EMERGENCY OBSTETRIC CARE

For Doctors and Midwives

Course Handbook
for Participants

AMDD
Averting Maternal Death
& Disability Program
Columbia University
MAILMAN SCHOOL
OF PUBLIC HEALTH

Maternal
& Neonatal
Health

EMERGENCY OBSTETRIC CARE

For Doctors and Midwives

Course Handbook
for Participants

AMDD
Averting Maternal Death
& Disability Program

Columbia University
MAILMAN SCHOOL
OF PUBLIC HEALTH

Maternal
& Neonatal
Health

Prepared by the JHPIEGO/MNH Program

The Averting Maternal Death and Disability (AMDD) Program focuses on the improved availability, quality and utilization of emergency obstetric care (EmOC). The AMDD program is based on the premise that most obstetric complications cannot be predicted or prevented, and that the vast majority of women who die in childbirth can be saved through prompt, efficient and appropriate treatment. This publication was supported by the AMDD Program at the Heilbrunn Department of Population and Family Health at the Joseph L. Mailman School of Public Health, Columbia University, and the Bill & Melinda Gates Foundation.

The Maternal and Neonatal Health (MNH) Program is committed to saving mothers' and newborns' lives by increasing the timely use of key maternal and neonatal health and nutrition practices. The MNH Program is jointly implemented by JHPIEGO, the Johns Hopkins University Center for Communication Programs, the Centre for Development and Population Activities, and the Program for Appropriate Technology in Health.
www.mnh.jhpiego.org

JHPIEGO is a nonprofit international health organization dedicated to improving the health of women and families. Established in 1973, JHPIEGO—affiliated with Johns Hopkins University and headquartered in Baltimore, Maryland—works in more than 30 countries through its collaborative partnerships with public and private organizations, and local communities.
www.jhpiego.org

We gratefully acknowledge the contribution of doctors, midwives, and anesthetists from Ministries of Health in Afghanistan, Bangladesh, Bhutan, India, Nepal, and Pakistan, UNICEF South Asia, and the following individuals, for their valuable assistance in developing and completing this learning package:

Malalai Naziri (Afghanistan)
Najeeba Qayum (Afghanistan)
Gulalai Naseri (Afghanistan)
Hekmat Jami (Afghanistan)
Salma Rouf (Bangladesh)
Mahbuba Khan (Bangladesh)
Farhana Dewan (Bangladesh)
Hafiza Begum (Bangladesh)
Jahanara Akhter (Bangladesh)
Sufia Khatun (Bangladesh)
Duptho Wangmo (Bhutan)
Renuka Mothey (Bhutan)
Chencho Dorjee (Bhutan)
Sanjay Rao (India)
Meera Upadhyay (Nepal)
Aasha Prajapati (Nepal)
Raffat Sultana (Pakistan)
Noreen Christopher (Pakistan)
Shakila Rajeel (Pakistan)

The assistance of the following people is also gratefully acknowledged:

Kamlesh Giri
Patricia Gomez
Barbara Kinzie
Matthews Matthai
Gloria Metcalfe
Judith O'Heir
Harshad Sanghvi
Jeff Smith

JHPIEGO Information Resources Office Staff
Ann Blouse
Sonia Elabd
Youngae Kim
Dana Lewison
Melissa McCormick
Deborah Raynor
Jane Sudbrink

June 2003

EMERGENCY OBSTETRIC CARE COURSE
PARTICIPANT'S HANDBOOK

WEEK 3

WEEKS 4 AND 5

PRESENTATION GRAPHICS: WEEK 1

PRESENTATION GRAPHICS: WEEK 2

PRESENTATION GRAPHICS: WEEKS 4 AND 5

OVERVIEW

BEFORE STARTING THIS TRAINING COURSE

This clinical training course will be conducted in a way that is different from traditional training courses. First of all, it is based on the assumption that people participate in training courses because they:

- Are **interested** in the topic
- Wish to **improve** their knowledge or skills, and thus their job performance
- Desire to be **actively involved** in course activities

For these reasons, all of the course materials focus on the **participant**. For example, the course content and activities are intended to promote **learning**, and the participant is expected to be actively involved in **all** aspects of that learning.

Second, in this training course, the **clinical trainer** and the **participant** are provided with a similar set of educational materials. The clinical trainer by virtue of her/his previous training and experiences works with the participants as an expert on the topic and guides the learning activities. In addition, the **clinical trainer** helps create a comfortable learning environment and promotes those activities that assist the participant in acquiring the new knowledge, attitudes and skills.

Finally, the training approach used in this course stresses the importance of the cost-effective use of resources and application of relevant educational technologies including humane training techniques. The latter encompasses the use of anatomic models, such as the childbirth simulator, to minimize client risk and facilitate learning.

LEARNING APPROACH

Mastery Learning

The mastery learning approach assumes that all participants can master (learn) the required knowledge, attitudes or skills provided sufficient time is allowed and appropriate learning methods are used. The goal of mastery learning is that 100 percent of the participants will "master" the knowledge and skills on which the learning is based. Mastery learning is used extensively in inservice training where the number of participants, who may be practicing clinicians, is often low. Although

the principles of mastery learning can be applied in preservice education, the larger number of participants presents some challenges.

Although some participants 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 also 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 participant to have a self-directed learning experience. This is achieved by having the trainer 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 in which the trainer regularly informs participants 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 participants to receive continual feedback on how successful they are in meeting the course objectives.

- Less stressful, because from the outset participants, 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 trainer.

Mastery learning is based on principles of adult learning. This means that learning is participatory, relevant and practical. It builds on what the participant already knows or has experienced, and provides opportunities for practicing skills. 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 trainer must clearly demonstrate the skill or activity so that participants 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 participant sees others perform the procedure and acquires a mental picture of the required steps. Once the mental image is acquired, the participant attempts to perform the procedure, usually with supervision. Next, the participant 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
Skill Proficiency	Knows the steps and their sequence (if necessary) and **effectively performs** the required skill or activity

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 participant 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 participant's performance more objective.

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

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

- **Before** practice—The trainer and participants 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 trainer observes, coaches and provides feedback to the participant as s/he performs the steps/tasks outlined in the learning guide.

- **After** practice—Immediately after practice, the trainer uses the learning guide to discuss the strengths of the participant'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. Initially working with models rather than with patients allows participants to learn and practice new skills in a simulated setting. This reduces stress for the participant as well as risk of injury and discomfort to the patient. Thus, effective use of models (humanistic approach) is an important factor in improving the quality of clinical training and, ultimately, service provision.

Before a participant performs a clinical procedure with a patient, two learning activities should occur:

- The clinical trainer should demonstrate the required skills and patient interactions several times using an anatomic model, role plays or simulations.

- Under the guidance of the trainer, the participant should practice the required skills and patient interactions using the model, role plays or simulations and actual instruments in a setting that is as similar as possible to the real situation.

Only when skill competency has been demonstrated should participants have their first contact with a patient. This often presents challenges in a preservice education setting when there are large numbers of participants. Before any participant provides services to a patient, however, it is important that the participant demonstrate skill competency using models, role plays or simulations, especially for core skills.

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 significantly reduced.

LEARNING METHODS

A variety of learning methods, which complement the learning approach described in the previous section, are 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 *Managing Complications in Pregnancy and Childbirth* reference manual.

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

During lectures, the trainer should direct questions to participants 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 and information of particular importance.

Group Activities

Group activities provide opportunities for participants to interact with each other and learn together. The main group activities in the learning resource package cover three important topics: clinical decision-making, interpersonal communication and infection prevention (IP).

The group activities associated with these topics are important because they provide a foundation for learning the skills required for clinical decision-making, interpersonal communication and for IP. All of these skills are essential for providing emergency obstetric care (EmOC).

Case Studies

The purpose of the case studies included in the learning resource package is to help participants develop and 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 homework assignments.

The case studies follow a clinical decision-making framework. (See "Teaching Clinical Decision-Making" in Tips for Trainers section.) Each case study has a key that contains the expected responses. The trainer should be thoroughly familiar with these responses before introducing the case studies to participants. Although the key contains "likely" answers, other answers provided by participants during the discussion may be equally acceptable. The technical content of the case studies is taken from the *Managing Complications in Pregnancy and Childbirth* reference manual. The relevant sections of the manual are indicated at the end of the case study keys.

Role Plays

The purpose of the role plays included in the learning resource package is to help participants develop and practice interpersonal communication skills. Each role play requires the participation of two or three participants, while the remaining participants are asked to observe the role play. Following completion of the role play, the trainer uses the questions provided to guide discussion.

Each role play has a key that contains the likely answers to the discussion questions. The trainer should be familiar with the answer key before using the role plays. Although the key contains "likely" answers, other answers provided by participants during the discussion may be equally acceptable.

Learning Guides and Checklists

The learning guides and checklists used in this course are designed to help the participant learn to provide EmOC services. There are 22 learning guides and 21 checklists in the learning resource package:

Learning Guide and Checklist for Adult Resuscitation

Learning Guide and Checklist for Postabortion Care (Manual Vacuum Aspiration [MVA])

Learning Guide and Checklist for Postabortion Family Planning Counseling

Learning Guide and Checklist for Conducting a Childbirth

Learning Guide and Checklist for Episiotomy and Repair

Learning Guide and Checklist for Repair of Cervical Tears

Learning Guide and Checklist for Breech Delivery

Learning Guide and Checklist for Vacuum Extraction

Learning Guide and Checklist for Bimanual Compression of the Uterus

Learning Guide and Checklist for Compression of the Abdominal Aorta

Learning Guide and Checklist for Manual Removal of Placenta

Learning Guide and Checklist for Newborn Resuscitation

Learning Guide and Checklist for Endotracheal Intubation

Learning Guide and Checklist for Cesarean Section

Learning Guide and Checklist for Emergency Laparotomy

Learning Guide and Checklist for Salpingectomy for Ectopic Pregnancy

Learning Guide and Checklist for Laparotomy and Repair of Ruptured Uterus

Learning Guide and Checklist for Laparotomy and Subtotal Hysterectomy for Removal of Ruptured Uterus

Learning Guide for Postpartum Assessment

Learning Guide for Basic Postpartum Care

Checklist for Postpartum Assessment and Basic Postpartum Care

Learning Guide and Checklist for Postpartum Family Planning

Learning Guide and Checklist for Newborn Examination

Each learning guide contains the steps or tasks performed by the provider for the specific procedure. These tasks correspond to the information presented in relevant chapters of the resource materials. This facilitates participant review of essential information.

The participant is not expected to perform all of the steps or tasks correctly the first time s/he practices them. Instead the learning guides are intended to:

- Help the participant in learning the correct steps and the order in which they should be performed (**skill acquisition**)

- Measure progressive learning in small steps as the participant gains confidence and skill (**skill competency**)

Before using the learning guides for EmOC procedures, the clinical trainer will review each procedure with the participants using the relevant learning materials. In addition, participants will be able to witness each EmOC procedure during demonstration sessions with the appropriate model and/or to observe the activity being performed in the clinic with a patient.

Used consistently, the learning guides and checklists for practice enable each participant to chart her/his progress and to identify areas for improvement. Furthermore, the learning guides are designed to make communication (coaching and feedback) between the participant and clinical trainer easier and more helpful. When using the learning guides, it is important that the participant and clinical trainer work together as a team. For example, **before** the participant attempts a skill or activity (e.g., MVA) the first time, the clinical trainer should briefly review the steps involved and discuss the expected outcome. The trainer should ask the participant if s/he feels comfortable going on. In addition, immediately **after** the skill or activity has been completed, the clinical trainer should debrief with the participant. The purpose of the debriefing is to provide **positive feedback** about the participant's progress and to define the areas (knowledge, attitude or practice) where improvement is needed in later practice sessions.

Using the Learning Guides

The learning guides for EmOC procedures are designed to be used primarily during the early phases of learning (i.e., skill acquisition) when the participant is practicing with models.

The **Learning Guide for Postabortion Family Planning Counseling** and **Learning Guide for Postpartum Family Planning** should be used at first during practice (simulated) counseling sessions using volunteers or with patients in real situations.

In the beginning, the participant can use the learning guides to follow the steps as the clinical trainer demonstrates the procedures with a training model or role plays counseling a woman. Later, during the classroom practice sessions, they serve as step-by-step guides for the participant as s/he performs the skill using the models or counsels a volunteer "patient."

Because the learning guides are used to help in developing skills, it is important that the rating (scoring) be done carefully and as objectively as possible. The participant's performance of each step is rated on a three-point scale as follows:

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 does not progress from step to step efficiently
3	**Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

Using the Checklists for Practice

The checklists for EmOC procedures are based on the information provided in the learning guides. As the participant progresses through the course and gains experience, dependence on the detailed learning guides decreases and the checklists may be used in their place. The checklists focus only on the key steps in the **entire** procedure, and can be used by the participant when providing services in a clinical situation to rate her/his own performance. These checklists that the participant uses for practice are the same as the checklists that the clinical trainer will use to evaluate the participant's performance at the end of the course. The rating scale used is described below:

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 or task not performed by participant during evaluation by trainer

Skills Practice Sessions

Skills practice sessions provide participants 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 trainer, and the resources needed to conduct the practice session, such as models, supplies, equipment, learning guides and checklists. Before conducting a skills practice session, the trainer should review the session and ensure that s/he can perform the relevant skill or activity proficiently. The trainer should also 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 center or clinical laboratory, a classroom may also be used, provided 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 participants 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 participant gains confidence and skill (skill competency).

Next, the trainer demonstrates the steps/tasks, several times if necessary, for the particular skill or activity, and then has participants work in pairs or small groups to practice the steps/tasks and observe each other's performance, using the relevant learning guide. The trainer should be available throughout the session to observe the performance of participants and provide guidance. Participants should be able to perform all of the steps/tasks in the learning guide before the trainer assesses skill competency, in the simulated setting, using the relevant **checklist**. Supervised practice should then be undertaken at a clinical site before the trainer assesses skill competency with patients, 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 participants and access to appropriate models and equipment. Therefore, numerous practice sessions will usually be required to ensure achievement of competency before moving into the clinical practice area.

Clinical Simulations

A clinical simulation is an activity in which the participant is presented with a carefully planned, realistic re-creation of an actual clinical situation. The participant 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 using clinical simulations is to develop participants' clinical decision-making skills.

The clinical simulations included in the learning resource package, therefore, provide participants with the opportunity to develop the skills they need to address complex, rare or life-threatening situations **before** moving into the clinical practice area. The clinical simulations may, in fact, be the **only** opportunity participants have to experience some rare situations and therefore may also be the only way that a trainer can assess participants' abilities to manage such situations.

The simulations in this package combine elements of case studies, role plays and skills practice using anatomic models (if available). The situations they present were selected because they are clinically important, require active participation by the participants, and include clinical decision-making and problem-solving skills. The simulations are structured so that they accurately reflect how clinical situations develop and progress in real life. Participants are provided with only a limited amount of information initially. As they analyze this information and identify additional information that is needed, it is provided. Participants may also perform any procedures or other skills as needed if the appropriate models and equipment are available. Based on the data they collect, participants make decisions regarding diagnoses, treatment and further information needed. The trainer asks the participants questions about what they are doing, why a particular choice was made, what the other alternatives might be, what might happen if circumstances or findings were to change, and so forth—in other words, the trainer explores the participants' decision-making process and depth of their knowledge and understanding, and provides feedback and suggestions for improvement.

The simulation should be conducted in as realistic a setting as possible, meaning that the models, equipment and supplies needed for managing the situation should be available to the participant. Because many of the situations addressed in simulations are clinically complex, providing the models and other equipment often requires creativity and ingenuity.

Participants 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 it presents is mastered. It can also be adapted to address different causes for the problem it presents, different treatment options or different outcomes, to provide participants with as wide a variety of experiences as possible. When a simulation is used for assessment, one standard version should be used with all participants to ensure the consistency of assessment standards and allow comparison of the performance of individual participants.

Emergency Drills

Emergency drills provide participants with opportunities to observe and take part in an emergency rapid response system. Unscheduled emergency drills should be a part of each service provision unit that potentially encounters emergencies. Frequent drills help ensure that each member of the emergency team knows her/his role and is able to respond **rapidly**. By the end of the training, participants should be able to conduct drills in their own facilities.

Drills can be conducted several times throughout training, and involve trainers and participants. The steps involved in setting up and conducting a drill are described below.

First Drill

Trainers decide on a scenario, such as one in which a woman suffers an immediate postpartum hemorrhage. In the first drill, trainers play all roles as in a demonstration. A participant may play the role of patient. Trainers should practice their roles before conducting the drill.
The roles are as follows:

Role 1: Charge Person

- Conducts rapid initial assessment
- Stabilizes patient (massages uterus, gives oxytocin, gives directions to others on team)
- Assists doctor when s/he arrives

Role 2: Runner

- Telephones or runs to inform doctor
- Returns to bedside and assists as needed (e.g., takes vital signs, takes specimens to lab, gathers equipment)
- Follows additional instructions of the charge person

Role 3: Supplier

- Checks emergency tray at beginning of each shift

- Brings emergency tray to bedside during emergency
- Gives needed supplies/medications to doctor/midwife
- Replenishes supplies/medications after use

Role 4: Assistant

- Cares for newborn
- Assists with crowd control
- Escorts family members away from bed; keeps patient and family informed of situation

At a pre-designated time, a small bell is rung. The participant selected to play the role of patient lies down on a table or bed; she has a newborn anatomic model. Another participant may act as the patient's family member. The charge person (Role 1) goes directly to the bedside and begins the rapid initial assessment. The runner (Role 2) telephones or runs to inform the doctor and returns to the bedside; the charge person should tell the runner to take vital signs. The supplier (Role 3) brings the emergency tray and assists with giving oxytocin, starting an IV, etc. The assistant (Role 4) takes the newborn and tells the family what is happening. All of this occurs simultaneously, as though it were a real situation. The charge person "massages" the woman's uterus and reports whether it is contracted; the runner takes the pulse, blood pressure and respiration and reports to the charge person; the assistant "gives" oxytocin if directed, etc. Upon arrival of the doctor, the charge person gives her/him a report of the patient's status and follows further directions until the patient is stable. After the emergency, the supplies are replenished, and equipment is disposed of using correct IP practices.

Subsequent Drills

At each subsequent drill, participants take the four designated roles. At the beginning of the day, participants are assigned a role, and when the bell rings signaling an emergency, these roles are assumed and played. Different scenarios can be used for each drill.

The focus of emergency drills is on rapidity of response and coordinated functioning of roles. Drills should occur at unannounced and unexpected times during clinical training as well as during routine clinical work, even when training is not occurring, in order to maintain a unit's capacity to respond to emergencies **rapidly and effectively**.

COMPONENTS OF THE EMERGENCY OBSTETRIC CARE LEARNING RESOURCE PACKAGE

This clinical training course is based on the following components:

- A **reference manual** and additional reference materials containing the need-to-know information
- A **participant's handbook** containing validated questionnaires, learning guides and skills checklists, case studies, role plays, and clinical simulations
- A **trainer's notebook**, which includes answer keys for questionnaires, case studies and role plays, and detailed information for conducting the course
- **Well designed learning aids** such as videotapes, presentation graphics and anatomic models
- Competency-based performance evaluation

The reference manual recommended for this course is *Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors* (MCPC) (World Health Organization [WHO] and JHPIEGO). The manual describes a symptom-based approach to the management of life-threatening obstetric complications and emphasizes rapid assessment and decision-making. The symptoms reflect the major causes of maternal death and disability. For each symptom (e.g., vaginal bleeding in early pregnancy) there is a statement of general, initial management. Diagnosis tables then link the presenting symptom and other symptoms and signs typically present to a probable diagnosis. Simplified management protocols for the specific diagnoses then follow. The manual also includes the clinical principles underlying the management of complications (e.g., operative care principles) and the procedures that may be required to manage the complications (e.g., vacuum extraction).

The additional reference materials recommended for the course include the manual *Infection Prevention: A Reference Booklet for Health Care Providers* and its supplement *Infection Prevention Practices in Emergency Obstetric Care* (EngenderHealth). The manual provides information covering the principles and practices of IP at the worksite. The Averting Maternal Death and Disability (AMDD) workbook, *(Almost) Everything You Want to Know about Using the UN Process Indicators of Emergency Obstetric Services* provides information for management of the emergency obstetric team and services. The AMDD chartbook, *Improving Emergency Obstetric Care through Criterion-Based Audit* covers information on undertaking an audit. Other resources include the *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition.

USING THE EMERGENCY OBSTETRIC CARE LEARNING RESOURCE PACKAGE

In designing the training materials for this course, particular attention has been paid to making them "user friendly" and to permitting the course participants and clinical trainer the widest possible latitude in adapting the training to the participants' (group and individual) learning needs. For example, at the beginning of each course an assessment is made of each participant's knowledge. The results of this precourse assessment are then used jointly by the participants and the advanced or master trainer to adapt the course content as needed so that the training focuses on acquisition of **new** information and skills.

A second feature relates to the use of the reference manual and participant's handbook. The **reference manual** and the additional reference materials are designed to provide all of the essential information needed to conduct the course in a logical manner. Because they serve as the "text" for the participants and the "reference source" for the trainer, special handouts or supplemental materials are not needed. In addition, because the manual and additional reference materials **only** contain information that is consistent with the course goals and objectives, they become an integral part of all classroom activities, such as giving an illustrated lecture or leading a discussion.

The **participant's handbook**, on the other hand, serves a dual function. First, and foremost, it is the road map that guides the participant through each phase of the course. It contains the course syllabus and course schedule, as well as all supplemental printed materials (precourse questionnaire, individual and group assessment matrix, learning guides, case studies and role plays) needed during the course.

The **trainer's notebook** contains the same material as the participant's handbook as well as material for the trainer. This includes the course outline, precourse questionnaire and answer key, midcourse questionnaire and answer key, answer keys for case studies, role plays and other exercises, and competency-based skills checklists.

In keeping with the training philosophy on which this course is based, all training activities will be conducted in an interactive, participatory manner. To accomplish this requires that the role of the trainer continually change throughout the course. For example, the trainer is an **instructor** when presenting a classroom demonstration; a **facilitator** when conducting small group discussions or using role plays; and shifts to the role of **coach** when helping participants practice a procedure. Finally, when objectively assessing performance, the trainer serves as an **evaluator**.

In summary, the CBT approach used in this course incorporates a number of key features. **First**, it is based on adult learning principles,

which means that it is interactive, relevant and practical. Moreover, it requires that the trainer facilitate the learning experience rather than serve in the more traditional role of an instructor or lecturer. **Second**, it involves use of behavior modeling to facilitate learning a standardized way of performing a skill or activity. **Third**, it is competency-based. This means that evaluation is based on **how well** the participant performs the procedure or activity, not just on **how much** has been learned. **Fourth**, where possible, it relies heavily on the use of anatomic models and other training aids (i.e., it is humanistic) to enable participants to practice repeatedly the standardized way of performing a skill or activity **before** working with clients. Thus by the time the trainer evaluates each participant's performance, using a checklist, **every** participant should be able to perform **every** skill or activity competently. **This is the ultimate measure of training**.

INTRODUCTION

TRAINING IN EMERGENCY OBSTETRIC CARE

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 will 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 and/or nurses with midwifery skills who, as team members, will provide basic and comprehensive EmOC 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 manual (MCPC) 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.

Finally, the setting up and effective day-to-day management of EmOC services at district hospitals are included as an integral part of the course.

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 EmOC.
- 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 and/or nurses with midwifery skills) who are qualified to provide EmOC, as team members, at district hospitals. Qualification is a statement by the training institution(s) that the participant has met the requirements of the course in knowledge, skills and practice. Qualification does **not** imply certification. Only an authorized organization or agency can certify personnel.

Qualification 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 end of the second week 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 in three settings—during the first 5 weeks of the course, with models in a simulated setting and with patients at the clinical training site; and during the 3-month self-directed practicum, at the time of the mentoring visit at the participant's hospital. 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. Although it is desirable that all of the skills/procedures included in the training course are learned and assessed in this manner, it may not be possible. For example, because obstetric emergencies are not common, opportunities to practice particular skills with patients

may be limited; therefore, practice and assessment of skill competency should take place in a simulated setting.

- **Clinical Practice**. It is the clinical trainer's responsibility to observe each participant's overall performance in providing EmOC 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 EmOC team. By doing this, the clinical trainer assesses how the participant uses what s/he has learned.

Further evaluation is provided during the 3-month self-directed practicum (see below) and is important for several reasons. First, it not only gives the participant direct feedback on her/his performance, but also provides an opportunity to discuss any problems or constraints related to the provision of EmOC (e.g., lack of instruments, drugs and other supplies). Second, and equally important, it provides the clinical service/training center, via the clinical trainer, key information on the adequacy of the training and its appropriateness to local conditions.

COURSE SYLLABUS

Course Description. This clinical training course is designed to prepare participants to manage obstetric emergencies and work effectively as members of an EmOC team. The course begins with a 5-week block at a designated training site and focuses on the development, application and evaluation of knowledge and skills; the first two weeks take place in the classroom and weeks three, four and five in designated clinical sites, which should be as close to the classroom as possible. The first five weeks are followed immediately by a 3-month self-directed practicum at the participant's worksite, during which the clinical trainers for the course provide at least two followup visits for mentoring and further evaluation. See pages 28–31 for participant guidelines for the self-directed practicum.

Course Goals

- To influence in a positive way the attitudes of the participant toward team work and her/his abilities to manage and provide emergency obstetric services

- To provide the participant with the knowledge and clinical skills needed to respond appropriately to obstetric emergencies

- To provide the participant with the decision-making skills needed to respond appropriately to obstetric 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:

1. Describe basic and comprehensive EmOC and the team approach to the provision of care in relation to reducing maternal mortality.

2. Describe the ethical issues related to EmOC, including feeling a sense of urgency, accountability for one's actions, respect for human life, and recognition and respect for the right of women to life, health, privacy and dignity.

3. Use interpersonal communication techniques that facilitate the development of a caring and trusting relationship with the woman when providing EmOC.

4. Use recommended IP practices for all aspects of EmOC.

5. Describe the process of rapid initial assessment and management of a woman who presents with a problem.

6. Identify the presenting symptoms and signs of shock and describe immediate and specific management.

7. Describe the principles and procedure of blood transfusion, including recognition and management of transfusion reactions.

8. Perform adult resuscitation.

9. Identify the presenting symptoms and signs, determine the probable diagnosis and use simplified management protocols for vaginal bleeding in early and later pregnancy.

10. Perform MVA for incomplete abortion.

11. Identify the presenting symptoms and signs, determine the probable diagnosis and use simplified management protocols for pregnancy-induced hypertension.

12. Identify and manage cord prolapse.

13. Provide care during labor, childbirth and the postpartum period.

14. Demonstrate use of the partograph to monitor progress in labor, recognize unsatisfactory progress in a timely manner and respond appropriately.

15. Demonstrate clean and safe childbirth, including active management of the third stage of labor and examination of the placenta and birth canal after the birth.

16. Perform and repair an episiotomy.

17. Identify and repair cervical tears.

18. Perform a breech delivery.

19. Perform a vacuum extraction.

20. Identify the presenting symptoms and signs, determine the probable diagnosis and use simplified management protocols for vaginal bleeding after childbirth.

21. Perform bimanual compression of the uterus.

22. Perform abdominal aortic compression.

23. Perform manual removal of the placenta.

24. Identify the presenting symptoms and signs, determine the probable diagnosis and use simplified management protocols for fever during and after childbirth.

25. Describe normal newborn care.

26. Perform basic newborn resuscitation using a self-inflating bag and mask.

27. Describe anesthesia and pain management associated with obstetric emergencies.

28. Describe pre- and post-operative care for women who require obstetric surgery.

29. Perform endotracheal intubation.*

30. Perform a cesarean section.*

31. Perform a laparotomy for ectopic pregnancy and ruptured uterus.*

32. Perform a postpartum hysterectomy.*

33. Describe the procedure for performing a craniotomy.*

34. Describe the process for conducting a maternal death review and explain how the results should be used.

35. Describe the steps involved in setting up EmOC services and managing them on a day-to-day basis.

*Applies only to doctors

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 for women who experience obstetric emergencies)

Learning Materials. The learning materials for the course are as follows:

- Reference manuals:
  - *Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors* (WHO and JHPIEGO)
  - *Infection Prevention: A Reference Booklet for Health Care Providers* and supplement *Infection Prevention Practices in Emergency Obstetric Care* (EngenderHealth)

- Other resources:
  - *(Almost) Everything You Want to Know about Using the UN Process Indicators of Emergency Obstetric Services* (AMDD Workbook)
  - *Improving Emergency Obstetric Care through Criterion-Based Audit* (AMDD Chartbook)
  - *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition

- Audiovisuals on managing complications in pregnancy and childbirth:

  Videotapes

  - *Malpresentation* and *Vaginal Breech Delivery* by Phyllis Long, available from:
    Designed by Experience, Inc.
    P.O. Box 423
    Hyden, Kentucky 41749, USA
    Telephone/Fax: 606-672-2763
  - *Vacuum Delivery: Reducing Risk* by Dr. Aldo Vacca, available from:
    Clinical Innovations, Inc.
    6777 S. Cottonwood Street
    Salt Lake City, Utah 84170, USA
    Telephone: 888-268-6222 or 801-268-8200
  - *Use of Manual Vacuum Aspiration and Recommended Practices for Processing MVA Instruments* (JHPIEGO Postabortion Care Video Photoset)

  Presentation Graphics

  - Averting Maternal Death and Disability, Program Orientation
  - Changing Obstetric and Midwifery Practice
  - Human Rights and Emergency Obstetric Care
  - Universal Precautions in Infection Prevention
  - Rapid Initial Assessment
  - Management of Shock
  - Vaginal Bleeding in Early Pregnancy
  - Vaginal Bleeding in Later Pregnancy and Labor
  - Postabortion Care
  - Headaches, Blurred Vision, Convulsions, Loss of Consciousness or Elevated Blood Pressure
  - Normal Labor and Childbirth
  - Managing Labor Using the Partograph
  - Postpartum Care
  - Vaginal Bleeding After Childbirth
  - Fever During and After Childbirth
  - Normal Newborn Care
  - Analgesia and Anesthesia in Emergency Obstetric Care

- Operative Care Principles
- Obstetric Surgery
- Improving Emergency Obstetric Care through Criterion-Based Audit

- Instruments and equipment:
  - Vacuum extractor
  - Self-inflating bag and mask (newborn and adult sizes)
  - Adult laryngoscope and endotracheal tubes
  - Surgical needles, suture materials and foam blocks
  - Childbirth kits
  - MVA instruments
  - Vaginal speculum
  - Gloves (including elbow-length), plastic or rubber aprons and eye shields
  - Containers and solutions for IP practices
  - Equipment for starting an IV infusion (needles, syringes, cannulae, strapping, tourniquet, swabs, spirit, cotton wool, gloves)
  - Equipment for bladder catheterization (cotton wool, kidney dish or bowl, catheter, gloves)
  - Sphygmomanometer and stethoscope
  - Oxygen cylinder, gauge
  - Single-toothed tenaculum or vulsellum forceps
  - Partograph forms
  - Poster-size laminated partograph
  - Examination light and examination table
  - Local anesthetic
  - Syringes and vials
  - Ring or sponge forceps
  - Receptacle for placenta
  - Suction equipment
  - Clock
  - Adhesive tape

- Reflex hammer (or similar device)
- Blanket and towels

- Anatomic models:

  - Childbirth simulator and placenta/cord/ammion model
  - Vinyl or cloth pelvic model
  - Fetal model (with hard skull)
  - Newborn resuscitation model
  - Model for endotracheal intubation

Participant Selection Criteria

- Participants for this course must be practicing clinicians (doctors, midwives and/or nurses with midwifery skills) who work at a district hospital where EmOC 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 EmOC.

- Participants must be selected from district hospitals capable of providing consistent institutional support for EmOC (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.

Methods of Evaluation

Participant

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

Course Duration

- The course is composed of 20 classroom sessions (2 weeks), followed by 3 weeks of supervised clinical practice and a 3-month self-directed practicum. It is important to note that course duration may need to be revised depending on participants' experience and progress in learning new knowledge and skills. For example, if participants do not develop skills competency by the end of the course, it may be necessary to extend supervised clinical practice and/or the self-directed practicum. Alternatively, it may also be necessary to extend the classroom component of the course.

Suggested Course Composition

- Four doctors and eight midwives and/or nurses with midwifery skills (four teams consisting of one doctor and two midwives and/or nurses with midwifery skills)

- Four clinical trainers (two doctors and two midwives)

PARTICIPANT GUIDELINES FOR SELF-DIRECTED PRACTICUM

The purpose of the 3-month self-directed practicum is to provide participants with an opportunity to apply the knowledge and skills learned during the first five weeks of the EmOC training course, at their worksites.

During the self-directed practicum, trainers will visit participants' worksites toward the end of the first and third months of the practicum to provide individual and team guidance, support and evaluation. Additional visits will be scheduled, if necessary, based on the individual and team needs of participants. The dates for mentoring visits will be agreed before the practicum begins.

PARTICIPANT RESPONSIBILITIES

During the self-directed practicum, participants will be expected to **apply their knowledge and skills** while providing care during pregnancy, labor and childbirth, with particular emphasis on EmOC. The clinical skills include:

- Management of Shock
- Adult Resuscitation
- Postabortion Care Clinical Skills
- Postabortion Care Family Planning Skills
- Clean and Safe Childbirth
- Episiotomy and Repair
- Repair of Cervical Tears
- Breech Delivery
- Vacuum Extraction
- Bimanual Compression of the Uterus
- Compression of the Abdominal Aorta
- Manual Removal of Placenta
- Newborn Resuscitation
- Postpartum Physical Examination and Care
- Newborn Examination
- Endotracheal Intubation*
- Cesarean Section*

- Salpingectomy (Ectopic Pregnancy)*
- Laparotomy (Ruptured Uterus)*
- Postpartum Hysterectomy*

*Applies only to doctors

Because obstetric emergencies are not common, opportunities to practice the skills listed above may be limited. Each time a participant has an opportunity to practice a skill, however, the relevant learning guide should be used. In addition, the participant must record the experience in her/his Clinical Experience Log Book, including the client's/patient's unit/hospital/patient number, presenting symptom(s), diagnosis, treatment and outcome.

Participants should, in particular, seek learning opportunities that will help meet the specific learning needs noted at the end of the 3-week clinical practice period that preceded the self-directed practicum.

In conjunction with skills practice, participants will be expected to:

- Demonstrate accountability for their actions.
- Demonstrate recognition of and respect for the right of women to life, health, privacy and dignity.
- Use appropriate interpersonal communication skills when providing care, with particular emphasis on EmOC.
- Apply recommended IP practices.

TEAM RESPONSIBILITIES

As team members, participants will be responsible for **implementing the Action Plan** developed at the end of the 3-week clinical practice period. At a minimum, this should include:

- Conducting emergency drills
- Ensuring readiness of casualty, labor room and operating room for obstetric emergencies
- Ensuring consistent availability of equipment, supplies and drugs for obstetric emergencies
- Ensuring IP practices are in place
- Conducting maternal death reviews or audits

Team members should meet each morning at labor ward rounds to discuss client/patient needs and identify learning opportunities with

respect to providing EmOC. In addition, team members should meet twice weekly (e.g., Mondays and Fridays) to discuss the following:

Monday meetings:

- Plan for the week
  - Emergency drills
  - Readiness of all areas of the hospital for obstetric emergencies
  - Availability of equipment, supplies and drugs
  - Maternal death review or audit

Friday meetings:

- Clinical cases requiring EmOC: presenting symptom(s), diagnosis, treatment and outcome
- Factors that facilitated clinical practice
- Factors that made clinical practice difficult; overcoming difficulties
- Individual and team strengths with respect to clinical practice
- Aspects of individual and team work that need to be strengthened and how to accomplish this

DOCUMENTING ACTIVITIES

Participants will be expected to use their Clinical Experience Log Book and their Action Plan Worksheets to document the activities undertaken during the self-directed practicum.

Clinical Experience Log Book

Participants must record activities/experience in the relevant section of their Clinical Experience Log Book on a daily basis. This will include information on clients/patients for whom EmOC has been provided, notes on perceptions of their individual progress and notes on team meetings/progress.

Action Plan Worksheets

Participants will annotate their action plans with the dates the steps were accomplished, or make revisions to any aspects of the overall plan. During mentoring visits and subsequent supervisory visits, the trainer/supervisor will assess the degree to which these steps have been achieved.

MODEL EMOC COURSE SCHEDULE (5 WEEKS OF 17-WEEK COURSE)

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
A.M. (4.5 Hours) **Opening**: Welcome and introductions Overview of the course (goals, objectives, schedule) Review course materials Identify participant expectations Precourse Knowledge Questionnaire Review clinical experience Identify individual and group learning needs **Review and Discussion**: Review site assessment findings and discuss improving provider performance, quality of care and team approach to EmOC **Presentation and Discussion**: Averting maternal death and disability, basic and comprehensive EmOC	**A.M. (4.5 Hours)** Agenda and opening activity **Presentation and Discussion**: IP practices **Demonstration**: • Handwashing • Decontamination • Sharps handling • Waste disposal • Instrument handling and preparation **Presentations and Discussion**: Rapid initial assessment, recognizing and managing shock, adult resuscitation, monitoring blood transfusion	**A.M. (4.5 Hours)** Agenda and opening activity **Presentations and Discussion**: Vaginal bleeding in early and later pregnancy and labor **Case Studies**: Vaginal bleeding in early pregnancy **Presentation and Discussion**: Postabortion care **Skill Demonstration**: MVA using model **Videotape**: • Postabortion Care Photoset **Skill Practice**: MVA • Participants practice in pairs using model	**A.M. (4.5 Hours)** Agenda and opening activity **Presentation and Discussion**: Normal labor and childbirth • Ambulation • Nutrition • Support person **Presentation and Discussion**: Plotting and interpreting the partograph • Normal labor • Unsatisfactory progress in labor • Prolonged active phase • Obstructed labor **Exercise**: Plotting and interpreting the partograph	**A.M. (4.5 Hours)** Agenda and opening activity **Presentation and Discussion**: Care of the woman in the postpartum period **Skill Demonstration**: Episiotomy and repair and repair of cervical tears using learning aid **Skill Practice**: Episiotomy and repair and repair of cervical tears • Participants practice in pairs using learning aid **Presentation and Discussion and Videotape**: Breech delivery **Skill Demonstration**: Breech delivery using model **Skill Practice**: Breech delivery • Participants practice in pairs using model
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
P.M. (3.5 Hours) **Presentation and Discussion**: Changing obstetric and midwifery practice **Presentation and Discussion**: Human rights and EmOC: • Feeling a sense of urgency • Accountability for one's actions • Respect for human life • Recognizing women's right to life, health, privacy and dignity **Role Play**: Interpersonal communication during EmOC Review of the day's activities	**P.M. (3.5 Hours)** **Skill Demonstration**: Adult resuscitation using model **Skill Practice**: Adult resuscitation • Participants practice in pairs using model **Clinical Simulation**: Emergency drill • Selected participants take part • Remaining participants observe **Discussion**: Being prepared for an emergency Review of the day's activities	**P.M. (3.5 Hours)** **Discussion**: Changing attitudes toward postabortion care services **Presentation and Discussion**: Headaches, blurred vision, convulsions, loss of consciousness, elevated blood pressure **Case Study**: Pregnancy-induced hypertension **Presentation and Discussion**: Managing prolapsed cord Review of the day's activities	**P.M. (3.5 Hours)** **Presentation and Discussion**: Normal labor and childbirth • Assessing descent, dilatation, position • Second stage • Active management of third stage • Episiotomy and repair • Immediate postpartum care **Skill Demonstration**: Clean and safe childbirth using model **Skill Practice**: Clean and safe childbirth • Participants practice in pairs using model Review of the day's activities	**P.M. (3.5 Hours)** **Presentation and Discussion and Videotape**: Vacuum extraction **Skill Demonstration**: Vacuum extraction using model **Skill Practice**: Vacuum extraction • Participants practice in pairs using model **Skills Practice with Models** Review of the day's activities
Reading Assignment: IP Manual: Sections 1 to 6; IP Supplement: 1–12; MCPC Manual: Section 1, C-1 to C-3, C-23 to C-29; Section 2, S-1 to S-5	**Reading Assignment**: MCPC Manual: Section 2, S-7 to S-23; Section 3, P-65 to P-68; Section 2, S-35 to S-50, S-97 to S-98	**Reading Assignment**: MCPC Manual: Section 1, C-57 to C-76; Section 2, S-57 to S-67	**Reading Assignment**: MCPC Manual: Section 1, C-13 to C-14; Section 2, S-74, S-79 to S-80; Section 3, P-27 to P-31, P-37 to P-42, P-71 to P-75, P-81	**Reading Assignment**: MCPC Manual: Section 2, S-25 to S-34, S-107 to S-114; Section 3, P-77 to P-79, P-91 to P-94

MODEL EMOC COURSE SCHEDULE (5 WEEKS OF 17-WEEK COURSE)

DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
A.M. (4.5 Hours) Agenda and opening activity **Presentation and Discussion**: Vaginal bleeding after childbirth **Skill Demonstration**: Bimanual compression of the uterus, abdominal aortic compression, manual removal of placenta using model **Skill Practice**: Bimanual compression of the uterus, abdominal aortic compression, manual removal of placenta • Participants practice in pairs using model **Case Studies**: Vaginal bleeding after childbirth	**A.M. (4.5 Hours)** Agenda and opening activity **Presentation and Discussion**: Normal newborn care • Preventing infections • Thermal protection • Basic newborn resuscitation • Breastfeeding • Best practices **Skill Demonstration**: Newborn resuscitation using model **Skill Practice**: Newborn resuscitation • Participants practice in pairs using model **Skills Practice with Models**	**A.M. (4.5 Hours)** Agenda and opening activity **Presentation and Discussion**: Endotracheal intubation **Skill Demonstration**: Endotracheal intubation using model **Skill Practice**: Endotracheal intubation • Participants practice in pairs using model **Presentation and Discussion (Part I)**: Obstetric surgery: • Cesarean section • Laparotomy • Postpartum hysterectomy	**A.M. (4.5 Hours)** Agenda and opening activity **Skills Practice with Models**	**A.M. (4.5 Hours)** Agenda and opening activity **Midcourse Knowledge Questionnaire** **Instructions for Clinical Practice** **Clinical Experience Log Book**
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
P.M. (3.5 Hours) **Presentation and Discussion**: Fever during and after childbirth **Case Studies**: Fever after childbirth **Skills Practice with Models** Review of the day's activities	**P.M. (3.5 Hours)** **Presentation and Discussion**: Pain management and analgesia and anesthesia in EmOC **Presentation and Discussion**: Pre and postoperative care principles Review of the day's activities	**P.M. (3.5 Hours)** **Presentation and Discussion (Part II)**: Obstetric surgery: • Cesarean section • Laparotomy • Hysterectomy **Videotape**: • Cesarean section **Presentation and Discussion**: Craniotomy Review of the day's activities	**P.M. (3.5 Hours)** **Skills Practice with Models** Review of the day's activities	**P.M. (3.5 Hours)** **Tour of Clinical Facilities** Review of the day's activities
Reading Assignment: MCPC Manual: Section 1, C-75 to C-80; Section 2, S-141 to S-150; Section 1, C-37 to C-55; Section 3, P-7 to P-14	**Reading Assignment**: MCPC Manual: Section 3, P-43 to P-52, P-95 to P-111, P-57 to P-60	**Assignment**:	**Assignment**: Review and become familiar with Clinical Experience Log Book.	**Assignment**: Participants who scored less than 85% on the Midcourse Knowledge Questionnaire should study the relevant sections of the reference manual(s).

MODEL EMOC COURSE SCHEDULE (5 WEEKS OF 17-WEEK COURSE)

DAY 11	DAY 12	DAY 13	DAY 14	DAY 15
A.M. (4.5 Hours) **Teams 1&2: Tour of model district hospital EmOC facilities** **Teams 3&4: Antenatal Ward Ward rounds, case reviews and discussion**: • Early pregnancy bleeding • Elevated blood pressure • Late pregnancy bleeding	**A.M. (4.5 Hours)** **Teams 3&4: Tour of model district hospital EmOC facilities** **Teams 1&2: Antenatal Ward Ward rounds, case review and discussion**: • Early pregnancy bleeding • Elevated blood pressure • Late pregnancy bleeding	**A.M. (4.5 Hours)** **Demonstration in operating room (1) Anesthesia: Teams 1&2 then Teams 3&4** • Ketamine anesthesia • Spinal anesthesia **(2) IP: Teams 3&4 then Teams 1&2** • Instrument and linen preparation • High-level disinfection • Sterilization **Discussion**: Maintaining operating room readiness	**A.M. (4.5 Hours)** **Teams 1&2: Main Hospital Labor Ward (full day)** **Teams 3&4: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4.5 Hours)** **Teams 1&2: Main Hospital Labor Ward (full day)** **Teams 3&4: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
P.M. (3.5 Hours) **Teams 1&2: Postnatal Ward Demonstration, discussion and practice**: • Postpartum examination and care • Fever • Postoperative care • Immediate newborn examination **Teams 3&4: Emergency reception area (Casualty) Demonstration and practice**: • Rapid assessment • Shock management Review of the day's activities (all)	**P.M. (3.5 Hours)** **Teams 1&2: Emergency reception area (Casualty) Demonstration and practice**: • Rapid assessment • Shock management **Teams 3&4: Emergency reception area (District Hospital Casualty) Demonstration and practice**: • Rapid assessment • Shock management Review of the day's activities (all)	**P.M. (3.5 Hours)** **Teams 1&2: Emergency reception area (District Hospital Casualty) Practice**: • Rapid assessment • Shock management **Teams 3&4: Postnatal Ward Demonstration, discussion and practice**: • Postpartum examination and care • Fever • Postoperative care • Immediate newborn examination Review of the day's activities (all)	**P.M. (3.5 Hours)** **Downtime case study or actual case: pregnancy-induced hypertension (severe pre-eclampsia/eclampsia)** Review of the day's activities (split)	**P.M. (3.5 Hours)** **Downtime case study or actual case: vaginal bleeding in early pregnancy (ectopic pregnancy)** Review individual progress with participants Review of the day's activities (split)
Reading Assignment: MCPC Manual: Section 2, S-7 to S-23, S-35 to S-56; Section 1, C-1 to C-3; Section 2, S-1 to S-5	**Reading Assignment**: MCPC Manual: Section 3, P-13 to P-14; Section 1, C-1 to C-3, C-43 to C-46; Section 2, S-1 to S-5; IP Manual: Sections 1 to 6; IP Supplement: 1–12	**Reading Assignment**: MCPC Manual: Section 2, S-35 to S-50	**Reading Assignment**: MCPC Manual: Section 2, S-7 to S-16 **Late duty teams 1&3**	**Reading Assignment**: MCPC Manual: Section 2, S-57 to S-67 **Late duty teams 2&4**

Saturday Duty Week 3: Team 1 main hospital, Team 3 district hospital

MODEL EMOC COURSE SCHEDULE (5 WEEKS OF 17-WEEK COURSE)

DAY 16	DAY 17	DAY 18	DAY 19	DAY 20
A.M. (4 Hours) **Teams 1&2: Main Hospital Labor Ward (full day)** **Teams 3&4: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 1&2: Main Hospital Labor Ward (full day)** **Teams 3&4: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 1&2: Main Hospital Labor Ward (full day)** **Teams 3&4: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 3&4: Main Hospital Labor Ward (full day)** **Teams 1&2: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 3&4: Main Hospital Labor Ward (full day)** **Teams 1&2: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
P.M. (3 Hours) **Downtime case study or actual case: unsatisfactory progress in labor (obstructed labor)** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime case study or actual case: fever after childbirth (metritis)** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime case study or actual case: vaginal bleeding after childbirth (atonic uterus)** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime clinical simulation: management of shock** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime clinical simulation: management of headaches, blurred vision, convulsions, loss of consciousness, elevated blood pressure** Review individual progress with participants Review of the day's activities (split)
Reading Assignment: MCPC Manual: Section 2, S-17 to S-114 **Late duty teams 1&3**	**Reading Assignment**: MCPC Manual: Section 2, S-25 to S-34 **Late duty teams 2&4**	**Reading Assignment**: MCPC Manual: Section 2, S-1 to S-5 **Late duty teams 1&3**	**Reading Assignment**: MCPC Manual: Section 2, S-35 to S-50 **Late duty teams 2&4**	**Reading Assignment**: MCPC Manual: Section 2, S-7 to S-16 **Late duty teams 1&3**

Saturday Duty Week 4: Team 2 main hospital, Team 4 district hospital

MODEL EMOC COURSE SCHEDULE (5 WEEKS OF 17-WEEK COURSE)

DAY 21	DAY 22	DAY 23	DAY 24	DAY 25
A.M. (4 Hours) **Teams 3&4: Main Hospital Labor Ward (full day)** **Teams 1&2: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 3&4: Main Hospital Labor Ward (full day)** **Teams 1&2: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** **Teams 3&4: Main Hospital Labor Ward (full day)** **Teams 1&2: District Hospital Labor Ward (full day)** • Ward rounds and discussion • Monitor and manage normal and complicated labor • MVA and obstetric surgery	**A.M. (4 Hours)** Agenda and opening activity **Presentation and Discussion**: Maternal and perinatal mortality reviews, near miss audits, records **Demonstration**: review or audit **Discussion**: Using the results of reviews and audits to identify and solve problems	**A.M. (4 Hours)** Agenda and opening activity **Group Work**: Develop action plans **Presentations**: Action plans **Next Steps**: Log book, on-the-job learning, planning mentoring visits
LUNCH	**LUNCH**	**LUNCH**	**LUNCH**	**LUNCH**
P.M. (3 Hours) **Downtime clinical simulation: management of vaginal bleeding in early pregnancy** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime clinical simulation: management of vaginal bleeding after childbirth** Review of the day's activities (split)	**P.M. (3 Hours)** **Downtime clinical simulation: management of the asphyxiated newborn** Review of the day's activities (split)	**P.M. (3 Hours)** **Discussion**: Lessons from clinical experience **Discussion**: Setting up and managing the emergency obstetric team and services **Discussions with Trainers**: Determine further individual learning needs of participants ***Introduce group work*** Review of the day's activities (all)	**P.M. (3 Hours)** **Course Summary** **Closing Ceremony**
Reading Assignment: MCPC Manual: Section 2, S-25 to S-34 **Late duty teams 2&4**	**Reading Assignment**: MCPC Manual: Section 2, S-141 to S-146 **Late duty teams 1&3**	**Reading Assignment**: MCPC Manual: Section 2, S-141 to S-146; Improving Emergency Obstetric Care through Criterion-Based Audit: 1–31; AMDD Workbook, Process Indicators: 1–29 **Late duty teams 2&4**	**Assignment**: Each team is to discuss and prepare for the development of an action plan during group work the next morning.	

PRECOURSE KNOWLEDGE QUESTIONNAIRE

HOW THE RESULTS WILL BE USED

The main objective of the **Precourse Knowledge 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. _____

4. A pregnant woman who has severe anemia typically presents with difficulty in breathing and wheezing. _____

BLEEDING DURING PREGNANCY AND LABOR

5. Management of inevitable abortion when the pregnancy is greater than 16 weeks usually involves administration of ergometrine or misoprostol. _____

6. Manual vacuum aspiration (MVA) is an effective method for treatment of incomplete abortion if the uterine size is not greater than 8 weeks. _____

7. Assessment of a woman who presents with vaginal bleeding after 22 weeks of pregnancy should be limited to abdominal examination. _____

8. If bleeding is heavy in the case of abruptio placentae and the cervix is fully dilated, delivery should be assisted by vacuum extraction. _____

BLEEDING AFTER CHILDBIRTH

9. Postpartum hemorrhage is defined as sudden bleeding after childbirth. _____

10. Continuous slow bleeding or sudden bleeding after childbirth requires early and aggressive intervention. _____

11. 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

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

13. 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. _____

14. 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

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

16. 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. _____

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

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

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

PARTOGRAPH

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

NORMAL LABOR AND CHILDBIRTH; OBSTETRIC SURGERY

21. Findings diagnostic of cephalopelvic disproportion are secondary arrest of descent of the head in the presence of good contractions. _____

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

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

24. 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. _____

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

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

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

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

29. In the case of a single large fetus, delivery should be by cesarean section. _____

30. A transverse uterine scar in a previous pregnancy is an indication for elective cesarean section. _____

31. If prelabor rupture of membranes occurs before 37 weeks gestation and there are no signs of infection, labor should be induced. _____

32. Meconium staining of amniotic fluid is seen frequently as the fetus matures and by itself is not an indicator of fetal distress. _____

FEVER DURING AND AFTER CHILDBIRTH

33. Loin pain and/or tenderness may be present in acute pyelonephritis. _____

34. Breast pain and tenderness 3 to 5 days after childbirth is usually due to breast engorgement. _____

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

NEWBORN RESUSCITATION

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

EMERGENCY OBSTETRIC CARE:
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																									
5																									BLEEDING DURING PREGNANCY AND LABOR
6																									
7																									
8																									
9																									BLEEDING AFTER CHILDBIRTH
10																									
11																									
12																									MANAGEMENT OF THIRD STAGE OF LABOR
13																									
14																									

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	
15																									HEADACHES, BLURRED VISION, CONVULSIONS, LOSS OF CONSCIOUSNESS OR ELEVATED BLOOD PRESSURE
16																									
17																									
18																									
19																									
20																									PARTOGRAPH
21																									NORMAL LABOR AND CHILDBIRTH; OBSTETRIC SURGERY
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
32																									

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	
33																									FEVER DURING AND AFTER CHILDBIRTH
34																									
35																									
36																									NEWBORN RESUSCITATION

CONFIDENTIAL CLINICAL EXPERIENCE QUESTIONNAIRE

Name:_____ **Date**:_____

Name of institution you are working in:

For teaching/training:_____

For clinical practice:_____

Qualification (state all degrees and diplomas and year obtained)

Qualification	Year obtained
_____	_____
_____	_____
_____	_____
_____	_____

Number of years in active clinical maternal and neonatal practice since qualification:_____

The following questions refer to your clinical and teaching activities. For each skill listed on the reverse, please record:

1. The number of cases personally managed in the last 6 months

2. The degree of confidence you have in performing these skills
   a. Very confident, I do not need any coaching
   b. Not very confident, I need coaching
   c. I cannot perform this skill

3. Whether you have taught this skill in the last 6 months

Skill	Number of Cases in Last 6 Months	Degree of Confidence *a* or *b* or *c*	Have Taught This Skill in Last 6 Months
Counseling for birth preparedness and complication readiness			
Managing severe pre-eclampsia and eclampsia			
Managing malaria in pregnancy			
Monitoring labor using partograph			
Augmentation of labor			
Normal childbirth			
Managing shock			
Active management of third stage of labor			
Episiotomy and repair			
Bimanual compression			
Manual removal of placenta			
Repair of cervical tears			
Repair of perineal tears			
Endotracheal intubation			
Vacuum extraction			
Breech delivery			
Cesarean section			
Postpartum hysterectomy			
Manual vacuum aspiration			

ROLE PLAY: INTERPERSONAL COMMUNICATION DURING EmOC

Directions

The trainer will select three participants to perform the following roles: skilled provider, postpartum patient and support person. The three participants participating 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 appreciate the importance of good interpersonal communication skills when providing care for a woman who experiences a postpartum complication.

Participant Roles

Provider:	The provider is an experienced midwife who has good interpersonal communication skills.
Patient:	Mrs. A. is 20 years old. She gave birth at home 2 hours ago.
Support person:	Village traditional birth attendant (TBA) who attended Mrs. A.'s birth.

Situation

Mrs. A. has been brought to the health center by the TBA because she has been bleeding heavily since childbirth 2 hours ago. The duration of labor was 12 hours and the TBA reports that there were no complications. The midwife has assessed Mrs. A. and treated her for shock and atonic uterus. Although the bleeding has decreased since Mrs. A. first arrived at the health center, her uterus is not well contracted, despite fundal massage and the administration of oxytocin. Mrs. A., who is very frightened, must be transferred to the district hospital for further management. The TBA is anxious and feels guilty about Mrs. A.'s condition. The midwife must explain the situation to Mrs. A. and the TBA and attempt to provide emotional support and reassurance as preparations are made for transfer.

Focus of the Role Play

The focus of the role play is the interpersonal interaction among the midwife, Mrs. A. and the TBA, and the appropriateness of the information provided and the emotional support and reassurance offered.

Discussion Questions

The trainer should use the following questions to facilitate discussion after the role play:

1. How did the midwife explain the situation to Mrs. A. and the TBA and the need to transfer Mrs. A. to the district hospital?
2. How did the midwife demonstrate emotional support and reassurance during her/his interaction with Mrs. A. and the TBA?
3. What verbal/nonverbal behaviors did Mrs. A. and the TBA use that would indicate they felt supported and reassured?

SKILLS PRACTICE SESSION: ADULT RESUSCITATION

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting with a fellow participant role-playing as a patient.	The following equipment or representations thereof: ● Equipment for starting an IV infusion ● Needles and syringes ● Equipment for bladder catheterization ● Sphygmomanometer and stethoscope ● Self-inflating bag and mask, oxygen cylinder, gauge ● Endotracheal tube ● New examination or high-level disinfected surgical gloves
Participants should review the Learning Guide for Adult Resuscitation before beginning the activity.	Learning Guide for Adult Resuscitation
The trainer should demonstrate the steps/tasks in the procedure of adult resuscitation 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 the Learning Guide for Adult Resuscitation.	Learning Guide for Adult Resuscitation
Participants should be able to perform the steps/tasks in the Learning Guide for Adult Resuscitation before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Adult Resuscitation.	Checklist for Adult Resuscitation
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Adult Resuscitation.[1]	Checklist for Adult Resuscitation

[1] If patients are not available at clinical sites for participants to practice adult resuscitation in relation to obstetric emergencies, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR ADULT RESUSCITATION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR ADULT RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GENERAL MANAGEMENT					
1. SHOUT FOR HELP to urgently mobilize available personnel.					
2. Greet the woman respectfully and with kindness.					
3. If the woman is conscious and responsive, tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
4. Provide continual emotional support and reassurance, as feasible.					
IMMEDIATE MANAGEMENT					
1. Check the woman's vital signs: • Temperature • Pulse • Blood pressure • Respiration					
2. Turn the woman onto her side and ensure that her airway is open. If the woman is not breathing, begin resuscitation measures.					
3. Give oxygen at 6–8 L/minute by face mask or nasal cannula.					
4. Cover the woman with a blanket to ensure warmth.					
5. Elevate the woman's legs—if possible, by raising the foot of the bed.					
BLOOD COLLECTION AND FLUID REPLACEMENT					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put new examination or high-level disinfected surgical gloves on both hands.					
3. Connect IV tubing to a 1 L container of normal saline or Ringer's lactate.					
4. Run fluid through tubing.					
5. Select a suitable site for infusion (e.g., back of hand or forearm).					
6. Place a tourniquet around the woman's upper arm.					
7. Put new examination or high-level disinfected surgical gloves on both hands.					

LEARNING GUIDE FOR ADULT RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
8. Clean skin at site selected for infusion.					
9. Insert 16- or 18-gauge needle or cannula into the vein.					
10. Draw blood for hemoglobin, cross-matching and bedside clotting test.					
11. Detach syringe from needle or cannula.					
12. Connect IV tubing to needle or cannula.					
13. Secure the needle or cannula with tape.					
14. Adjust IV tubing to run fluid at a rate sufficiently rapid to infuse 1 L in 15–20 minutes.					
15. Place the blood drawn into a labeled test tube for hemoglobin and cross-matching.					
16. Place 2 mL of blood into a small glass test tube (approximately 10 mm x 75 mm) to do a bedside clotting test: ● Hold the test tube in your closed fist to keep it warm. ● After 4 minutes, tip the tube slowly to see if a clot is forming. ● Tip it again every minute until the blood clots and the tube can be turned upside down. ● If a clot fails to form or a soft clot forms that breaks down easily, coagulopathy is possible.					
17. If the woman is not breathing or is not breathing well, perform endotracheal intubation and ventilate with an Ambu bag.					
18. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
19. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
20. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
BLADDER CATHETERIZATION					
1. Put new examination or high-level disinfected surgical gloves on both hands.					
2. Clean the external genitalia.					
3. Insert catheter into the urethral orifice and allow urine to drain into a clean receptacle, and measure and record amount.					
4. Secure catheter and attach it to urine drainage bag.					

LEARNING GUIDE FOR ADULT RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
5. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes decontamination.					
6. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
REASSESSMENT AND FURTHER MANAGEMENT					
1. Reassess the woman's response to IV fluids within 30 minutes for signs of improvement: ● Stabilizing pulse (90 beats/minute or less) ● Increasing systolic blood pressure (100 mm Hg or more) ● Improving mental status (less confusion or anxiety) ● Increasing urine output (30 mL/hour or more)					
2. If the woman's condition improves: ● Adjust the rate of IV infusion to 1 L in 6 hours. ● Continue management for underlying cause of shock.					
3. If the woman's condition fails to improve: ● Infuse normal saline rapidly until her condition improves. ● Continue oxygen at 6–8 L/minute. ● Continue to monitor vital signs every 15 minutes and intake and output every hour. ● Arrange for additional laboratory tests.					
4. Check for bleeding. If heavy bleeding is seen, take steps to stop the bleeding and transfuse blood, if necessary.					
5. Perform the necessary history, physical examination and tests to determine cause of shock if not already known.					

CHECKLIST FOR ADULT RESUSCITATION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR ADULT RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GENERAL MANAGEMENT					
1. Shout for help.					
2. Greet woman respectfully and with kindness.					
3. Provide continual emotional support and reassurance, as feasible.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
IMMEDIATE MANAGEMENT					
1. Check the woman's vital signs.					
2. Ensure that her airway is open.					
3. Give oxygen at 6–8 L/minute by face mask or nasal cannula.					
4. Ensure that she is warm.					
5. Elevate the woman's legs.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
BLOOD COLLECTION, FLUID REPLACEMENT AND BLADDER CATHETERIZATION					
1. Use antiseptic handrub or wash hands thoroughly and put on new examination or high-level disinfected surgical gloves.					
2. Draw blood for hemoglobin, cross-matching and bedside clotting test before beginning IV infusion.					
3. Infuse IV fluid at the rate of 1 L in 15–20 minutes.					
4. Do a bedside clotting test.					
5. If the woman is not breathing, or is not breathing well, perform endotracheal intubation and ventilate with a self-inflating bag.					
6. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
7. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					

CHECKLIST FOR ADULT RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
8. Use antiseptic handrub or wash hands thoroughly and put on new examination or high-level disinfected surgical gloves.					
9. Catheterize the bladder.					
10. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
11. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
REASSESSMENT AND FURTHER MANAGEMENT					
1. Reassess the woman's response to IV fluids and adjust rate accordingly.					
2. Continue to monitor vital signs every 15 minutes and intake and output every hour.					
3. Check for bleeding and transfuse blood if necessary.					
4. Perform history, physical examination and tests to determine cause of shock.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CASE STUDY 1A: VAGINAL BLEEDING IN EARLY PREGNANCY

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 has developed.

Case Study

Mrs. A. is a 20-year-old para 1 who presents with the complaint of vaginal bleeding that began yesterday as light bleeding, but has increased today. She reports passing a single clot. She also reports lower abdominal pain, as well as tiredness and "feeling sick" since yesterday. Mrs. A. reports 3 months of amenorrhea.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

3. What causes of bleeding do you need to rule out?

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. A., and your main findings include the following:

History:

Mrs. A. admits that she "may have seen" some tissue expelled this morning. She also reports regular menses with periods lasting approximately 5 days, and some nausea for the past 2½ months. She denies other signs of pregnancy.
She had spontaneous vaginal delivery of a full-term infant 2 years ago.
She is using no contraception.

Physical Examination:

Mrs. A. is conscious and alert with no signs of pallor.
Temperature is 37^{o}C, pulse is 100 beats per minute, blood pressure is 110/70 and respirations are 20 breaths per minute.
Abdominal exam shows no tenderness or masses. The uterus is not palpable. Vaginal exam shows heavy bleeding with clots, tissue is visualized in the cervix, the cervix is 2 cm dilated; there is no cervical motion nor adnexal tenderness. Uterus is 8 weeks size.

4. Based on these findings, what is Mrs. A.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Three hours after the procedure, Mrs. A. has recovered well from the procedure. Her temperature is 37^{o}C, pulse is 90 beats per minute, blood pressure is 112/74 and respirations are 18 per minute. Vaginal bleeding has decreased to spotting only. She is now ready to be discharged.

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

CASE STUDY 1B: VAGINAL BLEEDING IN EARLY PREGNANCY

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 has developed.

Case Study

Mrs. B. is a 30-year-old para 4 who presents with a history of vaginal bleeding for 4 days. She reports 3 months of amenorrhea. She also reports that she went to a local health worker who prescribed some tablets. Mrs. B. reports that vaginal bleeding started after taking the tablets. Bleeding has increased since yesterday. She has passed products of conception and has cramping lower abdominal pain. She feels tired and ill.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. B., and your main findings include the following:

History:

Mrs. B. reports that she does not know what medication she was given. During her visit to the health center, a vaginal exam was performed and some "medicine" was inserted vaginally.

Physical Examination:

Mrs. B. is conscious and alert with mild pallor. Her temperature is 38.5^{o}C, pulse is 120 beats per minute, blood pressure is 100/60 and respiration rate is 24. Her lower abdomen is tender. On vaginal exam, a foul-smelling, blood-stained vaginal discharge is noted. The cervix is 2–3 cm dilated and products of conception visible at the os. The uterus is 8 weeks size and tender.

3. Based on these findings, what is Mrs. B.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Mrs. B.'s post-procedure condition was unremarkable. The vaginal discharge decreased progressively after treatment. On postoperative day two, her temperature is 37^{o}C, pulse is 86, blood pressure is 110/72 and respirations are 18, and there is no abdominal tenderness.

5. Based on these findings, what is your continuing plan of care for Mrs. B., and why?

SKILLS PRACTICE SESSION: POSTABORTION CARE (MANUAL VACUUM ASPIRATION [MVA]) AND POSTABORTION FAMILY PLANNING COUNSELING

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Pelvic model ● High-level disinfected or sterile surgical gloves ● Personal protective equipment ● MVA syringes and cannula ● Vaginal speculum ● Single-toothed tenaculum or vulsellum forceps
Participants should review the Learning Guide for Postabortion Care (MVA) before beginning the activity and the Learning Guide for Postabortion Family Planning Counseling.	Learning Guide for Postabortion Care (MVA) Learning Guide for Postabortion Family Planning Counseling
The trainer should demonstrate the preliminary steps (medical evaluation, explaining the procedure, pelvic examination), followed by the steps in the MVA procedure 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 the Learning Guide for Postabortion Care (MVA).	Learning Guide for Postabortion Care (MVA)
The trainer should then demonstrate the steps/tasks in providing postabortion family planning counseling. Under the guidance of the trainer, participants should then work in groups of three to practice the steps/tasks and observe each other's performance; one participant should take the role of the postabortion woman, the second should practice counseling skills and the third should observe performance using the Learning Guide for Postabortion Family Planning Counseling. Participants should then reverse roles until each has had an opportunity to practice counseling skills.	Learning Guide for Postabortion Family Planning Counseling
Participants should be able to perform the steps/tasks in the Learning Guide for Postabortion Care (MVA) and Learning Guide for Postabortion Family Planning Counseling before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Postabortion Care (MVA) and Checklist for Postabortion Family Planning Counseling.	Checklist for Postabortion Care (MVA) Checklist for Postabortion Family Planning Counseling
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Postabortion Care (MVA) and Checklist for Postabortion Family Planning Counseling.[1]	Checklist for Postabortion Care (MVA) Checklist for Postabortion Family Planning Counseling

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

LEARNING GUIDE FOR POSTABORTION CARE (MANUAL VACUUM ASPIRATION [MVA])

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INITIAL ASSESSMENT					
1. Greet the woman respectfully and with kindness.					
2. Assess patient for shock and other life-threatening conditions.					
3. If any complications are identified, stabilize patient and transfer, if necessary.					
MEDICAL EVALUATION					
1. Take a reproductive health history.					
2. Perform limited physical (heart, lungs and abdomen) and pelvic examinations.					
3. Perform indicated laboratory tests.					
4. Give the woman information about her condition and what to expect.					
5. Discuss her reproductive goals, as appropriate.					
6. If she is considering an IUD: • She should be fully counseled regarding IUD use. • The decision to insert the IUD following the MVA procedure will be dependent on the clinical situation.					
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
3. Tell her she may feel discomfort during some of the steps of the procedure and you will tell her in advance.					
4. Give paracetamol 500 mg by mouth to the woman 30 minutes before the procedure.					
5. Ask about allergies to antiseptics and anesthetics.					

LEARNING GUIDE FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Determine that the necessary equipment and supplies are present: • Make sure that the required sterile or high-level disinfected instruments are present. • Make sure that the appropriate size cannula and adapters are available.					
7. Check the MVA syringe and charge it (establish vacuum).					
8. Check that patient has recently emptied her bladder.					
9. Check that patient has thoroughly washed and rinsed her perineal area.					
10. Put on personal protective equipment.					
11. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
12. Put high-level disinfected or sterile surgical gloves on both hands.					
13. Arrange sterile or high-level disinfected instruments on sterile tray or in high-level disinfected container.					
PREPROCEDURE TASKS					
1. Inform patient of each step in the procedure prior to performing it.					
2. If patient is in second trimester of pregnancy, give oxytocin 10 units IM or ergometrine 0.2 mg IM.					
3. Perform bimanual pelvic examination, checking the size and position of uterus and degree of cervical dilatation.					
4. Insert the speculum and remove blood or tissue from vagina using sponge forceps and gauze.					
5. Apply antiseptic solution to cervix and vagina three times using gauze or cotton sponge.					
6. Remove any products of conception (POC) from the cervical os and check cervix for tears.					
Administering Paracervical Block (when necessary)					
7. Prepare 20 mL 0.5% lignocaine solution without adrenaline.					
8. Draw 10 mL of 0.5% lignocaine solution into a syringe.					
9. If using a single-toothed tenaculum, inject 1 mL of lignocaine solution into the anterior or posterior lip of the cervix (the 10 o'clock or 12 o'clock position is usually used).					
10. Gently grasp anterior lip of the cervix with a single-toothed tenaculum or vulsellum forceps (preferably, use ring or sponge forceps if incomplete abortion).					
11. With tenaculum or vulsellum forceps on the cervix, use slight traction and movement to help identify the area between the smooth cervical epithelium and the vaginal tissue.					
12. Insert the needle just under the epithelium and aspirate by drawing the plunger back slightly to make sure the needle is **not** penetrating a blood vessel.					

LEARNING GUIDE FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
13. Inject about 2 mL of a 0.5% lignocaine solution just under the epithelium, not deeper than 3 mm, at 3, 5, 7 and 9 o'clock.					
14. Wait 2 minutes and then pinch the cervix with the forceps. (If the patient feels the pinch, wait 2 more minutes and then retest.)					
MVA PROCEDURE					
1. Gently apply traction on the cervix to straighten the cervical canal and uterine cavity.					
2. If necessary, dilate cervix using progressively larger cannula.					
3. While holding the cervix steady, push the selected cannula gently and slowly into the uterine cavity until it just touches the fundus (not more than 10 cm). Then withdraw the cannula slightly away from the fundus.					
4. Attach the prepared MVA syringe to the cannula by holding the cannula in one hand and the tenaculum and syringe in the other. Make sure cannula does not move forward as the syringe is attached.					
5. Release the pinch valve(s) on the syringe to transfer the vacuum through the cannula to the uterine cavity.					
7a. Evacuate any remaining contents of the uterine cavity by rotating the cannula and syringe from 10 to 2 o'clock and moving the cannula gently and slowly back and forth within the uterus.					
7b. If the syringe becomes half full before the procedure is complete, detach the cannula from the syringe. Remove **only** the syringe, leaving the cannula in place.					
7c. Push the plunger to empty POC into the strainer.					
7d. Recharge syringe, attach to cannula and release pinch valve(s).					
8. Check for signs of completion (red or pink foam, no more tissue in cannula, a "gritty" sensation and uterus contracts around the cannula). Withdraw the cannula and MVA syringe gently.					
9. Remove cannula from the MVA syringe and push the plunger to empty POC into the strainer.					
10. Remove tenaculum or forceps from the cervix before removing the speculum.					
11. Perform bimanual examination to check size and firmness of uterus.					
12. Rinse the tissue with water or saline, if necessary.					
13. Quickly inspect the tissue removed from the uterus to be sure the uterus is completely evacuated.					
14. If no POC are seen, reassess situation to be sure it is not an ectopic pregnancy.					
15. Gently insert speculum and check for bleeding.					
16. If uterus is still soft or bleeding persists, repeat steps 3–10.					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					

LEARNING GUIDE FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
4. Attach used cannula to MVA syringe and flush both with 0.5% chlorine solution.					
5. Detach cannula from syringe and soak them in 0.5% chlorine solution for 10 minutes for decontamination.					
6. Empty POC into utility sink, flushable toilet, latrine or container with tight-fitting lid.					
7. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
8. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
9. Allow the patient to rest comfortably for at least 60 minutes where her recovery can be monitored.					
10. Check for bleeding and ensure that cramping has decreased before discharge.					
11. Instruct patient regarding postabortion care and warning signs.					
12. Tell her when to return if followup is needed and that she can return anytime she has concerns.					
13. Discuss reproductive goals and, as appropriate, provide family planning.					

CHECKLIST FOR POSTABORTION CARE
(MANUAL VACUUM ASPIRATION [MVA])

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INITIAL ASSESSMENT					
1. Greet woman respectfully and with kindness.					
2. Assess patient for shock or complications.					
MEDICAL EVALUATION					
1. Take a reproductive history and perform physical examination and laboratory tests.					
2. Give her information about her condition.					
3. Discuss her reproductive goals.					
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
3. Give paracetamol 500 mg by mouth to the woman 30 minutes before procedure.					
4. Ask about allergies to antiseptics and anesthetics.					
5. Determine that required sterile or high-level disinfected instruments are present.					
6. Ensure that appropriate size cannula and adapters are available. Check MVA syringe and charge it (establish vacuum).					
7. Check that patient has recently emptied her bladder and washed her perineal area.					
8. Put on personal protective equipment.					
9. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.					
10. Arrange sterile or high-level disinfected instruments on sterile tray or in high-level disinfected container.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
PREPROCEDURE TASKS						
1. Explain each step of the procedure prior to performing it.						
2. If patient is in second trimester of pregnancy, give oxytocin 10 units IM or ergometrine 0.2 mg IM.						
3. Perform bimanual examination.						
4. Insert speculum.						
5. Apply antiseptic to cervix and vagina three times.						
6. Remove any products of conception (POC) and check for any cervical tears.						
MVA PROCEDURE						
1. Put single-toothed tenaculum or vulsellum forceps on lower lip of cervix.						
2. Administer paracervical block (if necessary).						
3. Apply traction on cervix.						
4. Dilate the cervix (if needed).						
5. Insert the cannula gently through the cervix into the uterine cavity.						
6. Attach the prepared syringe to the cannula.						
7. Evacuate contents of the uterus.						
8. When signs of completion are present, withdraw cannula and MVA syringe. Empty contents of MVA syringe into a strainer.						
9. Remove tenaculum or forceps and speculum.						
10. Perform bimanual examination.						
11. Inspect tissue removed from uterus to ensure complete evacuation.						
12. Insert speculum and check for bleeding.						
13. If uterus is still soft or bleeding persists, repeat steps 5–10.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
POSTPROCEDURE TASKS						
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.						
2. Flush MVA syringe and cannula with 0.5% chlorine solution and submerge in solution for decontamination.						
3. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.						
4. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.						
5. Use antiseptic handrub or wash hands thoroughly.						
6. Check for bleeding and ensure cramping has decreased before discharge.						

CHECKLIST FOR POSTABORTION CARE (MVA) (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
7. Instruct patient regarding postabortion care.					
8. Discuss reproductive goals and, as appropriate, provide family planning.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR POSTABORTION FAMILY PLANNING COUNSELING

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR POSTABORTION FAMILY PLANNING COUNSELING (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INITIAL INTERVIEW					
1. Greet the woman respectfully and with kindness.					
2. Assess whether counseling is appropriate at this time (if not, arrange for her to be counseled at another time and be sure she understands that she can become pregnant before her next menses).					
3. Assure necessary privacy.					
4. Obtain biographic information (name, address, etc.).					
5. Ask if she was using contraception before she became pregnant. If she was, find out if she: ● Used the method correctly ● Discontinued use ● Had any trouble using the method ● Has any concerns about the method					
6. Provide general information about family planning.					
7. Explore any attitudes or religious beliefs that either favor or rule out one or more methods.					
8. Give the woman information about the contraceptive choices available and the benefits and limitations of each: ● Show where and how each is used. ● Explain how the method works and its effectiveness. ● Explain possible side effects and other health problems. ● Explain the common side effects.					
9. Discuss the woman's needs, concerns and fears in a thorough and sympathetic manner.					
10. Help the woman begin to choose an appropriate method.					
SCREENING					
1. Screen the woman carefully to make sure there is no medical condition that would be a problem (complete Screening Checklist).					

LEARNING GUIDE FOR POSTABORTION FAMILY PLANNING COUNSELING (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
2. Explain potential side effects and make sure that each is fully understood.						
3. Perform further evaluation (physical examination), if indicated. (Nonmedical counselors must refer woman for further evaluation.)						
4. Discuss what to do if the woman experiences any side effects or problems.						
5. Provide followup visit instructions.						
6. Assure woman she can return to the same clinic at any time to receive advice or medical attention.						
7. Ask the woman to repeat instructions.						
8. Answer the woman's questions.						

CHECKLIST FOR POSTABORTION FAMILY PLANNING COUNSELING

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR POSTABORTION FAMILY PLANNING COUNSELING (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INITIAL INTERVIEW					
1. Greet woman respectfully and with kindness.					
2. Assess whether counseling is appropriate at this time (if not, arrange for counseling at another time).					
3. Assure necessary privacy.					
4. Obtain biographic information (name, address, etc.).					
5. Ask about her previous experience with contraception. Provide general information about family planning.					
6. Give the woman information about the contraceptive choices available and the benefits and limitations of each.					
7. Discuss woman's needs, concerns and fears. Help her begin to choose an appropriate method.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
SCREENING					
1. Screen woman carefully to make sure there is no medical condition that would be a problem (complete Screening Checklist).					
2. Perform physical examination, if indicated. (Nonmedical counselors must refer woman for further evaluation.)					
3. Discuss what to do if the woman experiences any side effects or problems.					
4. Provide followup visit instructions and assure woman that she can return to the same clinic at any time.					
5. Ask the woman to repeat instructions and answer any questions.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CASE STUDY 2: PREGNANCY-INDUCED HYPERTENSION

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 has developed.

Case Study

Mrs. C. is a 23-year-old gravida 3 para 2 at 37 weeks gestation who is brought to the emergency department of the district hospital complaining of a severe headache and blurred vision. Mrs. C has had four prenatal care visits during this pregnancy. Her prenatal course has been unremarkable. She was last seen 1 week ago, at which time she was counseled about danger signs in pregnancy and what to do about them.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. C., and your main findings include the following:

History:

Mrs. C. reports onset of severe headache 3 hours prior to admission, and blurred vision that began 2 hours after onset of headache. She denies upper abdominal pain, decreased urine output, convulsions or loss of consciousness. She reports normal fetal movement.

Physical Examination:

Mrs. C. is conscious and alert. Her blood pressure is 160/110. There is no abdominal tenderness. Uterus is 37 weeks size. Fetal movements are normal and fetal heart rate is 120/minute.

Laboratory Tests:

Urine shows 3+ protein.

4. Based on these findings, what is Mrs. C.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Two hours following the initiation of treatment, Mrs. C.'s diastolic blood pressure is 100. Patient reports that headache persists. Fetal heart rate has ranged between 120 and 140/minute. Reflexes are normal. Lungs are clear on auscultation. Clotting time is 6 minutes by bedside clotting test (clotting within 7 minutes is normal). Urine output has dropped to 20 mL/hour.

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

EXERCISE: USING THE PARTOGRAPH

PURPOSE

The purpose of this exercise is to enable participants to practice using the partograph to manage labor.

INSTRUCTIONS

The trainer should review the partograph form with participants before beginning the exercise.

Each participant should be given three blank partograph forms.

Case 1: The trainer should read each step to the class, plot the information on the poster-size laminated partograph and ask the questions included in each of the steps. At the same time participants should plot the information on one of their partograph forms.

Case 2: The trainer should read each step to the class and have participants plot the information on another of their partograph forms. The questions included in each step should be asked as they arise.

Case 3: The trainer should read each step to the class and have participants plot the information on the third of their partograph forms. The questions should then be asked when the partograph is completed.

Throughout the exercise, the trainer should ensure that participants have completed their partograph forms correctly.

The trainer should provide participants with the three completed partograph forms from the Answer Key and have them compare these with the partograph forms they have completed. The trainer should discuss and resolve any differences between the partographs completed by participants and those in the Answer Key.

RESOURCES

The following equipment or representations thereof:

- Partograph forms (three for each participant)
- Poster-size laminated partograph

Exercise: Using the Partograph Answer Key

EXERCISE: USING THE PARTOGRAPH: CASE 1

STEP 1

- Mrs. A. was admitted at 05.00 on 12.5.2000
- Membranes ruptured 04.00
- Gravida 3, Para 2+0
- Hospital number 7886

- On admission the fetal head was 4/5 palpable above the symphysis pubis and the cervix was 2 cm dilated

Q: What should be recorded on the partograph?

Note: The woman is not in active labor. Record only the details of her history, i.e., first 4 bullets, not the descent and cervical dilatation.

STEP 2

- 09.00:
  - The fetal head is 3/5 palpable above the symphysis pubis
  - The cervix is 5 cm dilated

Q: What should you now record on the partograph?

Note: The woman is now in the active phase of labor. Plot this and the following information on the partograph:

- There are 3 contractions in 10 minutes, each lasting 20–40 seconds
- Fetal heart rate (FH) 120
- Membranes ruptured, amniotic fluid clear
- Sutures of the skull bones are apposed
- Blood pressure 120/70 mm Hg
- Temperature 36.8°C
- Pulse 80 per minute
- Urine output 200 mL; negative protein and acetone

Q: What steps should be taken?
Q: What advice should be given?
Q: What do you expect to find at 13.00?

STEP 3

Plot the following information on the partograph:

09.30 FH 120, Contractions 3/10 each 30 sec, Pulse 80
10.00 FH 136, Contractions 3/10 each 30 sec, Pulse 80
10.30 FH 140, Contractions 3/10 each 35 sec, Pulse 88
11.00 FH 130, Contractions 3/10 each 40 sec, Pulse 88, Temp 37
11.30 FH 136, Contractions 4/10 each 40 sec, Pulse 84, Head is 2/5 up
12.00 FH 140, Contractions 4/10 each 40 sec, Pulse 88
12.30 FH 130, Contractions 4/10 each 45 sec, Pulse 88
13.00 FH 140, Contractions 4/10 each 45 sec, Pulse 90, Temp 37

- 13.00:
  - The fetal head is 0/5 palpable above the symphysis pubis
  - The cervix is fully dilated
  - Amniotic fluid clear
  - Sutures apposed
  - Blood pressure 100/70 mm Hg
  - Urine output 150 mL; negative protein and acetone

Q: What steps should be taken?
Q: What advice should be given?
Q: What do you expect to happen next?

STEP 4

Record the following information on the partograph:

- 13.20: Spontaneous delivery of a live female infant, Wt. 2.850 g

Answer the following questions:

Q: How long was the active phase of the first stage of labor?
Q: How long was the second stage of labor?

EXERCISE: USING THE PARTOGRAPH: CASE 2

STEP 1

- Mrs. B. was admitted at 10.00 on 2.5.2000
- Membranes intact
- Gravida 1, Para 0+0
- Hospital number 1443

Record the information above on the partograph, together with the following details:

- The fetal head is 5/5 palpable above the symphysis pubis
- The cervix is 4 cm dilated
- There are 2 contractions in 10 minutes, each lasting less than 20 seconds
- FH 140
- Membranes intact
- Blood pressure 100/70 mm Hg
- Temperature 36.2°C
- Pulse 80 per minute
- Urine output 400 mL; negative protein and acetone

Q: What is your diagnosis?
Q: What action will you take?

STEP 2

Plot the following information on the partograph:

10.30 FH 140, Contractions 2/10 each 15 sec, Pulse 90
11.00 FH 136, Contractions 2/10 each 15 sec, Pulse 88, Membranes intact
11.30 FH 140, Contractions 2/10 each 20 sec, Pulse 84
12.00 FH 136, Contractions 2/10 each 15 sec, Pulse 88, Temp 36.2

- The fetal head is 5/5 palpable above the symphysis pubis
- The cervix is 4 cm dilated, membranes intact

Q: What is your diagnosis?
Q: What action will you take?

STEP 3

Plot the following information on the partograph:

12.30 FH 136, Contractions 1/10 each 15 sec, Pulse 90
13.00 FH 140, Contractions 1/10 each 15 sec, Pulse 88
13.30 FH 130, Contractions 1/10 each 20 sec, Pulse 88
14.00 FH 140, Contractions 2/10 each 20 sec, Pulse 90, Temp 36.8, Blood pressure 100/70

- The fetal head is 5/5 palpable above the symphysis pubis
- Urine output 300 mL; negative protein and acetone
- Membranes intact

Q: What is your diagnosis?
Q: What will you do?

Plot the following information on the partograph:

- The cervix is 4 cm dilated, sutures apposed
- Labor augmented with oxytocin 2.5 units in 500 mL IV fluid at 10 drops per minute (dpm)

STEP 4

Plot the following information on the partograph:

- 14.30:
  - 2 contractions in 10 minutes each lasting 30 seconds
  - Infusion rate increased to 20 dpm
  - FH 140, Pulse 88
- 15.00:
  - 3 contractions in 10 minutes each lasting 30 seconds
  - Infusion rate increased to 30 dpm
  - FH 140, Pulse 90
- 15.30:
  - 3 contractions in 10 minutes each lasting 30 seconds
  - Infusion rate increased to 40 dpm
  - FH 140, Pulse 88
- 16.00:
  - The fetal head is 2/5 palpable above the symphysis pubis
  - The cervix is 6 cm dilated; sutures apposed
  - 3 contractions in 10 minutes each lasting 30 seconds
  - Infusion rate increased to 50 dpm
  - FH 144, Pulse 92
- 16.30:
  - FH 140, Contractions 3/10 each 45 sec, Pulse 90

Q: What steps would you take?

STEP 5

17.00	FH 138, Pulse 92, Contractions 3/10 each 40 sec, Maintain at 50 dpm
17.30	FH 140, Pulse 94, Contractions 3/10 each 45 sec, Maintain at 50 dpm
18.00	FH 140, Pulse 96, Contractions 4/10 each 50 sec, Maintain at 50 dpm
18.30	FH 144, Pulse 94, Contractions 4/10 each 50 sec, Maintain at 50 dpm

STEP 6

Plot the following information on the partograph:

- 19.00:
  - The fetal head is 0/5 palpable above the symphysis pubis
  - FH 144, Contractions 4/10 each 50 sec, Pulse 90
  - The cervix is fully dilated

STEP 7

Record the following information on the partograph:

- 19.30:
  - FH 142, Contractions 4/10 each 50 sec, Pulse 100
- 20.00:
  - FH 146, Contractions 4/10 each 50 sec, Pulse 110
- 20.10:
  - Spontaneous delivery of a live male infant, Wt. 2.654 g

Answer the following questions:

Q: How long was the active phase of the first stage of labor?
Q: How long was the second stage of labor?
Q: Why was labor augmented?

EXERCISE: USING THE PARTOGRAPH: CASE 3

STEP 1

- Mrs. C. was admitted at 10.00 on 12.5.2000
- Membranes ruptured 09.00
- Gravida 4, Para 3+0
- Hospital number 6639

Record the information above on the partograph, together with the following details:

- The fetal head is 3/5 palpable above the symphysis pubis
- The cervix is 4 cm dilated
- There are 3 contractions in 10 minutes, each lasting 30 seconds
- FH 140
- Amniotic fluid clear
- Sutures apposed
- Blood pressure 120/70 mm Hg
- Temperature 36.8°C
- Pulse 80 per minute
- Urine output 200 mL; negative protein and acetone

STEP 2

Plot the following information in the partograph:

10.30 FH 130, Contractions 3/10 each 35 sec, Pulse 80
11.00 FH 136, Contractions 3/10 each 40 sec, Pulse 90
11.30 FH 140, Contractions 3/10 each 40 sec, Pulse 88
12.00 FH 140, Contractions 3/10 each 40 sec, Pulse 90, Temp 37, Head 3/5 up
12.30 FH 130, Contractions 3/10 each 40 sec, Pulse 90
13.00 FH 130, Contractions 3/10 each 40 sec, Pulse 88
13.30 FH 120, Contractions 3/10 each 40 sec, Pulse 88
14.00 FH 130, Contractions 4/10 each 45 sec, Pulse 90, Temp 37, Blood pressure 100/70

- The fetal head is 3/5 palpable above the symphysis pubis
- The cervix is 6 cm dilated, amniotic fluid clear
- Sutures overlapped but reducible

STEP 3

14.30 FH 120, Contractions 4/10 each 40 sec, Pulse 90, Liquor clear
15.00 FH 120, Contractions 4/10 each 40 sec, Pulse 88, Blood stained
15.30 FH 100, Contractions 4/10 each 45 sec, Pulse 100
16.00 FH 90, Contractions 4/10 each 50 sec, Pulse 100, Temp 37
16.30 FH 90, Contractions 4/10 each 50 sec, Pulse 110, Head 3/5 up, Meconium liquor

- The fetal head is 3/5 palpable above the symphysis pubis
- The cervix is 6 cm dilated
- Amniotic fluid meconium stained
- Sutures overlapped and not reducible
- Urine output 100 mL; protein negative, acetone 1+

STEP 4

Record the following information on the partograph:

- Cesarean section at 17.00, live female infant with poor respiratory effort, Wt. 4,850 g

Answer the following questions:

Q: What is the final diagnosis?
Q: What action was indicated at 14.00, and why?
Q: What action was indicated at 16.00, and why?
Q: At 16.30, a decision was taken to do a cesarean section, and this was done. Was this a correct action?
Q: What problems may be expected in the newborn?

SKILLS PRACTICE SESSION: CONDUCTING A CHILDBIRTH

PURPOSE

The purpose of this activity is to enable participants to practice conducting a childbirth, including active management of the third stage and examination of placenta, and achieve competency in the skills required.

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate pelvic and fetal models.	The following equipment or representations thereof: ● Childbirth simulator and placenta/cord/amnion model ● Fetal model (with hard skull) ● Plastic or rubber apron ● High-level disinfected or sterile surgical gloves ● Childbirth kit ● Receptacle for placenta
Participants should review the Learning Guide for Conducting a Childbirth, before beginning the activity.	Learning Guide for Conducting a Childbirth
The trainer should demonstrate the steps/tasks in the procedure for conducting a normal childbirth, including active management of the third stage and examination of 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 the Learning Guide for Conducting a Childbirth.	Learning Guide for Conducting a Childbirth
Participants should be able to perform the steps/tasks in the Learning Guide for Conducting a Childbirth before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Conducting a Childbirth.	Checklist for Conducting a Childbirth
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Conducting a Childbirth.[1]	Checklist for Conducting a Childbirth

[1] If patients are not available at clinical sites for participants to practice conducting a childbirth, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR CONDUCTING A CHILDBIRTH

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Allow the woman to push spontaneously.					
3. Allow the woman to adopt the position of choice.					
4. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
5. Provide continual emotional support and reassurance, as feasible.					
CONDUCTING THE CHILDBIRTH					
1. Put on a clean plastic or rubber apron, rubber boots and eye goggles.					
2. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
3. Put high-level disinfected or sterile surgical gloves on both hands.					
4. Clean the perineum with a cloth or compress, wet with antiseptic solution or soap and water, wiping from front to back.					
5. Place one sterile drape from the delivery pack under the woman's buttocks, one over her abdomen and use the third drape to receive the newborn.					
Delivery of the Head					
6. Place fingers of one hand on the advancing head to sustain flexion and control birth of the head.					
7. Use the other hand to support the perineum with a pad, cloth, or compress.					
8. As the perineum distends, decide whether an episiotomy is necessary (e.g., if the perineum is very tight). If needed, provide perineal infiltration with lignocaine and perform an episiotomy (see **Learning Guide for Episiotomy and Repair**).					
9. Maintain firm but gentle pressure on the head to encourage flexion.					
10. Ask the woman to gently blow out each breath in order to avoid pushing.					
11. After crowning, allow the head to gradually extend under your hand.					

LEARNING GUIDE FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
12. Using a clean cloth, wipe the mucus (and membranes if needed) from the baby's mouth and nose.					
13. Gently feel around the newborn's neck for the cord: • If the cord is around the neck but loose, slip it over the baby's head. • If the cord is loose but cannot reach over the head, slacken the cord so that it can slip backwards over the shoulders as the shoulders are born. • If the cord is tightly wound around the neck, clamp the cord with two artery forceps, placed 3 cm apart, and cut the cord between the two clamps.					
14. Allow restitution and external rotation of the head to occur.					
Delivery of the Shoulders					
15. Place one hand on either side of the newborn's head, over the ears.					
16. Apply gentle downward traction to allow the anterior shoulder to slip beneath the symphysis pubis.					
17. When the axillary crease is seen, guide the head and trunk in an upward curve to allow the posterior shoulder to escape over the perineum.					
18. Grasp the newborn around the chest to aid the birth of the trunk and lift the newborn toward the woman's abdomen.					
19. Note the time of birth.					
Immediate Care of the Newborn					
20. Dry the newborn quickly and thoroughly with a clean, dry towel/cloth immediately after birth.					
21. Wipe the newborn's eyes with a clean piece of cloth.					
22. Place the newborn in skin-to-skin contact on the mother's abdomen and cover with a clean, dry towel/cloth.					
23. Observe the newborn's breathing while completing steps 1 and 2: • If the newborn is not breathing, begin resuscitation measures (see the appropriate **Learning Guide for Newborn Resuscitation**). • If the newborn is breathing normally, continue with the following care.					
Clamping and Cutting the Cord					
24. Place two clamps on the cord with enough room between them to allow for easy cutting of the cord.					
25. Cut the cord, using sterile scissors under cover of a gauze swab to prevent blood spurting.					
26. Tie the cord tightly 2.5 cm from the newborn's abdomen.					
27. Leave the newborn in skin-to-skin contact on the mother's abdomen or chest, covered by a clean, dry towel/cloth.					
28. Palpate the mother's abdomen to rule out the presence of another baby.					
29. Give 10 IU oxytocin intramuscularly.					

LEARNING GUIDE FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
ACTIVE MANAGEMENT OF THE THIRD STAGE					
Getting Ready					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
3. Ask an assistant to place a sterile receptacle (e.g., kidney basin) against the woman's perineum.					
Delivering and Examining the Placenta					
4. Clamp the cord close to the perineum with forceps.					
5. Wait for the uterus to contract.					
6. Use one hand to grasp the forceps with the clamped end of the cord.					
7. Place the other hand just above the level of the symphysis pubis, on top of the drape covering the woman's abdomen, with the palm facing toward the mother's umbilicus and gently apply counter-traction in an upward direction.					
8. At the same time, firmly apply traction to the cord, in a downward direction, using the hand that is grasping the forceps.					
9. Apply steady tension by pulling the cord firmly and maintaining pressure (jerky movements and force must be avoided): • If the maneuver is not successful within 30–40 seconds, stop pulling, wait for the next contraction and repeat.					
10. When the placenta is visible at the vaginal opening, hold it in both hands.					
11. Use a gentle upward and downward movement or twisting action to deliver the membranes.					
12. Hold the placenta in the palms of the hands, with maternal side facing upward.					
13. Immediately and gently massage the uterus through the woman's abdomen until it is well contracted.					
14. Check whether all of the lobules are present and fit together					
15. Now hold the cord with one hand and allow the placenta and membranes to hang down.					
16. Insert the other hand inside the membranes, with fingers spread out.					
17. Inspect the membranes for completeness.					
18. Note the position of insertion of the cord.					
19. Inspect the cut end of the cord for the presence of two arteries and one vein.					
20. Place the placenta in the receptacle (e.g., kidney basin) provided.					
21. Show the mother how to massage her uterus to maintain contractions.					
Examining the Birth Canal					
22. Ask assistant to direct a strong light onto the perineum.					

LEARNING GUIDE FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
23. Gently separate the labia and inspect the lower vagina for lacerations/tears.					
24. Inspect the perineum for lacerations/tears.					
25. Repair episiotomy (if one was performed) (see **Learning Guide for Episiotomy and Repair**).					
26. Wash the vulva and perineum gently with warm water or an antiseptic solution and dry with a clean, soft cloth.					
27. Place a clean cloth or pad on the woman's perineum.					
28. Remove soiled bedding, make the woman comfortable, and cover her with a blanket.					
29. Before removing gloves, place soiled linen in 0.5% chlorine solution for 10 minutes for decontamination.					
POST-BIRTH TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag and dispose of the placenta by incineration (or place in a leakproof container for burial), after consulting with the woman about cultural practices.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
4. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
5. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
6. Record all findings on woman's record.					

CHECKLIST FOR CONDUCTING A CHILDBIRTH

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Allow the woman to push spontaneously.						
3. Allow the woman to adopt the position of choice.						
4. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
5. Provide continual emotional support and reassurance, as feasible.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
CONDUCTING THE CHILDBIRTH						
1. Put on personal protective equipment.						
2. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.						
3. Clean the perineum with antiseptic solution.						
4. As the perineum distends, decide whether an episiotomy is necessary and perform as necessary.						
5. After crowning, allow the head to gradually extend and feel around the newborn's neck for the cord: • If found, slacken the cord and slip over head or allow the shoulders to pass through, or clamp and cut the cord.						
6. Allow restitution and external rotation of the head to occur.						
7. Apply gentle downward traction on the head to allow the anterior shoulder to slip beneath the symphysis pubis.						
8. Guide the head and trunk in an upward curve to allow the posterior shoulder to escape over the perineum.						
9. Grasp the newborn around the chest to aid the birth of the trunk and lift it toward the woman's abdomen.						

CHECKLIST FOR CONDUCTING A CHILDBIRTH (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Note the time of birth.					
11. Dry the newborn quickly and thoroughly with a clean, dry towel/cloth immediately after birth.					
12. Wipe the newborn's eyes with a clean piece of cloth.					
13. Place the newborn in skin-to-skin contact on the mother's abdomen and cover with a clean, dry towel/cloth.					
14. Observe the newborn's breathing (see **Learning Guide for Newborn Resuscitation**).					
15. Clamp and cut, or tie and cut, cord.					
16. Perform active management of the third stage of labor: Palpate the mother's abdomen to rule out presence of another baby and give 10 units of oxytocin intramuscularly.					
17. Apply gentle but firm traction to the cord during a contraction, while at the same time applying counter-traction to the uterus.					
18. If the placenta is not delivered with the first contraction, wait for the next contraction and repeat controlled cord traction with counter-traction to the uterus.					
19. Hold the placenta in both hands, when it is visible.					
20. Use a gentle upward and downward movement or twisting action to deliver the membranes.					
21. Examine the placenta and membranes for completeness and abnormalities					
22. Check that the uterus is well contracted.					
23. Massage uterus if it is not contracted.					
24. Inspect the lower vagina and perineum for lacerations/tears and repair, if necessary.					
25. Repair episiotomy, if one was performed.					
26. Wash and dry, and place clean cloth or pad on the perineum.					
27. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
28. Place all instruments in 0.5% chlorine solution for decontamination.					
29. If reusing needle and syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
30. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing					
31. Use antiseptic handrub or wash hands thoroughly.					
32. Record all findings on woman's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION: EPISIOTOMY AND REPAIR

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: • Pelvic model or foam block that would enable episiotomy and repair to be performed • High-level disinfected or sterile surgical gloves • Personal protective equipment • Examination light • Local anesthetic • Needles and syringes • Suture materials
Participants should review the Learning Guide for Episiotomy and Repair before beginning the activity.	Learning Guide for Episiotomy and Repair
The trainer should demonstrate the steps/tasks in the procedure of episiotomy and repair 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 the Learning Guide for Episiotomy and Repair.	Learning Guide for Episiotomy and Repair
Participants should be able to perform the steps/tasks in the Learning Guide for Episiotomy and Repair before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Episiotomy and Repair.	Checklist for Episiotomy and Repair
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Episiotomy and Repair.[1]	Checklist for Episiotomy and Repair

[1] If patients are not available at clinical sites for participants to practice episiotomy and repair, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR EPISIOTOMY AND REPAIR

(To be completed by **Participants**)

Note: Participants should use this learning guide in conjunction with the **Learning Guide for Conducting a Childbirth**.

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR EPISIOTOMY AND REPAIR (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
4. Ask about allergies to antiseptics and anesthetics.						
5. Put on personal protective equipment.						
ADMINISTERING LOCAL ANESTHETIC **Note**: As the skilled provider, you should already have protective clothing and gloves on.						
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.						
2. Put high-level disinfected or sterile surgical gloves on both hands.						
3. Clean the perineum with antiseptic solution.						
4. Draw 10 mL of 0.5% lignocaine into a syringe.						
5. Place two fingers into the vagina along the proposed incision line.						
6. Insert the needle beneath the skin for 4–5 cm following the same line and aspirate by drawing the plunger back slightly to make certain the needle is not penetrating a blood vessel.						
7. Inject the lignocaine solution into the vaginal mucosa, beneath the skin of the perineum and into the perineal muscle.						
8. Wait 2 minutes and then pinch the incision site with forceps. (If the woman feels the pinch, wait 2 more minutes and then retest.)						

LEARNING GUIDE FOR EPISIOTOMY AND REPAIR (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
MAKING THE EPISIOTOMY					
1. Wait to perform episiotomy until: • The perineum is thinned out. • 3–4 cm of the newborn's head is visible **during a contraction**.					
2. Insert two fingers into the vagina, palmar side downward, between the newborn's head and the perineum.					
3. Insert the open blade of the scissors between the perineum and the two fingers.					
4. Make a single cut 3–4 cm long in a mediolateral direction (45º angle to the midline toward a point midway between the ischial tuberosity and the anus).					
5. Use scissors to cut 2–3 cm up the middle of the posterior vagina.					
6. If delivery of the head does not follow immediately, apply pressure to the episiotomy site between contractions, using a piece of gauze, to minimize bleeding.					
7. Control delivery of the head to avoid extension of the episiotomy.					
8. Carefully examine for extensions and other tears.					
REPAIRING THE EPISIOTOMY					
1. Ask the woman to position her buttocks toward the lower end of the bed or table (use stirrups if available).					
2. Ask an assistant to direct a strong light onto the woman's perineum.					
3. Clean the woman's perineum with antiseptic solution.					
4. If it is necessary to repeat local anesthetic, draw 10 mL of 0.5% lignocaine into a syringe.					
5. Insert the needle along one side of the vaginal incision and inject the lignocaine solution while slowly withdrawing the needle.					
6. Repeat on the other side of the vaginal incision and on each side of the perineal incision.					
7. Wait 2 minutes to allow the lignocaine solution to take effect.					
8. Using 2/0 chromic catgut, insert the suture needle just above (1 cm) the vaginal incision.					
9. Use a continuous suture from the apex downward to repair the vaginal incision.					
10. Continue the suture to the level of the vaginal opening.					
11. At the opening of the vagina, bring together the cut edges.					
12. Bring the needle under the vaginal opening and out through the incision and tie.					
13. Use interrupted 2/0 sutures to repair the perineal muscle, working from the top of the perineal incision downward.					
14. Use interrupted or subcuticular 2/0 sutures to bring the skin edges together.					
15. Place a clean cloth or pad on the woman's perineum.					

LEARNING GUIDE FOR EPISIOTOMY AND REPAIR (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
4. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
5. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
6. Record the procedure on woman's record.					

CHECKLIST FOR EPISIOTOMY AND REPAIR

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR EPISIOTOMY AND REPAIR (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
4. Ask about allergies to antiseptics and anesthetics.						
5. Put on personal protective equipment.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
MAKING THE EPISIOTOMY						
1. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.						
2. Clean the perineum with antiseptic solution.						
3. Administer local anesthetic.						
4. Perform episiotomy when perineum is thinned out and newborn's head is visible during a contraction.						
5. Insert two fingers into the vagina between the newborn's head and the perineum.						
6. Insert the open blade of the scissors between the perineum and the fingers. Make a single cut in a mediolateral direction.						
7. If delivery of the head does not follow immediately, apply pressure to the episiotomy site between contractions.						
8. Control delivery of the head to avoid extension of the episiotomy.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						

CHECKLIST FOR EPISIOTOMY AND REPAIR (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
REPAIRING THE EPISIOTOMY					
1. Clean the woman's perineum with antiseptic solution.					
2. Repeat local anesthetic, if necessary.					
3. Use a continuous suture from the apex downward to repair the vaginal incision.					
4. At the vaginal opening, bring the cut edges together.					
5. Bring the needle under the vaginal opening and out through the incision and tie.					
6. Use interrupted sutures to repair the perineal muscle, working from the top of the perineal incision downward and to bring the skin edges together.					
7. Place a clean cloth or pad on the woman's perineum.					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for decontamination.					
3. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
4. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
5. Use antiseptic handrub or wash hands thoroughly.					
6. Record procedure on woman's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
REPAIR OF CERVICAL TEARS

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Foam block to simulate a vagina and cervix ● High-level disinfected or sterile surgical gloves ● Personal protective equipment ● Examination light ● Vaginal speculum ● Ring or sponge forceps ● Suture materials
Participants should review the Learning Guide for Repair of Cervical Tears before beginning the activity.	Learning Guide for Repair of Cervical Tears
The trainer should demonstrate the steps/tasks in the procedure of repair of cervical tears 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 the Learning Guide for Repair of Cervical Tears.	Learning Guide for Repair of Cervical Tears
Participants should be able to perform the steps/tasks in the Learning Guide for Repair of Cervical Tears before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Repair of Cervical Tears.	Checklist for Repair of Cervical Tears
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Repair of Cervical Tears.[1]	Checklist for Repair of Cervical Tears

[1] If patients are not available at clinical sites for participants to practice repair of cervical tears, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR REPAIR OF CERVICAL TEARS

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR REPAIR OF CERVICAL TEARS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
4. Have the woman empty her bladder or insert a catheter, if necessary.					
5. Give anesthesia (IV pethidine and diazepam, or ketamine), if necessary.					
6. Put on personal protective equipment.					
REPAIR OF CERVICAL TEARS					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put high-level disinfected or sterile surgical gloves on both hands.					
3. Have an assistant shine a light into the vagina.					
4. Clean the vagina and cervix with antiseptic solution.					
5. Have the assistant massage the uterus and provide fundal pressure.					
6. Insert a ring or sponge forceps into the vagina and grasp the cervix on one side of the tear.					
7. Insert a second ring or sponge forceps and grasp the cervix on other side of the tear.					
8. Gently pull in various directions to see the entire cervix as there may be several tears.					
9. Place the handles of both forceps in one hand: • Hold the cervix steady by gently pulling the forceps toward you.					
10. Place the first suture at the top (the apex) of the tear.					
11. Close the tear with a continuous suture: • Be sure to include the whole thickness of the cervix each time the suture needle is inserted.					

LEARNING GUIDE FOR REPAIR OF CERVICAL TEARS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
12. If a long section of the rim of the cervix is tattered, under-run it with a continuous 0 chromic (or polyglycolic) suture.					
13. If the apex is difficult to reach and ligate: ● Grasp it with artery or ring forceps. ● Leave the forceps in place for 4 hours. ● After 4 hours, open the forceps partially but do not remove. ● After another 4 hours, remove the forceps completely.					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
4. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
5. Record the procedure on the woman's record.					

CHECKLIST FOR REPAIR OF CERVICAL TEARS

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR REPAIR OF CERVICAL TEARS (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
4. Have the woman empty her bladder or insert a catheter.						
5. Give anesthesia, if necessary.						
6. Put on personal protective equipment.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
REPAIR OF CERVICAL TEARS						
1. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.						
2. Clean the vagina and cervix with an antiseptic solution.						
3. Grasp both sides of the cervix using ring or sponge forceps (one forceps for each side of tear).						
4. Place the first suture at the top of the tear and close 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-run it with a continuous suture.						
6. Use ring forceps if the apex is difficult to reach and ligate.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
POSTPROCEDURE TASKS						
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.						
2. Place all instruments in 0.5% chlorine solution for decontamination.						

CHECKLIST FOR REPAIR OF CERVICAL TEARS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
4. Use antiseptic handrub or wash hands thoroughly.					
5. Record procedure on woman's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
BREECH DELIVERY

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Childbirth simulator and placenta/cord/amnion model ● High-level disinfected or sterile surgical gloves ● Personal protective equipment
Participants should review the Learning Guide for Breech Delivery before beginning the activity.	Learning Guide for Breech Delivery
The trainer should demonstrate the steps/tasks in the procedure of breech delivery 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 the Learning Guide for Breech Delivery.	Learning Guide for Breech Delivery
Participants should be able to perform the steps/tasks in the Learning Guide for Breech Delivery before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Breech Delivery.	Checklist for Breech Delivery
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Breech Delivery.[1]	Checklist for Breech Delivery

[1] If patients are not available at clinical sites for participants to practice breech delivery, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR BREECH DELIVERY

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR BREECH DELIVERY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
4. Review to ensure that the following conditions for breech delivery are present: ● Complete or frank breech ● Adequate clinical pelvimetry, especially that sacral promontory is not tipped ● Fetus is not too large ● No previous cesarean section for cephalopelvic disproportion ● Flexed head					
5. Put on personal protective equipment.					
6. Start an IV infusion.					
PREPROCEDURE TASKS					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put high-level disinfected or sterile surgical gloves on both hands.					
3. Clean the vulva with antiseptic solution.					
4. Catheterize the bladder, if necessary.					
BREECH DELIVERY					
Delivery of the Buttocks and Legs					
1. When the buttocks have entered the vagina and the cervix is fully dilated, tell the woman she can bear down with contractions.					
2. As the perineum distends, decide whether an episiotomy is necessary (e.g., if the perineum is very tight). If needed, provide perineal infiltration with lignocaine and perform an episiotomy (see **Learning Guide for Episiotomy and Repair**).					

LEARNING GUIDE FOR BREECH DELIVERY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Let the buttocks deliver until the lower back and then the shoulder blades are seen.					
4. Gently hold the buttocks in one hand, but do not pull.					
5. If the legs do not deliver spontaneously, deliver one leg at a time: ● Push behind the knee to bend the leg. ● Grasp the ankle and deliver the foot and leg. ● Repeat for the other leg.					
6. Hold the newborn by the hips, but do not pull.					
Delivery of the Arms					
7. If the arms are felt on the chest, allow them to disengage spontaneously: ● After spontaneous delivery of the first arm, lift the buttocks toward the mother's abdomen to enable the second arm to deliver spontaneously. ● If the arm does not deliver spontaneously, place one or two fingers in the elbow and bend the arm, bringing the hand down over the newborn's face.					
8. If the arms are stretched above the head or folded around the neck, use Lovset's maneuver: ● Hold the newborn by the hips and turn half a circle, keeping the back uppermost. ● Apply downward traction at the same time so that the posterior arm becomes anterior, and deliver the arm under the pubic arch by placing one or two fingers on the upper part of the arm. ● Draw the arm down over the chest as the elbow is flexed, with the hand sweeping over the face. ● To deliver the second arm, turn the newborn back half a circle while keeping the back uppermost and applying downward traction to deliver the second arm in the same way under the pubic arch.					
9. If the newborn's body cannot be turned to deliver the arm that is anterior first, deliver the arm that is posterior: ● Hold and lift the newborn up by the ankles. ● Move the newborn's chest toward the woman's inner leg to deliver the posterior shoulder. ● Deliver the arm and hand. ● Lay the newborn down by the ankles to deliver the anterior shoulder. ● Deliver the arm and hand.					

LEARNING GUIDE FOR BREECH DELIVERY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Delivery of the Head					
10. Deliver the head by the Mauriceau Smellie Veit maneuver: ● Lay newborn face down with the length of its body over your hand and arm. ● Place first and third fingers of this hand on the newborn's cheekbones. ● Place second finger in the newborn's mouth to pull the jaw down and flex the head. ● Use the other hand to grasp the newborn's shoulders. ● With two fingers of this hand, gently flex the newborn's head toward the chest. ● At the same time apply downward pressure on the jaw to bring the newborn's head down until the hairline is visible. ● Pull gently to deliver the head. ● Ask an assistant to push gently above the mother's pubic bone as the head delivers. ● Raise the newborn, still astride the arm, until the mouth and nose are free.					
11. Perform active management of the third stage of labor to deliver the placenta: ● Give 10 IU oxytocin intramuscularly. ● Control cord traction. ● Massage uterus.					
12. Check the birth canal for tears following childbirth and repair, if necessary.					
13. Repair the episiotomy, if one was performed (see **Learning Guide for Episiotomy and Repair**).					
14. Provide immediate postpartum and newborn care, as required.					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
3. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
4. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
5. Record the procedure and findings on woman's record.					

CHECKLIST FOR BREECH DELIVERY

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR BREECH DELIVERY (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
4. Ensure that the conditions for breech delivery are present.						
5. Put on personal protective equipment.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
PREPROCEDURE TASKS						
1. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.						
2. Clean the vulva with antiseptic solution.						
3. Catheterize 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, tell the woman she can bear down with contractions.						
2. Perform an episiotomy, if necessary.						
3. Let the buttocks deliver until the lower back and shoulder blades are seen.						
4. Gently hold the buttocks in one hand.						
5. If the legs do not deliver spontaneously, deliver one leg at a time.						
6. Hold the newborn by the hips.						

CHECKLIST FOR BREECH DELIVERY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Delivery of the Arms					
7. If the arms are felt on the chest, allow them to disengage spontaneously.					
8. If the arms are stretched above the head or folded around the neck, use Lovset's maneuver.					
9. If the newborn's body cannot be turned to deliver the arm that is anterior first, deliver the arm that is posterior.					
Delivery of the Head					
10. Deliver the head using the Mauriceau Smellie Veit maneuver.					
11. Complete steps for active management of the third stage of labor.					
12. Following childbirth, check the birth canal for tears and repair, if necessary. Repair the episiotomy, if one was performed.					
13. Provide immediate postpartum and newborn care, as required.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for decontamination.					
3. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
4. Use antiseptic handrub or wash hands thoroughly.					
5. Record procedure and findings on woman's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
VACUUM EXTRACTION

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Childbirth simulator and placenta/cord/amnion model ● High-level disinfected or sterile surgical gloves ● Personal protective equipment ● Vacuum extractor
Participants should review the Learning Guide for Vacuum Extraction before beginning the activity.	Learning Guide for Vacuum Extraction
The trainer should demonstrate the steps/task in the procedure of vacuum extraction 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 the Learning Guide for Vacuum Extraction.	Learning Guide for Vacuum Extraction
Participants should be able to perform the steps/tasks in the Learning Guide for Vacuum Extraction before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Vacuum Extraction.	Checklist for Vacuum Extraction
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Vacuum Extraction.[1]	Checklist for Vacuum Extraction

[1] If patients are not available at clinical sites for participants to practice vacuum extraction, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR VACUUM EXTRACTION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 **Proficiently Performed**: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR VACUUM EXTRACTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
4. Review to ensure that the following conditions for vacuum extraction are present: ● Vertex presentation ● Term fetus ● Cervix fully dilated ● Head at least at 0 station or no more than 2/5 palpable above the symphysis pubis					
5. Make sure an assistant is available.					
6. Put on personal protective equipment.					
PREPROCEDURE TASKS					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put high-level disinfected or sterile surgical gloves on both hands.					
3. Clean the vulva with antiseptic solution.					
4. Catheterize the bladder, if necessary.					
5. Check all connections on the vacuum extractor and test the vacuum on a gloved hand.					
VACUUM EXTRACTION					
1. Assess the position of the fetal head by feeling the sagittal suture line and the fontanelles.					
2. Identify the posterior fontanelle.					
3. Apply the largest cup that will fit, with the center of the cup over the flexion point, 1 cm anterior to the posterior fontanelle.					

LEARNING GUIDE FOR VACUUM EXTRACTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Perform an episiotomy, if necessary, for proper placement of the cup (see **Learning Guide for Episiotomy and Repair**): ● If episiotomy is not necessary for placement of the cup, delay until the head stretches the perineum or the perineum interferes with the axis of traction.					
5. Check the application and ensure that there is no maternal soft tissue (cervix or vagina) within the rim of the cup: ● If necessary, release pressure and reapply cup.					
6. Have the assistant create a vacuum of 0.2 kg/cm^2 negative pressure with the pump and check the application of the cup.					
7. Increase the vacuum to 0.8 kg/cm^2 negative pressure and check the application of the cup.					
8. After maximum negative pressure has been applied, start traction in the line of the pelvic axis and perpendicular to the cup: ● If the fetal head is tilted to one side or not flexed well, traction should be directed in a line that will try to correct the tilt or deflexion of the head (i.e., to one side or the other, not necessarily in the midline).					
9. With each contraction, apply traction in a line perpendicular to the plane of the cup rim: ● Place a gloved finger on the scalp next to the cup during traction to assess potential slippage and descent of the vertex.					
10. Between each contraction have assistant check: ● Fetal heart rate ● Application of the cup					
11. With progress, and in the absence of fetal distress, continue the "guiding" pulls for a maximum of 30 minutes.					
12. When the head has been delivered, release the vacuum, remove the cup and complete the birth of the newborn.					
13. Perform active management of the third stage of labor to deliver the placenta: ● Give 10 IU oxytocin intramuscularly. ● Control cord traction. ● Massage uterus.					
14. Check the birth canal for tears following childbirth and repair, if necessary.					
15. Repair the episiotomy, if one was performed (see **Learning Guide for Episiotomy and Repair**).					
16. Provide immediate postpartum and newborn care, as required.					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					

LEARNING GUIDE FOR VACUUM EXTRACTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
4. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
5. Record the procedure and findings on woman's record.					

CHECKLIST FOR VACUUM EXTRACTION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR VACUUM EXTRACTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
4. Ensure that the conditions for vacuum extraction are present.					
5. Make sure an assistant is available.					
6. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.					
2. Clean the vulva with antiseptic solution.					
3. Catheterize the bladder, if necessary.					
4. Check all connections on the vacuum extractor and test the vacuum.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
VACUUM EXTRACTION					
1. Assess the position of the fetal head and identify the posterior fontanelle.					
2. Apply the largest cup that will fit.					
3. Perform an episiotomy, if necessary, for placement of the cup.					
4. Check the application and ensure that there is no maternal soft tissue within the rim of the cup.					
5. Have assistant create a vacuum of negative pressure and check the application of the cup.					

CHECKLIST FOR VACUUM EXTRACTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Increase the vacuum to the maximum and then apply traction. Correct the tilt or deflexion of the head.					
7. With each contraction, apply traction in a line perpendicular to the plane of the cup rim and assess potential slippage and descent of the vertex.					
8. Between each contraction, have assistant check fetal heart rate and application of the cup.					
9. Continue the "guiding" pulls for a maximum of 30 minutes. Release the vacuum when the head has been delivered.					
10. Complete birth of newborn and delivery of placenta.					
11. Following childbirth, check the birth canal for tears and repair, if necessary. Repair the episiotomy, if one was performed.					
12. Provide immediate postpartum and newborn care, as required.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for decontamination.					
3. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
4. Use antiseptic handrub or wash hands thoroughly.					
5. Record procedure and findings on woman's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
BIMANUAL COMPRESSION OF THE UTERUS

PURPOSE

The purpose of this activity is to enable participants to practice bimanual compression of the uterus and achieve competency in the skills required.

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate models.	The following equipment or representations thereof: ● Childbirth simulator and placenta/cord/amnion model ● Childbirth kit ● High-level disinfected or sterile surgical gloves ● Personal protective equipment
Participants should review the Learning Guide for Bimanual Compression of the Uterus before beginning the activity.	Learning Guide for Bimanual Compression of the Uterus
The trainer should demonstrate the steps/tasks in the procedure of bimanual compression of the uterus 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 the Learning Guide for Bimanual Compression of the Uterus.	Learning Guide for Bimanual Compression of the Uterus
Participants should be able to perform the steps/tasks in the Learning Guide for Bimanual Compression of the Uterus before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Bimanual Compression of the Uterus.	Checklist for Bimanual Compression of the Uterus
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Bimanual Compression of the Uterus.[1]	Checklist for Bimanual Compression of the Uterus

[1] If patients are not available at clinical sites for participants to practice bimanual compression of the uterus, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR BIMANUAL COMPRESSION OF THE UTERUS

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR BIMANUAL COMPRESSION OF THE UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
3. Put on personal protective equipment.					
BIMANUAL COMPRESSION					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put high-level disinfected or sterile surgical gloves on both hands.					
3. Clean the vulva and perineum with antiseptic solution.					
4. Insert one hand into the vagina and form a fist.					
5. Place the fist into the anterior vaginal fornix and apply pressure against the anterior wall of the uterus.					
6. Place the other hand on the abdomen behind the uterus.					
7. Press the abdominal hand deeply into the abdomen and apply pressure against the posterior wall of the uterus.					
8. Maintain compression until bleeding is controlled and the uterus contracts.					
POSTPROCEDURE TASKS					
1. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
2. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
3. Monitor vaginal bleeding and take the woman's vital signs: • Every 15 minutes for 1 hour • Then every 30 minutes for 2 hours					
4. Make sure that the uterus is firmly contracted					

CHECKLIST FOR BIMANUAL COMPRESSION OF THE UTERUS

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR BIMANUAL COMPRESSION OF THE UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
3. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
BIMANUAL COMPRESSION					
1. Use antiseptic handrub or wash hands thoroughly and put on high-level disinfected or sterile surgical gloves.					
2. Clean the vulva and perineum with antiseptic solution.					
3. Insert fist into anterior vaginal fornix and apply pressure against the anterior wall of the uterus.					
4. Place other hand on abdomen behind uterus, press the hand deeply into the abdomen and apply pressure against the posterior wall of the uterus.					
5. Maintain compression until bleeding is controlled and the uterus contracts.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Remove gloves and discard them in leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
2. Use antiseptic handrub or wash hands thoroughly.					
3. Monitor vaginal bleeding, take the woman's vital signs and make sure that the uterus is firmly contracted.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
COMPRESSION OF THE ABDOMINAL AORTA

PURPOSE

The purpose of this activity is to enable participants to practice compression of the abdominal aorta and achieve competency in the skills required.

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate models.	The following equipment or representations thereof: • Childbirth simulator and placenta/cord/amnion model
Participants should review the Learning Guide for Compression of the Abdominal Aorta before beginning the activity.	Learning Guide for Compression of the Abdominal Aorta
The trainer should demonstrate the steps/tasks in the procedure of compression of the abdominal aorta for participants. Under the guidance of the trainer, participants should then work in groups of three to practice the steps/tasks; while one participant performs the procedure on another, the third participant should use the Learning Guide for Compression of the Abdominal Aorta to observe performance. Participants should then reverse roles until each has had an opportunity to perform the procedure and be observed.	Learning Guide for Compression of the Abdominal Aorta
Participants should be able to perform the steps/tasks in the Learning Guide for Compression of the Abdominal Aorta before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Compression of the Abdominal Aorta.	Checklist for Compression of the Abdominal Aorta
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Compression of the Abdominal Aorta.[1]	Checklist for Compression of the Abdominal Aorta

[1] If patients are not available at clinical sites for participants to practice compression of the abdominal aorta, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR COMPRESSION OF THE ABDOMINAL AORTA

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR COMPRESSION OF THE ABDOMINAL AORTA (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
Note: Steps 1 and 2 should be implemented at the same time as the following steps.					
COMPRESSION OF THE ABDOMINAL AORTA					
1. Place a closed fist just above the umbilicus and slightly to the left.					
2. Apply downward pressure over the abdominal aorta directly through the abdominal wall.					
3. With the other hand, palpate the femoral pulse to check the adequacy of compression: ● If the pulse is palpable during compression, the pressure is inadequate. ● If the pulse is not palpable during compression, the pressure is adequate.					
4. Maintain compression until bleeding is controlled.					
POSTPROCEDURE TASKS					
1. Monitor vaginal bleeding and take the woman's vital signs: ● Every 15 minutes for 1 hour ● Then every 30 minutes for 2 hours					
2. Make sure that the uterus is firmly contracted.					

CHECKLIST FOR COMPRESSION OF THE ABDOMINAL AORTA

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR COMPRESSION OF THE ABDOMINAL AORTA (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
2. Provide continual emotional support and reassurance, as feasible.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
COMPRESSION OF THE ABDOMINAL AORTA					
1. Place a closed fist just above the umbilicus and slightly to the left.					
2. Apply downward pressure over the abdominal aorta directly through the abdominal wall.					
3. With the other hand, palpate the femoral pulse to check the adequacy of compression.					
4. Maintain compression until bleeding is controlled.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Monitor vaginal bleeding, take the woman's vital signs and make sure that the uterus is firmly contracted.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
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	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Childbirth simulator and placenta/cord/amnion model ● High-level disinfected or sterile elbow-length surgical gloves ● Personal protective equipment ● Receptacle for placenta
Participants should review the Learning Guide for Manual Removal of Placenta before beginning the activity.	Learning Guide for Manual Removal of Placenta
The trainer 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 the Learning Guide for Manual Removal of Placenta.	Learning Guide for Manual Removal of Placenta
Participants should be able to perform the steps/tasks in the Learning Guide for Manual Removal of Placenta before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Manual Removal of Placenta.	Checklist for Manual Removal of Placenta
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Manual Removal of Placenta.[1]	Checklist for Manual Removal of Placenta

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

LEARNING GUIDE FOR MANUAL REMOVAL OF PLACENTA

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR MANUAL REMOVAL OF PLACENTA (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
4. Have the woman empty her bladder or insert a catheter, if necessary.					
5. Give anesthesia (IV pethidine and diazepam, or ketamine).					
6. Give a single dose of prophylactic antibiotics: • Ampicillin 2 g IV PLUS metronidazole 500 mg IV, OR • Cefazolin 1 g IV PLUS metronidazole 500 mg IV					
7. Put on personal protective equipment.					
MANUAL REMOVAL OF PLACENTA					
1. Use antiseptic handrub or wash hands and forearms thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put high-level disinfected or sterile surgical gloves on both hands. (Note: elbow-length gloves should be used, if available.)					
3. Hold the umbilical cord with a clamp.					
4. Pull the cord gently until it is parallel to the floor.					
5. Place the fingers of one hand into the vagina and into the uterine cavity, following the direction of the cord until the placenta is located.					
6. When the placenta has been located, let go of the cord and move that hand onto the abdomen to support the fundus abdominally and to provide counter-traction to prevent uterine inversion.					
7. Move the fingers of the hand in the uterus laterally until the edge of the placenta is located.					
8. Keeping the fingers tightly together, ease the edge of the hand gently between the placenta and the uterine wall, with the palm facing the placenta.					

LEARNING GUIDE FOR MANUAL REMOVAL OF PLACENTA (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
9. Gradually move the hand back and forth in a smooth lateral motion until the whole placenta is separated from the uterine wall: ● If the placenta does not separate from the uterine wall by gentle lateral movement of the fingers at the line of cleavage, suspect placenta accreta and arrange for surgical intervention.					
10. When the placenta is completely separated: ● Palpate the inside of the uterine cavity to ensure that all placental tissue has been removed. ● Slowly withdraw the hand from the uterus bringing the placenta with it. ● Continue to provide counter-traction to the fundus by pushing it in the opposite direction of the hand that is being withdrawn.					
11. Give oxytocin 20 units in 1 L IV fluid (normal saline or Ringer's lactate) at 60 drops/minute.					
12. Have an assistant massage the fundus to encourage atonic uterine contraction.					
13. If there is continued heavy bleeding, give ergometrine 0.2 mg IM or give prostaglandins.					
14. Examine the uterine surface of the placenta to ensure that it is complete.					
15. Examine the woman carefully and repair any tears to the cervix or vagina, or repair episiotomy.					
POSTPROCEDURE TASKS					
1. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
2. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
3. Monitor vaginal bleeding and take the woman's vital signs: ● Every 15 minutes for 1 hour ● Then every 30 minutes for 2 hours					
4. Make sure that the uterus is firmly contracted.					
5. Record procedure and findings on woman's record.					

CHECKLIST FOR MANUAL REMOVAL OF PLACENTA

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR MANUAL REMOVAL OF PLACENTA (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
4. Have the woman empty her bladder or insert a catheter.						
5. Give anesthesia.						
6. Give prophylactic antibiotics.						
7. Put on personal protective equipment.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
MANUAL REMOVAL OF PLACENTA						
1. Use antiseptic handrub or wash hands and forearms thoroughly and put on high-level disinfected or sterile surgical gloves (use elbow-length gloves, if available).						
2. Hold the umbilical cord with a clamp and pull the cord gently.						
3. Place the fingers of one hand into the uterine cavity and locate the placenta.						
4. Provide counter-traction abdominally.						
5. Move the hand back and forth in a smooth lateral motion until the whole placenta is separated from the uterine wall.						
6. Withdraw the hand from the uterus, bringing the placenta with it while continuing to provide counter-traction abdominally.						
7. Give oxytocin in IV fluid.						
8. Have an assistant massage the fundus to encourage atonic uterine contraction.						
9. If there is continued heavy bleeding, give ergometrine by IM injection or prostaglandins.						

CHECKLIST FOR MANUAL REMOVAL OF PLACENTA (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Examine the uterine surface of the placenta to ensure that it is complete.					
11. Examine the woman carefully and repair any tears to the cervix or vagina or repair episiotomy.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
2. Use antiseptic handrub or wash hands thoroughly.					
3. Monitor vaginal bleeding, take the woman's vital signs and make sure that the uterus is firmly contracted.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CASE STUDY 1A: VAGINAL BLEEDING AFTER CHILDBIRTH

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 has developed.

Case Study

Mrs. A. is a 20-year-old gravida 4 para 4 who presents 6 days postpartum at the hospital complaining that she feels weak, "light-headed" and "sick." Mrs. A reports that the birth was without complication and that the baby is well. Mrs. A. admits to vaginal bleeding equal to a heavy period.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. A., and your main findings include the following:

History:

Mrs. A reports lessening of lochia during the first 4 days postpartum but increasing bright red blood during the past 2 days. She admits foul smell of lochia during past day.

Physical Examination:

Mrs. A.'s temperature is 37.2ºC, her pulse rate is 90, her blood pressure is 120/80 and her respiration rate is 20 per minute.
Her uterus is soft, nontender, and almost to the level of her umbilicus. She has no signs of cervical, vaginal or perineal trauma. Lochia is red, moderate, without foul smell. She also has mild conjunctival pallor.

Laboratory Tests:

Hemoglobin is 9 g/dL.

Mrs. A.'s hospital record does not indicate blood loss after childbirth or whether the placenta was

complete.
4. Based on these findings, what is Mrs. A.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Two hours following removal of clots and placental remnants, Mrs. A. is resting. Her temperature is 37ºC, her pulse rate is 82, her blood pressure is 120/80 and her respirations are 20. Her uterus is well contracted, 3 cm below the umbilicus. Bleeding is minimal.

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

CASE STUDY 1B: VAGINAL BLEEDING AFTER CHILDBIRTH

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.

Case Study

Mrs. B. is a 30-year-old, para four who experienced a normal spontaneous vaginal birth, at the health center, to a full-term healthy newborn weighing 4.2 kg. At the completion of second stage she was given ergometrine 0.2 mg. The placenta was delivered 5 minutes later, without complication. Thirty minutes later, Mrs. B. reports that she has heavy vaginal bleeding.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. B., and your main findings include the following:

Mrs. B.'s temperature is 37ºC, her pulse rate is 88, her blood pressure is 110/80 and her respiration rate is 18 per minute.
Her uterus is firm and well contracted. The placenta is complete.
She has no perineal trauma. Examination of the vagina and cervix is difficult because she continues to have heavy vaginal bleeding; therefore, tears of the cervix and vagina have not yet been ruled out

4. Based on these findings, what is Mrs. B.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

A cervical tear was identified and repaired. One hour following the repair, Mrs. B's temperature is 37ºC, her pulse rate is 86, her blood pressure is 110/80 and her respiration rate is 16 per minute. Her uterus remains well contracted. Bleeding is minimal.

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

CASE STUDY 2A: FEVER AFTER CHILDBIRTH

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 has developed.

Case Study

Mrs. B. is a 22-year-old para 1 who has come to the health center complaining that her perineal wound has become increasingly tender during the past 12 hours. She also says that she feels hot and unwell. Mrs. B. reports that she gave birth to a full-term newborn 3 days ago at the health center. The newborn weighed 4 kg and Mrs. B. suffered a perineal laceration that required suturing. She was counseled about danger signs before leaving the health center, including the need to seek care early if any danger signs occur.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. B., and your main findings include the following:

History:

Mrs. B. denies abdominal pain, frequent or painful urination, abdominal tenderness, foul-smelling lochia, or loss of consciousness.

Physical Examination:

Mrs. B.'s temperature is 38ºC, her pulse rate is 88 beats per minute, her blood pressure is 120/80 and her respiration rate is 20 breaths per minute. There is no abdominal tenderness. Her lochia is of normal color and amount, and without offensive odor.
Her perineal wound is tender, with pus draining from the center. The wound is not edematous but there is slight erythema present extending beyond the edge of the incision.

4. Based on these findings, what is Mrs. B.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Mrs. B. returns to the health center the next day. Her temperature is 37.6ºC. Her perineal wound is slightly less tender and there is less discharge.

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

CASE STUDY 2B: FEVER AFTER CHILDBIRTH

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 has developed.

Case Study

Mrs. D. is a pleasant 17-year-old para 1 who is 3 weeks postpartum. She comes to the health center today complaining of breast pain and tenderness, and feeling unwell. Her birth at the health center was uncomplicated and the newborn was healthy and weighed 2.9 kg. You had last seen Mrs. D. 2 days postpartum, when she and her newborn were found to be doing well.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. D., and your main findings include the following:

History:

Mrs. D. reports that for the first week or so after birth, her newborn seemed to have difficulty taking the nipple into his mouth, but more recently she thinks that he has been doing better. He feeds about 6 times in a 24-hour period and is given water between feedings. Mrs. D. had breastfed the newborn less than an hour before you examined her.

Physical Examination:

Her temperature is 38ºC, her pulse rate is 120 per minute, her blood pressure is 120/80 and her respiration rate is 20 per minute.
She has pain and tenderness in her left breast, and there is a wedge-shaped area of redness in the outer upper quadrant of the left breast. There are no areas of fluctuant swelling and no cracks or lesions on her nipples.

4. Based on these findings, what is Mrs. D.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Three days later Mrs. D. reports that she is feeling better and has stopped taking her medication. Her temperature is 37.6ºC, her pulse rate is 90 beats per minute, her blood pressure is 120/80 and her respiration rate is 20 breaths per minute. There is less pain, redness and swelling in her breast. She reports that she has stopped giving her newborn water and he has been feeding more than 6 times in 24 hours. She also reports that the newborn seems to be attaching better to the breast.

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

SKILLS PRACTICE SESSION: NEWBORN RESUSCITATION

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	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Examination table ● Newborn resuscitation model ● Suction equipment ● Self-inflating bag (newborn) ● Newborn face masks ● Clock
Participants should review the Learning Guide for Newborn Resuscitation before beginning the activity.	Learning Guide for Newborn Resuscitation
The trainer should demonstrate the steps/tasks in the procedure of newborn resuscitation, using a bag and mask, 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 the Learning Guide for Newborn Resuscitation.	Learning Guide for Newborn Resuscitation
Participants should be able to perform the steps/tasks in the Learning Guide for Newborn Resuscitation before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Newborn Resuscitation.	Checklist for Newborn Resuscitation
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Newborn Resuscitation.[1]	Checklist for Newborn Resuscitation

[1] If patients are not available at clinical sites for participants to practice newborn resuscitation, the skills should be taught, practiced and assessed in a simulated setting.

LEARNING GUIDE FOR NEWBORN RESUSCITATION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR NEWBORN RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY **Note**: Newborn resuscitation equipment should be available and ready for use at all births. Hands should be washed and gloves worn before touching the newborn.					
1. Quickly dry and wrap or cover the newborn, except for the face and upper chest.					
2. Place the newborn on its back on a clean, warm surface.					
3. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
4. Provide continual emotional support and reassurance, as feasible.					
RESUSCITATION USING BAG AND MASK					
1. Position the head in a slightly extended position to open the airway.					
2. Clear the airway by suctioning **the mouth first** and **then the nose**: ● Introduce catheter 5 cm into the newborn's mouth and suction while withdrawing catheter. ● Introduce catheter 3 cm into each nostril and suction while withdrawing catheter. ● Do not suction deep in the throat because this may cause the newborn's heart to slow or breathing to stop. ● Be especially thorough with suctioning if there is blood or meconium in the newborn's mouth and/or nose. ● If the newborn is still not breathing, start ventilating.					
3. Quickly recheck the position of the newborn's head to make sure that the neck is slightly extended.					
4. Place the mask on the newborn's face so that it covers the chin, mouth and nose.					
5. Form a seal between the mask and the newborn's face.					
6. Squeeze the bag with two fingers only or with the whole hand, depending on the size of the bag.					
7. Check the seal by ventilating two times and observing the rise of the chest.					

LEARNING GUIDE FOR NEWBORN RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
8. If the newborn's chest is rising: ● Ventilate at a rate of 40 breaths/minute. ● Observe the chest for an easy rise and fall.					
9. If the newborn's chest is not rising: ● Check the position of the head again to make sure the neck is slightly extended. ● Reposition the mask on the newborn's face to improve the seal between mask and face. ● Squeeze the bag harder to increase ventilation pressure. ● Repeat suction of mouth and nose to remove mucus, blood or meconium from the airway.					
10. Ventilate for 1 minute and then stop and quickly assess if the newborn is breathing spontaneously.					
11. If breathing is normal (30–60 breaths/minute) and there is no indrawing of the chest and no grunting: ● Put in skin-to-skin contact with mother. ● Observe breathing at frequent intervals. ● Measure the newborn's axillary temperature and rewarm if temperature is less than 36° C. ● Keep in skin-to-skin contact with mother if temperature is 36° C or less. ● Encourage mother to begin breastfeeding.					
12. If newborn is not breathing, breathing is less than 30 breaths/minute or severe chest indrawing is present, ventilate with oxygen if available. Arrange immediate transfer for special care.					
13. If there is no gasping or breathing at all after 20 minutes of ventilation, stop ventilating.					
POSTPROCEDURE TASKS					
1. Dispose of disposable suction catheters and mucus extractors in a leakproof container or plastic bag.					
2. For reusable catheters and mucus extractors: ● Place in 0.5% chlorine solution for 10 minutes for decontamination. ● Wash in water and detergent. ● Use a syringe to flush catheters/tubing. ● Boil or disinfect in an appropriate chemical solution.					
3. Take the valve and mask apart and inspect for cracks and tears.					
4. Wash the valve and mask and check for damage with water and detergent and rinse.					
5. Select a method of sterilization or high-level disinfection: ● Silicone and rubber bags and patient valves can be boiled for 10 minutes, autoclaved at 136°C or disinfected in an appropriate chemical solution (this may vary depending on the instructions provided by the manufacturer).					
6. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					

LEARNING GUIDE FOR NEWBORN RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
7. After chemical disinfection, rinse all parts with clean water and allow to air dry.					
8. Reassemble the bag.					
9. Test the bag to make sure that it is functioning: ● Block the valve outlet by making an airtight seal with the palm of your hand and observe if the bag reinflates when the seal is released. ● Repeat the test with the mask attached to the bag.					
DOCUMENTING RESUSCITATION PROCEDURES					
1. Record the following details: ● Condition of the newborn at birth ● Procedures necessary to initiate breathing ● Time from birth to initiation of spontaneous breathing ● Clinical observations during and after resuscitation measures ● Outcome of resuscitation measures ● In case of failed resuscitation measures, possible reasons for failure ● Names of providers involved					

CHECKLIST FOR NEWBORN RESUSCITATION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR NEWBORN RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Quickly wrap or cover the newborn and place on a clean, warm surface.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
RESUSCITATION USING BAG AND MASK					
1. Position the head in a slightly extended position to open the airway.					
2. Clear the airway by suctioning the mouth and nose.					
3. Position the newborn's neck and place the mask on the newborn's face so that it covers the chin, mouth and nose. Form a seal between mask and newborn's face.					
4. Ventilate at a rate of 40 breaths/minute for 1 minute and then stop and quickly assess if the newborn is breathing spontaneously.					
5. If breathing is normal, and there is no indrawing of the chest and no grunting, put in skin-to-skin contact with mother.					
6. If newborn is not breathing, breathing is less than 30 breaths/minute or severe chest indrawing is present, ventilate with oxygen if available. Arrange immediate transfer for special care.					
7. If there is no gasping or breathing at all after 20 minutes of ventilation, check heart sounds. If absent, stop ventilating.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Dispose of disposable suction catheters and mucus extractors in a leakproof container or plastic bag. Place reusable catheters and mucus extractors in 0.5% chlorine solution for decontamination. Then, clean and process.					
2. Clean and decontaminate the valve and mask and check for damage.					

CHECKLIST FOR NEWBORN RESUSCITATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Use antiseptic handrub or wash hands thoroughly.					
4. Record pertinent information on the mother's/newborn's record.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION: ENDOTRACHEAL INTUBATION

PURPOSE

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

INSTRUCTIONS	RESOURCES
This activity should be conducted in a simulated setting, using the appropriate model.	The following equipment or representations thereof: ● Model for endotracheal intubation ● Adult laryngoscope and endotracheal tubes ● Self-inflating bag and mask (adult size) ● New examination or high-level disinfected surgical gloves ● Adhesive tape
Participants should review the Learning Guide for Endotracheal Intubation before beginning the activity.	Learning Guide for Endotracheal Intubation
The trainer should demonstrate the steps/tasks in the procedure of endotracheal intubation 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 the Learning Guide for Endotracheal Intubation.	Learning Guide for Endotracheal Intubation
Participants should be able to perform the steps/tasks in the Learning Guide for Endotracheal Intubation before skill competency is assessed by the trainer in the simulated setting, using the Checklist for Endotracheal Intubation.	Checklist for Endotracheal Intubation
Finally, following supervised practice at a clinical site, the trainer should assess the skill competency of each participant, using the Checklist for Endotracheal Intubation.[1]	Checklist for Endotracheal Intubation

[1] If patients are not available at clinical sites for participants to practice endotracheal intubation, the skills should be taught, practiced and assessed in a simulated setting or, if permitted, on cadavers.

LEARNING GUIDE FOR ENDOTRACHEAL INTUBATION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR ENDOTRACHEAL INTUBATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. If the woman is conscious and responsive, tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
3. Provide continual emotional support and reassurance, as feasible.					
INTUBATION					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
2. Put new examination or high-level disinfected surgical gloves on both hands.					
3. Give 100% oxygen by bag and mask for 5 minutes.					
4. Position the woman's head on a folded sheet, ensuring her neck is not extended.					
5. If the woman is conscious, give diazepam 5–10 mg IV slowly over 2 minutes.					
6. Ask an assistant to apply pressure to the cricoid against the esophagus.					
7. Open the woman's mouth and gently insert the laryngoscope over the tongue and toward the back of the throat.					
8. If necessary, suction out any secretions in the throat.					
9. Lift the blade of the laryngoscope upward and forward, using the wrist, to visualize the glottis.					
10. Insert the endotracheal tube and stylet through the glottis into the trachea.					
11. Remove the laryngoscope.					
12. Withdraw the stylet.					
13. Inflate the cuff of the endotracheal tube with 3–5 mL of air.					
14. Connect the endotracheal tube to the Ambu bag.					

LEARNING GUIDE FOR ENDOTRACHEAL INTUBATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
ENSURING CORRECT PLACEMENT OF ENDOTRACHEAL TUBE					
1. Press the Ambu bag 2–3 times rapidly while observing the woman's chest for inflation.					
1a. If the chest inflates while pressing the Ambu bag, auscultate the chest to confirm that air is entering both lungs equally. • If air entry into both lungs is unequal, deflate the cuff and gently withdraw the endotracheal tube slightly until air entry is heard equally on both sides. Re-inflate the cuff.					
1b. If the chest does not inflate: • Deflate the cuff and withdraw the endotracheal tube. • Give 100% oxygen by bag and mask for 3 minutes. • Attempt intubation again.					
2. Once the endotracheal tube is properly positioned, use adhesive tape to fix the tube to the woman's face.					
3. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
4. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
5. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
EXTUBATION					
1. Confirm that the woman is ready for extubation.					
2. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a sterile cloth or air dry.					
3. Put new examination or high-level disinfected surgical gloves on both hands.					
4. Remove adhesive tape that holds the tube in position.					
5. Gently open the woman's mouth and suction out any secretions in the throat.					
6. Deflate the cuff of the endotracheal tube and gently remove the tube.					
7. Give oxygen by mask while ensuring that regular breathing is established.					
8. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					

LEARNING GUIDE FOR ENDOTRACHEAL INTUBATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
9. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
10. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					

CHECKLIST FOR ENDOTRACHEAL INTUBATION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR ENDOTRACHEAL INTUBATION (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. If the woman is conscious and responsive, tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.						
3. Provide continual emotional support and reassurance, as feasible.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
INTUBATION						
1. Use antiseptic handrub or wash hands thoroughly and put on new examination or high-level disinfected surgical gloves.						
2. Give oxygen.						
3. Position the woman's head.						
4. Give diazepam, if necessary.						
5. Ask an assistant to apply pressure to the cricoid against the esophagus.						
6. Insert the laryngoscope. If necessary, suction out any secretions in the throat. Visualize the glottis.						
7. Insert the endotracheal tube, remove the laryngoscope and withdraw the stylet.						
8. Inflate the cuff of the endotracheal tube and connect it to the Ambu bag.						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
ENSURING CORRECT PLACEMENT OF ENDOTRACHEAL TUBE						
1. Observe inflation of the chest and auscultate the chest to ensure correct placement of the endotracheal tube.						
2. Once the endotracheal tube is properly positioned, fix the tube to the woman's face.						
3. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.						

CHECKLIST FOR ENDOTRACHEAL INTUBATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
5. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
EXTUBATION					
1. Confirm that the woman is ready for extubation.					
2. Use antiseptic handrub or wash hands thoroughly and put on new examination or high-level disinfected surgical gloves.					
3. Remove the tube.					
4. Give oxygen while ensuring that regular breathing is established.					
5. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
6. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
7. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

SKILLS PRACTICE SESSION:
CESAREAN SECTION

PURPOSE

The purpose of this activity is to enable participants to practice performing cesarean section and achieve competency in the skills required.

INSTRUCTIONS	RESOURCES
This activity should be done in a real patient situation under close supervision of the trainer.	The following equipment or representations thereof: ● High-level disinfected or sterile surgical gloves ● Pelvic model or foam block ● Needles and syringes ● Suture materials ● Fetal model (with hard skull) ● Receptacle for placenta ● Childbirth kit
Participants should review the Learning Guide for Cesarean Section before beginning the activity.	Learning Guide for Cesarean Section
The trainer should demonstrate the correct use of all instruments and correct suturing and knots technique with a pelvic block or foam model. Under the guidance of the trainer, participants should then do a return demonstration.	Learning Guide for Cesarean Section
The trainer should then demonstrate each step of a cesarean section with a patient. One participant acts as second assistant. As second assistant, the participant observes the demonstration.	Learning Guide for Cesarean Section
With another patient, the trainer demonstrates each step again but this time the same participant acts as first assistant. As first assistant, the participant provides retraction, keeps site clear of blood, removes clamps, cuts sutures and, under guidance of the trainer, closes the abdomen.	Learning Guide for Cesarean Section
With the next patient, the same participant now performs the procedure with the trainer as first assistant.	Learning Guide for Cesarean Section
Finally, the same participant performs the procedure with a patient. The trainer acts as second assistant. The trainer should assess the skill competency of the participant, using the Checklist for Cesarean Section.	Checklist for Cesarean Section

LEARNING GUIDE FOR CESAREAN SECTION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Obtain blood for hemoglobin and blood type and cross-match 2 units of blood.					
5. Set up an IV line and infuse 500 cc of IV fluids (normal saline or Ringer's lactate).					
6. Give premedication including: • Atropine 0.6 mg IM (or IV if in theater) • Magnesium trisilicate 300 mg					
7. Catheterize the woman's bladder.					
8. Help the woman to put on a gown and cap.					
9. Evaluate anesthetic options: • General anesthetic • Local anesthetic • Spinal anesthetic					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub for 3 to 5 minutes and dry each hand on a separate high-level disinfected or sterile towel.					
3. Put on a sterile gown and put high-level disinfected or sterile surgical gloves on both hands.					

LEARNING GUIDE FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
5. Ensure that an assistant is scrubbed and dressed.					
PREPARING THE WOMAN					
1. Tilt operating table to the left or place a pillow under the woman's right lower back.					
2. Ensure that the woman has been anesthetized and the anesthesia has taken full effect.					
3. Apply antiseptic solution to the incision site and surrounding area three times. Allow to dry.					
4. Drape the abdomen, leaving the surgical area exposed, and then drape the woman.					
PROCEDURE					
1. Ask the instrument nurse to stand with the instrument tray on the other side toward the foot of the woman.					
2. Stand on the right side of the woman and ask the assistant to stand on the left side of the woman.					
3. Make a midline vertical incision below the umbilicus to the pubic hair (or Pfannenstiel's incision), through the skin and to the level of the fascia.					
4. Clamp any significant bleeding points with artery forceps, and tie off the vessels with plain 0 catgut or cauterize the tissue.					
5. Make a 2–3 cm vertical incision in the fascia (or transverse incision if using Pfannenstiel's incision).					
6. Hold the fascial edge with forceps and lengthen the incision up and down using scissors.					
7. Use fingers or scissors to separate the rectus muscle.					
8. Use fingers to make an opening in the peritoneum near the umbilicus. Use scissors to lengthen the incision up and down in order to see the entire uterus. Carefully, to prevent bladder injury, use scissors to separate layers and open the lower part of the peritoneum.					
9. Place a bladder retractor over the pubic bone.					
10. Use forceps to pick up the loose peritoneum covering the anterior surface of the lower uterine segment and incise with scissors.					
11. Extend the incision by placing the scissors between the uterus and the loose serosa and cutting about 3 cm on each side in a transverse fashion.					
12. Replace the bladder retractor over the pubic bone to retract the bladder downward.					
13. Use a scalpel to make a 3 cm transverse incision in the lower segment of the uterus. It should be about 1 cm below the level where the vesico-uterine serosa was incised to bring the bladder down.					

LEARNING GUIDE FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
14. Widen the incision by placing a finger at each edge and gently pulling upward and laterally at the same time.					
15. If it is necessary to extend the incision, do so using scissors instead of fingers to avoid extension into the uterine vessels. Make a crescent-shaped incision.					
16. If the membranes are intact, rupture them. Ask the assistant to suction the liquid.					
DELIVERING THE NEWBORN					
1. Place one hand inside the uterine cavity between the uterus and the fetal head.					
2. With your fingers, grasp and flex the head.					
3. Gently lift the fetal head through the incision, taking care not to extend the incision down toward the cervix.					
4. With the other hand, gently press on the abdomen over the top of the uterus to help deliver the head.					
5. If the fetal head is deep in the pelvis or vagina, ask an assistant (not the scrubbed nurse) to put on high-level disinfected gloves and push the head up through the vagina from below. Then lift and deliver the head.					
6. Suction the newborn's mouth and nose when delivered.					
7. If uterine tone is inadequate ask an assistant to check the blood pressure and give ergometrine 0.2 mg IV/IM if the blood pressure is < 160/110. If blood pressure is 160/110 or higher give oxytocin 20 units in 1 L IV at 60 drops per minute for 2 hours.					
8. Deliver the shoulders and body.					
9. Clamp the cord at two points and cut it.					
10. Hand the newborn to midwife or assistant.					
11. Ask an assistant to give a single dose of prophylactic antibiotics—ampicillin 2 g IV or cefazolin 1 g IV.					
12. Deliver the placenta by cord traction or manually.					
13. Quickly inspect the placenta for completeness and abnormalities. Dilate cervix from above if necessary.					
CLOSING THE UTERINE INCISION AND ABDOMEN					
1. Conduct an instrument and swab count.					
2. Grasp the edges and corners of the uterine incision with Green Armytage clamps or ring forceps. Make sure that the clamp on the lower edge of the incision is separate from the bladder.					
3. Repair the incision, starting at the corner using a continuous locking stitch of 0 chromic catgut suture. Take care not to touch the needle with fingers.					
4. Ensure hemostatsis. If there is any further bleeding from the incision site, close with figure-of-eight sutures.					
5. Make sure there is no bleeding and the uterus is firm.					

LEARNING GUIDE FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Before closing the abdomen, check for injury to the bladder. If the bladder has been injured, identify the extent of the injury and repair it.					
7. Hold the fascia at the upper and lower ends of the incision using Kocher's forceps. Place a clamp midway on either side of the incision.					
8. Close the fascia: ● Use a toothed dissecting forceps and a cutting needle threaded with 0 chromic catgut (or polyglycolic) suture mounted in a needle holder. ● Pass the needle into the fascia on the woman's right side from the inside out, starting at the upper end of the incision. ● Pass the needle through the fascia on the woman's left side from the outside to the inside of the incision. ● Tie the knot. ● Take care not to touch needle with fingers.					
9. Continue the closure of the fascia with a running suture until the lower end of the incision is reached, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
10. Tie off the suture: ● Once the lower end of the incision is reached, tie a knot with the suture. ● Pull upward on the suture and knot. ● Reinsert the needle into the fascia just below the knot and bring it out through the fascia about 1 cm above the knot (toward the upper end of the incision). ● Pull on the suture to bury the knot under the fascia. ● Cut the suture flush with the fascia.					
11. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection: ● Use a toothed dissecting forceps and a round needle threaded with plain catgut in a needle holder to place interrupted sutures to bring the fat layer together, if necessary. ● Use a toothed dissecting forceps and a cutting needle in a needle holder with 3-0 nylon (or silk) to place interrupted mattress sutures about 2 cm apart to bring the skin layer together.					
12. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
13. Evacuate clots from vagina using forceps and swab and put on sterile pad.					
14. Assist in getting woman off operating table.					
POSTPROCEDURE TASKS					
1. Before removing gloves, remove blade from knife handle, and dispose of blade and all suture needles in sharps container. Dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					

LEARNING GUIDE FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
4. Remove gown and then immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
5. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
6. Write notes of the operation, postoperative observations and management instructions.					
7. Monitor pulse, blood pressure, respiration rate and bleeding, both from the wound and vaginally.					
8. Assess the woman before she is transferred out of the recovery area.					
9. Check woman on the ward daily or as frequently as necessary.					
10. Discuss reasons for cesarean section, family planning and future pregnancies before discharge.					
11. Schedule appointment for postpartum care.					

CHECKLIST FOR CESAREAN SECTION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
GETTING READY						
1. Prepare the necessary equipment.						
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.						
3. Examine the woman, assess her condition and examine the medical record for information and completeness.						
4. Obtain blood for hemoglobin and blood type and cross-match 2 units of blood.						
5. Set up an IV line and infuse 500 cc of IV fluids.						
6. Give premedication including: • Atropine 0.6 mg IM (or IV if in theater) • Magnesium trisilicate 300 mg						
7. Catheterize the woman's bladder.						
8. Help the woman to put on a gown and cap.						
9. Evaluate anesthetic options: • General anesthetic • Local anesthetic • Spinal anesthetic						
SKILL/ACTIVITY PERFORMED SATISFACTORILY						
PREPROCEDURE TASKS						
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.						
2. Perform a surgical handscrub and put on high-level disinfected or sterile surgical gloves and a sterile gown.						
3. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.						
4. Ensure that an assistant is scrubbed and dressed.						

CHECKLIST FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPARING THE WOMAN					
1. Tilt operating table to the left or place a pillow under the woman's right lower back.					
2. Ensure that the anesthesia has taken full effect.					
3. Apply antiseptic solution to the abdomen, allow to dry, and place a drape over the woman.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PROCEDURE					
1. Make a 2–3 cm midline vertical incision below the umbilicus to the pubic hair (or transverse incision if using Pfannenstiel's incision) through skin and fascia.					
2. Lengthen the incision and separate the rectus muscle.					
3. Open the lower part of the peritoneum.					
4. Place a bladder retractor over the pubic bone.					
5. Extend the incision by 3 cm on each side.					
6. Push the bladder downward off the lower uterine segment and replace the bladder retractor over the pubic bone to retract the bladder downward.					
7. Make a 3 cm transverse incision in the lower segment of the uterus.					
8. Widen the incision. Extend the incision, if necessary.					
9. If the membranes are intact, rupture them.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
DELIVERING THE NEWBORN					
1. Place one hand inside the uterine cavity between the uterus and the fetal head.					
2. Grasp and flex the head, and gently lift the fetal head through the incision.					
3. Gently press on the abdomen over the top of the uterus to help deliver the head. If necessary, ask an assistant to push the head up through the vagina from below.					
4. If uterine tone is inadequate, check the blood pressure and give ergometrine 0.2 mg IV/IM if blood pressure is <160/110. If the blood pressure is 160/110 or higher, give oxytocin 20 units in 1 L IV at 60 drops per minute for 2 hours.					
5. Suction the newborn's mouth and nose when delivered.					
6. Clamp the cord at two points and cut it.					
7. Ask an assistant to give a single dose of prophylactic antibiotics—ampicillin 2 g IV or cefazolin 1 g IV.					
8. Deliver the placenta and inspect it for completeness or abnormalities.					
9. Dilate cervix from above if necessary.					

CHECKLIST FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Conduct an instrument and swab count.					
11. Repair the uterus and ensure hemostatsis.					
12. Ensure that there is no further bleeding.					
13. Check the bladder for injury and repair injury, if necessary.					
14. Inspect the wall of the uterus and close the fascia with a running suture, using a cutting needle and 0 chromic catgut (or polyglycolic) suture, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
15. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection, close the fat layer, if necessary, with an interrupted suture, using a round needle and plain catgut, and close the skin with interrupted mattress sutures about 2 cm apart, using a cutting needle and 3-0 nylon or silk.					
16. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
17. Evacuate clots from vagina using forceps and swab and put on sterile pad.					
18. Assist in getting woman off operating table.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE TASKS					
1. Before removing gloves, remove blade from knife handle. Dispose of blade and all suture needles in sharps container, and dispose of waste materials in a leakproof container or plastic bag.					
2. Place all instruments in 0.5% chlorine solution for decontamination.					
3. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
4. Remove gown and gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
5. Use antiseptic handrub or wash hands thoroughly.					
6. Write operation notes and post-operative management instructions.					
7. Monitor pulse, blood pressure, respiration rate and bleeding, wound and vaginally.					
8. Assess the woman before she is transferred out of the recovery area.					
9. Check woman on the ward daily or as frequently as necessary.					

CHECKLIST FOR CESAREAN SECTION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Discuss reasons for cesarean section, family planning and future pregnancies before discharge.					
11. Schedule appointment for postpartum care.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR EMERGENCY LAPAROTOMY

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Set up an IV line and infuse IV fluids (normal saline or Ringer's lactate) and check hemoglobin and availability of cross-matched blood.					
5. Catheterize the woman's bladder.					
6. Arrange for anesthesia.					
7. Ask the anesthetist to give a single dose of prophylactic antibiotics: • Ampicillin 2 g IV PLUS metronidazole 500 mg IV, OR • Cefazolin 1 g IV PLUS metronidazole 500 mg IV					
8. Put on personal protective equipment.					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub for 3 to 5 minutes and dry each hand on a separate high-level disinfected or sterile towel.					
3. Put on a sterile gown and put high-level disinfected or sterile surgical gloves on both hands.					
4. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
5. Ensure that an assistant is scrubbed and dressed.					

LEARNING GUIDE FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the woman has been anesthetized and the anesthesia has taken full effect (ideally general anesthetic).					
3. Apply antiseptic solution to the incision site three times.					
4. Drape the abdomen, leaving the surgical area exposed, and then drape the woman.					
OPENING THE ABDOMEN					
1. Ask the instrument nurse to stand with the instrument tray toward the foot of the woman.					
2. Stand on the right side of the woman and ask the assistant to stand on the left side of the woman.					
3. Make a midline vertical incision below the umbilicus to the pubic hair, through the skin and to the level of the fascia.					
4. Clamp any significant bleeding points with artery forceps, and tie off the vessels with plain 0 catgut or cauterize the tissue.					
5. Make a 2–3 cm vertical incision in the fascia.					
6. Hold the fascial edges with forceps and push the tip of closed scissors under the fascia and above the rectus muscles through this incision.					
7. Open the scissors to make a tunnel under the fascia.					
8. Close the scissors and withdraw them. Use the scissors to cut the fascia along and up to the end of the tunnel.					
9. Repeat steps 7–9 until the fascia is opened to the end of the skin incision.					
10. Insert the index fingers of both hands, back to back, between the rectus muscles (abdominal wall muscles) and separate the muscles. At the lower end, separate the two pyramidalis muscles by using scissors to cut the aponeurosis between them. The peritoneum should now be exposed.					
11. Use fingers to make an opening in the peritoneum near the umbilicus. Alternatively, lift the peritoneum with two forceps, ensure that no intra-abdominal contents are caught in forceps, and incise the peritoneum.					
12. Lift the peritoneum up using forceps.					
13. Use scissors to extend the incision in the peritoneum up and down, under direct vision, taking care to avoid damage to the bladder and other organs. Remove the forceps.					
14. Legate the active bleeders.					
15. Place a bladder retractor over the pubic bone.					
16. Place self-retaining abdominal retractors.					

LEARNING GUIDE FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
INSPECTING THE ABDOMEN					
1. Conduct a general examination of the peritoneal cavity to detect any abnormality and operative diagnosis; treat accordingly.					
2. Before closing the abdomen, check for injury to the bladder. If the bladder has been injured, identify the extent of the injury and repair it.					
CLOSING THE ABDOMEN					
1. Conduct an instrument and swab count.					
2. Hold the fascia at the upper and lower ends of the incision using Kocher's forceps. Place a clamp midway on either side of the incision.					
3. Close the fascia: ● Use a toothed dissecting forceps and a cutting needle threaded with 0 chromic catgut (or polyglycolic) suture mounted in a needle holder. ● Pass the needle into the fascia on the woman's right side from the inside out, starting at the upper end of the incision. ● Pass the needle through the fascia on the woman's left side from the outside to the inside of the incision. ● Tie the knot.					
4. Continue the closure of the fascia with a running suture until the lower end of the incision is reached, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
5. Tie off the suture: ● Once the lower end of the incision is reached, tie a knot with the suture. ● Pull upward on the suture and knot. ● Reinsert the needle into the fascia just below the knot and bring it out through the fascia about 1 cm above the knot (toward the upper end of the incision). ● Pull on the suture to bury the knot under the fascia. ● Cut the suture flush with the fascia.					
6. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection: ● Use a toothed dissecting forceps and a round needle threaded with plain catgut in a needle holder to place interrupted sutures to bring the fat layer together, if necessary. ● Use a toothed dissecting forceps and a cutting needle in a needle holder with 3-0 nylon (or silk) to place interrupted mattress sutures about 2 cm apart to bring the skin layer together.					
7. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
8. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
9. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					

LEARNING GUIDE FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Decontaminate or dispose of needle or syringe: • If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. • If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
11. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
12. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
POSTPROCEDURE CARE					
1. Transfer the woman to recovery area. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Write notes of the operation, postoperative observations and management instructions.					
3. Assess the woman before she is transferred out of the recovery area.					
4. Once the woman has woken fully from the anesthesia, explain what was found at surgery and what procedures have been done.					
5. Ensure the woman has written postoperative instructions (e.g., awareness of complications and warning signs, when to return to work) and necessary medications before discharge.					
6. Tell her when to return if followup is needed and that she can return anytime she has concerns.					
7. Discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning.					

CHECKLIST FOR EMERGENCY LAPAROTOMY

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Set up an IV line and infuse IV fluids.					
5. Catheterize the woman's bladder.					
6. Have anesthetist give anesthesia and prophylactic antibiotics.					
7. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub and put on high-level disinfected or sterile surgical gloves and a sterile gown.					
3. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
4. Ensure that an assistant is scrubbed and dressed.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the anesthesia has taken full effect.					

CHECKLIST FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Apply antiseptic solution to the abdomen and place a drape over the woman.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
OPENING THE ABDOMEN					
1. Make a 2–3 cm midline vertical incision below the umbilicus to the pubic hair through skin and fascia.					
2. Lengthen the incision and separate the rectus muscle.					
3. Place a bladder retractor and self-retaining abdominal retractors.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
INSPECTING THE ABDOMEN					
1. Conduct a general examination of the peritoneal cavity to detect any abnormality and operative diagnosis; treat accordingly.					
2. Check the bladder for injury and repair injury, if necessary.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
CLOSING THE ABDOMEN					
1. Conduct an instrument and swab count.					
2. Close the fascia with a running suture, using a cutting needle and 0 chromic catgut (or polyglycolic) suture, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
3. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection, close the fat layer, if necessary, with an interrupted suture, using a round needle and plain catgut, and close the skin with interrupted mattress sutures about 2 cm apart, using a cutting needle and 3-0 nylon or silk.					
4. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
5. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
6. Place all instruments in 0.5% chlorine solution for decontamination.					
7. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
8. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
9. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR EMERGENCY LAPAROTOMY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
POSTPROCEDURE CARE					
1. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Explain to the woman what was found at surgery and what procedures have been done.					
3. Ensure the woman has written postoperative instructions, necessary medications before discharge and instructions regarding a followup visit.					
4. Provide counseling on prognosis for fertility and, if appropriate, provide family planning.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Infuse IV fluids (normal saline or Ringer's lactate) and check hemoglobin and availability of cross-matched blood.					
5. Catheterize the woman's bladder.					
6. Arrange for anesthesia.					
7. Ask the anesthetist to give a single dose of prophylactic antibiotics: • Ampicillin 2 g IV PLUS metronidazole 500 mg IV, OR • Cefazolin 1 g IV PLUS metronidazole 500 mg IV					
8. Put on personal protective equipment.					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub for 3 to 5 minutes and dry each hand on a separate high-level disinfected or sterile towel.					
3. Put on a sterile gown and put high-level disinfected or sterile surgical gloves on both hands.					
4. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
5. Ensure that an assistant is scrubbed and dressed.					

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the woman has been anesthetized and the anesthesia has taken full effect.					
3. Apply antiseptic solution to the incision site three times.					
4. Drape the abdomen, leaving the surgical area exposed, and then drape the woman.					
OPENING THE ABDOMEN					
1. Ask the instrument nurse to stand with the instrument tray at the foot of the woman.					
2. Stand on the right side of the woman and ask the assistant to stand on the left side of the woman.					
3. Make a midline vertical incision below the umbilicus to the pubic hair, through the skin and to the level of the fascia.					
4. Clamp any significant bleeding points with artery forceps, and tie off the vessels with plain 0 catgut or cauterize the tissue.					
5. Make a 2–3 cm vertical incision in the fascia.					
6. Hold the fascial edges with forceps and push the tip of closed scissors under the fascia and above the rectus muscles through this incision.					
7. Open the scissors to make a tunnel under the fascia.					
8. Close the scissors and withdraw them. Use the scissors to cut the fascia along and up to the end of the tunnel.					
9. Repeat steps 7–9 until the fascia is opened to the end of the skin incision.					
10. Insert the index fingers of both hands, back to back, between the rectus muscles (abdominal wall muscles) and separate the muscles. At the lower end, separate the two pyramidalis muscles by using scissors to cut the aponeurosis between them. The peritoneum should now be exposed.					
11. Use fingers to make an opening in the peritoneum near the umbilicus.					
12. Lift the peritoneum up using forceps.					
13. Use scissors to extend the incision in the peritoneum up and down, under direct vision, taking care to avoid damage to the bladder and other organs. Remove the forceps.					
14. Place a bladder retractor over the pubic bone.					
15. Place self-retaining abdominal retractors.					
SALPINGECTOMY					
1. Identify and bring to view the fallopian tube with the ectopic pregnancy and its ovary.					
2. Apply traction forceps (e.g., Babcock) to increase exposure and clamp the mesosalpinx to stop bleeding.					

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Aspirate blood from the lower abdomen and remove blood clots.					
4. Use gauze moistened with warm, sterile saline to pack away the bowel and omentum from the operative field.					
5. Divide the mesosalpinx using a series of clamps, applying each clamp close to the tube.					
6. Transfix and tie the divided mesosalpinx with 2-0 chromic catgut (or polyglycolic) suture before releasing the clamps.					
7. Place a proximal suture around the tube at the isthmic end and excise the tube.					
8. Ensure that there is no bleeding from the cut ends of the fallopian tube and remove blood clots.					
9. Before closing the abdomen, check for injury to the bladder. If the bladder has been injured, identify the extent of the injury and repair it.					
CLOSING THE ABDOMEN					
1. Check instruments and swabs.					
2. Hold the fascia at the upper and lower ends of the incision using Kocher's forceps. Place a clamp midway on either side of the incision.					
3. Close the fascia: ● Use a toothed dissecting forceps and a cutting needle threaded with 0 chromic catgut (or polyglycolic) suture mounted in a needle holder. ● Pass the needle into the fascia on the woman's right side from the inside out, starting at the upper end of the incision. ● Pass the needle through the fascia on the woman's left side from the outside to the inside of the incision. ● Tie the knot.					
4. Continue the closure of the fascia with a running suture until the lower end of the incision is reached, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
5. Tie off the suture: ● Once the lower end of the incision is reached, tie a knot with the suture. ● Pull upward on the suture and knot. ● Reinsert the needle into the fascia just below the knot and bring it out through the fascia about 1 cm above the knot (toward the upper end of the incision). ● Pull on the suture to bury the knot under the fascia. ● Cut the suture flush with the fascia.					

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection: ● Use a toothed dissecting forceps and a round needle threaded with plain catgut in a needle holder to place interrupted sutures to bring the fat layer together, if necessary. ● Use a toothed dissecting forceps and a cutting needle in a needle holder with 3-0 nylon (or silk) to place interrupted mattress sutures about 2 cm apart to bring the skin layer together.					
7. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
8. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
9. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
10. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					
11. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
12. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
POSTPROCEDURE CARE					
1. Transfer the woman to the recovery area. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Write notes of the operation, postoperative observations and management instructions.					
3. Assess the woman before she is transferred out of the recovery area.					
4. Once the woman has woken fully from the anesthesia, explain what was found at surgery and what procedures have been done.					
5. Ensure the woman has written postoperative instructions (e.g., awareness of complications and warning signs, when to return to work) and necessary medications before discharge.					

LEARNING GUIDE FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
6. Tell her when to return if followup is needed and that she can return anytime she has concerns.					
7. Discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning.					

CHECKLIST FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Infuse IV fluids.					
5. Catheterize the woman's bladder.					
6. Have anesthetist give anesthesia and prophylactic antibiotics.					
7. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub and put on high-level disinfected or sterile surgical gloves and a sterile gown.					
3. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
4. Ensure that an assistant is scrubbed and dressed.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the anesthesia has taken full effect.					

CHECKLIST FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Apply antiseptic solution to the abdomen and place a drape over the woman.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
OPENING THE ABDOMEN					
1. Make a 2–3 cm midline vertical incision below the umbilicus to the pubic hair through skin and fascia.					
2. Lengthen the incision and separate the rectus muscle.					
3. Place a bladder retractor and self-retaining abdominal retractors.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
SALPINGECTOMY					
1. Identify and bring to view the affected fallopian tube and its ovary.					
2. Clamp the mesosalpinx to stop bleeding, aspirate blood from the abdomen and remove any blood clots.					
3. Use moist gauze to pack away the bowel and omentum from the operative field.					
4. Divide the mesosalpinx using a series of clamps and tie the mesosalpinx with 2-0 chromic catgut (or polyglycolic) suture.					
5. Place a proximal suture around the tube at the isthmic end and excise the tube.					
6. Ensure that there is no bleeding.					
7. Check the bladder for injury and repair injury, if necessary.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
CLOSING THE ABDOMEN					
1. Check instruments and swabs.					
2. Close the fascia with a running suture, using a cutting needle and 0 chromic catgut (or polyglycolic) suture, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
3. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection, close the fat layer, if necessary, with an interrupted suture, using a round needle and plain catgut, and close the skin with interrupted mattress sutures about 2 cm apart, using a cutting needle and 3-0 nylon or silk.					
4. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
5. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
6. Place all instruments in 0.5% chlorine solution for decontamination.					

CHECKLIST FOR SALPINGECTOMY FOR ECTOPIC PREGNANCY (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
7. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
8. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
9. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE CARE					
1. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Explain to the woman what was found at surgery and what procedures have been done.					
3. Ensure the woman has written postoperative instructions, necessary medications before discharge and instructions regarding a followup visit.					
4. Provide counseling on prognosis for fertility and, if appropriate, provide family planning.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR LAPAROTOMY AND REPAIR OF RUPTURED UTERUS

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR LAPAROTOMYAND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Infuse IV fluids (normal saline or Ringer's lactate) and check hemoglobin and availability of cross-matched blood.					
5. Catheterize the woman's bladder.					
6. Arrange for anesthesia.					
7. Ask the anesthetist to give a single dose of prophylactic antibiotics: • Ampicillin 2 g IV PLUS metronidazole 500 mg IV, OR • Cefazolin 1 g IV PLUS metronidazole 500 mg IV					
8. Put on personal protective equipment.					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub for 3 to 5 minutes and dry each hand on a separate high-level disinfected or sterile towel.					
3. Put on a sterile gown and put high-level disinfected or sterile surgical gloves on both hands.					
4. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
5. Ensure that an assistant is scrubbed and dressed.					

LEARNING GUIDE FOR LAPAROTOMYAND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the woman has been anesthetized and the anesthesia has taken full effect.					
3. Apply antiseptic solution to the incision site three times.					
4. Drape the abdomen, leaving the surgical area exposed, and then drape the woman.					
OPENING THE ABDOMEN					
1. Ask the instrument nurse to stand with the instrument tray at the foot of the woman.					
2. Stand on the right side of the woman and ask the assistant to stand on the left side of the woman.					
3. Make a midline vertical incision below the umbilicus to the pubic hair, through the skin and to the level of the fascia.					
4. Clamp any significant bleeding points with artery forceps, and tie off the vessels with plain 0 catgut or cauterize the tissue.					
5. Make a 2–3 cm vertical incision in the fascia.					
6. Hold the fascial edges with forceps and push the tip of closed scissors under the fascia and above the rectus muscles through this incision.					
7. Open the scissors to make a tunnel under the fascia.					
8. Close the scissors and withdraw them. Use the scissors to cut the fascia along and up to the end of the tunnel.					
9. Repeat steps 7–9 until the fascia is opened to the end of the skin incision.					
10. Insert the index fingers of both hands, back to back, between the rectus muscles (abdominal wall muscles) and separate the muscles. At the lower end, separate the two pyramidalis muscles by using scissors to cut the aponeurosis between them. The peritoneum should now be exposed.					
11. Use fingers to make an opening in the peritoneum near the umbilicus. Alternatively, lift the peritoneum with two forceps, ensure that no intra-abdominal contents are caught in forceps, and incise the peritoneum.					
12. Lift the peritoneum up using forceps.					
13. Use scissors to extend the incision in the peritoneum up and down, under direct vision, taking care to avoid damage to the bladder and other organs. Remove the forceps.					
14. Examine the abdomen and the uterus for the site of rupture.					
15. Aspirate blood from the lower abdomen and remove any blood clots.					
16. Place a bladder retractor over the pubic bone.					
17. Place self-retaining abdominal retractors.					

LEARNING GUIDE FOR LAPAROTOMYAND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
REPAIR OF UTERINE RUPTURE					
1. Deliver the newborn and placenta.					
2. Ask the anesthetist to infuse oxytocin 20 units in 1 L normal saline or Ringer's lactate at 60 drops per minute.					
3. Check for uterine contractions. After the uterus contracts, ask the anesthetist to reduce oxytocin infusion rate to 20 drops per minute.					
4. Lift the uterus out of the pelvis and examine the front, back and sides of the uterus.					
5. Hold the bleeding edges of the uterus with Green Armytage clamps (or ring forceps).					
6. Separate the urinary bladder from the lower uterine segment by sharp and blunt dissection.					
7. Determine if the tear is through the cervix and vagina or laterally through the uterine artery or if there is a broad ligament hematoma, and repair as necessary.					
8. Repair the uterine tear using continuous locking sutures with 0 chromic catgut (or polyglycolic) suture, ensuring the ureter is not included in a stitch.					
9. Place a second layer of sutures if bleeding is not controlled or if the upper segment of the uterus is involved in the rupture.					
10. Check the fallopian tubes and ovaries. If tubal ligation was requested, perform the procedure.					
11. If there is bleeding, control by clamping with long artery forceps and ligating. If the bleeding points are deep, use figure-of-eight sutures.					
12. Place an abdominal drain: • Make a stab incision in the lower abdomen about 3–4 cm away from the edge of the midline incision, just below the level of the anterior superior iliac spine. • Insert a long clamp through the incision. • Grasp the end of the abdominal drain and bring this end out through the incision. • Ensure that the peritoneal end of the drain is in place and anchor the drain to the skin with nylon or silk suture.					
13. Ensure there is no bleeding and remove any blood clots. If there is a hematoma, drain the hematoma.					
14. Before closing the abdomen, check for injury to the bladder. If the bladder has been injured, identify the extent of the injury and repair it.					
CLOSING THE ABDOMEN					
1. Conduct an instrument and swab count.					
2. Hold the fascia at the upper and lower ends of the incision using Kocher's forceps. Place a clamp midway on either side of the incision.					

LEARNING GUIDE FOR LAPAROTOMYAND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Close the fascia: ● Use a toothed dissecting forceps and a cutting needle threaded with 0 chromic catgut (or polyglycolic) suture mounted in a needle holder. ● Pass the needle into the fascia on the woman's right side from the inside out, starting at the upper end of the incision. ● Pass the needle through the fascia on the woman's left side from the outside to the inside of the incision. ● Tie the knot.					
4. Continue the closure of the fascia with a running suture until the lower end of the incision is reached, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
5. Tie off the suture: ● Once the lower end of the incision is reached, tie a knot with the suture. ● Pull upward on the suture and knot. ● Reinsert the needle into the fascia just below the knot and bring it out through the fascia about 1 cm above the knot (toward the upper end of the incision). ● Pull on the suture to bury the knot under the fascia. ● Cut the suture flush with the fascia.					
6. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection: ● Use a toothed dissecting forceps and a round needle threaded with plain catgut in a needle holder to place interrupted sutures to bring the fat layer together, if necessary. ● Use a toothed dissecting forceps and a cutting needle in a needle holder with 3-0 nylon (or silk) to place interrupted mattress sutures about 2 cm apart to bring the skin layer together.					
7. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
8. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
9. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
10. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					

LEARNING GUIDE FOR LAPAROTOMYAND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
11. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
12. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
POSTPROCEDURE CARE					
1. Transfer the woman to the recovery area. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Write notes of the operation, postoperative observations and management instructions.					
3. Assess the woman before she is transferred out of the recovery area.					
4. Once the woman has woken fully from the anesthesia, explain what was found at surgery and what procedures have been done.					
5. Ensure the woman has written postoperative instructions (e.g., awareness of complications and warning signs, when to return to work) and necessary medications before discharge.					
6. Tell her when to return if followup is needed and that she can return anytime she has concerns.					
7. If tubal ligation was not performed, discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning. If the woman wishes to have more children, advise her to have an elective cesarean section for future pregnancies.					

CHECKLIST FOR LAPAROTOMY AND REPAIR OF RUPTURED UTERUS

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR LAPAROTOMY AND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Infuse IV fluids.					
5. Catheterize the woman's bladder.					
6. Have anesthetist give anesthesia and prophylactic antibiotics.					
7. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub and put on high-level disinfected or sterile surgical gloves and a sterile gown.					
3. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
4. Ensure that an assistant is scrubbed and dressed.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the anesthesia has taken full effect.					

CHECKLIST FOR LAPAROTOMY AND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Apply antiseptic solution to the abdomen and place a drape over the woman.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
OPENING THE ABDOMEN					
1. Make a 2–3 cm midline vertical incision below the umbilicus to the pubic hair through skin and fascia.					
2. Lengthen the incision and separate the rectus muscle.					
3. Examine the uterus for the site of rupture.					
4. Aspirate blood from the abdomen and remove any blood clots.					
5. Place a bladder retractor and self-retaining abdominal retractors.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
REPAIR OF UTERINE RUPTURE					
1. Deliver the newborn and placenta.					
2. Infuse oxytocin.					
3. Separate urinary bladder from uterus.					
4. Determine if the tear is through the cervix and vagina or laterally through the uterine artery or if there is a broad ligament hematoma, and repair as necessary.					
5. Repair uterine tear using continuous locking sutures with 0 chromic catgut (or polyglycolic) suture.					
6. Check the fallopian tubes and ovaries, and perform tubal ligation, if requested.					
7. Control bleeding by clamping and using figure-of-eight sutures.					
8. Place an abdominal drain.					
9. Check the bladder for injury and repair injury, if necessary.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
CLOSING THE ABDOMEN					
1. Conduct an instrument and swab count.					
2. Inspect the wall of the uterus and close the fascia with a running suture, using a cutting needle and 0 chromic catgut (or polyglycolic) suture, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
3. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection, close the fat layer, if necessary, with an interrupted suture, using a round needle and plain catgut, and close the skin with interrupted mattress sutures about 2 cm apart, using a cutting needle and 3-0 nylon or silk.					
4. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					

CHECKLIST FOR LAPAROTOMY AND REPAIR OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
5. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
6. Place all instruments in 0.5% chlorine solution for decontamination.					
7. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
8. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
9. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE CARE					
1. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Explain to the woman what was found at surgery and what procedures have been done.					
3. Ensure the woman has written postoperative instructions, necessary medications before discharge and instructions regarding a followup visit.					
4. If tubal ligation was not performed, discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning. If the woman wishes to have more children, advise her to have an elective cesarean section for future pregnancies.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR LAPAROTOMY AND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Set up an IV line and infuse IV fluids (normal saline or Ringer's lactate) and check hemoglobin and availability of cross-matched blood.					
5. Catheterize the woman's bladder.					
6. Arrange for anesthesia.					
7. Ask the anesthetist to give a single dose of prophylactic antibiotics: • Ampicillin 2 g IV PLUS metronidazole 500 mg IV, OR • Cefazolin 1 g IV PLUS metronidazole 500 mg IV					
8. Put on personal protective equipment.					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub for 3 to 5 minutes and dry each hand on a separate high-level disinfected or sterile towel.					
3. Put on a sterile gown and put high-level disinfected or sterile surgical gloves on both hands.					

LEARNING GUIDE FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
5. Ensure that an assistant is scrubbed and dressed.					
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the woman has been anesthetized and the anesthesia has taken full effect.					
3. Apply antiseptic solution to the incision site three times.					
4. Drape the abdomen, leaving the surgical area exposed, and then drape the woman.					
OPENING THE ABDOMEN					
1. Ask the instrument nurse to stand with the instrument tray at the foot of the woman.					
2. Stand on the right side of the woman and ask the assistant to stand on the left side of the woman.					
3. Make a midline vertical incision below the umbilicus to the pubic hair, through the skin and to the level of the fascia.					
4. Clamp any significant bleeding points with artery forceps, and tie off the vessels with plain 0 catgut or cauterize the tissue.					
5. Make a 2–3 cm vertical incision in the fascia.					
6. Hold the fascial edges with forceps and push the tip of closed scissors under the fascia and above the rectus muscles through this incision.					
7. Open the scissors to make a tunnel under the fascia.					
8. Close the scissors and withdraw them. Use the scissors to cut the fascia along and up to the end of the tunnel.					
9. Repeat steps 7–9 until the fascia is opened to the end of the skin incision.					
10. Insert the index fingers of both hands, back to back, between the rectus muscles (abdominal wall muscles) and separate the muscles. At the lower end, separate the two pyramidalis muscles by using scissors to cut the aponeurosis between them. The peritoneum should now be exposed.					
11. Use fingers to make an opening in the peritoneum near the umbilicus. Alternatively, lift the peritoneum with two forceps, ensure that no intra-abdominal contents are caught in forceps, and incise the peritoneum.					
12. Lift the peritoneum up using forceps.					
13. Use scissors to extend the incision in the peritoneum up and down, under direct vision, taking care to avoid damage to the bladder and other organs. Remove the forceps.					
14. Examine the abdomen and the uterus for the site of rupture.					

LEARNING GUIDE FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
15. Aspirate blood from the lower abdomen and remove any blood clots.					
16. Place a bladder retractor over the pubic bone.					
17. Place self-retaining abdominal retractors.					
SUBTOTAL HYSTERECTOMY					
1. Deliver the newborn and placenta.					
2. Lift the uterus out of the pelvis and examine the front, back and sides of the uterus.					
3. Hold the bleeding edges of the uterus with Green Armytage clamps (or ring forceps).					
4. Separate the urinary bladder from the lower uterine segment by sharp and blunt dissection.					
5. Determine if the tear is through the cervix and vagina or laterally through the uterine artery or if there is a broad ligament hematoma, and repair as necessary.					
6. • Apply two long clamps or artery forceps to tube, ovarian ligament and round ligament and divide between clamps. • Transfix the lateral pedicle. • Apply two long clamps to uterine vessels and divide between clamps. Transfix the lateral pedicle.					
7. Apply long artery forceps to the uterine rupture edge and divide untorn muscle between clamps, at the lower segment above the bladder.					
8. Free the uterus from the cervical stump and apply hemostatic sutures to the edge of the cut lower segment walls.					
9. Check to ensure hemostasis.					
10. If there is bleeding, control by clamping with long artery forceps and ligating. If the bleeding points are deep, use figure-of-eight sutures.					
11. Place an abdominal drain: • Make a stab incision in the lower abdomen about 3–4 cm away from the edge of the midline incision, just below the level of the anterior superior iliac spine. • Insert a long clamp through the incision. • Grasp the end of the abdominal drain and bring this end out through the incision. • Ensure that the peritoneal end of the drain is in place and anchor the drain to the skin with nylon or silk suture.					
12. Ensure there is no bleeding and remove any blood clots. If there is a hematoma, drain the hematoma.					
13. Before closing the abdomen, check for injury to the bladder. If the bladder has been injured, identify the extent of the injury and repair it.					
CLOSING THE ABDOMEN					

LEARNING GUIDE FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
1. Hold the fascia at the upper and lower ends of the incision using Kocher's forceps. Place a clamp midway on either side of the incision.					
2. Close the fascia: ● Use a toothed dissecting forceps and a cutting needle threaded with 0 chromic catgut (or polyglycolic) suture mounted in a needle holder. ● Pass the needle into the fascia on the woman's right side from the inside out, starting at the upper end of the incision. ● Pass the needle through the fascia on the woman's left side from the outside to the inside of the incision. ● Tie the knot.					
3. Continue the closure of the fascia with a running suture until the lower end of the incision is reached, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
4. Tie off the suture: ● Once the lower end of the incision is reached, tie a knot with the suture. ● Pull upward on the suture and knot. ● Reinsert the needle into the fascia just below the knot and bring it out through the fascia about 1 cm above the knot (toward the upper end of the incision). ● Pull on the suture to bury the knot under the fascia. ● Cut the suture flush with the fascia.					
5. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection: ● Use a toothed dissecting forceps and a round needle threaded with plain catgut in a needle holder to place interrupted sutures to bring the fat layer together, if necessary. ● Use a toothed dissecting forceps and a cutting needle in a needle holder with 3-0 nylon (or silk) to place interrupted mattress sutures about 2 cm apart to bring the skin layer together.					
6. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
7. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
8. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.					
9. Decontaminate or dispose of needle or syringe: ● If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for 10 minutes for decontamination. ● If disposing of needle and syringe, flush needle and syringe with 0.5% chlorine solution three times, then place in a puncture-proof container.					

LEARNING GUIDE FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
10. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. • If disposing of gloves, place them in a leakproof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
11. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
POSTPROCEDURE CARE					
1. Transfer the woman to the recovery area. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Write notes of the operation, postoperative observations and management instructions.					
3. Assess the woman before she is transferred out of the recovery area.					
4. Once the woman has woken fully from the anesthesia, explain what was found at surgery and what procedures have been done.					
5. Ensure the woman has written postoperative instructions (e.g., awareness of complications and warning signs, when to return to work) and necessary medications before discharge.					
6. Tell her when to return if followup is needed and that she can return anytime she has concerns.					
7. If tubal ligation was not performed, discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning. If the woman wishes to have more children, advise her to have an elective cesarean section for future pregnancies.					

CHECKLIST FOR LAPAROTOMY AND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her, respond attentively to her questions and concerns and obtain informed consent.					
3. Examine the woman, assess her condition and examine the medical record for information and completeness.					
4. Set up an IV line and infuse IV fluids.					
5. Catheterize the woman's bladder.					
6. Have anesthetist give anesthesia and prophylactic antibiotics.					
7. Put on personal protective equipment.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PREPROCEDURE TASKS					
1. Put on theater clothes, protective footwear, cap, facemask, protective eyeglasses and a plastic apron.					
2. Perform a surgical handscrub and put on high-level disinfected or sterile surgical gloves and a sterile gown.					
3. Ensure that the instruments and supplies are available and arrange them on a sterile tray or in a high-level disinfected container. Conduct an instrument and swab count and ask an assistant to note on board.					
4. Ensure that an assistant is scrubbed and dressed.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
PREPARING THE WOMAN					
1. Place the woman in the supine position on the operating table.					
2. Ensure that the anesthesia has taken full effect.					
3. Apply antiseptic solution to the abdomen and place a drape over the woman.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
OPENING THE ABDOMEN					
1. Make a 2–3 cm midline vertical incision below the umbilicus to the pubic hair through skin and fascia.					
2. Lengthen the incision and separate the rectus muscle.					
3. Examine the uterus for the site of rupture.					
4. Aspirate blood from the abdomen and remove any blood clots.					
5. Place a bladder retractor and self-retaining abdominal retractors.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
SUBTOTAL HYSTERECTOMY					
1. Deliver the newborn and placenta.					
2. Separate urinary bladder from uterus.					
3. Determine if the tear is through the cervix and vagina or laterally through the uterine artery or if there is a broad ligament hematoma, and repair as necessary.					
4. • Apply 2 long clamps or artery forceps to tube, ovarian ligament and round ligament and divide between clamps. • Transfix the lateral pedicle. • Apply 2 long clamps to uterine vessels and divide between clamps. Transfix the lateral pedicle.					
5. Apply long artery forceps to the uterine rupture edge and divide untorn muscle between clamps, at the lower segment above the bladder.					
6. Free the uterus from the cervical stump and apply hemostatic sutures to the edge of the cut lower segment walls.					
7. Check to ensure hemostasis.					
8. Control bleeding by clamping and using figure-of-eight sutures.					
9. Place an abdominal drain.					
10. Check the bladder for injury and repair injury, if necessary.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CHECKLIST FOR LAPAROTOMYAND SUBTOTAL HYSTERECTOMY FOR REMOVAL OF RUPTURED UTERUS (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
CLOSING THE ABDOMEN					
1. Close the fascia with a running suture, using a cutting needle and 0 chromic catgut (or polyglycolic) suture, ensuring that the peritoneum and intraperitoneal contents are not included in the suture.					
2. If there are signs of infection, pack the subcutaneous tissue with gauze and place loose 0 catgut (or polyglycolic) sutures. Close the skin with a delayed closure after the infection has cleared. If there are no signs of infection, close the fat layer, if necessary, with an interrupted suture, using a round needle and plain catgut, and close the skin with interrupted mattress sutures about 2 cm apart, using a cutting needle and 3-0 nylon or silk.					
3. Ensure there is no bleeding, clean the wound with gauze moistened in antiseptic solution and apply a sterile dressing.					
4. Before removing gloves, dispose of waste materials in a leakproof container or plastic bag.					
5. Place all instruments in 0.5% chlorine solution for decontamination.					
6. If reusing needle or syringe, fill syringe (with needle attached) with 0.5% chlorine solution and submerge in solution for decontamination. If disposing of needle and syringe, place in puncture-proof container.					
7. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
8. Use antiseptic handrub or wash hands thoroughly.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
POSTPROCEDURE CARE					
1. Do not leave the woman unattended until the effects of the anesthesia have worn off.					
2. Explain to the woman what was found at surgery and what procedures have been done.					
3. Ensure the woman has written postoperative instructions, necessary medications before discharge and instructions regarding a followup visit.					
4. If tubal ligation was not performed, discuss reproductive goals, provide counseling on prognosis for fertility and, if appropriate, provide family planning. If the woman wishes to have more children, advise her to have an elective cesarean section for future pregnancies.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR POSTPARTUM ASSESSMENT

(To be completed by **Participants**)

Note: Participants should use this learning guide in conjunction with the **Learning Guide for Basic Postpartum 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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR POSTPARTUM ASSESSMENT (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the client exam area and necessary equipment.					
2. Greet the woman respectfully and with kindness and introduce yourself.					
3. Offer the woman a seat.					
4. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
5. Make sure that Quick Check has been performed to identify any danger signs (heavy vaginal bleeding, severe headache/blurred vision, convulsions/loss of consciousness, difficulty breathing, fever, severe abdominal pain, foul-smelling discharge, signs of depression/hallucinations). If not done, perform immediately. If danger signs are present, stabilize and manage or refer as appropriate.					
HISTORY					
1. Check the woman's record or ask for the following information and record her responses: ● Name ● Age ● Reason for visit ● Contact information ● Financial and transportation situation ● Parity ● Number of living children					
2. Ask the woman about her daily habits and lifestyle: ● Workload ● Diet ● Harmful substances ● Household support/composition ● Potential gender violence					

LEARNING GUIDE FOR POSTPARTUM ASSESSMENT (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Check the woman's record or ask her about her **childbirth** and record her responses: ● Date of baby's birth ● Place of birth and birth attendant ● Mode of childbirth (SVD, cesarean section, instrumental assistance) ● Pregnancy complications (pre-eclampsia, convulsions, anemia, infection, syphilis, malaria) ● Complications during or after birth (fever, heavy bleeding, convulsions, lacerations) ● Condition of the baby at birth					
4. Ask the woman about current postpartum period: ● Pain, swelling or discharge from perineum ● Bleeding/lochia ● Breastfeeding (frequency, day-and-night, attachment and sucking, baby's satisfaction, problems) ● Problems with passing or holding urine or stool ● Neonatal complications ● Thoughts and feelings about the baby ● Other problems					
5. Ask the woman about her previous postpartum experiences: ● Previous breastfeeding experience ● Previous physical or mental problems					
6. Ask the woman about her medical history: ● HIV status ● Anemia ● Chronic conditions such as tuberculosis, hepatitis B, diabetes ● Drugs/medications she is using ● Tetanus toxoid immunization					
7. Check the woman's record or ask her about (according to local prevalence/protocols): ● Iron-folate ● Vitamin A ● Malaria prophylaxis ● Mebendazole					
8. Ask the woman about **family planning** and record her responses: ● Desire for more children ● Methods used ● Method preference					
9. Ask the woman about **social support** and record her responses: ● Main support persons (e.g., husband, mother, mother-in-law) ● Availability of money for food and baby supplies					
PHYSICAL EXAMINATION					
1. Observe general appearance (gait, facial expression, hygiene, skin).					
2. Help the woman onto the examination table and place a pillow under her head and upper shoulders.					

LEARNING GUIDE FOR POSTPARTUM ASSESSMENT (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
3. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean cloth or air dry.					
4. Explain each step of the physical examination as you proceed and encourage the woman to ask questions.					
5. Take the woman's temperature, pulse and blood pressure and record findings.					
6. Check the woman's conjunctiva for pallor.					
7. Examine breasts: ● Engorgement ● Cracked nipples ● Local tenderness, redness or swelling					
8. Examine abdomen: ● Fresh scars ● Firmness and size of uterus ● Tenderness (lower abdomen)					
9. Examine legs: ● Localized pain or tenderness ● Hot spots ● Pain in calf when foot is forcibly dorsiflexed (Homan's sign)					
10. Put new examination or high-level disinfected gloves on both hands.					
11. Examine perineum and genitalia: ● Tears/ lesions ● Swelling ● Pus					
12. Observe lochia: ● Color ● Odor ● Amount					
13. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. ● If disposing of gloves, place them in a leakproof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination.					
14. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
MOTHER-NEWBORN OBSERVATIONS					
1. Observe interaction/bonding.					
2. Observe breastfeeding (position, attachment, finishing feed, satisfaction).					
POST PHYSICAL EXAMINATION TASKS					
1. Ask the woman if she has any additional questions.					
2. Help the woman off the examination table and offer her a seat.					
3. Record all relevant findings from the physical examination on the woman's record.					

LEARNING GUIDE FOR POSTPARTUM ASSESSMENT (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
SCREENING PROCEDURES					
1. Do a hemoglobin test, if clinical signs of anemia.					
2. Do a RPR test (syphilis screening), if not done during pregnancy.					
3. Do HIV screening, if the woman agrees.					

LEARNING GUIDE FOR BASIC POSTPARTUM CARE

(To be completed by **Participants**)

Note: Participants should use this learning guide in conjunction with the **Learning Guide for Postpartum Assessment**, **Learning Guide for Postpartum Family Planning**, and **Learning Guide for Newborn Examination.**

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR BASIC POSTPARTUM CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the client care area and necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
IDENTIFYING PROBLEMS/NEEDS					
Note: Problem identification should be based on the findings of the postpartum history, physical examination and screening procedures. Individual problems/needs will vary from client to client, however, the following interventions form the basic package of postpartum care that should be made available to all women.					
PROVIDING CARE/TAKING ACTION					
Care for Mother					
1. Provide HIV voluntary counseling and testing: • Pre-test counseling • Post-test counseling					
2. Provide breastfeeding and breast care counsel and support: • Importance of breastfeeding • Techniques for successful breastfeeding • Caring for breasts					
3. Provide nutritional counsel and support: • Dietary counsel • Iron-folate • Vitamin A					
3. Counsel on prevention of infection: • Genital hygiene • Hand hygiene • Malaria and hookworm					
4. Counsel on rest and sleep.					

LEARNING GUIDE FOR BASIC POSTPARTUM CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
5. Facilitate complication readiness planning: • Recognition of danger signs: heavy vaginal bleeding, severe/persistent headache or blurred vision, convulsions, foul-smelling vaginal discharge, fever, severe abdominal pain, difficulty breathing, signs of depression/hallucinations. • Planning response to danger signs.					
6. Counsel on mother-newborn and family relationships.					
7. Counsel on sexual relations and safer sex.					
8. Counsel on family planning.					
9. Counsel on newborn care.					
10. Provide immunizations and preventive therapy: • Tetanus toxoid • Iron-folate • Malaria prophylaxis (use of ITNs for self and baby according to local prevalence) • Mebendazole (according to local policy) • Vitamin A (according to local policy)					
11. Treat syphilis if RPR positive and untreated during pregnancy.					
Care for Baby					
12. Provide breastfeeding counsel and support (can be provided while mother is breastfeeding baby during breastfeeding observation if possible). • Provide guidance as needed about attachment, positioning, effective sucking, finishing the breastfeed. • Encourage exclusive feeding on-demand. • Answer questions and respond to concerns.					
14. Provide counseling about warmth: • Dressing and wrapping the baby • Keeping the room warm					
15. Provide counseling about hygiene: • Handwashing • Bathing • Cord care					
16. Facilitate complication readiness planning: • Provide counseling about recognition of danger signs (breathing difficulties, blue color, floppy, not feeding, convulsions, pus or blood from cord, pus from eyes, convulsions, spasms, loss of consciousness, hotness/fever, coldness, bleeding, yellowness/jaundice, diarrhea, continuous vomiting). • Planning response to danger signs					
17. Counsel additionally concerning: • Importance of immunizations • Prevention of malaria (according to local prevalence/protocols) • Sleep and other behaviors • Feeding and elimination					

LEARNING GUIDE FOR BASIC POSTPARTUM CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
18. Provide newborn immunization, if not already immunized.					
19. Record the relevant details of care for mother and baby.					
20. Ask the mother if she has any further questions or concerns.					
21. Thank the mother for coming and tell her when she should come for her next postpartum visit, if necessary.					

CHECKLIST FOR POSTPARTUM ASSESSMENT AND BASIC CARE

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT_____**Date Observed**_____

CHECKLIST FOR POSTPARTUM ASSESSMENT AND BASIC CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the client exam area and necessary equipment.					
2. Greet the woman respectfully and with kindness and introduce yourself.					
3. Offer the woman a seat.					
4. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
5. Make sure that Quick Check has been performed to identify any danger signs, and stabilize and manage or refer if danger signs present.					
HISTORY					
1. Check the woman's record or ask for her name, age, reason for visit, contact information, financial and transportation situation, parity, and number of living children.					
2. Ask the woman about her daily habits and lifestyle, including workload, diet, harmful substances, household support/composition, potential gender violence.					
3. Check the woman's record or ask her about her **childbirth** and record her responses: ● Date of baby's birth ● Place of birth and birth attendant ● Mode of childbirth (SVD, cesarean section, instrumental assistance) ● Pregnancy complications (pre-eclampsia, convulsions, anemia, infection, syphilis, malaria) ● Complications during or after birth (fever, heavy bleeding, convulsions, lacerations) ● Condition of the baby at birth					

CHECKLIST FOR POSTPARTUM ASSESSMENT AND BASIC CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
4. Ask the woman about current postpartum period: ● Pain, swelling or discharge from perineum ● Bleeding/lochia ● Breastfeeding (frequency, day-and-night, attachment and sucking, baby's satisfaction, problems) ● Problems with passing or holding urine or stool ● Neonatal complications ● Thoughts and feelings about the baby ● Other problems					
5. Ask the woman about her previous postpartum experiences including breastfeeding and previous physical or mental problems.					
6. Ask the woman about her medical history including HIV status, anemia, chronic conditions, drugs/medications she is using, and tetanus toxoid immunization.					
7. Check the woman's record or ask her about (according to local prevalence/protocols) iron-folate, vitamin A, malaria prophylaxis, mebendazole.					
8. Ask the woman about **family planning, including** method preference.					
9. Ask the woman about **social support**, including support persons and resources to care for baby.					
PHYSICAL EXAMINATION					
1. Observe general appearance (gait, facial expression, hygiene, skin).					
2. Use antiseptic handrub or wash hands thoroughly.					
3. Explain each step of the physical examination.					
4. Take the woman's temperature, pulse and blood pressure.					
5. Check the woman's conjunctiva for pallor.					
6. Examine breasts for engorgement, cracked nipples, local tenderness, redness or swelling.					
7. Examine abdomen to check the uterus and detect tenderness.					
8. Examine legs for pain or tenderness.					
9. Put on new examination or high level-disinfected gloves.					
10. Examine perineum and genitalia for signs of trauma or infection.					
11. Observe color, odor and amount of lochia.					
12. Remove gloves and discard them in a leakproof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
13. Use antiseptic handrub or wash hands thoroughly.					

CHECKLIST FOR POSTPARTUM ASSESSMENT AND BASIC CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
MOTHER-NEWBORN OBSERVATIONS					
1. Observe interaction/bonding.					
2. Observe breastfeeding (position, attachment, finishing feed, satisfaction).					
POST PHYSICAL EXAMINATION TASKS					
1. Ask the woman if she has any additional questions.					
2. Help the woman off the examination table and offer her a seat.					
3. Record all relevant findings from the physical examination on the woman's record.					
SCREENING PROCEDURES					
1. Do a hemoglobin test, if clinical signs of anemia.					
2. Do a RPR test (syphilis screening), if not done during pregnancy.					
3. Do HIV screening, if the woman agrees.					
PROVIDING CARE/TAKING ACTION					
Care for Mother					
1. Provide HIV voluntary counseling and testing.					
2. Treat according to results of RPR, if necessary.					
3. Facilitate complication readiness planning, including recognition of danger signs and what to do about them.					
4. Counsel on: • Nutrition and iron supplementation • Prevention of infection, including genital hygiene, hand hygiene, malaria, and hookwork • Rest and sleep • Sexual relations and safer sex • Mother-newborn and family relationships					
5. Counsel on family planning: • Explain how lactational amenorrhea method (LAM) works. • Help the woman choose an appropriate method of contraception if she does not want to use LAM. • If the woman is not breastfeeding, explain the return of menstrual cycles and help her choose an appropriate method of contraception. • Provide method of choice and instructions for use. • Discuss what to do if side effects are experienced. • Provide followup instructions.					
6. Provide immunizations and preventive therapy, including tetanus toxoid, iron-folate, malaria prophylaxis, mebendazole, and vitamin A.					

CHECKLIST FOR POSTPARTUM ASSESSMENT AND BASIC CARE (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
Care for Baby					
7. Provide breastfeeding counsel and support for good attachment, positioning, sucking, and feeding on-demand.					
8. Provide counseling about keeping the baby warm.					
9. Provide counseling about hygiene, including handwashing, bathing and cord care.					
10. Facilitate complication readiness planning including danger signs in the baby and what to do about them.					
11. Counsel additionally concerning: • Importance of immunizations • Prevention of malaria (according to local prevalence/protocols) • Sleep and other behaviors • Feeding and elimination					
12. Provide newborn immunization, if not already immunized.					
13. Record the relevant details of care for mother and baby.					
14. Ask the mother if she has any further questions or concerns.					
15. Thank the mother for coming and tell her when she should come for her next postpartum visit, if necessary.					

LEARNING GUIDE FOR POSTPARTUM FAMILY PLANNING

(To be completed by **Participants**)

Note: Participants should use this learning guide in conjunction with the **Learning Guide for Basic Postpartum 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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR POSTPARTUM FAMILY PLANNING (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the client care area and necessary equipment.					
2. Tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
PROVIDING CARE/TAKING ACTION – BREASTFEEDING WOMEN					
1. Ask how long the woman plans to breastfeed.					
2. Ask how frequently the baby feeds during the day and during the night.					
3. Explain that women who are breastfeeding exclusively do not need contraception for at least 6 weeks postpartum, and if using lactational amenorrhea method (LAM) not for up to 6 months.					
4. Explain how LAM works.					
5. Explain the possible problems related to LAM.					
6. If the woman is breastfeeding but wants to use a contraceptive method other than LAM, provide information about: • The contraceptive choices available and the potential effect of some contraceptives on breastfeeding and the health of the baby • The time for starting each method with respect to breastfeeding status					
7. Make sure that the woman does not have a medical condition that would contraindicate use of a particular method (see the *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition).					
8. Help the woman choose an appropriate method if she does not want to use LAM.					
9. Provide method of choice and instructions for use. (Assumes that the healthcare provider has the skills needed to do this.)					
10. Ask the woman to repeat instructions.					
11. Discuss what to do if the woman experiences side effects or problems with the method of choice.					

LEARNING GUIDE FOR POSTPARTUM FAMILY PLANNING (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
12. Provide followup visit instructions, including assurance that the woman can return to the clinic at any time to receive advice and medical attention.					
13. Answer any questions that the woman has.					
PROVIDING CARE/TAKING ACTION – NON-BREASTFEEDING WOMEN					
1. If the woman is not breastfeeding, explain that her menstrual cycles will probably resume within 4–6 weeks after the birth.					
2. Explain that to avoid all risk of pregnancy, contraception should be started at the time of (barriers, spermicides, withdrawal) or before (hormonals, IUD or voluntary sterilization) the first sexual intercourse.					
3. Explain the recommended time for the non-breastfeeding woman to start the various available methods.					
4. Explain the potential side effects of the available methods and make sure that each is understood.					
5. Make sure that the woman does not have a medical condition that would contraindicate use of a particular method (see the *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition).					
6. Help the woman to choose an appropriate method.					
7. Provide method of choice and instructions for use. (Assumes that the healthcare provider has the skills needed to do this.)					
8. Ask the woman to repeat instructions.					
9. Discuss what to do if the woman experiences side effects or problems with the method of choice.					
10. Provide followup visit instructions, including assurance that the woman can return to the clinic at any time to receive advice and medical attention.					
11. Answer any questions that the woman has.					

CHECKLIST FOR POSTPARTUM FAMILY PLANNING

(To be completed by **Participants**)

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

CHECKLIST FOR POSTPARTUM FAMILY PLANNING (Many of the following steps/tasks should be performed simultaneously.)						
STEP/TASK	**CASES**					
PROVIDING CARE/TAKING ACTION – BREASTFEEDING WOMEN						
1. Ask how long the woman plans to breastfeed.						
2. Ask how frequently the baby feeds during the day and during the night.						
3. Explain that women who are breastfeeding exclusively do not need contraception for at least 6 weeks postpartum, and if using lactational amenorrhea method (LAM) not for up to 6 months.						
4. Explain how LAM works.						
5. Explain the possible problems related to LAM.						
6. If the woman is breastfeeding but wants to use a contraceptive method other than LAM, provide information about: • The contraceptive choices available and the potential effect of some contraceptives on breastfeeding and the health of the baby • The time for starting each method with respect to breastfeeding status						
7. Make sure that the woman does not have a medical condition that would contraindicate use of a particular method (see the *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition).						
8. Help the woman choose an appropriate method if she does not want to use LAM.						
9. Provide method of choice and instructions for use. (Assumes that the healthcare provider has the skills needed to do this.)						
10. Ask the woman to repeat instructions.						
11. Discuss what to do if the woman experiences side effects or problems with the method of choice.						
12. Provide followup visit instructions, including assurance that the woman can return to the clinic at any time to receive advice and medical attention.						
13. Answer any questions that the woman has.						

CHECKLIST FOR POSTPARTUM FAMILY PLANNING (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
PROVIDING CARE/TAKING ACTION – NON-BREASTFEEDING WOMEN					
1. If the woman is not breastfeeding, explain that her menstrual cycles will probably resume within 4–6 weeks after the birth.					
2. Explain that to avoid all risk of pregnancy, contraception should be started at the time of (barriers, spermicides, withdrawal) or before (hormonals, IUD or voluntary sterilization) the first sexual intercourse.					
3. Explain the recommended time for the non-breastfeeding woman to start the various available methods.					
4. Explain the potential side effects of the available methods and make sure that each is understood.					
5. Make sure that the woman does not have a medical condition that would contraindicate use of a particular method (see the *JHPIEGO PocketGuide for Family Planning Service Providers*, 2nd edition).					
6. Help the woman to choose an appropriate method.					
7. Provide method of choice and instructions for use. (Assumes that the healthcare provider has the skills needed to do this.)					
8. Ask the woman to repeat instructions.					
9. Discuss what to do if the woman experiences side effects or problems with the method of choice.					
10. Provide followup visit instructions, including assurance that the woman can return to the clinic at any time to receive advice and medical attention.					
11. Answer any questions that the woman has.					

LEARNING GUIDE FOR NEWBORN EXAMINATION

(To be completed by **Participants**)

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 does not progress from step to step efficiently

3 Proficiently Performed: Step or task efficiently and precisely performed in the proper sequence (if necessary)

LEARNING GUIDE FOR NEWBORN EXAMINATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY (Every visit)					
1. Prepare the client care area and necessary equipment.					
2. Greet the mother, acknowledge the newborn, and tell the woman (and her support person) what is going to be done, listen to her and respond attentively to her questions and concerns.					
HISTORY					
1. (1st visit) Obtain personal information: • Newborn's name and sex • Contact information • Date and time of birth • Any problem that brought mother to healthcare provider					
2. (1st visit) Check the mother's record for risk of infection or ask her if: • She had a uterine infection or a fever during labor or birth. • Her membranes ruptured more than 18 hours before childbirth. • She had a positive RPR test (syphilis screening) during this pregnancy. If so, was she treated adequately? • She is known to be HIV positive. If so, is she receiving AIDS-associated retrovirus treatment? • She has been diagnosed with tuberculosis. If so, has she been treated for at least 2 months? • She is known to be Hepatitis B positive.					
3. (1st visit) Check the mother's record for other complications for her or the newborn such as: • Shoulder dystocia, birth asphyxia, breech birth or instrumental assistance or eclampsia • Weighed less than 2500 grams at birth					
4. (1st visit) Check the newborn's or mother's record or ask if the newborn has had the following immunizations: • OPV-0 • BCG • Hepatitis B					

LEARNING GUIDE FOR NEWBORN EXAMINATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
5. (Every visit) Ask the mother about breastfeeding: • Frequency and duration of feedings • Attachment and sucking • Newborn's satisfaction with feedings Observe the newborn at the breast, if s/he is ready to feed.					
6. (Every visit) Ask how often the newborn: • Urinates • Passes stool					
7. (Return visits) Ask if the newborn has had problems since last visit: • Has the newborn received care from another caregiver? • Has the mother been unable to carry out any part of the care plan? • Has the newborn has any untoward reactions to immunizations or other care?					
PHYSICAL EXAMINATION					
1. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry and put exam gloves on both hands.					
2. Place the newborn on a clean, warm surface or examine her/him in the mother's arms. Remove the newborn's clothing as necessary, taking care to keep newborn as covered and warm as possible.					
3. (Every visit) Check: • Breathing (normal rate ranges from 30–60 breaths/minute), grunting, chest indrawing • Temperature (normal range 36.5–37.5) • Color • Skin • General alertness, movements, and muscle tone					
4. (Every visit) Weigh the newborn.					
5. Examine the head, face, mouth and eyes: • (Every visit) Check general size and symmetry of the head. • (Every visit) Check the skull contours and feel for the normal sutures and fontanelles. • (Every visit) Open the eyelids and check that the eyes have a normal appearance and that there are no signs of infection. • (First visit) Check for any abnormalities of the face, especially for asymmetrical movement. • (First visit) Feel in the mouth to check that the palate is properly developed.					
6. (Every visit) Examine the chest for symmetrical movement.					
7. (Every visit) Examine the umbilicus for bleeding and infection.					
8. (First visit) Examine the genitalia for abnormalities. (1st visit only)					
9. (First visit) Examine the spine for abnormalities. (1st visit only)					
10. (Every visit) Examine the upper and lower limbs: • Check the skin, soft tissues and bones for abnormalities. • Check for symmetry of movement.					

LEARNING GUIDE FOR NEWBORN EXAMINATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
POST PHYSICAL EXAMINATION TASKS					
1. Dress, or help the mother to dress, the newborn.					
2. Remove gloves and discard.					
3. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.					
4. Inform the mother of your findings and ask her if she has additional questions.					
5. Record all relevant findings from the physical examination.					

CHECKLIST FOR NEWBORN EXAMINATION

(To be used by the **Participant** for practice and by the **Trainer** at the end of the course)

Place a "✓" in case box if step/task is performed **satisfactorily**, an "**X**" if it is **not** performed **satisfactorily**, or **N/O** if not observed.

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 or task not performed by participant during evaluation by trainer

PARTICIPANT _____ **Date Observed** _____

CHECKLIST FOR NEWBORN EXAMINATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
GETTING READY					
1. Prepare the necessary equipment.					
2. Greet the mother, acknowledge the newborn, tell the woman (and her support person) what is going to be done, and listen and respond to her questions and concerns.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
HISTORY					
1. Ask newborn's name, sex, contact information, date and time of birth, and any problem that brought mother to the healthcare provider.					
2. Check the mother's record or ask her about maternal and other conditions/ factors that may affect the newborn.					
3. Ask the mother about breastfeeding.					
4. Ask about urination and stool.					
5. Check the mother's or newborn's record or ask if the newborn has had OPV, BCG, and HBV immunizations.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					
PHYSICAL EXAMINATION					
1. Use antiseptic handrub or wash hands thoroughly.					
2. Remove the newborn's clothing.					
3. Check the newborn's general appearance and alertness, breathing, heart rate, temperature, skin, and muscle tone.					
4. Weigh the newborn.					
5. Examine the head, face, mouth and eyes.					
6. Examine the chest for symmetrical movement.					
7. Examine the umbilicus for bleeding and infection.					
8. Examine the genitalia.					

CHECKLIST FOR NEWBORN EXAMINATION (Many of the following steps/tasks should be performed simultaneously.)					
STEP/TASK	**CASES**				
9. Examine the spine.					
10. Examine the upper and lower limbs, checking the skin, soft tissues and bones and symmetrical movement.					
11. Use antiseptic handrub or wash hands thoroughly.					
12. Inform mother of findings and ask her if she has additional questions.					
13. Record all relevant findings.					
SKILL/ACTIVITY PERFORMED SATISFACTORILY					

CASE STUDY 1: PREGNANCY-INDUCED HYPERTENSION

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 has developed.

Case Study

Mrs. B. is a 16-year-old gravida 1 para 0 at 30 weeks gestation, who has come today for a followup visit as requested by her provider at her last visit 1 week ago. She reports that at that visit she was told she had "high blood pressure" but was not given any advice about activity. However, she was told to return sooner than 1 week if she noticed any danger signs. A review of her records shows that she has had three antenatal visits this pregnancy and that before her last visit all findings were within normal limits. At her last 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.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. B., and your main findings include the following:

History:

Mrs. B. denies severe headache, blurred vision, upper abdominal pain, convulsions or loss of consciousness, or other problems since her last visit. She reports normal fetal movement.

Physical Examination:

Mrs. B.'s blood pressure is 130/90 mm Hg, and she has proteinuria 1+.
The fetus is active and fetal heart rate is 136 per minute. Uterine size is consistent with dates.

4. Based on these findings, what is Mrs. B.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Mrs. B. attends the antenatal clinic on a twice-weekly basis, as requested. Her blood pressure remains the same, she continues to have proteinuria 1+ and the fetal growth is normal. Four weeks later, however, her blood pressure is 130/100 mm Hg and she has proteinuria 2+. Mrs. B. has not suffered headache, blurred vision, upper abdominal pain, convulsions, loss of consciousness or a change in fetal movement. She finds it very tiring, however, 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 Mrs. B., and why?

CASE STUDY 2: VAGINAL BLEEDING IN EARLY PREGNANCY

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 has developed.

Case Study

Mrs. B. is a 20-year-old para 2 who came to the health center 2 days ago complaining of irregular vaginal bleeding and abdominal and pelvic pain. Symptoms of early pregnancy were detected and confirmed with a pregnancy test. Mrs. B. was advised to avoid strenuous activity and sexual intercourse and return immediately if her symptoms persisted. Mrs. B. returns to the health center today and reports that irregular vaginal bleeding has continued and she now has acute abdominal pain that started 2 hours ago.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. B., and your main findings include the following:

Mrs. B.'s temperature is 36.8ºC, her pulse rate is 130 beats per minute and weak, her blood pressure is 85/60 and her respirations are 20 per minute.
Her skin is pale and sweaty.
Mrs. B. has acute abdominal and pelvic pain, her abdomen is tense and she has rebound tenderness. She has light vaginal bleeding. On vaginal exam, the cervix is found to be closed, and cervical motion tenderness is present. The 6-week size uterus is softer than normal.

4. Based on these findings, what is Mrs. B.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Mrs. B.'s postoperative course was without complications, and notable for patient tolerating oral intake, having minimal complaints of abdominal pain, ambulating well, and spontaneously voiding. She is now ready to be discharged; however, her hemoglobin is 9 g/dL.
She has indicated that she would like to become pregnant again, but not for at least a year.

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

CASE STUDY 3: ELEVATED BLOOD PRESSURE IN PREGNANCY

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 has developed.

Case Study

Mrs. A. is a 34-year-old gravida 4 para 3 at 18 weeks gestation who has come to the antenatal clinic today for a followup visit as requested by her midwife at her last visit 1 week ago. She attended her first antenatal care visit 1 week ago, when it was found that her blood pressure was 140/100 mm Hg on two readings taken 4 hours apart. Mrs. A. 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.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. A., and your main findings include the following:

Mrs. A.'s blood pressure is 140/100 mm Hg. She is feeling well and denies headache, visual disturbance, upper abdominal pain or decreased fetal movements. Uterine size is 18-week size. Fetal heart tones are 128 per minute. Her urine is negative for protein. It has not been possible to obtain Mrs. A.'s medical record.

4. Based on these findings, what is Mrs. A.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Mrs. A. returns to the antenatal clinic in 1 week. She feels well and denies headache, blurred vision, upper abdominal pain, convulsions, loss of consciousness or decreased fetal movement. Her blood pressure is 136/100 mm Hg. On abdominal exam, her uterus is 19-week size and fetal heart rate is 132 per minute. Her urine is negative for protein. 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 Mrs. A., and why?

CASE STUDY 1: UNSATISFACTORY PROGRESS IN LABOR

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 has developed.

Case Study

Mrs. D. is a 20-year-old primigravida at term. She had antenatal care in a health center. She reports that labor pains started about 12 hours before she came to the hospital.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. D., and your main findings include the following:

History:

Mrs. D. reports that contractions have increased in intensity in the 12 hours since they began and have been approximately every 4–6 minutes for the past 4–5 hours. She admits that she felt a gush of water approximately 1 hour prior to admission. She reports normal fetal movement. She denies any danger signs.

Physical Examination:

Mrs. D.'s temperature is 37^{o}C, her pulse rate is 84 per minute, her blood pressure is 112/70 and her respirations are 22 per minute. There are no signs of dehydration, ketosis or shock. She is moderately distressed by pain.
The fundal height is 40 cm. She has 3 contractions in 10 minutes, each lasting 30 seconds. The fetal head is 5/5 palpable above the symphysis pubis. The fetal heart rate is regular at 144 per minute. The cervix is 4 cm dilated. The membranes are not palpable and no amniotic fluid is visibly draining. There is no molding of the fetal skull.

3. Based on these findings, what is Mrs. D.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Four hours later, Mrs. D.'s temperature is 37°C, her pulse rate is 88 per minute, and her blood pressure is 114/70. She is having 4 contractions in 10 minutes, each lasting 30 seconds.
The cervix is 6 cm dilated. Scanty but clear amniotic fluid is draining. There is no moulding.
The fetal head is 5/5 palpable above the symphysis pubis and the fetal heart rate is 144 beats per minute. She produced 200 mL of urine in the past 4 hours, negative for protein and acetone.

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

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

Oxytocin infusion (2.5 units in 500 mL) is started. The infusion rate is titrated to ensure establishment of at least 3 uterine contractions in 10 minutes lasting at least 40 seconds.

7. When would you reassess Mrs. D. again, and why?

On reassessment 2½ hours later, Mrs. D.'s temperature is 37°C, her pulse rate is 90 per minute, and her blood pressure is 120/70. She is having 4 contractions in 10 minutes, each lasting 40–45 seconds. The fetal heart rate is 152 per minute. The fetal head is 4/5 palpable above the symphysis pubis. The cervix is 6 cm dilated and edematous. There is no amniotic fluid draining. Moulding is 2: sutures overlapping but reducible. She produced 160 mL of urine in the past 4 hours, negative for protein and acetone.

8. Based on these findings, what is Mrs. D.'s diagnosis (problem/need), and why?

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

CASE STUDY 2: FEVER AFTER CHILDBIRTH

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 has developed.

Case Study

Mrs. C. is a 35-year-old para three. Mrs. C.'s husband has brought her to the health center today because she has had fever and chills for the past 24 hours. She gave birth to a full-term infant at home 48 hours ago. Her birth attendant was the local traditional birth attendant (TBA). Labor lasted 2 days and the TBA inserted herbs into Mrs. C.'s vagina to help speed up the childbirth. The newborn breathed spontaneously and appears healthy.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your assessment of Mrs. C., and your main findings include the following:

History:

Mrs. C. admits that she has felt weak and lethargic, has abdominal pain, and has noticed a foul-smelling vaginal discharge. She denies painful urination, as well as having been in a malarious area.

Physical Examination:

Mrs. C.'s temperature is 39.8ºC, her pulse rate is 136 per minute, her blood pressure is 100/70 and her respiration rate is 24 per minute.
She appears pale and lethargic and slightly confused.
Abdominal exam shows a poorly contracted and tender uterus that is just 1 cm below the umbilicus.
Examination of the perineum shows that she has foul-smelling vaginal discharge, but no tears or lesions. On vaginal exam, the cervix is 2 cm dilated with cervical motion tenderness present.
It is not known whether the placenta was complete.
Mrs. C. is fully immunized against tetanus and had a booster 3 years ago.

4. Based on these findings, what is Mrs. C.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

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

Mrs. C.'s temperature is 38ºC, her pulse rate is 96 beats per minute, her blood pressure is 110/70 and her respiration rate is 20 breaths per minute. She is less pale and no longer confused. Her uterus is less tender and is firm at 3 cm below the umbilicus. Lochia is minimal and no longer foul-smelling.

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

CASE STUDY 3: VAGINAL BLEEDING AFTER CHILDBIRTH

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 has developed.

Case Study

Mrs. A. is a 20-year-old para 1 who has been brought to the health center by the local traditional birth attendant (TBA) because she has been bleeding heavily since childbirth at home 2 hours ago. The TBA reports that the birth was a spontaneous vaginal delivery of a full-term newborn. Mrs. A. and the TBA report that the duration of labor was 12 hours, the birth was normal and the placenta was delivered 20 minutes after the birth of the newborn.

Assessment (history, physical examination, screening procedures/laboratory tests)

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

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

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

Diagnosis (identification of problems/needs)

You have completed your rapid assessment of Mrs. A., and your main findings include the following:

History:

The TBA says that she thinks the placenta and membranes were delivered without difficulty and were complete.

Physical Examination:

Mrs. A.'s temperature is 36.8ºC, her pulse rate is 108 per minute, her blood pressure is 80/60 and her respirations are 24 per minute.
She is pale and sweating.
Her uterus is soft and does not contract with fundal massage. She has heavy, bright red vaginal bleeding. On inspection there is no evidence of perineal, vaginal or cervical tears.

4. Based on these findings, what is Mrs. A.'s diagnosis (problem/need), and why?

Care Provision (planning and intervention)

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

Evaluation

Manual exploration of the uterus was performed and some placental tissue has been removed. Fifteen minutes after the initiation of treatment, however, she continues to have heavy vaginal bleeding. Her uterus remains poorly contracted. Her bedside clotting test is 5 minutes. Her pulse is 110 per minute and her blood pressure is 80/60. Her skin continues to be cold and clammy and she is confused.

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

ACTION PLAN FOR PARTICIPANTS

Participant Name: _____

Country of Residence: _____

Training Attended: _____

Name of Facility: _____

Date: _____

Based on what you learned during this training, please write down three things that you would like to change at your facility over the next year:

Goal #1 _____
Goal #2 _____
Goal #3 _____

Goal #1_____

Activities/Steps	Date Planned	Contact/s	Date Completed
1.			
2.			
3.			

Goal #2_____

Activities/Steps	Date Planned	Contact/s	Date Completed
1.			
2.			
3.			

Goal #3_____

Activities/Steps	Date Planned	Contact/s	Date Completed
1.			
2.			
3.			