately after birth
    D. Covered with a clean, dry cloth after the cord has been cut

30. Newborn cord care involves
    A. Applying a dry dressing to the cord stump
    B. Swabbing the cord stump with alcohol and applying a dry dressing
    C. Keep the cord stump dry without putting any substance on it
    D. Covered with antiseptic soaked wet gauze

APPENDIX: 7

ESSENTIAL COMPETENCIES FOR THE SKILLED BIRTH ATTENDANT

GUIDING PRINCIPLES:

The consensus on essential competencies for skilled birth attendant in the African Region is guided by the following principles:

Human rights approach – The right to health and life is a basic human right and women and the newborns have a right to universal access to appropriate quality care.

Public health approach – Essential maternal and newborn health care services should be an integral component of the minimum package services at all levels of the health care delivery system

A continuum of care – All women should receive appropriate quality care before and during pregnancy, childbirth and postpartum period.

The inseparable dyad of mother and newborn – Interventions for maternal and newborn health should be provided as a package at all levels of the health care service delivery system

Integration with other relevant programmes – Due importance should be accorded to the need for the prevention and management of indirect causes of maternal and newborn morbidity and mortality such as Malaria and HIV/AIDS.

COMPETENCY IN SOCIAL, EPIDEMIOLOGIC AND CULTURAL CONTEXT OF MATERNAL AND NEWBORN HEALTH

The skilled attendant should have knowledge about social determinants and epidemiological context of maternal and newborn health and ethics that form the basis of appropriate care

Knowledge is required on:

1. Demography and epidemiology of the local community, including vital statistics of births and deaths, and indicators for health and disease.
2. Direct and indirect causes of maternal, perinatal and neonatal mortality and morbidity, and strategies for reducing them including the advantages of care by skilled birth attendant during pregnancy, childbirth and the postnatal/postpartum period

3. Social determinants for health such as income, water, sanitation, housing, adequacy of food supplies, level of literacy and education, environmental hazards and access to health facilities, local culture, customs and beliefs, including religious beliefs, gender roles and traditional practices.
4. National and local health services including policies, plans and legal framework that regulates provision of and access to essential health package for maternal and child health care at each level in the context of the continuum of care.
5. Community-based primary care, communication and counselling techniques to enhance health promotion and disease prevention.
6. Referral system to higher health facility levels including transport mechanisms
7. The role and function of other relevant national programmes such as HIV, Malaria and Immunization
8. Ethical principles that promote equitable access, respect of and inclusion of the patient in decision making
9. Principles of good management including effective teamwork with other health care professionals.

Essential skills:

1. Compile a community health profile
2. Practice in a responsible manner and is accountable for his/her clinical decisions and actions.
3. Recognise the signs and symptoms of complications and the need for consultation with other medical staff and/or referral and takes appropriate and timely action.
4. Behave in a courteous, respectful, on-judgemental and culturally appropriate manner with all clients, regardless of status, ethnic origin or creed.
5. Promote involvement of women to make informed choices about all aspects of their care and encourages them to take responsibility for their own health.
6. Use appropriate communication and counselling techniques and provide health education relevant for the local community and information about available health services.
7. Work in liaison with individuals, families and communities and other key stakeholders to promote and advocate for safe motherhood.
8. organise his/her work to ensure collaboration with other health workers for effective team work in the provision of health services to women and their families and keep correct records

COMPETENCY IN PRE-PREGNANCY CARE AND FAMILY PLANNING

The skilled attendant should provide high quality, culturally sensitive health education and family planning services in order to promote healthy family life, planned pregnancies and positive parenting.

Knowledge of:

1. Female and male anatomy and physiology related to sexuality, fertility and reproduction.
2. Cultural norms and practices surrounding sexuality, sexual practices and childbearing including FGM.
3. Relevant components of a health and family history
4. Details of physical examination required and investigative laboratory studies that evaluate potential for a healthy pregnancy.
5. Health education content targeted at reproductive health, sexually transmitted diseases (STD's), HIV/AIDS, nutrition and promotion of general health and well-being.
6. Methods for child spacing and family planning namely: natural methods, barrier, steroidal, mechanical, chemical and surgical methods of contraception including emergency contraception,
7. Advantages and disadvantages of different methods of child spacing and family planning and details for their effective use.
8. Policies and legislation on family planning including factors involved in decision-making related to unplanned or unwanted pregnancies
9. Signs and symptoms, screening methods and appropriate treatment of urinary tract infection and common sexually transmitted diseases, including post-exposure preventive treatment

Essential skills:

1. Obtain a relevant and comprehensive history in a sensitive and friendly manner, assuring the woman of confidentiality.
2. Perform a general physical examination of the woman and identify, and appreciate the significance of any abnormal findings.

3. Request and/or perform and interpret accurately common laboratory tests such as full blood picture, urinanalysis and microscopy.
4. Take a cervical smear correctly for cytology (Papanicolaou).
5. Correlate all data obtained from the history, physical examination and any laboratory tests and interpret the findings in preparation for giving appropriate information and care to the woman.
6. Record all findings from history, physical examination and tests as well as advice, counselling, treatment and recommendations for follow-up.
7. Provide a full range of family planning services including the insertion of an intrauterine contraceptive device and implants, provide post-exposure preventive treatment in accordance with the woman's choice,
8. Record the contraceptive method provided and give appropriate advice and care for any adverse side effects and advice on follow-up.
9. Use health education and basic counselling skills appropriately when giving information and advice.

COMPETENCY IN CARE AND COUNSELLING DURING PREGNANCY

The skilled attendant should provide high quality antenatal care to maximise the woman's health during pregnancy, detect early and treat any complications which may arise and refer if specialist attention is required.

Knowledge of:

1. The biology of human reproduction, e.g. the neuro-hormonal regulation of human reproduction and foetal development.
2. Signs and symptoms of pregnancy including physiological changes and advice on the minor disorders which may result from some of them.
3. Examinations and tests for confirmation of pregnancy.
4. Dating pregnancy by menstrual history, size of uterus by palpation and ultrasound if available.
5. Medical complications and their effect on pregnancy, e.g. severe anaemia, diabetes, cardiac or respiratory conditions, essential hypertension, renal disease.

6. Taking a comprehensive and relevant history of the current pregnancy, the woman's health, her obstetric history and her family health history.
7. Components of a general physical examination to assess the well-being of the mother including weight and blood pressure and the significance of the findings.
8. Components of a general physical examination to assess the well-being of the fetus including fundal height, fetal activity and heart rate and, in the latter weeks, the lie, presentation, position and descent of the fetus and the significance of the findings.
9. Screening tests in pregnancy, including the interpretation of findings, e.g. haemoglobin, urinanalysis for protein, tests for syphilis, e.g. rapid plasma reagin (RPR), HIV testing, screen for TB and laboratory tests for asymptomatic bacteriuria.
10. Nutritional requirements of the pregnant woman and her fetus.
11. Health education and counselling regarding hygiene, nutrition, sexuality including safer sex, risks of HIV and contraception, the dangers associated with smoking, alcohol and un-prescribed drugs.
12. The importance of birth preparedness including place for birth, funds, transportation and social support
13. Infant feeding, including the advantages of exclusive breast feeding, and replacement feeding in the context of HIV.
14. Education of women and their families about danger signs during pregnancy and the need to seek immediate help from a skilled health worker.
15. Recognition and management of serious conditions in pregnancy which require immediate attention: e.g. pre-eclampsia and eclampsia, vaginal bleeding, preterm labor, preterm rupture of the membranes, severe anaemia, abortion, ectopic or multiple pregnancy, malpresentations at term, e.g. breech and shoulder.
16. Appropriate care for the HIV-positive pregnant woman and interventions to prevent mother-to child-transmission.
17. Measures for prevention of malaria in pregnancy

Essential skills:

1. Take an initial and ongoing history at each antenatal visit.
2. Calculate the estimated date of delivery from the date of the woman's last menstrual period, if known; otherwise assess gestational age from onset of fetal movements and assessment of fundal height.
3. Perform a full general physical examination and explain the findings to the woman.

4. Assess maternal vital signs including temperature, blood pressure and pulse.
5. perform and interpret screening tests in pregnancy, e.g. haemoglobin, urinanalysis for protein, tests for syphilis, HIV, screening for TB and asymptomatic bacteriuria
6. Assess maternal nutrition and give appropriate advice on nutritional requirements in pregnancy and how to achieve them.
7. Perform an abdominal examination, including measurement of the fundal height and comparison with gestational age to assess fetal growth and stage of pregnancy; in the latter weeks of pregnancy, identify the lie, presentation, position and descent of fetus and auscultate the fetal heart.
8. Correlate all data obtained from the history, examination of the woman and results of any laboratory tests and interpret the findings in preparation for giving appropriate information, advice and care to the woman.
9. Educate and counsel women about health issues; e.g. nutrition, hygiene, exercise, dangers of smoking and taking unprescribed drugs, safer sex and risks of HIV.
10. Give preventive care and treat: malaria, sexually transmitted diseases, and urinary tract infections.
11. Provide counselling, care, treatment and support for the HIV positive pregnant woman including measures to prevent mother-to-child transmission i.e infant feeding options
12. Educate women and their families about the need to seek immediate help from a skilled health worker if any of the following danger signs develop: severe headache, visual disturbances, epigastric pain, vaginal bleeding, abdominal pain associated with episodes of fainting, severe vomiting, preterm rupture of the membranes, fever, offensive or irritating vaginal discharge.
13. Diagnose complications and risk conditions in pregnancy for referral to more specialized care such as:
    - elevated blood pressure and proteinuria, and/or severe headaches, visual changes and epigastric pain associated with elevated blood pressure
    - high fever
    - heavy vaginal bleeding in early pregnancy
    - any vaginal bleeding after 28 week
    - abdominal pain associated with episodes of fainting in early pregnancy, with or without vaginal bleeding
    - multi-fetal pregnancy
    - malpresentation at term, e.g. breech, shoulder
    - preterm rupture of the membranes

- suspected oligo- or polyhydramniosis
- intrauterine fetal death
- record findings of history, examinations, tests and give advice and instructions for follow-up.

COMPETENCY IN CARE DURING LABOR AND BIRTH

The skilled attendant should provide high quality, culturally sensitive care during labor, conduct a cleansafe delivery, give immediate care to the newborn and manage emergencies effectively to prevent maternal and neonatal mortality and morbidity.

Knowledge of:

1. Onset, physiology and mechanisms of labor.
2. Anatomy of fetal skull, including main diameters and landmarks.
3. Cultural issues concerning labor and birth.
4. Assessment of progress in labor and use of the partograph.
5. Measures to assess fetal well-being in labor.
6. Measures to ensure maternal well-being in labor, hygiene and bladder care, hydration and nutrition, mobility and positions of the woman's choice, emotional support, massage.
7. Universal precautions to prevent infections.
8. Diagnosis and management of the second stage of labor including delivery of the baby,
9. Indications and technique for making and repairing an episiotomy, including the technique for local anaesthesia of the perineum.
10. Immediate care of the newborn,
    - procedures for maintaining warmth,
    - clearing of airways and assessing breathing
    - methods of resuscitation
    - cord care,
    - early initiation of exclusive breastfeeding, or replacement feeding if the mother is HIV positive and that is her choice.
11. Use, action and indications of uterotonics.

12. Management of the third stage of labor including active management of the third stage of labor.
13. Reasons and method for examination and safe disposal of the placenta and membranes.
14. Technique for examination of the perineum, vulva and lower vagina for tears and grading of perineal tears.
15. Methods of suturing second degree perineal and lower vaginal tears.
16. Measures to assess the woman's condition after birth
17. Complications in labor requiring emergency care and/or referral, e.g.
18. intra-partum haemorrhage,
    - multi-fetal pregnancy,
    - malpresentations,
    - fetal distress including the risk associated with premature rupture of membranes (PROM) and meconium-stained liquor
    - cord prolapse,
    - prolonged or obstructed labor,
    - shoulder dystocia,
    - retained placenta,
    - postpartum haemorrhage,
    - severe vaginal and cervical tears,
    - Serious infections.
19. Emergency management of PPH
20. Use of magnesium-sulphate for management of eclampsia,
21. Operative delivery, especially vacuum extraction (VE).
22. Cardio-pulmonary resuscitation
23. PMTCT including HIV screening in women with unknown HIV status
24. Care, treatment and support in labor and birth for the HIV-positive woman and her newborn

Essential skills:

1. Take full history of pregnancy and labor including the review of maternal pregnancy records.
2. perform a general physical examination to assess the woman's condition.
3. Perform an abdominal examination to confirm the period of gestation, identify the lie, presentation, position and descent of the fetus, and auscultate the fetal heart.
4. Assess the frequency, duration and strength of uterine contractions.
5. Make a vaginal examination to determine cervical effacement and dilatation, confirm whether or not the membranes have ruptured, identify the presenting part and position of the fetus, the moulding, the station and level of the head and the adequacy of the pelvis for the passage of the fetus.
6. accurately record the progress of labor using the partograph
7. Monitor maternal and fetal condition regularly throughout labor, identifying deviations from normal and taking timely, appropriate action.
8. provide emotional support for the woman and her family, ensuring that the woman has a companion of her choice to stay with her throughout labor, and keep her fully informed of progress, involving her in all decisions related to her care.
9. Keep the woman in optimum condition during labor, maintaining adequate hydration and nutrition, ensuring that the bladder is emptied regularly, promoting high standards of hygiene to prevent infection and helping with methods of pain relief such as massage and enabling the woman to adopt the positions of her choice.
10. Recognise the signs and symptoms of the second stage of labor and provide constant care, observation and support, allowing non-directive pushing, providing support of the perineum and avoid interference with the normal mechanism of labor
11. Use universal precations to prevent infection
12. Apply a local anestesia to the perineum before making an episiotomy, if indicated.
13. Make an episiotomy where indicted and repair it.
14. Provide immediate care for the newborn, including drying, clearing airways, ensuring that breathing is established, and skin-to-skin contact with mother and covering to provide warmth.
15. Conduct correctly management of the third stage of labor including the active management of the third stage of labor, using uterotonics (for example oxytocin)

16. After delivery of the placenta and membranes, ensure that the uterus is well contracted by rubbing up a contraction and expelling clots, if necessary, and check that vaginal bleeding is minimal.
17. Examine the vulva, perineum and lower vagina for lacerations, repair second degree tears of the perineum, but refer women with third degree perineal tears and cervical tears to specialized care.
18. Estimate and record all blood loss as accurately as possible.
19. Examine the placenta and membranes for completeness and normality and dispose of them safely as appropriate.
20. Monitor the mother's condition, ensuring that vital signs and vaginal bleeding are within normal limits and that the uterus remains well contracted.
21. Manage postpartum haemorrhage urgently, if it occurs, by massaging the uterus, administration of uterotonic (for example oxytocin) drug, emptying the bladder, establishing an intravenous infusion and, if still bleeding, aortic or bimanual compression and preparation for referral.
22. Perform urinary catheterisation using an aseptic technique to prevent the introduction of infection.
23. Monitor the condition of the newborn, ensuring that breathing and colour are normal, warmth is maintained and that there is no bleeding from the umbilical cord.
24. Resuscitate the asphyxiated newborn and give appropriate care before referral.
25. Keep mother and baby together to promote attachment and support early initiation (within one hour) of exclusive breastfeeding.
26. Record all details of the birth, care given to the mother and baby and advice about follow-up.
27. Provide HIV testing for women with unknown HIV-status
28. Give appropriate care and support to the HIV-positive woman and the newborn including PMTCT interventions
29. Refer women presenting with FGM stage III
30. Diagnose and safely deliver breech presentation.
31. Manage cord presentation or prolapse correctly.
32. Infiltrate local anaesthetic
33. Perform Vacuum extraction when indicated.
34. Perform MVA to evacuate retained products of conception

35. Manage shoulder dystocia correctly.
36. Perform manual removal of the placenta and membranes correctly.
37. Insert intravenous line when indicated, draw blood for tests.
38. Prescribe and administer certain drugs, e.g. magnesium sulphate, diazepam, antibiotics and analgesics.
39. Arrange for and undertake timely referral and transfer of women with serious complications to a higher level health facility, taking appropriate drugs and equipment and accompanying them on the journey in order to continue giving emergency care, as required.

POSTPARTUM CARE OF WOMEN

Competency 5: The skilled attendant should provide comprehensive, high quality, culturally sensitive postpartum care for women.

Knowledge of:

1. Physiological changes in the puerperium.
2. The physiology of lactation, the initiation and management of breastfeeding and the recognition and management of common problems which may occur.
3. Recognition, monitoring and management of the psychological and emotional changes, which may occur in the puerperium.
4. Parent-infant attachment and factors which promote and hinder it.
5. The risks of infection and measures taken to prevent infection in mother and newborn after childbirth.
6. Health education and counselling on self care, adequate sleep, rest, good nutrition, personal hygiene including perineal care and care of the newborn infant.
7. Procedure and reasons for postnatal examinations of the mother during the first 12-24 hours, within one week and at six weeks after the birth, or sooner if required.
8. Diagnosis and treatment of anaemia after childbirth.
9. Diagnosis, management and referral of complications e.g.
    - ♦ infection and disorders of the reproductive and/or urinary tract

- breast infections,
- thromboembolic disorders,
- eclampsia,
- secondary postpartum haemorrhage and
- psychiatric disorders.

10. The grief process following stillbirth or neonatal death, or the birth of an abnormal child, counselling, comforting and supporting the mother and her family.
11. Medical conditions which may complicate the puerperium, e.g. cardiac, lung and renal diseases, hypertensive disorders and diabetes.
12. Special support for adolescents, HIV positive women and living with violence, including rape,
13. Care, support and treatment for the HIV positive mother and her newborn including continuing monitoring and follow up of women on ARVs
14. Family planning and birth spacing methods appropriate in the postpartum period.

Essential skills:

1. Take full history of pregnancy, birth and the earlier postpartum period, identifying factors which will influence the care and advice given.
2. Perform a systematic postpartum examination of the mother identifying any actual or potential problems.
3. Provide appropriate and timely treatment for any complications detected during the postpartum examination i.e detection and treatment of anemia.
4. Facilitate and support the early initiation and maintenance of exclusive breastfeeding.
5. use universal precautions for the prevention of infection to prevent the spread of infection after childbirth
6. Educate and counsel the woman on care for herself and for her baby.
7. Facilitate psychosocial family and community based supportive measures.
8. Emergency treatment of uncomplicated PPH with MVA
9. Emergency care of a woman during and after an eclamptic fit, including preparation for referral.
10. Emergency treatment of severe puerperal sepsis and preparation for referral.

11. Counsel, comfort and support the mother and father if the baby is stillborn, born with abnormalities or dies in the neonatal period.
12. Provide care, support and treatment for the HIV positive woman
13. Counsel the woman on family planning and safer sex and provide appropriate family planning services in accordance with the woman's choice including information on advantages and disadvantages of the chosen method.
14. Record the contraceptive method provided and give appropriate advice and care for any adverse side effects and advice on follow-up.
15. Keep accurate records on postnatal care and make arrangements for follow-up or referral, as appropriate.

COMPETENCY IN POSTNATAL NEWBORN CARE

The skilled attendant should provide high quality postnatal care for the newborn

Knowledge of:

1. Physiological changes at birth.
2. Assessment of the newborn using Apgar score.
3. Neonatal resuscitation
4. Parent/infant attachment.
5. Procedure for examination of the newborn at birth and subsequently.
6. Infant feeding, both exclusive breastfeeding and replacement feeding.
7. Nutritional requirements of the infant.
8. Traditional practices as they relate to newborn care.
9. Essential elements of daily care of the newborn, e.g. warmth, skin care, care of the umbilical cord, observation for signs of infection, jaundice, frequency and character of stools, feeding and signs of thriving and failure to thrive.
10. Prevention of infection.
11. Programme for immunisations and vaccinations during the first five years.
12. Common disorders of the newborn, e.g. skin rashes, minor vomiting, minor infections, minor feeding problems and physiological jaundice.
13. Serious disorders of the newborn, e.g. major infections, respiratory difficulties, cardiac conditions, congenital malformations, neonatal convulsions.
14. Low birthweight babies, e.g. preterm and small-for-gestational age.
15. Kangaroo mother care for low birth weight babies
16. Growth and development monitoring
17. Birth registration
18. Follow-up of the newborn using correct records.
19. Management of the very low birthweight infant.
20. Monitoring, testing and follow up of newborns born to a HIV-positive mother.

21. Infant feeding options for newborns born to a HIV-positive mother.

Essential skills:

1. Apply aspiration of the airways when head is delivered if meconium stained liquor
2. Clear airways at birth, to facilitate breathing.
3. Assess the condition of the newborn at birth
4. Use bag and mask correctly to resuscitate the asphyxiated newborn.
5. Dry the newborn at birth, place in skin-to-skin contact on the mother's abdomen or chest and cover to keep the baby warm. If skin-to-skin contact is not possible, place the baby on a clean, warm surface and wrap warmly.
6. Clamp and cut the umbilical cord, taking appropriate measures to prevent infection.
7. Label the newborn for correct identification
8. Examine the newborn systematically from head to feet to detect any congenital malformations, birth injuries or signs of infection.
9. Administration of vitamin K and eye drops.
10. Assist the new mother to initiate exclusive breastfeeding within one hour,
11. Educate the mother and her family about all aspects of infant feeding, especially the importance of exclusive breast feeding for the first six months of life
12. Teach and supervise the mother in making up feeds correctly and the technique of cup-feeding her baby, if replacement feeding is selected
13. Teach the mother about the general care an hygiene of the baby, e.g. skin, eyes and cord to prevent infection
14. Monitor the growth and development of the baby during the postnatal period
15. Recognise minor and serious disorders in the newborn and treat appropriately, including arranging for referral, if necessary.
16. Give appropriate care including kangaroo mother care to the low birthweight baby, and arrange for referral if potentially serious complications arise, or very low birth weight.
17. Educate the parents about the signs of potentially serious conditions in the newborn and the need to seek immediate help from a skilled health worker.
18. Give immunisations correctly at the optimum time and advise the parents of any possible adverse effects and when to return for further immunisations.

19. Keep full and accurate records of
20. Manage bereavement and loss in the event of neonatal death and prepare the dead neonate.
21. Care for baby born to an HIV positive mother e.g administration of ARV and replacement feeding
22. Emergency management of life-threatening conditions, e.g. establishing an intravenous infusion, administration of appropriate drugs, monitors the condition of the baby, and preparing the mother and newborn for referral.

APPENDIX: 8

LIST OF POWER POINT PRESENTATIONS

PRESENTATION №	PRESENTATION TOPIC	PAGE
1	Approach to "Competency based training ".	
2	Current approaches to Reduction of Maternal and Newborn Mortality.	
3	Gender Based Violence	
4	Women friendly care.	
5	Infection prevention	
6	Rapid initial assessment and managing emergencies:	
7	Focused antenatal care (FANC)	
8	PMTCT	
9	Vaginal bleeding in early pregnancy	
10	Vaginal Bleeding in Later Pregnancy and Labor	
11	Headaches, Blurred Vision, Convulsions, Loss of Consciousness or Elevated Blood Pressure	
12	Fever during pregnancy	
13	Basic Care during labor and child birth	
14	Immediate care of the newborn	
15	Abnormal labor	
16	Vaginal Bleeding After Childbirth	
17	Tear repair	
18	Assisted Breech Delivery	
19	Vacuum extractor assisted delivery	
20	Basic Care during Postpartum period	
21	Fever After Childbirth	
22	Care of the Newborn with Problems	