Basic Maternal and Newborn Care:

Basic Antenatal Care

Course Notebook for Trainers
The Maternal and Neonatal Health (MNH) Program is committed to saving mothers’ and newborn’s 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.

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This publication was made possible through support provided by the Maternal and Child Health Division, Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, U.S. Agency for International Development, under the terms of Award No. HRN-00-98-00043-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

September 2004
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OVERVIEW

Training interventions to improve worker performance are among the most important aspects of performance management and support for human resources development. Healthcare providers must have the knowledge, attitudes, and skills required to perform their jobs in a competent and caring manner. Clinical training deals primarily with making sure that participants acquire the knowledge, attitudes, and skills needed to carry out a specific procedure or activity (e.g., antenatal care, infection prevention and control, or counseling for HIV testing) and helping participants apply this procedure or activity on the job. The goal of clinical training is to assist healthcare workers in learning to provide safe, high-quality reproductive healthcare services through improved work performance.

COMPETENCY-BASED TRAINING

This clinical training course is designed to enable participants to immediately apply, on the job, the new information and skill(s) they have learned, and thus improve their performance. The course uses a competency-based learning approach that focuses on the specific knowledge, attitudes, and skills needed to carry out a procedure or activity. Competency-based learning is learning by doing—learning that emphasizes how the participant performs (i.e., a combination of knowledge, attitudes, and, most important, skills). The trainer assesses participants’ skill competency by evaluating their overall performance.

Learning to perform a skill occurs in three stages:

Skill acquisition: The participant knows the steps and their sequence (if necessary) to perform the required skill or activity but needs assistance.

Skill competency: The participant knows the steps and their sequence (if necessary) and can perform the required skill or activity.

Skill proficiency: The participant knows the steps and their sequence (if necessary) and efficiently performs the required skill or activity.

In the first stage, skill acquisition, participants attend a series of interactive and participatory sessions conducted by the trainer. The trainer involves the participants through a variety of learning methods including the use of questions, role play, case studies, problem-solving activities, and other exercises. In addition, the trainer demonstrates skills through the role play or emergency drill in a simulated setting as
participants observe and follow the steps in a competency-based learning guide (see below). As participants practice these skills, the trainer observes, provides feedback, and encourages the participants to assess each other using the learning guide. Participants practice until they achieve skill competency and feel confident performing the procedure. The final stage, skill proficiency, occurs only with repeated practice over time.

The use of competency-based learning guides and checklists to measure clinical skills or other observable behaviors in comparison to a predetermined standard is an integral part of learning new skills. A learning guide contains the individual steps or tasks in sequence (if necessary) required to perform a skill or activity in a standard way.

A clinical skill or activity is standardized by identification of its essential steps. Each step is analyzed to determine the most efficient and safe way to perform and learn it. This process is called “standardization.” Once a procedure has been standardized, competency-based learning guides and checklists can be developed for it.

Learning guides

- help the participant learn the correct steps and sequence in which they should be performed (skill acquisition), and

- measure learning in small steps as the participant gains confidence and skill (skill competency).

Checklists are based on the learning guides and focus only on key steps or tasks. They allow the trainer to objectively assess a participant’s skill competency and overall performance.

**ASSESSMENT OF KNOWLEDGE AND SKILLS**

Assessment of participants’ knowledge and skills is an essential component of training and learning interventions. Participants should be aware of how and when they will be assessed. Assessment of their knowledge and skill performance should be made throughout the course using objective assessment methods, described below.

- Knowledge assessment occurs with the administration of a precourse questionnaire on the first day of the course. Participants score their own questionnaires because the purpose is to help them see the important content areas of the course.
The trainer gives a midcourse questionnaire at the point during the course when all of the knowledge content has been presented. Participants must achieve a score of at least 85% to demonstrate that they have achieved the learning objectives. The trainer gives participants who did not achieve a score of at least 85% correct another opportunity to study and answer the items they missed.

The trainer assesses participants’ skills using a performance checklist. Once participants demonstrate skill competency during the role play and emergency drill in a simulated setting, they progress to learn other skills, or, in some courses, to gain additional skill practice in a clinical setting with clients.

This means that participants know, from the beginning of the course, the basis upon which the trainer will assess their competency. In addition, participants will have an opportunity to practice the skill(s) using the same checklist the trainer will use. Assessment of learning in competency-based training is dynamic, because participants receive continual feedback and have ample opportunity for review and discussion with the trainer; and less stressful, because participants know from the beginning what they are expected to learn.

This interactive approach is the essence of competency-based training—and it is distinctly different from traditional training. In competency-based training, the participant is an active participant in the learning process. The trainer acts as a coach and is also actively involved in transferring new knowledge, attitudes, and skills through demonstration and regular feedback:

- Before skills practice—The trainer and participants meet briefly before each practice session to review the skill/activity, including the steps or tasks that will be emphasized during the session.

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

- After skills 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.
THE USE OF SIMULATIONS

Another key component of competency-based training is the use of simulations to provide participants the opportunity to practice new skills before working in an actual clinical site. Practicing with the role play or emergency drill in a simulated setting reduces stress for the participant. Only when participants have demonstrated skill competency and some degree of skill proficiency should they be allowed to apply their new skills in a clinical setting. Work with simulations also provides ample opportunity for practice before final evaluation for qualification in the clinical skill or activity being learned.

A SUPPORTIVE ENVIRONMENT FOR LEARNING

Competency-based training is most effective when there is a supportive environment at the participant’s workplace. In addition to the healthcare worker who attends the course and the trainer who conducts it, supervisors and coworkers play a critical role in helping to create and maintain this environment. All of these individuals have responsibilities before, during, and after a training course. By working as partners, they can help sustain the knowledge and skills learned during training and, ultimately, the quality of clinical services. This process is called “transfer of learning.” It is described in the next section.

TRANSFER OF LEARNING

Transfer of learning is defined as ensuring that the knowledge and skills acquired during a learning intervention are applied on the job.

The clinical knowledge and skills of providers are a critical factor in providing high-quality healthcare services. However, providers may acquire new knowledge and skills only to find that they are unable to use, or transfer, these new skills at their workplace. There are several inter-related factors that support good performance in the workplace, as described below.

---

<table>
<thead>
<tr>
<th>THE PERFORMANCE FACTORS</th>
<th>POSSIBLE INTERVENTIONS</th>
</tr>
</thead>
</table>
| 1. Job expectations  
*Do providers know what they are supposed to do?* | Provide adequate performance standards and detailed job descriptions.  
Create the necessary channels to communicate job roles and responsibilities effectively. |
| 2. Performance feedback  
*Do providers know how well they are doing?* | Offer timely, constructive, and comprehensive information about how well performance is meeting expectations. |
| 3. Physical environment and tools  
*What is the work environment like, and what systems are in place to support it?* | Develop logistical and maintenance systems to provide a satisfactory physical environment and maintain adequate supplies and equipment.  
Design work space to suit activities. |
| 4. Motivation  
*Do people have a reason to perform as they are asked to perform? Does anyone notice?* | Seek provider input to identify incentives for good performance.  
Provide positive consequences for good performance and neutral or negative consequences for below standard performance.  
Encourage coworkers to support new skills. |
| 5. Skills and knowledge to do the job  
*Do providers know how to do the job?* | Ensure job candidates have prerequisite skills.  
Provide access to trainers and information resources.  
Offer appropriate learning opportunities. |

The final factor on the list, required knowledge and skills, is addressed primarily through training and learning interventions. Transfer of learning to the workplace is critical to improving job performance. The key individuals involved in this process include:

**Supervisors**—responsible for monitoring and maintaining the quality of services and ensuring that healthcare workers are properly supported in the workplace

**Trainers**—responsible for helping healthcare workers acquire the necessary knowledge and skills to perform well on the job

**Healthcare workers**—responsible for the delivery of high-quality services (e.g., clinicians, counselors, administrators, cleaners)

**Coworkers**—responsible for supporting participants while they are engaged in training and as they apply new knowledge and skills at the workplace

The “transfer of learning” process describes the tasks that supervisors, trainers, participants, and coworkers undertake before, during, and after training in order to ensure transfer of knowledge and skills to the workplace. The goal is for participants to transfer 100% of their new knowledge and skills to their jobs. The following matrix outlines these specific tasks. The tasks that trainers and participants should do during the learning experience appear in **bold** in the matrix.
## TRANSFER OF LEARNING MATRIX

<table>
<thead>
<tr>
<th>Supervisors</th>
<th>Before Learning</th>
<th>During Learning</th>
<th>After Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>z Understand the performance need</td>
<td>● Participate in or observe training</td>
<td>● Monitor progress of action plans with participants and revise as needed</td>
<td></td>
</tr>
<tr>
<td>z Participate in any additional assessments required for training</td>
<td>● Protect participants from interruptions</td>
<td>● Conduct post-training debriefing with participants and coworkers</td>
<td></td>
</tr>
<tr>
<td>z Influence selection of participants</td>
<td>● Plan post-training debriefing</td>
<td>● Be a coach and role model—provide encouragement and feedback</td>
<td></td>
</tr>
<tr>
<td>z Communicate with trainers about the learning intervention</td>
<td>● Provide supplies and space and schedule opportunities for participants to practice</td>
<td>● Evaluate participants’ performance</td>
<td></td>
</tr>
<tr>
<td>z Help participants create a preliminary action plan</td>
<td>● Communicate with trainers about the learning intervention</td>
<td>● Stay in contact with trainers</td>
<td></td>
</tr>
<tr>
<td>z Support and encourage participants</td>
<td>● Help participants create a preliminary action plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trainers</th>
<th>Before Learning</th>
<th>During Learning</th>
<th>After Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>z Validate and supplement the results of the performance needs assessment</td>
<td>● Provide work-related exercises and appropriate job aids</td>
<td>● Conduct follow-up activities in a timely manner</td>
<td></td>
</tr>
<tr>
<td>z Use instructional design and learning principles to develop or adapt the course</td>
<td>● Give immediate and clear feedback</td>
<td>● Help strengthen supervisors’ skills</td>
<td></td>
</tr>
<tr>
<td>z Send the course syllabus, objectives and precourse learning activities in advance</td>
<td>● Help participants develop realistic action plans</td>
<td>● Facilitate review of action plans with supervisors and participants</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants</th>
<th>Before Learning</th>
<th>During Learning</th>
<th>After Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>z Participate in needs assessments and planning</td>
<td>● Participate actively in the course</td>
<td>● Meet with supervisor to review action plan</td>
<td></td>
</tr>
<tr>
<td>z Review course objectives and expectations and prepare preliminary action plans</td>
<td>● Develop realistic action plans for transferring learning</td>
<td>● Apply new skills and implement action plan</td>
<td></td>
</tr>
<tr>
<td>z Begin establishing a support network</td>
<td>● Complete participants’ reassigned work duties</td>
<td>● Use job aids</td>
<td></td>
</tr>
<tr>
<td>z Complete precourse learning activities</td>
<td>● Participate in learning exercises at the request of participants</td>
<td>● Network with other participants and trainers for support</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coworkers and others</th>
<th>Before Learning</th>
<th>During Learning</th>
<th>After Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>z Participate in needs assessments and discussions of the training’s intended impact</td>
<td>● Complete participants’ reassigned work duties</td>
<td>● Be supportive of participants’ accomplishments</td>
<td></td>
</tr>
<tr>
<td>z Ask participants to bring back key learning points to share with the work group</td>
<td>● Participate in learning exercises at the request of participants</td>
<td></td>
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As reflected in the matrix, transfer of learning is a complex process. An action plan can help make the process easier for all of the individuals involved. An action plan is a written document that describes the steps that supervisors, trainers, participants, and coworkers will complete to help maximize the transfer of learning. An action plan should be initiated before the training intervention so that everyone who can support the transfer of learning is involved.
from the beginning. The participants refine their plan during the training course and usually do not complete it until after the course when they are using their new skills on the job. The content and layout of an action plan should support the users of the plan, especially the participants. In developing an action plan, keep in mind these important points:

- Write activities as discrete steps that are realistic, measurable, and attainable.
- Identify clear responsibilities for participants, supervisors, coworkers, and trainers.
- Develop a specific time schedule for completing activities.
- Identify resources necessary to complete the activities, including plans for acquiring those resources.
- Instruct participants to use a learning journal to help facilitate the development of an action plan. A learning journal is a notebook in which participants document issues, problems, additional skills they need to develop, and questions that arise as they apply their new knowledge and skills on the job.

If time permits, the development of an action plan can be included in the training course. If it is not, however, participants can take the initiative to develop an action plan on their own. See page 8 for an example of a completed action plan. This example is more detailed than may be necessary in a given situation. The level of detail required should depend on the performance problem and the learning intervention being undertaken. A blank action plan format can be found on page 9. Participants may copy this for their use or develop their own format.
### EXAMPLE OF A COMPLETED ACTION PLAN

**Action Plan Goal:** Implementation of the New National Guidelines for Essential Maternal and Neonatal Care (EMNC)

**Facility:** Mercy Hospital

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>WHO DOES IT?</th>
<th>RESOURCES NEEDED</th>
<th>DATE NEEDED</th>
<th>HOW TO MONITOR THE ACTIVITY</th>
<th>RESULT AND HOW TO MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire sufficient quantities of the service delivery guidelines to serve the needs of the facility.</td>
<td>Sister-in-charge</td>
<td>Copies of the service provision guidelines</td>
<td>31 March 2004</td>
<td>Copies of the service provision guidelines are available and used by all staff.</td>
<td>By December 2004, 90% of doctors and nurses will be providing basic maternal and newborn care services according to new national service provision guidelines. Observe clinical practice in comparison with clinical protocols.</td>
</tr>
<tr>
<td>Conduct orientation of all staff from the Antenatal Clinic.</td>
<td>Sister-in-charge and senior nurse/midwife</td>
<td>Copies of the service provision guidelines</td>
<td>31 May 2004</td>
<td>Staff demonstrates familiarity with contents of service provision guidelines through participatory discussion led by sister-in-charge.</td>
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</tr>
<tr>
<td>Form Job Aids Committee.</td>
<td>Senior nurse/midwife</td>
<td>None</td>
<td>31 May 2004</td>
<td>Committee exists and is creating job aids.</td>
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<tr>
<td>Have Job Aids Committee review guidelines and identify clinical protocols to post on the walls of the Antenatal Clinic.</td>
<td>Senior nurse/midwife</td>
<td>Copies of the service provision guidelines, pen and paper</td>
<td>15 June 2004</td>
<td>Observe minutes of the meeting.</td>
<td></td>
</tr>
<tr>
<td>Make enlarged photocopies of the selected clinical protocols.</td>
<td>Job Aids Committee representative</td>
<td>Transport and funds to make photocopies</td>
<td>21 June 2004</td>
<td>Photocopies exist.</td>
<td></td>
</tr>
<tr>
<td>Post clinical protocols on the walls and show to staff.</td>
<td>Job Aids Committee representative</td>
<td>Tape</td>
<td>30 June 2004</td>
<td>Observe that protocols are posted on the walls and referred to on a regular basis.</td>
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</table>
EXAMPLE OF A BLANK ACTION PLAN

Performance Gap Addressed: ____________________________________________________

Action Plan Goal: _____________________________________________________________

Facility: ___________________________________________________________________

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<tr>
<th>ACTIVITY</th>
<th>WHO DOES IT?</th>
<th>RESOURCES NEEDED</th>
<th>DATE NEEDED</th>
<th>HOW TO MONITOR THE ACTIVITY</th>
<th>RESULT AND HOW TO MEASURE</th>
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INTRODUCTION

TRAINING IN BASIC ANTENATAL CARE

Antenatal care (ANC) is the care provided throughout pregnancy to help ensure that women go through pregnancy and childbirth in good health and that their newborns are healthy. The emphasis in this training course is on focused ANC, which relies on evidence-based interventions provided to women during pregnancy by skilled healthcare providers such as midwives, doctors, and nurses with midwifery and life-saving skills. Focused ANC includes assessment of maternal and fetal well-being, preventive measures, preparation of a birth plan including complication readiness, and health messages and counseling.

USING THE ANTENATAL CARE TRAINING 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 the course, an assessment is made of each participant's knowledge. The participants and trainer(s) use the results of this precourse assessment 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 course handbook. The reference manual is designed to provide all of the essential information needed to conduct the course in a logical manner. Because it serves 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 only contains information that is consistent with the course goals and objectives, it becomes an integral part of all classroom activities, such as giving an illustrated lecture or leading a discussion.

The reference manual used for this course is Basic Maternal and Newborn Care: A Guide for Skilled Providers (BMNC):

- Section One: Fundamentals of Basic Care (Chapters 1 through 3);
- Section Two: Core Components of Basic Care (Chapters 4 and 5);
- Section Three: Additional Care (Chapters 9 through 11—selections relevant to ANC); and

- Section Four: Annexes (Annex 5—selections relevant to ANC; and Annexes 6 and 7).

The course 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 needed during the course, including precourse questionnaire, competency-based skills learning guide and practice checklist, case studies, role play, and other exercises; instructions for using the tools; illustrated lecture handouts; and the course evaluation.

The trainer’s notebook contains the same material as the course handbook for participants as well as material for the trainer, including answer keys for the questionnaires, competency-based skills checklist, case studies, role play, and other exercises; instructions for conducting activities; and additional guidance for trainers.

**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 antenatal care by completing a written assessment (**Precourse Questionnaire**).

- Classroom and clinical sessions focus on key aspects of antenatal care.

- Progress in knowledge-based learning is measured during the course using a standardized written assessment (**Knowledge Questionnaire**).

- Clinical skills training builds on the participant's previous experience relevant to antenatal care. For some of the skills, participants practice first in a simulated setting, using learning guides that list the key steps in performing the skills/procedures for antenatal care. In this way, they learn the skills needed more quickly and in a standardized way.
• Progress in learning new skills is documented using the clinical skills learning guides.

• A clinical trainer uses a competency-based skills checklist to evaluate each participant's performance.

• Participants learn and are evaluated in clinical decision-making through case studies and simulated exercises and during clinical practice with clients.

• Participants learn appropriate interpersonal skills through behavior modeling and role play and are evaluated during clinical practice with clients.

Successful completion of the course is based on successful completion of the knowledge and skills components, as well as satisfactory overall performance in providing focused ANC.

EVALUATION

This clinical training course is designed to produce healthcare providers (i.e., doctors, midwives, and nurses with midwifery and life-saving skills) who are qualified to provide focused ANC. 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 Knowledge Assessment Questionnaire

• **Skills**—Satisfactory performance of clinical skills for antenatal care

• **Practice**—Demonstrated ability to provide antenatal care in the clinical setting

The participant and the trainer share responsibility for the qualification of the participant.

The evaluation methods used in the course are described briefly below:

• **Knowledge Assessment Questionnaire**. Knowledge will be assessed at the end 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. Arrangements should be made for participants scoring less than 85% to complete the Knowledge Assessment Questionnaire again.

- **Clinical Skills.** The clinical trainer will use a skills checklist to evaluate each participant as they perform the skills and procedures needed to provide antenatal care. Participants should be able to perform all of the steps/tasks for a particular skill/procedure, before the trainer assesses skill competency using the relevant checklist. Assessment of competency may take place in the simulated setting and then at a clinical site or only at a clinical site, depending on the skill being assessed. In addition, case studies 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 time during the course through observation of participants during the role play, whereas evaluation of the clinical skills, including problem-solving and decision-making skills, will take place at various points throughout the course.

- **Clinical Practice.** During the course, it is the clinical trainer's responsibility to observe each participant's overall performance in providing antenatal care. This includes observing the participant's attitude—a critical component of quality service provision—to women attending antenatal clinic and to co-workers. Through this observation, the clinical trainer assesses how effectively the participant uses what s/he has learned.

**COURSE SYLLABUS**

**Course Description.** This 6-day clinical training course is designed to prepare participants to provide focused ANC.

**Course Goals**

- To influence in a positive way the attitude of the participant toward focused ANC.

- To provide the participant with the knowledge and clinical skills needed to support and maintain maternal and fetal well-being throughout normal pregnancy and childbirth.

- To enable the participant to recognize and respond to a pregnant woman who is experiencing life-threatening complications.
Participant Learning Objectives

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

1. Describe the fundamentals of basic maternal and newborn care and their application to antenatal care.

2. Use the recommended clinical decision-making framework when providing antenatal care.

3. Use interpersonal communication techniques that help the provider develop a caring and trusting relationship with the woman while providing antenatal care.

4. Use recommended infection prevention practices while providing antenatal care.

5. After a quick check has been conducted, take an antenatal history, including personal information, menstrual and contraceptive history, present pregnancy, daily habits and lifestyle, obstetric history, medical history, and interim history.

6. Perform an antenatal physical examination, including assessment of well-being, blood pressure measurement, visual inspection of breasts, abdominal examination, and genital examination.

7. Perform basic testing procedures as follows: hemoglobin level, RPR test (or refer for VDRL), HIV test (accompanied by counseling, as shown below), blood group and RH, and urine for diabetes (if applicable).

8. Help the woman develop a birth plan that includes preparations for a normal birth and possible complications.

9. Provide health messages and counseling about nutrition; self-care and other healthy practices (use of potentially harmful substances, prevention of infection, hygiene, rest and activity, sexual relations and safer sex, early and exclusive breastfeeding, and family planning); and HIV (pre- and post-test counseling).

10. Provide immunization and other preventive measures, as needed, including tetanus toxoid immunization, iron/folate, and—in areas endemic for these diseases and deficiencies—intermittent preventive treatment for malaria, presumptive treatment for hookworm infestation, vitamin A supplementation, and iodine supplementation.
11. Differentiate between signs and symptoms of the common discomforts of pregnancy and alert signs, which may indicate a problem.

12. Explain the anatomic/physiologic basis for common discomforts of pregnancy and counsel about prevention and relief measures.

13. Identify women with special needs during pregnancy and address these needs appropriately.

14. Explain the recognition and appropriate response to life-threatening complications that may arise during pregnancy.

Training/Learning Methods

- Illustrated lectures and group discussions
- Case studies
- Role play and other exercises
- Simulated practice
- Guided clinical activities (assessing and providing care for women requiring antenatal care)

Learning Materials

- Presentation graphics
- Instruments and equipment:
  - For general classroom activities: overhead projector and screen, flipchart with markers
  - For learning activities: pregnancy calculators (wheels), calendars, antenatal record cards
  - For the infection prevention demonstration: soap/antiseptic hand cleanser, nail brush, gloves, plastic apron, instruments, needles and syringes, plastic receptacles, chlorine solution
  - For clinic-based activities (See the Annex 2 in the reference manual.)
Participant Selection Criteria

- Participants for this course should be practicing clinicians (doctors, midwives, and/or nurses with midwifery and life-saving skills) who provide or will provide antenatal care.

- Participants should have the support of their supervisors or managers to attend the course, and their supervisors should be willing to support transfer of learning at the participant’s job site.

Methods of Evaluation

Participant

- Precourse and Knowledge Assessment Questionnaires

- Learning Guide and Checklist for Antenatal Assessment (History, Physical Examination, Testing) and Care

Course

- Course Evaluation (to be completed by each participant)

Course Duration

- 12 sessions in a 6-day sequence

Suggested Course Composition

- Up to 20 participants

- 1 clinical trainer for every 4 to 5 participants
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<td>Basic antenatal assessment: history</td>
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<td><strong>P.M. (3.5 Hours)</strong> Tour of Antenatal Clinic Facilities</td>
<td><strong>P.M. (3.5 Hours)</strong> Illustrated Lecture-Discussion (PPT2A):</td>
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<td><strong>Case Study (CS2 &amp;3):</strong></td>
<td><strong>Emergency drill:</strong></td>
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<td>Basic antenatal assessment: physical examination</td>
<td>Basic antenatal assessment: testing</td>
<td>Antenatal assessment and care</td>
<td>Antenatal assessment and care</td>
<td>Management of headache/blurred vision, elevated blood pressure, loss of consciousness convulsions</td>
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<td><strong>Review Assignment</strong> BMNC—Section 2: Chapter 5 (through “Antenatal Care Provision”); Section 3: Chapter 9 (pages 3-1 to 3-24—all pregnancy-related entries); Section 4: Annex 5</td>
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PRE COURSE QUESTIONNAIRE

HOW THE RESULTS WILL BE USED

The main objective of the Precourse Questionnaire is to assist both the clinical trainer and the participant as they begin their work together in the course by assessing what participants, individually and as a group, know about the course topic. This allows the clinical trainer to identify topics that 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 (page 24), is provided to record the scores of all course participants. Using this form, the clinical trainer and participants can quickly chart the number of correct answers for each of the 25 questions. By examining the data in the matrix, the group members can easily determine their collective strengths and weaknesses and jointly plan the desired learning objectives.

For the clinical 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 clinical trainer may elect to use some of the allotted time for other purposes. For example, if the participants as a group did well (85% or more correct) in answering the questions in the category “Fundamentals of Basic Care” (Questions 1 through 5), the clinical trainer may elect to assign Section 1 of the reference manual as homework rather than discussing this information in class.

For the participants, the learning objective(s) related to each question and the corresponding chapter(s) in the reference manual are noted beside the answer column. To make the best use of the limited course time, participants are encouraged to address their individual learning needs by studying the designated chapter(s).
PREOCOURSE QUESTIONNAIRE

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

FUNDAMENTALS OF BASIC CARE

1. The single most critical intervention for saving the lives of women and newborns is the presence of a skilled caregiver at birth, supported by transport if emergency referral is required. ___ Participant Objective 1 (Section 1: Chapter 1)

2. The clinical decision-making process is based entirely on the information obtained from the client and her record. ___ Participant Objective 2 (Section 1: Chapter 3)

3. Effective communication is critical to the development of a trusting relationship with clients. ___ Participant Objective 3 (Section 1: Chapter 3)

4. Handwashing should be carried out only after contact with clients known to be infectious. ___ Participant Objective 4 (Section 1: Chapter 3)

BASIC ANTENATAL ASSESSMENT

5. The estimated date of childbirth (EDC) should be calculated based on the last day of the woman’s last menstrual period. ___ Participant Objective 5 (Section 2: Chapter 5)

6. The fundus is palpable just above the symphysis pubis at 16 weeks’ gestation. ___ Participant Objective 6 (Section 2: Chapter 5)

7. If the systolic blood pressure of a pregnant woman is less than 90 mmHg, it is considered normal. ___ Participant Objective 6 (Section 2: Chapter 5)

8. The normal fetal heart rate range during pregnancy (before labor) is 120-160 beats per minute. ___ Participant Objective 6 (Section 2: Chapter 5)

9. At 36 weeks’ gestation, the fetus is normally longitudinal in lie and in cephalic/vertex presentation. ___ Participant Objective 6 (Section 2: Chapter 5)

10. A hemoglobin level of 7-11 g/dL indicates severe anemia. ___ Participant Objective 7 (Section 2: Chapter 5)

11. HIV testing should be offered on each subsequent visit, even if the woman told you at her visit that she does not want to be tested. ___ Participant Objective 7 (Section 2: Chapter 5)
BASIC ANTENATAL CARE PROVISION

12. The birth plan should be developed at the first antenatal visit and reviewed and updated on return visits.  
   Participant Objective 8  
   (Section 2: Chapter 5)

13. Knowing the danger signs of pregnancy and childbirth will help the woman and her family recognize and respond to complications.  
   Participant Objective 8  
   (Section 2: Chapter 5)

14. Health messages and counseling should be individualized and aim at helping the woman to stay healthy during pregnancy.  
   Participant Objective 9  
   (Section 2: Chapter 5)

15. Early and exclusive breastfeeding provides the best nutrition for the newborn.  
   Participant Objective 9  
   (Section 2: Chapter 5)

16. Foods rich in vitamin C may inhibit iron absorption.  
   Participant Objective 10  
   (Section 2: Chapter 5)

17. A woman should wait until after her first trimester (3 months) of pregnancy to receive her first tetanus toxoid immunization.  
   Participant Objective 10  
   (Section 2: Chapter 5)

COMMON DISCOMFORTS

18. One relief measure for dizziness and fainting during pregnancy is to advise the woman to get up slowly from a sitting or lying position.  
   Participant Objective 11  
   (Section 3: Chapter 9)

19. Abdominal cramps and twinges during pregnancy are almost always associated with a serious complication.  
   Participant Objective 12  
   (Section 3: Chapter 9)

SPECIAL NEEDS

20. If a woman reports abuse, acknowledge her situation by making a statement such as “Many women face abuse at home, so you should not be afraid or let it affect your pregnancy.”  
   Participant Objective 13  
   (Section 3: Chapter 10)

21. If an HIV-positive mother wants to breastfeed, but wants to minimize the risk of transmitting the infection to her baby, she should use “mixed feeding” (alternating breastfeeding with replacement feeding).  
   Participant Objective 13  
   (Section 3: Chapter 10)
LIFE-THREATENING COMPLICATIONS

22. Rapid initial assessment and, if necessary, stabilization procedures are essential for responding to women who experience life-threatening complications during pregnancy and childbirth.  


24. The emergency treatment of choice for a pregnant woman with eclampsia is 10 mg diazepam IV.
<table>
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<th>QUESTION NUMBER</th>
<th>CORRECT ANSWERS (PARTICIPANTS)</th>
<th>CATEGORIES</th>
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ROLE PLAY AND EXERCISE

USING THE ROLE PLAY AND EXERCISE

Role Play: Listening to the Antenatal Client

The purpose of the role play is to provide an opportunity for learners to understand the importance of good interpersonal communication skills when providing antenatal care. The emphasis in the role play is on good listening skills. There are directions for the trainer, together with discussion questions to facilitate discussion after the role play. There is also an answer key. It is important for the trainer to become familiar with the answer key before conducting the role play. Although the key contains “likely” responses, other responses provided by participants may be equally acceptable.

Exercise: Calculating the EDC

The exercise is designed to help the participant practice calculating the estimated date of childbirth (EDC). Instructions are provided for the trainer and the resources required for the exercise are listed. An answer key is also provided for the trainer to use after participants have completed the exercise.
ROLE PLAY 1: LISTENING TO THE ANTENATAL CLIENT

DIRECTIONS

The trainer will select two participants to perform the following roles: healthcare provider and antenatal client. The two participants taking part in the role play should take a few minutes to prepare for the activity by reading the background information provided below. The remaining participants, who will observe the role play, should also read the background information before the role play begins.

The purpose of the role play is to provide an opportunity for participants to understand the importance of good listening skills when providing antenatal care.

PARTICIPANT ROLES

Healthcare provider: The healthcare provider is an experienced midwife who has good listening skills.

Client: Mrs. A is 19 years old. This is her second pregnancy.

SITUATION

Mrs. A is 20 weeks’ pregnant and generally healthy. This is her second antenatal visit for this pregnancy. She has not had any pregnancy-related problems so far. Her first pregnancy was uncomplicated. She is not comfortable about being at the clinic because the midwife who provided antenatal care in her first pregnancy did not listen to what she had to say. In addition, the midwife she saw 2 months ago on her first visit for this pregnancy was hurried and did not listen to her. However, her mother-in-law has sent her to the clinic today. The midwife senses the client's discomfort as she starts taking the interim antenatal history; she decides to use listening skills to make Mrs. A feel comfortable.

FOCUS OF THE ROLE PLAY

The focus of the role play is the interpersonal interaction between the midwife and the woman, specifically appropriate listening skills.
EXERCISE 1: CALCULATING THE ESTIMATED DATE OF CHILDBIRTH (EDC)

PURPOSE

The purpose of this exercise is to enable participants to practice calculating the estimated date of childbirth (EDC).

INSTRUCTIONS

The exercise can be done in small groups or individually.

- The trainer should review the method for calculating the EDC with participants.
- Participants should answer Questions 1 through 5.
- The trainer should distribute pregnancy calculators (gestational wheels) to participants and demonstrate how to use them.
- Participants should answer Questions 1 through 5 again, this time using pregnancy calculators. They should then compare the results with their original calculations.
- If pregnancy calculators are not available, the trainer should review participants' original calculations for accuracy.

RESOURCES

- Calendars
- Pregnancy calculators (gestational wheels)
- Guidelines for calculating the EDC (BMNC, page 2-9)
- Questions 1 through 5 (next page)
- Answer Key to Questions 1 through 5 (trainer’s notebook)
EXERCISE 1: CALCULATING THE EDC

CALCULATING THE EDC

1. **Due Date—Calendar Method**
   - Add seven days to the date of the first day of the last normal menstrual period.
   - Subtract three months

2. **Gestation and Due Date—Gestation Wheel Method**
   - Calculate on the gestation/pregnancy wheel (if available)

QUESTIONS (STATE MONTH, DATE, AND YEAR)

1. Mrs. A comes to antenatal clinic on 3 January. She tells you that her last normal menstrual period started on 10 October. What is her EDC?

2. Mrs. B comes to antenatal clinic on 15 May. She tells you that her last normal menstrual period started on 10 March. What is her EDC?

3. Mrs. C comes to antenatal clinic on July 11. She tells you that her last normal menstrual period started on 10 March. What is her EDC?

4. Mrs. D comes to antenatal clinic on 15 May. She tells you that her last normal menstrual period started on 1 January. What is her EDC?

5. Mrs. E comes to antenatal clinic on 30 April. She tells you that her last normal menstrual period started on 15 December. What is her EDC?
CASE STUDIES

CASE STUDY 1: ANTENATAL ASSESSMENT AND CARE

DIRECTIONS

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

CLIENT PROFILE

Mrs. A is a 34-year-old Gravida 2/Para 1 with no living children. Her first child died at 3 months of age from “diarrhea.” Mrs. A presents today for her first antenatal visit.

PRE-ASSESSMENT

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

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

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

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

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

DIAGNOSIS (interpreting information to identify problems/needs)

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

History:

- According to Mrs. A’s menstrual history, she is 16 weeks pregnant.

- She reports that she did not breastfeed her first baby, nor did she try, because she was told that something was wrong with her nipples. She believes she will not be able to breastfeed this baby either. Mrs. A also says that after her first baby was born, she did not have the funds to buy the recommended amount of breastmilk substitute, and she did not always have access to clean water to prepare it.

- All other aspects of Mrs. A’s history are normal or without significance.
  - She denies any problems during the previous pregnancy, labor, and birth. She reports that her baby was “very healthy” at birth.
  - She denies any problems during this pregnancy.
Physical Examination:

- Mrs. A’s breast exam is normal except that her nipples appear to be inverted. However, when the areola is gently squeezed on either side of the nipple, the nipple protrudes and the inversion is corrected.

- All other aspects of her physical examination are within normal range.
  - Mrs. A appears well-nourished and healthy.
  - Her blood pressure is 108/78.
  - The conjunctiva are pink.
  - The fundal height is approximately halfway between the symphysis pubis and umbilicus, consistent with the EDC.
  - The genital exam is normal.

Testing:

- Test results were: HIV – negative; RPR – non-reactive; Hemoglobin – 11.5 Gm/dl; Blood type O, Rh positive.

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

CARE PROVISION (implementing plan of care and interventions)

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

EVALUATION/FOLLOW-UP

- Mrs. A returns for her scheduled antenatal care visits. She reports that she has decided to breastfeed, and even tells you that she knows she must breastfeed so that this baby will live and be healthy.

- Mrs. A is also adhering to the care plan and following other recommendations discussed on previous visits.

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

REFERENCES

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10; Section Four: Annexes, Annex 5
CASE STUDY 2: ANTENATAL ASSESSMENT AND CARE

DIRECTIONS

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

CLIENT PROFILE

Mrs. B, a 26-year-old Gravida 3/Para 2, presents for her first antenatal clinic visit. Her children are 18 months and 8 months of age. Both are well. She and her family live in a rural village that is in a malaria-endemic area. You note that Mrs. B looks pale and tired.

PRE-ASSESSMENT

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

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

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

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

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

DIAGNOSIS (interpreting information to identify problems/needs)

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

History:

- According to Mrs. B's menstrual history, she is 28 weeks pregnant.
- She admits to feeling weak, tired, and dizzy, but denies other symptoms of anemia.
- She reports that she has been treated for malaria twice in the past 12 months; the most recent episode was 4 months ago, during which she was treated with antimalarial drugs. She denies any symptoms of malaria now.
- She reports that she had no signs or symptoms of anemia during her previous pregnancies.
- She is not taking any medication at present.
- She and her family have an adequate food supply at present, but Mrs. B’s appetite has been poor lately.
Mrs. B’s mother-in-law provides some help with childcare and housework.

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

**Physical Examination:**

- Mrs. B has mild conjunctival pallor.
- All other aspects of her physical examination are within normal range.
  - Her blood pressure is 100/68.
  - Her temperature is 37.6°C. (Although temperature is not a routine part of antenatal care, because she comes from a malaria-endemic area, this is part of the assessment.)
  - Her breast exam is normal.
  - Mrs. B’s fundal height measurement is 28 weeks, consistent with the EDC.
  - Fetal heart rate is 136 beats/minute and regular.
  - The genital exam is normal.

**Testing:**

- Hemoglobin is 9 g/dL
- Other test results: RPR – non-reactive; HIV – negative; blood type - O, Rh - positive.

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

**CARE PROVISION (implementing plan of care and interventions)**

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

**EVALUATION**

Mrs. B comes back to the antenatal clinic on the appointed date and on assessment your findings are as follows:

- She has taken her iron/folate tablets as directed, even though she has had mild constipation.
- She has been able to rest more because her mother-in-law has provided more help than usual. She also reports that her appetite has improved.
- She appears less tired and is not as pale, generally, as she was at her first antenatal visit. She says that she "feels much better."
- On physical examination, you find that she still has mild conjunctival pallor.
- She does not have a fever.
- The fetal heart rate is normal, and Mrs. B says that the fetus is active.
- Mrs. B’s hemoglobin is now 10 g/dL.
7. Based on these findings, what is your continuing plan of care for Mrs. B?

REFERENCES

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10
CASE STUDY 3: ANTENATAL ASSESSMENT AND CARE

DIRECTIONS

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

CLIENT PROFILE

Mrs. C, a 27-year-old Gravida 3/Para 2, presents for her second regularly scheduled antenatal care visit at 26 weeks’ gestation. Her first visit was at 16 weeks. At that time, Mrs. C chose not to be tested for HIV, a test that is recommended for all pregnant women. Her other laboratory tests were normal. She lives with her husband and children in a suburb of the capital city of a country where the prevalence of HIV infection in pregnant women has increased over the past few years. You note that she looks anxious and unhappy.

PRE-ASSESSMENT

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

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

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

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

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

DIAGNOSIS (interpreting information to identify problems/needs)

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

History:

- During the first antenatal visit, all aspects of Mrs. C’s history were normal, except that she opted out of HIV testing.
- During this visit, when you ask whether there is anything worrying her or anything that she would like to talk about, she reports that:
  - She is very concerned about her family history of HIV: Her brother-in-law has AIDS and his wife and their youngest child are both HIV-positive.
  - She felt embarrassed to talk about this with you at her first antenatal visit, even though you provided an opportunity for her to do so when you asked about her HIV status,
offered HIV testing, and provided HIV counseling.

- She knows that her husband has sexual relations with at least one other woman; however, he refuses to use a condom during intercourse with his wife. Mrs. C has no sexual partners other than her husband.
- She is very distraught, as she fears that she may be HIV-positive.
- During this visit, all other aspects of Mrs. C’s history are normal.

Physical Examination:

- During the first antenatal visit, all findings on physical examination were within normal range.
- During this visit, all findings on physical examination are within normal range.

Testing:

- During the first antenatal visit, she “opted out” of HIV testing; all other test results were normal as mentioned above in client profile.
  - Hemoglobin 11 gm/dL.
  - RPR non-reactive.
  - Blood type O, Rh positive

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

CARE PROVISION (implementing plan of care and interventions)

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

EVALUATION

- Mrs. C agreed to HIV testing on her last visit and now comes back to see you with the result of her HIV test, which is positive. Her tests for gonorrhea and chlamydia were negative.
- She tells you that some counseling was provided at the testing site, which was helpful, but she wants to discuss her situation further with you.
- She is very distraught.

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

REFERENCES

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10
SKILLS PRACTICE SESSIONS

SKILLS PRACTICE SESSION 1: ANTENATAL HISTORY

PURPOSE

The purpose of this activity is to enable participants to practice taking an antenatal history and achieve competence in the skills required.

INSTRUCTIONS

This activity should be conducted in a simulated situation.

Participants should review the steps/tasks under “History” in Learning Guide 1, before beginning the activity. Participants should also review the content for these topics in the BMNC—Section Two: Core Components of Basic Care, Chapter 5: Antenatal Care Provision and Section Three: Additional Care, Chapter 6: Common Discomforts (selected text).

The trainer should demonstrate the steps/tasks in taking an antenatal history for participants.

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:

- While one participant takes a history from another, the third participant should use the relevant section of Learning Guide 1 to observe performance.

- Participants should then reverse roles until each has had an opportunity to take a history and be observed.

Participants should be able to perform the steps/tasks relevant to taking an antenatal history before progressing to physical examination.

RESOURCES

Antenatal record cards (sufficient for each participant to practice history taking several times)

The BMNC

Learning Guide 1: Antenatal Assessment (History, Physical Examination, Testing) and Care
SKILLS PRACTICE SESSION 2: BIRTH PLANNING AND COUNSELING

PURPOSE

The purpose of this activity is to enable participants to practice counseling on the following topics: birth planning including complication readiness, nutrition, prevention of infection/hygiene, rest and activity, sexual relations and safer sex, early and exclusive breastfeeding, family planning, HIV (risks, prevention, testing), common discomforts of pregnancy, and use of potentially harmful substances.

INSTRUCTIONS

This activity should be conducted in a simulated situation.

Participants should review the steps/tasks in Steps 1 through 12 under “Care Provision” in Learning Guide 1, before beginning the activity. Participants should also review the content for these topics in the BMNC—Section Two: Core Components of Basic Care, Chapter 5: Antenatal Care Provision and Section Three: Additional Care, Chapter 6: Common Discomforts (selected text).

The trainer should demonstrate the steps/tasks in birth planning and counseling for participants.

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.

- Each participant should practice counseling on two of the subjects listed above (under Purpose). Each participant should choose two subjects that are different from those chosen by other participants in this exercise.

- While one participant counsels another, the third participant should use the relevant section of Learning Guide 1 to observe performance.

- Participants should then reverse roles until each has had an opportunity to counsel a simulated client.

RESOURCES

Any patient charts or patient education materials that are available in the clinic where participants will be practicing with clients

The BMNC

Learning Guide 1: Antenatal Assessment (History, Physical Examination, Testing) and Care
LEARNING GUIDE AND PRACTICE CHECKLIST

The Learning Guide and Checklist for are designed to help the participant learn the steps or tasks involved in conducting a basic antenatal care visit.

USING THE LEARNING GUIDE

There is one learning guide in this handbook:

Learning Guide 1: Antenatal Assessment and Care

The learning guide contains the steps or tasks relevant to the skills for basic antenatal assessment (history, physical examination, testing) and care provision and correspond to the information presented in the applicable chapters/annexes of the reference manual for the course.

- Initially, participants can follow the learning guide as the trainer demonstrates the steps or tasks for a particular procedure.

- Subsequently, during classroom and clinic practice sessions, it serves as a step-by-step guide for the participant as she/he performs the skills. During this phase, participants work in groups of two or three, using the learning guides to rate each other’s performance or prompt each other as necessary. The clinical trainer(s) will provide guidance to each group to ensure that learning is progressing and that participants are following the steps outlined in the learning guides.

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:

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<thead>
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<tbody>
<tr>
<td>1</td>
<td>Needs Improvement: Step or task not performed correctly, performed out of sequence (if sequence necessary), or omitted</td>
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<tr>
<td>2</td>
<td>Competently Performed: Step or task performed correctly and in proper sequence (if sequence necessary), but learner does not progress from step to step efficiently</td>
</tr>
<tr>
<td>3</td>
<td>Proficiently Performed: Step or task performed correctly, in proper sequence (if sequence necessary), and efficiently</td>
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USING THE PRACTICE CHECKLIST

There is one checklist for the course:

Checklist 1: Antenatal Assessment and Care

The checklist is based on the information provided in the learning guide. Unlike the learning guide, which is quite detailed, the checklist focuses on the key steps in the entire process.

Using the Checklist for Practice

As the participant progresses through the course and gains experience, dependence on the detailed learning guide decreases and the checklist may be used in its place. The checklist can also be used by the participant when providing services in a clinical situation to rate her/his own performance.

Using the Checklist for Evaluation

This checklist, which the participant uses for practice, is the same as the checklist that the clinical trainer will use to evaluate the participant’s performance in providing basic antenatal care at the end of the course.

Criteria for assessment are included at the beginning of the checklist. Assessment of clinical skills will usually take place at the end of the training course. It is important that each participant demonstrates the steps or tasks at least once for feedback and coaching prior to the final assessment. If a step or task is not performed correctly, the participant should repeat the entire skill or activity sequence, not just the incorrect step. In addition, it is recommended that the trainer not stop the participant at the incorrect step unless the safety of the client is at stake. If it is not, the trainer should allow the participant to complete the skill/procedure before providing coaching and feedback on her/his overall performance.

In determining whether the participant is qualified, the trainer(s) will observe and rate the participant’s performance on each step/task of a skill or procedure. The participant must be rated as “Satisfactory” for each step/task in the checklist to be assessed as qualified. The rating scale used is described on the next page:
**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
LEARNING GUIDE 1: ANTENATAL ASSESSMENT (HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE

(To be used by the Participant)

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

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

2 **Competently Performed**: Step or task performed correctly and in proper sequence (if sequence necessary), but learner does not progress from step to step efficiently

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

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LEARNING GUIDE FOR ANTENATAL ASSESSMENT (HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE

Some of the following steps/tasks should be performed simultaneously

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>CASES</th>
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<tbody>
<tr>
<td><strong>GETTING READY</strong></td>
<td></td>
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<tr>
<td>1. Prepare the client care area, necessary supplies, and equipment.</td>
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<tr>
<td>2. Use an antiseptic handrub or wash hands thoroughly with soap and water and dry with clean, dry cloth or allow to air dry.</td>
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<td>3. Greet the woman and her companion respectfully and with kindness, introduce yourself, and offer the woman a seat.</td>
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<tr>
<td>4. Tell the woman what you are going to do, encourage her to ask questions, and listen to what she has to say.</td>
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<tr>
<td>5. Confirm that woman has undergone Quick Check. Perform Quick Check if not done.</td>
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</table>

**HISTORY**

*Note*: Flexibility may be used with respect to the order in which the questions are asked. For example, it may be better to link some questions with particular aspects of the woman’s physical examination. In performing the ANC history and physical examination, learners should ask appropriate followup questions as needed.

**Personal Information (First Visit)**

1. Ask the woman’s name, age, address, and phone number (if available).
2. Ask if she has access to reliable transportation.
3. Ask what are her/her family’s sources of income/financial support.
4. Ask if she is having a medical, obstetric, social, or personal problem or other concern, and if she has had any problems during this pregnancy.
5. Ask if she has received care from another caregiver during this pregnancy.

**Menstrual and Contraceptive History (First Visit)**

6. Ask the first day of her last menstrual period and calculate her EDC.
7. Ask how many more children she plans to have.
8. Ask if she has used a family planning method before. If she has, ask which method(s) and whether she liked the method(s).
**LEARNING GUIDE FOR ANTENATAL ASSESSMENT**  
**HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE**  
Some of the following steps/tasks should be performed simultaneously

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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<tbody>
<tr>
<td>9. Ask if she plans on using a family planning method after this baby is born. If so, ask which method.</td>
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<tr>
<td><strong>Present Pregnancy (First Visit)</strong></td>
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<tr>
<td>10. Ask if she has felt the baby move. If she has, ask the woman when the baby first moved and whether she has felt it move in the last day.</td>
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<tr>
<td>11. Ask what her feelings are about this pregnancy.</td>
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<tr>
<td>12. Ask what the feelings of her partner or family about this pregnancy.</td>
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<tr>
<td><strong>Daily Habits and Lifestyle (First Visit)</strong></td>
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<tr>
<td>13. Ask if she works outside the home.</td>
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<tr>
<td>14. Ask if she walks long distances, carries heavy loads or does heavy physical labor.</td>
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<tr>
<td>15. Ask if she gets enough sleep and rest.</td>
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<tr>
<td>16. Ask what she normally eats in a day, and what she has eaten in the past 2 days. Ask if she eats any non-food substances such as dirt or clay.</td>
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<tr>
<td>17. Ask if she has had a baby within the last year. If she has, ask if the woman is currently breastfeeding.</td>
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<tr>
<td>18. Ask if she smokes, drinks alcohol, or uses any other possibly harmful substances.</td>
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<td>19. Ask who she lives with.</td>
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<tr>
<td>20. Ask if:</td>
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<tr>
<td>• anyone has ever prevented her from seeing family or friends, stopped her from leaving her house, or threatened her life.</td>
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<tr>
<td>• she has ever been injured, hit, or forced to have sex by someone.</td>
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<tr>
<td>• she is frightened of anyone.</td>
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<tr>
<td><strong>Obstetric History (First Visit)</strong></td>
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<tr>
<td>22. Ask if she has had any problems during a previous pregnancy or during/following childbirth:</td>
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<tr>
<td>• convulsions during pregnancy or during/after childbirth</td>
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<tr>
<td>• caesarean section, uterine rupture, or uterine surgery during childbirth</td>
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<tr>
<td>• tears through the sphincter and/or rectum during childbirth</td>
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<tr>
<td>• postpartum hemorrhage</td>
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<tr>
<td>• stillbirths, preterm, low birthweight, babies, babies who died before 1 month of age, three or more spontaneous abortions.</td>
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<tr>
<td>23. Ask if she has breastfed before. If she has, ask how long she breastfed and whether she had any problems.</td>
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<tr>
<td><strong>Medical History (First Visit)</strong></td>
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<tr>
<td>24. Ask if she has any allergies.</td>
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<tr>
<td>25. Ask if she has been diagnosed with anemia in the last 3 months.</td>
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<tr>
<td>26. Ask if she has been diagnosed with syphilis.</td>
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<tr>
<td>27. Ask if she has been diagnosed with any chronic illnesses or conditions such as tuberculosis, heart disease, kidney disease, sickle cell disease, diabetes, goiter, or another serious chronic illness.</td>
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</table>
LEARNING GUIDE FOR ANTENATAL ASSESSMENT  
(HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE  
Some of the following steps/tasks should be performed simultaneously

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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<tbody>
<tr>
<td>28. Ask if she has ever been in the hospital or had surgery.</td>
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<tr>
<td>29. Ask if she is taking any drugs/medications (including traditions/local preparations, herbal remedies, over-the-counter drugs, vitamins, or dietary supplements).</td>
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<tr>
<td>30. Ask if she has had a complete series of five tetanus toxoid (TT) immunizations. If she has, ask if it has been less than 10 years since her last booster.</td>
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</table>

**Interim History (Return Visits).** Remember that the questions about her present pregnancy should be asked at every ANC visit.

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>CASES</th>
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<tbody>
<tr>
<td>31. Ask if she is having a medical, obstetric, social, or personal problem or other concerns.</td>
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<tr>
<td>32. Ask if she has had any problems or significant changes since her last visit.</td>
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<tr>
<td>33. Ask if she has received care from another caregiver since her last visit. If so, ask who provided the care, what care was provided and what the outcome of care was.</td>
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<tr>
<td>34. Ask if any of her personal information has changed since her last visit.</td>
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<tr>
<td>35. Ask if her daily habits or lifestyle (workload, rest, dietary intake) changed since her last visit.</td>
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<tr>
<td>36. Ask if there has been a change in her medical history since her last visit.</td>
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<tr>
<td>37. Ask if she has taken drugs/medications prescribed and followed the advice/recommendations provided at her last visit.</td>
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<tr>
<td>38. Ask if she has had any reactions to or side effects from immunizations or drugs/medications given at her last visit.</td>
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**PHYSICAL EXAMINATION**

**Assessment of General Well-Being and Blood Pressure (Every Visit)**

1. Observe her general well-being:
   - Her gait and movements (walks steadily and without a limp)
   - Her facial expression (is alert and responsive)
   - Her general cleanliness (no visible dirt, no odor)
   - Her skin (free from lesions and bruises)
   - Her conjunctiva (are pink, not white or very pale pink in color)

2. Measure blood pressure while the woman is seated or lying down with the knees slightly bent and relaxed:
   - If diastolic BP is >90 mm Hg., ask the woman if she has severe headache, blurred vision or epigastric pain, and check her urine for protein

**Preparing for Further Examination**

3. Explain the steps in the physical examination and obtain the woman’s consent.

4. Ask her to empty her bladder. Have her provide a urine sample if indicated and if urine testing is available.

5. Have the woman undress in private. Ask her to remove only enough clothing to complete the examination.

6. Provide her with a drape or cloth to cover the parts of her body that are not being examined.
<table>
<thead>
<tr>
<th>STEP/TASK</th>
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<tbody>
<tr>
<td>7. Help her onto the examination surface and assist her in assuming a comfortable position.</td>
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<tr>
<td><strong>Visual Breast Examination (First Visit/As Needed)</strong></td>
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<tr>
<td>8. Conduct <em>visual breast examination (First visit/as needed)</em>:</td>
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<tr>
<td>• Ask the woman to sit on the examination surface, uncover her body from the waist up, and place her arms at her sides.</td>
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<tr>
<td>• Visually inspect the overall appearance of the woman’s breasts (contours, skin, nipples and note any abnormalities)</td>
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<tr>
<td>• If nipples appear inverted, test for protractility by placing the thumb and fingers on either side of areola and gently squeezing</td>
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<tr>
<td>• If the nipple goes in, it is inverted</td>
<td></td>
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<tr>
<td><strong>Abdominal Examination (Every Visit)</strong></td>
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<tr>
<td>9. Ask the woman to lie on her back with her knees slightly bent and uncover her abdomen.</td>
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<tr>
<td>10. Check abdomen for scars:</td>
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<tr>
<td>• If there is a scar, ask if it is from a caesarean section or other uterine surgery.</td>
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<tr>
<td>11. Measure fundal height:</td>
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<tr>
<td>• If 12–22 weeks, palpate and estimate weeks of gestation by determining distance between top of fundus and symphysis pubis.</td>
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</tr>
<tr>
<td>• If more than 22 weeks, use a tape measure to determine the number of centimeters from the upper edge of symphysis pubis to the top of the fundus.</td>
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</tr>
<tr>
<td>12. Carry out fundal palpation:</td>
<td></td>
</tr>
<tr>
<td>• Stand at the woman’s side, facing her head.</td>
<td></td>
</tr>
<tr>
<td>• Place both hands on the sides of the fundus at the top of the abdomen.</td>
<td></td>
</tr>
<tr>
<td>• Using the flat part of your fingers, apply gentle but firm pressure to assess consistency and mobility of the fetal part.</td>
<td></td>
</tr>
<tr>
<td>13. Carry out lateral palpation:</td>
<td></td>
</tr>
<tr>
<td>• Move hands smoothly down sides of uterus to feel for fetal back.</td>
<td></td>
</tr>
<tr>
<td>• Keep dominant hand steady against the side of uterus, while using palm of other hand to apply gentle but deep pressure to explore opposite side of uterus.</td>
<td></td>
</tr>
<tr>
<td>• Repeat procedure on other side of uterus.</td>
<td></td>
</tr>
<tr>
<td>14. Carry out supra-pubic (pelvic) palpation:</td>
<td></td>
</tr>
<tr>
<td>• Turn and face the woman’s feet.</td>
<td></td>
</tr>
<tr>
<td>• Place hands on either side of uterus with palms below the level of the umbilicus and fingers pointing to symphysis pubis.</td>
<td></td>
</tr>
<tr>
<td>• Grasp fetal part snugly between hands to feel shape, size, consistency and mobility.</td>
<td></td>
</tr>
<tr>
<td>• Observe the woman’s face for signs of pain/tenderness during palpation.</td>
<td></td>
</tr>
</tbody>
</table>
### LEARNING GUIDE FOR ANTENATAL ASSESSMENT
**(HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE**

Some of the following steps/tasks should be performed simultaneously

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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<tbody>
<tr>
<td>15. Listen to the fetal heart rate:</td>
<td></td>
</tr>
<tr>
<td>- Place fetal stethoscope on abdomen (on the same side that you palpated the fetal back.</td>
<td></td>
</tr>
<tr>
<td>- Place your ear in close, firm contact with fetal stethoscope.</td>
<td></td>
</tr>
<tr>
<td>- Remove hands from fetal stethoscope and listen to fetal heart for a full minute, counting beats against the second hand of a clock.</td>
<td></td>
</tr>
<tr>
<td>- Feel the woman’s pulse at wrist, simultaneously, to ensure that fetal heart tones, and not maternal pulse, are being measured.</td>
<td></td>
</tr>
</tbody>
</table>

#### Genital Examination (First Visit/As Needed)

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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</thead>
<tbody>
<tr>
<td>16. Tell the woman what you are going to do before each step of the examination.</td>
<td></td>
</tr>
<tr>
<td>17. Ask the woman to uncover her genital area and cover or drape her to preserve privacy and modesty.</td>
<td></td>
</tr>
<tr>
<td>18. Ask the woman to separate her legs while continuing to keep knees slightly bent. Turn on and direct light toward genital area.</td>
<td></td>
</tr>
<tr>
<td>19. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with clean, dry cloth or allow to air dry.</td>
<td></td>
</tr>
<tr>
<td>20. Put new examination or high-level disinfected gloves on both hands.</td>
<td></td>
</tr>
<tr>
<td>21. Touch the inside of the woman’s thigh before touching genital area.</td>
<td></td>
</tr>
<tr>
<td>22. Separate labia majora with two fingers, check labia minora, clitoris, urethral opening, and vaginal opening.</td>
<td></td>
</tr>
<tr>
<td>23. Palpate the labia minora:</td>
<td></td>
</tr>
<tr>
<td>- look for swelling, discharge, tenderness, ulcers, and fistulas</td>
<td></td>
</tr>
<tr>
<td>- feel for irregularities and nodules</td>
<td></td>
</tr>
<tr>
<td>24. Check Skene’s gland for discharge and tenderness:</td>
<td></td>
</tr>
<tr>
<td>- With palm facing upward, insert index finger into vagina and gently push upward against urethra and milk gland on each side, and then directly, on urethra.</td>
<td></td>
</tr>
<tr>
<td>25. Check Bartholin’s glands for discharge and tenderness:</td>
<td></td>
</tr>
<tr>
<td>- Insert index finger into vagina at lower edge of opening and feel at base of each labia majora.</td>
<td></td>
</tr>
<tr>
<td>- Using finger and thumb, palpate each side for swelling or tenderness.</td>
<td></td>
</tr>
<tr>
<td>26. Check perineum for scars, lesions, inflammation or cracks in skin.</td>
<td></td>
</tr>
</tbody>
</table>

#### After the Examination

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>CASES</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Immerse both gloved hands in 0.5% chlorine solution:</td>
<td></td>
</tr>
<tr>
<td>- Remove gloves by turning them inside out</td>
<td></td>
</tr>
<tr>
<td>- If disposing of gloves, place in leak proof container or plastic bag</td>
<td></td>
</tr>
<tr>
<td>- If reusing gloves, submerge in 0.5% chlorine solution for 10 minutes to decontaminate</td>
<td></td>
</tr>
<tr>
<td>28. Use antiseptic handrub or wash hands thoroughly with soap and water and dry with clean, dry cloth or allow to air dry.</td>
<td></td>
</tr>
<tr>
<td>29. Help the woman off the examination table.</td>
<td></td>
</tr>
<tr>
<td>30. Share your findings with the woman.</td>
<td></td>
</tr>
</tbody>
</table>
### Testing

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>CASES</th>
</tr>
</thead>
</table>
| 1. Do a hemoglobin test (1st visit, at about 28 weeks, and as needed based on signs and symptoms):  
  - If hemoglobin is less than 7 g/dL, refer woman to hospital.  
  - If hemoglobin is 7–11 g/dL, give iron/folate 1 tablet twice daily. |       |
| 2. Do an RPR test (first visit/as needed):  
  - If result is positive, refer woman for treatment of syphilis.  
  - Plan to treat newborn.  
  - Encourage woman to bring sexual partner for treatment.  
  - Advise on correct and consistent use of condom to prevent reinfection after treatment. |       |
| 3. Inform woman that HIV testing is recommended for all pregnant women, but that she may choose not to have the test. If she chooses to be tested, refer her to counseling and testing services for HIV:  
  - Provide information about counseling and testing. |       |
| 4. Test for blood group and Rh, if available. If Rh negative, woman is candidate for anti-D immune globulin. |       |
| 5. If woman lives in an area with high prevalence of diabetes/gestational diabetes, test urine for glucose:  
  - If urine positive for glucose, refer for treatment. |       |

### Care Provision

**Note:** Individualize the woman’s care by considering all findings gathered during assessment.

<table>
<thead>
<tr>
<th>STEP/TASK</th>
<th>CASES</th>
</tr>
</thead>
</table>
| 1. Provide advice and counseling about diet and nutrition:  
  - Eat a balanced diet  
  - Eat a variety of foods  
  - Eat an extra serving of staple food per day  
  - Eat a balanced diet and a variety of foods  
  - Eat smaller more frequent meals, if necessary  
  - Take 1 iron/folate tablet daily |       |
| 2. Develop a birth plan with the woman, including all preparations for normal birth and plans in case of emergency:  
  - Skilled provider and place of birth  
  - Transportation/emergency transportation and funds/emergency funds  
  - Decision making and support person  
  - Items for clean and safe birth and for newborn  
  - Danger signs and signs of labor |       |
| 3. Provide advice and counseling about common discomforts of pregnancy, as needed. |       |
| 4. Provide advice and counseling about use of potentially harmful substances:  
  - Smoking, drinking, alcohol, drugs/medications  
  - Inform healthcare worker before use of prescription drugs |       |
5. Provide advice and counseling about hygiene:
   - Handwashing
   - Safe drinking water
   - Food handling/safety
   - Body, clothing, bedding, environment

6. Provide advice and counseling about rest and activity:
   - Decreasing heavy work
   - Needing additional rest
   - Periodic rest periods throughout day
   - Avoid lying on back
   - Avoid standing for long periods
   - Susceptibility to injuries
   - Increased caloric needs

7. Provide advice and counseling about sexual relations and safer sex:
   - Abstinence or monogamy
   - Use of condoms
   - Other high risk sexual practices
   - Change in sexual desire during pregnancy
   - Intercourse not harming fetus
   - Avoiding if fluid leakage, bleeding, premature labor
   - Changes in positions
   - STIs

8. Provide advice and counseling about early and exclusive breastfeeding:
   - Benefits (economic, health for baby, health for mother, bonding)
   - General principles (beginning immediately at birth, benefits of colostrum, exclusive breastfeeding, on demand breastfeeding)

9. Provide advice and counseling about family planning:
   - Benefits of optimum birth spacing (at least 3 years)
   - Method choice
   - Starting before fertility returns

10. Provide advice and counseling about HIV testing:
    - Pretest counseling
    - Post-test counseling

11. Encourage the woman to ask questions and express concerns.

12. Ask the woman questions to be sure that she understands what is being said.

**Immunizations and Other Prophylaxis**

13. Give tetanus toxoid (TT) based on woman’s need.

14. Give enough iron folate to last until next visit and counsel the woman about the following:
   - Eat food rich in vitamin C
   - Avoid tea, coffee, and colas
   - Possible side effects of medication
## LEARNING GUIDE FOR ANTENATAL ASSESSMENT
(HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE
Some of the following steps/tasks should be performed simultaneously

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>15. Give medications as follows:</td>
<td></td>
</tr>
<tr>
<td>• Antimalarial tablets (based on region/population-specific need)</td>
<td></td>
</tr>
<tr>
<td>• Mebendazole (based on region/population-specific need)</td>
<td></td>
</tr>
<tr>
<td>• Vitamin A (based on region/population-specific need)</td>
<td></td>
</tr>
<tr>
<td>• Iodine (based on region/population-specific need)</td>
<td></td>
</tr>
<tr>
<td><strong>Return Visits</strong></td>
<td></td>
</tr>
<tr>
<td>16. Schedule the next antenatal visit:</td>
<td></td>
</tr>
<tr>
<td>• Make sure the woman knows when and where to come</td>
<td></td>
</tr>
<tr>
<td>• Answer any additional questions or concerns</td>
<td></td>
</tr>
<tr>
<td>17. Thank the woman and her family for coming.</td>
<td></td>
</tr>
<tr>
<td>18. Record findings from assessment and care provision on woman’s record.</td>
<td></td>
</tr>
</tbody>
</table>
CHECKLIST 1: ANTENATAL ASSESSMENT (HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE
(To be used by the Trainer)

Place a “✓” in case box if task/activity is performed satisfactorily, an “✗” 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

<table>
<thead>
<tr>
<th>CHECKLIST FOR ANTENATAL ASSESSMENT (HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE</th>
</tr>
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<tr>
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### GETTING READY

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare the client care area, necessary supplies, and equipment. Use antiseptic handrub or wash and dry hands.</td>
<td></td>
</tr>
<tr>
<td>2. Greet the woman and her companion respectfully and with kindness, introduce yourself, and offer the woman a seat.</td>
<td></td>
</tr>
<tr>
<td>3. Tell the woman what you are going to do, encourage her to ask questions, and listen to what she has to say.</td>
<td></td>
</tr>
<tr>
<td>4. Perform Quick Check if not done.</td>
<td></td>
</tr>
</tbody>
</table>

**SKILL ACTIVITY PERFORMED SATISFACTORILY**

### HISTORY

**Personal Information (First Visit)**

1. Obtain identifying information from the woman and ask whether she has access to reliable transportation.

2. Ask if she is currently having a problem, or if she has had any problems during this pregnancy.

3. Ask if she has received care from another caregiver during this pregnancy.

**Menstrual and Contraceptive History (First Visit)**

4. Obtain her menstrual and contraceptive history and calculate her EDC.

5. Obtain information on her use of family planning methods and whether she plans to use a family planning method in the future.

**Present Pregnancy (First Visit)**

6. Ask if she has felt the baby move, when the baby first moved and whether she has felt it move in the last day.

7. Ask how she and her partner or family feel about this pregnancy.

**Daily Habits and Lifestyle (First Visit)**

8. Obtain information about her daily life and work, including her sleeping and eating habits, whether she is currently breastfeeding, use of harmful substances, and whether there is a history of violence or abuse.
### Checklist for Antenatal Assessment

**Checklist for Antenatal Assessment (History, Physical Examination, Testing) and Care**

Some of the following steps/tasks should be performed simultaneously.

<table>
<thead>
<tr>
<th>STEP/TASK</th>
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</thead>
<tbody>
<tr>
<td><strong>Obstetric History (First Visit)</strong></td>
<td></td>
</tr>
<tr>
<td>9. Ask if she has had any problems during a previous pregnancy or during/ following childbirth</td>
<td></td>
</tr>
<tr>
<td>10. Ask if she has breastfed or had any problems breastfeeding.</td>
<td></td>
</tr>
<tr>
<td><strong>Medical History (First Visit)</strong></td>
<td></td>
</tr>
<tr>
<td>11. Obtain her medical history, including whether she has been tested for HIV, whether she has anemia, any chronic illnesses, or been hospitalized or had surgery.</td>
<td></td>
</tr>
<tr>
<td>12. Ask if she is taking any drugs/medications (including traditions/local preparations, herbal remedies, over-the-counter drugs, vitamins, or dietary supplements).</td>
<td></td>
</tr>
<tr>
<td>13. Ask if she has had a complete series of five tetanus toxoid (TT) immunizations and when she had her last booster shot.</td>
<td></td>
</tr>
<tr>
<td><strong>Interim History (Return Visits)</strong></td>
<td></td>
</tr>
<tr>
<td>14. Ask if she is having any problems or if there have been significant changes since her last visit.</td>
<td></td>
</tr>
<tr>
<td>15. Ask if she has received care from another caregiver since her last visit.</td>
<td></td>
</tr>
<tr>
<td>16. Ask if there have been any changes in her personal information, daily habits or lifestyle, or medical history since her last visit.</td>
<td></td>
</tr>
<tr>
<td>17. Ask if she taken medications prescribed and followed the advice provided at her last visit.</td>
<td></td>
</tr>
</tbody>
</table>

### Skill Activity Performed Satisfactorily

#### Physical Examination

**Assessment of General Well-Being and Blood Pressure (Every Visit)**

1. Observe her general well-being
2. Measure blood pressure while the woman is seated and relaxed

**Preparing for Further Examination**

3. Obtain the woman’s consent for the physical examination.
4. Have the woman empty her bladder.
5. Provide her with a drape or cloth and help her onto the examination surface.

**Visual Breast Examination (First Visit/As Needed)**

6. Visually inspect overall appearance of the woman’s breasts, and test for nipple protactility if indicated.

**Abdominal Examination (Every Visit)**

7. Ask the woman to uncover her stomach and lie on her back with her knees slightly bent.
8. Check abdomen for scars.
9. Measure fundal height.
10. Carry out fundal, lateral, and pelvic palpation.
### CHECKLIST FOR ANTENATAL ASSESSMENT

**HISTORY, PHYSICAL EXAMINATION, TESTING AND CARE**

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<tbody>
<tr>
<td>11. Listen to the fetal heart rate.</td>
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</tbody>
</table>

### Genital Examination (First Visit/As Needed)

12. Tell the woman what you are going to do before each step of the examination.
13. Ask the woman to uncover her genital area and cover her with a cloth or drape.
14. Use antiseptic handrub or wash and dry hands.
15. Put gloves on both hands.
16. Touch the inside of the woman’s thigh before touching genital area.
17. Separate labia majora with two fingers, check labia minora, clitoris, urethral opening and vaginal opening.
18. Palpate the labia minora,
19. Check Skene’s and Bartholin’s glands for discharge and tenderness.
20. Check perineum for scars, lesions, inflammation or cracks in skin.

### After the Examination

21. Immersse both gloved hands in 0.5% chlorine solution and remove gloves.
22. Use antiseptic handrub or wash and dry hands.
23. Share your findings with the woman.

### SKILL/ACTIVITY PERFORMED SATISFACTORILY

### TESTING

1. Do a hemoglobin test (1st visit, at about 28 weeks, and as needed based on signs and symptoms).
2. Do an RPR test (first visit/as needed) and refer and counsel depending on result.
3. Refer woman to counseling and testing services for HIV test, if she chooses to be tested.
4. Test for blood group and Rh, if available.
5. Test urine for glucose if woman lives in an area with high prevalence of diabetes/gestational diabetes and refer for treatment if positive.

### SKILL/ACTIVITY PERFORMED SATISFACTORILY

### CARE PROVISION

1. Develop a birth plan with the woman, including all preparations for normal birth and plans in case of emergency.
2. Provide advice and counseling about common discomforts of pregnancy, as needed.
3. Provide advice and counseling about use of potentially harmful substances.
4. Provide advice and counseling about hygiene.
5. Provide advice and counseling about rest and activity.
6. Provide advice and counseling about sexual relations and safer sex.
7. Provide advice and counseling about early and exclusive breastfeeding.
### CHECKLIST FOR ANTENATAL ASSESSMENT

(HISTORY, PHYSICAL EXAMINATION, TESTING) AND CARE

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<tbody>
<tr>
<td>8. Provide advice and planning about family planning.</td>
<td></td>
</tr>
<tr>
<td>9. Provide advice and counseling about HIV testing.</td>
<td></td>
</tr>
<tr>
<td>10. Encourage the woman to ask questions and be sure that she understands what is being said.</td>
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#### Immunizations and Other Prophylaxis

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<tr>
<th>STEP/TASK</th>
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<tbody>
<tr>
<td>11. Give tetanus toxoid (TT) based on woman’s need.</td>
<td></td>
</tr>
<tr>
<td>12. Give enough iron folate to last until next visit and counsel the woman about nutrition and possible side effects related to iron folate.</td>
<td></td>
</tr>
<tr>
<td>13. Give appropriate medications.</td>
<td></td>
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</tbody>
</table>

#### Return Visits

<table>
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<tr>
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#### SKILL/ACTIVITY PERFORMED SATISFACTORILY

Participant is □ QUALIFIED □ NOT QUALIFIED to provide antenatal care services based on the following criteria:

- Score on Midcourse Questionnaire _____________ % (attach answer sheet)
- ANC Skills Evaluation □ Satisfactory □ Unsatisfactory
- Provision of services (practice) □ Satisfactory □ Unsatisfactory
USING 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 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.
Basic Maternal and Newborn Care
Fundamentals of Basic Care

Session Objectives
By end of session, participants will be able to describe/define:
- The global maternal health situation
- Evidence-based care and rationales
- Core competencies/responsibilities of skilled provider
- An adequate care provision system
- Woman-friendly care
- Male involvement
- Culturally appropriate care
- Individualization of care

Maternal Mortality and Morbidity: Scope of Problem
- 180–200 million pregnancies per year
- 75 million unwanted pregnancies
- 50 million induced abortions and 20 million unsafe abortions
- 600,000 maternal deaths/year (1 per minute), 99% of which occur in developing countries
- 30 maternal morbidities for every 1 maternal death
Slide 4

Deaths Worldwide from Complications of Pregnancy and Childbirth

Sepsis: 15%
HDP: 13%
Obstructed labor: 7%
Other direct: 8%
Other indirect: 13%
Unsafe abortion: 13%
Hemorrhage: 19%
Septic shock: 14%
Other: 8%
Maternal death: 11%

Deaths per 100,000 live births

Slide 5

Principles of Basic Care

• Based on evidence
• Given by skilled provider in functioning healthcare system
• Provided in manner respectful of woman, her newborn and family, and their culture
• Individualized to meet unique needs of woman, newborn, and family

Slide 6

Objectives of Evidence-Based Care

• Promote practices based on best available evidence
• Encourage clinicians to:
  • Value evidence above mere tradition or habit—"We've always done it this way."
  • Access and evaluate new clinical data as it becomes available
  • Incorporate evidence into daily clinical practice (i.e., modify practices accordingly)
Slide 7

In an Ideal World…

- The most effective care for every condition is known
- Every clinician has access to and understands most up-to-date evidence
- Every clinician practices most effective care s/he knows

Slide 8

Levels of Evidence

<table>
<thead>
<tr>
<th>Levels</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1a</td>
<td>Systematic review of randomised controlled trials</td>
</tr>
<tr>
<td>A 1b</td>
<td>Individual randomised controlled trials</td>
</tr>
<tr>
<td>B 2a</td>
<td>Systematic review of cohort studies</td>
</tr>
<tr>
<td>B 2b</td>
<td>Individual cohort studies</td>
</tr>
<tr>
<td>B 3a</td>
<td>Systematic review of case-control studies</td>
</tr>
<tr>
<td>B 3b</td>
<td>Individual case-control studies</td>
</tr>
<tr>
<td>C 4</td>
<td>Case studies</td>
</tr>
<tr>
<td>D 5</td>
<td>Expert opinion without explicit critical appraisal</td>
</tr>
</tbody>
</table>

Slide 9

Importance of Rationales

- Practices should be based on firm rationales
- Provider should know why practice is important:
  - What condition can be detected by conducting this part of examination?
  - What condition may be prevented by giving this supplement?
- Understanding rationales helps provider focus assessment and care provision
The Skilled Provider

• Term refers to person with certain core competencies rather than specific cadre of professionals

• Skilled provider:
  - has knowledge, skills, and qualifications needed to provide essential (basic and life-saving) care throughout child-bearing cycle
  - can provide this care in any setting (e.g., home, clinic, hospital)

• Presence of skilled provider can have significant impact on reducing maternal and newborn deaths

Core Competencies/Responsibilities of Skilled Provider

• Gathers relevant information: history, physical examination, testing

• Analyzes information to plan and implement appropriate care

• Provides quality care for woman and her baby throughout childbearing cycle

• Recognizes potential problems

Core Competencies/Responsibilities of Skilled Provider (cont.)

• Manages problems and complications: stabilizes (as needed), treats, and/or refers (as needed)

• Evaluates care on ongoing basis; modifies care plan as needed

• Continually learns and seeks to strengthen services

• Supports linkages among providers/facilities, communities, and families
Care Provision System

- Necessary infrastructure:
  - adequate facilities and human resources
  - essential supplies and equipment
  - financing systems/schemes
  - roads
- Functioning system for referral/transfer

Care Provision System (cont.)

- Quality assurance
  - service delivery guidelines
  - mechanisms for ongoing assessment and improvement of systems
- Systems for developing and maintaining clinical competence (preservice and inservice)

Emergency-Response System

- Identification: Designated staff member performs quick check to assess for danger signs
- Initial response: If danger sign is identified, emergency-response procedures are initiated. Skilled provider is notified and performs:
  - Rapid initial assessment
  - Stabilization (if needed)
Emergency-Response System (cont.)

- **Management or referral/transfer:** Skilled provider manages complication/condition (depending on skills and resources) and/or urgently refers/transfers woman to CEOC facility
  - Responsibility beyond “pushing them out door”—must ensure:
    - Safe, rapid transportation
    - Care during transport
    - Communication with referral facility
    - Follow-up with client

CEOC Services

- Anesthesia
- Blood transfusion
- Surgical obstetrics, including:
  - Cesarean section
  - Repair of 3rd and 4th degree vaginal tears and extensive cervical tears
  - Laparotomy
- Care for sick or low birthweight newborns

Woman-Friendly Care

- Provides services that are acceptable to woman:
  - Respects beliefs, traditions, and culture
  - Involves family, partner, or other support person in care
  - Includes relevant and feasible advice
  - Empowers woman and her family to become active participants in care
Slide 19

**Woman-Friendly Care (cont.)**

- Considers rights of woman:
  - Right to information about her health
  - Right to be informed about what to expect during visit
  - Obtains permission/consent prior to exams and procedures
- Ensures that all healthcare staff use good interpersonal skills
- Considers emotional, psychological, and social well-being of woman

Slide 20

**Woman-Friendly Care (cont.)**

- Respects and supports mother-baby dyad:
  - Encourages bonding
  - Keeps baby with mother
  - Places baby on mother’s abdomen (at breast) immediately after birth

Slide 21

**Male Involvement**

- Works to decrease provider bias against involvement of male partner
- Helps male partner to feel comfortable participating in care
- Makes special effort to include male partner in birth preparedness and complication readiness
- Targets couple during relevant counseling and health promotion
Culturally Appropriate Care

- Recognizes richness and spiritual significance of community and culture
- Is aware of traditional beliefs regarding pregnancy and childbirth
- Promotes cooperation and liaisons with traditional healthcare system when possible
- Includes culturally sensitive practices

Culturally Sensitive Practices

- Speak to woman in her own language
- Observe rules and norms of her culture as appropriate
- Be aware of who makes decisions in her life and involve that person in discussions and decisions
- Work with traditional birth attendants when possible
- Learn about traditional practices:
  - Promote/build upon positive traditional practices
  - Offer alternatives to those that are harmful

Individualization of Care

The provider modifies standard basic care package to:

- Address woman’s individual needs
- Take into consideration:
  - Findings from current history, including daily habits and lifestyle
  - Findings from current physical exam and tests
  - Cultural beliefs and customs
  - Any other unique circumstances
Slide 25

Linkages with Community

- Invite community to learn about, and shape, services
- Be aware of traditional care being provided in community
- Collaborate with community in developing transportation, financing, and communication systems around healthcare
- Organize activities to raise safe motherhood awareness in community

Slide 26

Working with Traditional Birth Attendants (TBAs)

- Include TBA in support of woman and her family
- Enlist TBAs to communicate health messages
- Partner with TBAs in identifying pregnant women in community
- Respond respectfully and promptly when TBAs bring women to facility

Slide 27

Summary

Quality basic care is:

- Based on evidence and rationales
- Given by skilled provider in functioning healthcare system
- Provided in manner that is respectful of woman, her newborn and family, and their culture:
- Individualized to meet unique needs of woman, newborn, and family
PRESENTATION 1B
KEY TOOLS IN BASIC CARE 1: CLINICAL DECISION MAKING, INTERPERSONAL SKILLS, RECORD KEEPING

Slide 1
Basic Maternal and Newborn Care
Key Tools in Basic Care I:
Clinical Decision-Making
Interpersonal Skills
Record Keeping

Slide 2
Session Objectives
By end of session, participants will be able to:
• Describe steps in clinical decision-making
• Discuss basic considerations in interpersonal skills
• Outline key principles of clear, concise, and accurate record keeping

Slide 3
Clinical Decision-Making
A purposeful, organized thinking process that links assessment with care provision and evaluation of care through series of logical steps
Steps in Clinical Decision-Making

1) Gather information
   • History
   • Physical examination
   • Testing

2) Interpret information
   • Consider each sign/symptom in context of other findings
   • Compare signs/symptoms to accepted descriptions/definitions of health and disease
   • Consult reliable sources of up-to-date information

Clinical Decision-Making (cont.)

3) Develop care plan
   • Based on assessment
     • Individualized
     • Collaborative—responsibility shared by care provider, woman, and family

4) Implement care plan—also collaborative

Clinical Decision-Making (cont.)

5) Evaluate care plan—and modify as needed
   • Monitor continuously
   • Compare present and past findings
   • Deem effective when:
     • Improves or maintains woman’s health
     • Restores abnormal findings to normal
     • Addresses woman’s needs
     • Is acknowledged as valuable by woman and her family
Interpersonal Skills

Verbal and nonverbal patterns of interaction that:

• Facilitate positive relationship with client
• Promote safe and comfortable environment
• Help ensure that client adheres to care plan and returns for continued care

Interpersonal Skills (cont.)

In general:

• Treat woman with respect and courtesy
• Use effective communication skills
• Ensure privacy and confidentiality
• Respond to woman’s emotional, as well as physical, needs
• Display professional attitude with both clients and coworkers

Effective Communication

Some key elements:

• Use simple, clear, and locally understood language
• Show respect for social norms and cultural beliefs
• Highlight important information by repetition or summarizing
Effective Communication (cont.)
- Encourage woman to ask questions and express concerns
- Listen carefully to what woman has to say
- Be honest, empathetic, and nonjudgmental

Privacy and Confidentiality
Some key considerations:
- Separate waiting area from care provision area
- Close and lock doors during visit and/or secure curtains to block view of client care area
- Allow woman to decide whether her companion will be included in all or any parts of her visit

Privacy and Confidentiality (cont.)
- Speak in low voice when discussing history or health status
- Have woman remove only necessary clothing; exit room while undressing; provide covering
- Store medical records securely
Slide 13

Interpersonal Skills for Physical Examination

- Explain to woman what is going to happen and why
- Be encouraging and supportive
- Preserve her privacy and respect her modesty
- Ensure that woman is as comfortable as possible on exam table

Slide 14

Interpersonal Skills for Physical Examination (cont.)

- Be gentle
- Obtain woman’s consent before proceeding with each part of examination
- Discuss findings as examination progresses

Slide 15

Key Principles in Effective Counseling

- Messages should:
  - be feasible
  - emphasize what woman needs to do and how to do it
  - be easy to understand and remember
Slide 16

Key Principles in Effective Counseling (cont.)

• Advice and counseling should:
  • be integrated with other components of care plan
  • be individualized to fit woman’s needs
  • be provided in manner that empowers woman to exercise informed choice
  • involve woman’s support system as appropriate

Slide 17

Tips for Effective Group Education

• Consider local needs for more information
• Ask questions to find out what group knows
• Introduce topic and state objective(s) at beginning
• Encourage all clients to participate and ask questions
• Use interactive approach and praise participation

Slide 18

Tips for Effective Group Education (cont.)

• Maintain eye contact with group
• Speak loudly enough for everyone to hear
• Use supplemental materials (e.g., visual aids) as appropriate
• Summarize key points at end
Record Keeping

Accurate record keeping is necessary for:
- Planning and evaluating client's care
- Enabling continuity of care (over time)
- Facilitating communication (among healthcare workers and facilities)

Key Principles in Record-Keeping

- Prepare/update records as soon as possible
- Record all signs/symptoms that contribute to diagnosis
- Note absence of signs/symptoms relevant to diagnosis
- Note exact measurements and values where appropriate

Key Principles in Record-Keeping (cont.)

- Clearly distinguish between clinical observations and patient's subjective experience
- Present findings as objectively as possible
- Be neat and avoid unnecessary abbreviations
- Store records in secure location
Summary
Integrated throughout, the following practices contribute to overall effectiveness of basic care:
• Clinical decision-making
• Interpersonal skills
• Record keeping
PRESENTATION 1C
KEY TOOLS IN BASIC CARE II: INFECTION PREVENTION PRACTICES

Slide 1

Basic Maternal and Newborn Care
Key Tools in Basic Care II:
Infection Prevention Practices

Slide 2

Session Objectives
By end of session, participants will be able to:
• Describe disease transmission cycle
• Describe how infection prevention (IP) practices work
• Outline key IP principles
• Discuss appropriate handwashing and antisepsis

Slide 3

Session Objectives (cont.)
• Discuss appropriate gloving and personal protective equipment
• Outline safe handling of sharps
• Discuss proper instrument processing and waste disposal
The Six Components of Disease Transmission Cycle

1. **Agent**: Disease-producing microorganisms
2. **Reservoir**: Place where agent lives, such as in or on humans, animals, plants, soil, air, or water
3. **Place of exit**: Where agent leaves host
4. **Mode of transmission**: How agent travels from place to place (or person to person)
5. **Place of entry**: Where agent enters next host
6. **Susceptible host**: Person who can become infected

How Can We Prevent Spread of Infection?

• Inhibiting or killing infectious agent (applying antiseptic to skin prior to surgery)
• Blocking agent’s means of getting from infected person to susceptible person (handwashing or using alcohol-based hand rub)

How Can We Prevent Spread of Infection? (cont.)

• Ensuring that people, especially healthcare workers, are immune or vaccinated
• Providing healthcare workers with proper protective equipment to prevent contact with infectious agents
Why is Infection Prevention Important?
- Protects patients/clients—helps provide quality care that is also safe
- Lowers healthcare costs—prevention is less expensive than treatment
- Prevents infection among healthcare staff and community
- Limits number and spread of infectious agents that can become antibiotic-resistant

Key Infection Prevention Precautions
- Regard all clients, patients, and healthcare staff as infectious and at risk of infection
- Wash hands or use alcohol-based hand rub—the single most important factor for preventing infections
- Wear gloves before touching anything wet (e.g., broken skin, mucous membranes) or performing invasive procedures
- Wear personal protective equipment (PPE)—such as goggles, face masks, aprons, gloves—if splashes or spills of body fluids are anticipated
Key Infection Prevention Precautions (cont.)

- Use antiseptic agents before invasive procedures
- Follow safe work practices (e.g., proper waste disposal practices, not recapping or bending needles, proper instrument processing)
- Vaccinate staff who are in direct contact with patients/clients for: hepatitis B, rubella, measles, mumps, influenza

Handwashing

the single most practical procedure for preventing infection

When to wash hands:
- Before and after examining client
- After contact with blood, body fluids, or soiled instruments even if gloves are worn
- Before and after removing gloves
- Upon arriving at and before leaving workplace

Alcohol-Based Hand Rub

- More effective than handwashing unless hands are visibly soiled
- 2 mL emollient (e.g., glycerin) + 100 mL ethyl or isopropyl alcohol 60–90%
Antisepsis

- Antisepsis for mucus membranes
  - Ask about allergic reactions
  - Use water-based product (e.g., iodophor or chlorhexidine), as alcohols may burn or irritate mucus membranes

- Skin preparation for injections
  - If skin is clean, antisepsis is not necessary
  - If skin appears dirty, wash with soap and water
  - Before giving injection, dry with clean towel

When to Glove

- When there is reasonable chance of contact with broken skin, mucous membranes, blood, or other body fluids
- When performing invasive procedure
- When handling:
  - Soiled instruments
  - Medical, or contaminated, waste
  - When touching contaminated surfaces

Guidelines for Gloving

- Wear separate pair of gloves for each woman/newborn to prevent spreading infection from client to client
- Wear high level-disinfected gloves for procedures involving contact with broken skin or tissue under skin
- Wear examination gloves for starting IV, drawing blood, or handling blood or body fluids
Slide 16

Guidelines for Gloving (cont.)

- Wear utility gloves for cleaning instruments, handling waste, and cleaning up blood and body fluids
- Surgical gloves can be re-used if decontaminated, washed, rinsed, and sterilized or high level-disinfected
- Never use gloves that are cracked or peeling or have holes

Slide 17

Personal Protective Equipment

- Gloves: utility, examination, HLD/sterile
- Eyewear: face shields, goggles, glasses
- Aprons
  - Should be fluid-resistant
  - Should be decontaminated after use
- Footwear
  - Protects from injury from sharps or heavy items
  - Should cover entire foot

Slide 18

Safe Handling of Sharps

- Never pass sharp instrument from one hand directly to another person’s hand
- After use, decontaminate syringes and needles by flushing three times with chlorine solution
- Immediately dispose of sharps in puncture-proof container
Slide 19
Safe Handling of Sharps (cont.)
• Do not recap, bend, break, or disassemble needles before disposal
• Always use needle holder when suturing
• Never hold or guide needle with fingers

Slide 20
Instrument Processing
• Decontamination
  • Should be done immediately after use
  • Makes objects safer to handle
• Cleaning
  • Most effective way to reduce number of organisms
  • Removes visible dirt and debris

Slide 21
Instrument Processing (cont.)
• Sterilization
  • Destroys all microorganisms
  • Includes autoclave, dry heat, chemicals
• High level disinfection (HLD)
  • Destroys all microorganisms except bacterial endospores
  • Includes boiling, steaming, soaking
• Storage
  • After processing, must remain dry and clean
Slide 22

Housekeeping
- Each site should follow housekeeping schedule
- Always wear utility gloves when cleaning
- Clean from top to bottom
- Ensure that fresh bucket of disinfectant solution is available at all times

Slide 23

Housekeeping (cont.)
- Immediately clean up spills of blood or body fluids
- After each use, wipe off beds, tables, and procedure trolleys using disinfectant solution
- Decontaminate cleaning equipment with chlorine solution

Slide 24

Waste Disposal
- Separate contaminated waste from noncontaminated waste
- Use puncture-proof container for sharps and destroy when two-thirds full

Contaminated waste includes blood and other body fluids, and items that come into contact with them, such as dressings.
Slide 25

Waste Disposal (cont.)

- Follow these steps to destroy contaminated waste and sharps:
  - Add small amount of kerosene to burn
  - Burn contaminated waste in open area downwind from care site
  - Dispose of waste at least 50 meters away from water sources

Slide 26

Summary

- Everyone (staff and patients) is at risk for infection
- This risk can be reduced through rigorous adherence to IP practices:
  - Handwashing or using alcohol-based hand rub
  - Antiseptics
  - Personal protective equipment, including gloving
  - Safe handling of sharps and needles
  - Instrument processing
  - Housekeeping and waste disposal
Basic Maternal and Newborn Care

Introduction to Antenatal Care

Session Objectives
By end of session, participants will be able to:
• Explain goals of antenatal care
• Define scope of basic antenatal care (ANC)
• Outline components of basic ANC visit

Focused ANC
• Focused ANC emphasizes quality of visits over quantity
• Is based on premise that every pregnant woman is at risk for complications
• Relies on evidence-based, goal-directed interventions appropriate to gestational age of pregnancy
Focused ANC (cont.)
- Targets most prevalent health issues affecting pregnant women
- Is given by skilled healthcare provider (midwife, doctor, nurse, etc., with basic midwifery and life-saving skills)

Goals of Antenatal Care
- Promotion of health and prevention of disease
- Detection of existing diseases and treatment
- Early detection and management of complications
- Birth preparedness and complication readiness

Health Promotion
- Healthcare messages and counseling empower women to take good care of themselves during pregnancy
- Messages should focus on information that will help to make healthy decisions during pregnancy, childbirth, and postpartum/newborn period
Health Promotion Topics

- Nutrition
- Counseling and testing for HIV
- Care for common discomforts
- Use of potentially harmful substances
- Prevention of infection/hygiene
- Rest and activity

Health Promotion Topics (cont.)

- Sexual relations and safer sex
- Early and exclusive breastfeeding
- Family planning
- Prevention of anemia and tetanus

Prevention Measures

- Tetanus toxoid immunization to prevent tetanus in woman and newborn
- Iron/folate supplementation to prevent iron deficiency—single most prevalent nutritional deficiency affecting pregnant woman and can lead to anemia
Prevention Measures (cont.)
- In disease- or deficiency-endemic areas:
  - Intermittent preventive treatment and insecticide-treated bednets for malaria
  - Presumptive treatment for hookworm infection
  - Vitamin supplementation
  - Iodine supplementation

Detection of Existing Diseases and Treatment
If not treated, existing diseases can complicate—or be complicated by—pregnancy.
Examples include:
- Syphilis and STIs
- HIV/AIDS
- Hepatitis
- Malaria
- Tuberculosis
- Anemia
- Heart disease
- Diabetes
- Malnutrition

Early Detection and Management...
...of following complications can mean difference between survival and death for woman and newborn:
- Hemorrhage
- Obstructed labor
- Sepsis/infection
- Pre-eclampsia/eclampsia
Birth Preparedness and Complication Readiness

As part of focused ANC, skilled provider assists woman and her family in developing birth plan to:

• Help ensure arrangements are made for clean and safe birth with skilled provider
• Help family prepare for possible emergency—as every woman is at risk for complications and most complications cannot be predicted.

Birth Preparedness and Complication Readiness...

...includes making arrangements for following:

• Skilled provider to attend birth
• Appropriate place of birth
• Transportation of/to skilled provider
• Funds for normal birth
• Support/birth companion

Birth Preparedness and Complication Readiness (cont.)

• Items needed for clean and safe birth and for newborn
• Danger signs
• Emergency transportation and funds
• Blood donor
Slide 16

### Scope of Basic Antenatal Care

Majority of pregnant women need these services only

Some pregnant women require these services also

Fewer pregnant women require these services

Core components of basic care: to maintain normal

Additional care: to address common discomforts and special needs

Initial care for women with life-threatening complications

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Slide 17

### Scheduling of ANC Visits

For normally progressing pregnancies, following scheduled visits are recommended:

- 1st visit – 16 weeks (by end of 4 months)
- 2nd visit – 24-28 weeks (6-7 months)
- 3rd visit – 32 weeks (8 months)
- 4th visit – 36 weeks (9 months)

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Slide 18

### Core Components of Basic ANC Visit

- Quick check
- Basic assessment
- Basic care provision

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Quick Check

- Screens for danger signs or signs and symptoms of advanced labor:
  - Helps to:
    - quickly identify woman who need immediate medical attention
    - stabilize (if necessary)
    - treat and/or refer as quickly as possible

Quick Check (cont.)

Danger signs:
- Severe headache/blurred vision
- Convulsions/loss of consciousness
- Breathing difficulty
- Fever (feeling of hotness)
- Foul-smelling discharge/ fluid from vagina
- Vaginal bleeding
- Severe abdominal pain

Signs/symptoms of advanced labor:
- Strong, regular contractions
- Urge to push
- Leaking of fluid from vagina
- Grunting or moaning

Basic ANC Assessment

- Ensures maternal and fetal well-being
- Helps identify common discomforts and special needs
- Screens for conditions beyond scope of basic care, including life-threatening complications
Basic ANC Assessment (cont.)

- History
- Physical examination
  - General well-being
  - Blood pressure
  - Breasts
  - Abdomen
  - Genital
- Testing
  - Hemoglobin
  - RPR or VDRL for syphilis
  - HIV (if woman does not "opt out")
  - Blood group and Rh
  - Blood glucose, if applicable

Basic ANC Care Provision

- Helps maintain normal pregnancy
- Empowers woman to make adopt healthy practices
- Prepares woman and family for birth and possible complications
- Helps prevents certain diseases

Basic ANC Care Provision (cont.)

- Nutritional support
- Birth and complication readiness plan
- Self-care and other healthy practices
- HIV counseling and testing
- Immunizations and other preventive measures
Summary
Through targeted assessment and individualized care provision, focused ANC aims to:
• Promote health and prevent disease
• Detect and treat/refer existing diseases
• Detect and manage/refer complications
• Prepare woman and her family for birth and possible complications
PRESEANTATION 2B
BASIC ANTENATAL CARE I: ASSESSMENT—HISTORY TAKING

Slide 1

Basic Antenatal Care I
Assessment: History Taking

Slide 2

Session Objective
- By end of session, participants will be able to explain steps of antenatal history taking

Slide 3

Basic Antenatal Assessment (cont.)
- Throughout assessment, provider adheres to principles of basic care and incorporates key tools:
  - Clinical decision-making
  - Interpersonal skills
  - Infection prevention practices
  - Record keeping
Basic Antenatal Assessment (cont.)

During every visit:
- Consider each finding in context of other findings to:
  - Target assessment
  - Make more accurate diagnosis
- If abnormal signs/symptoms (s/s), conduct additional assessment

Basic Antenatal Assessment (cont.)

During return visits:
- Ensure continued normal progress
- Identify changes, both positive and negative
- Determine whether care plan has been effective or requires modification

Basic Antenatal Assessment

- History
- Physical Examination
- Testing

Note: Before performing basic assessment:
- Welcome woman
- Offer her (and companion, if she desires) seat
- Ensure that she has undergone quick check
History
Focus history taking on following areas:
- Personal history (1st visit)
- Menstrual history and contraceptive history/plans (1st visit)
- Present pregnancy (every visit)
- Daily habits and lifestyle (1st visit)
- Obstetric history (1st visit)
- Medical history (1st visit)
- Interim history (on return visits)

Personal Information (1st Visit)
Ask about:
- Woman’s name, age, phone number, address—to identify and contact her easily when needed
- Reliable transportation and access to funds—to guide birth planning
- Previous pregnancies and childbirths—to guide counseling and other care

Personal Information (cont.)
- Current/recent problems or concerns—if yes, ask general follow-up questions to determine nature of problem or concern
- Care from another provider—if yes, ask why she sought care and about care received
Slide 10

Personal Information (cont.)
- Consider this information in context of further assessment, and use to:
  - guide counseling and other care
  - identify special needs and other conditions that require additional care

___________________________________
___________________________________
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___________________________________

Slide 11

Menstrual History and Contraceptive History/Plans (1st Visit)
- Ask about last menstrual period (LMP):
  - first day of LMP?
  - onset, flow, and duration normal?
  - using hormonal contraception or breastfeeding?
- If possible, calculate estimated date of childbirth (EDC)

___________________________________
___________________________________
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___________________________________
___________________________________
___________________________________
___________________________________

Slide 12

Menstrual History and Contraceptive History/Plans (cont.)
- If necessary, confirm pregnancy with other methods:
  - symptoms of pregnancy
  - pelvic examination
  - testing

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___________________________________
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___________________________________
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___________________________________
___________________________________
Slide 13

Menstrual History and Contraceptive History/Plans (cont.)

- Plans for more children:
  - How many?
  - When?
- Family planning methods:
  - Past use
  - Preferences
  - Plans for use after this baby is born
- Use this information to guide counseling and other care

Slide 14

Present Pregnancy (Every Visit)

- Ask whether she has felt any fetal movements
- If yes, ask:
  - When they began—useful for calculating/confirming EDC
  - Whether she has felt them in last day—if not, she requires further evaluation/additional care

Slide 15

Present Pregnancy (cont.)

- Take note of her and her family’s feelings about this pregnancy—to guide counseling and other care, and identify special needs and other problems
Slide 16

**Daily Habits and Lifestyle (1st Visit)**

Ask about:
- daily workload
- sleep/rest
- dietary intake
- birth in last year
- currently breastfeeding

Use this information to:
- Determine whether there is balance between physical demands and dietary intake
- Guide counseling and other care

Slide 17

**Daily Habits and Lifestyle (cont.)**

- Ask whether she smokes, drinks alcohol, or uses other potentially harmful substances—to guide counseling and other care, and identify potential problems
- Inquire about her household (is she living with her husband, partner, children, or other family members?)—to guide birth planning

Slide 18

**Daily Habits and Lifestyle (cont.)**

- Inform her that you are going to ask some personal questions that you ask of all clients:
  - Has anyone restricted her mobility or threatened her life?
  - Has anyone physically harmed her?
  - Is she frightened of anyone?
Slide 19

Daily Habits and Lifestyle (cont.)

- If yes, she requires further evaluation/additional care (special need)
- If no or she is not comfortable answering, tell her she can discuss this issue with you at any time

Slide 20

Obstetric History (1st Visit)

Poor obstetric history does not necessarily require special care but helps provider:

- Understand woman’s concerns in this pregnancy
- Emphasize importance of skilled provider at every birth

Slide 21

Obstetric History (cont.)

- If not woman’s first pregnancy, ask about complications during previous pregnancy, childbirth, or postpartum/newborn period
- If yes, she requires further evaluation/additional care (special need)
Slide 22

Obstetric History (cont.)

- Ask whether she has had any problems with breastfeeding—to guide counseling and other care, and identify special needs and other problems

Slide 23

Medical History (1st Visit)

Ask whether diagnosed with:

- Allergies—if yes, avoid known allergens
- HIV, anemia, or syphilis—if yes, she requires further evaluation/additional care (special need)
- Heart disease, diabetes, or other chronic condition—if yes, facilitate nonurgent referral/transfer

Slide 24

Medical History (cont.)

Ask whether she has had:

- Previous hospitalization or surgery or is taking any medications/drugs—to guide counseling and other care, and identify special needs and other problems
- A complete series of tetanus toxoid (TT) vaccines—to assess her need for TT, according to recommended TT schedule
Interim History (Return Visits)

- Current/recent problems or concerns—
  if yes, ask general follow-up questions to
determine nature of problem or concern
- Care from another provider—if yes, ask
  why she sought care and about care
  received

Interim History (cont.)

- Consider this information in context of
  further assessment, and use to:
  - guide counseling and other care
  - identify special needs and other conditions that
    require additional care

Interim History (cont.)

- Ask whether any of following have changed
  since her last visit:
  - personal information
  - daily habits or lifestyle
  - medical history
- Check whether she has been unable to
  adhere to plan of care
Slide 28

Interim History (cont.)

- Note any reactions or side effects to immunizations or drugs/medications given at last visit
- Use this information to:
  - maintain accuracy of woman's medical records
  - guide further assessment and identify problems
  - determine changes that need to be made in current plan of care

Slide 29

Summary

- A focused history is part of basic assessment
- Assessment is the foundation upon which the care plan is designed and implemented
Basic Antenatal Care II
Assessment: Physical Examination

Session Objective
• By end of session, participants will be able to describe basic components of antenatal physical examination

Basic Antenatal Assessment
• History
• Physical Examination
• Testing

Note: Information gathered through history-taking should be taken into consideration during physical examination
Physical Examination

Focus physical examination on following:
- General well-being (every visit)
- Blood pressure (every visit)
- Breasts (1st visit, as needed based on s/s)
- Abdomen (every visit)
- Genitals (1st visit, as needed based on s/s)

General Well-Being (Every Visit)

- Gait and movement—no limp, steady/moderately paced
- Facial expression—alert, responsive, calm
- General cleanliness—no visible dirt, odor
- Condition of skin—no lesions, bruises
- Color of conjunctiva—pink

Use findings to:
- Identify problems (e.g., conjunctival pallor can be sign of anemia, bruises may be sign of abuse)
- Guide counseling and other care
Blood Pressure Measurement (Every Visit)
- Note whether systolic and diastolic blood pressures are within normal range
  - Systolic 90 to 140 mmHg
  - Diastolic less than 90 mmHg

Blood Pressure Measurement (cont.)
- If systolic less than 90 or diastolic more than 110 mmHg, perform rapid initial assessment
- Diastolic more than 90 mmHg requires urgent further evaluation/additional care (life-threatening complication)

Visual Inspection of Breasts (1st Visit, as needed)
- Contour—regular contour, no dimpling or visible lumps
- Texture—smooth skin, no puckering; no areas of scaliness, thickening, or redness; no lesions, sores, or rashes
- Nipples—no abnormal nipple discharge, no inverted nipples; normal variation: colostrum after 6 weeks’ gestation
Abdominal Examination  
(Every Visit—except as noted)

- **Surface of abdomen** (1st visit)
- **Fundal height** (after 12 weeks’ gestation)
- **Fetal parts and movements** (between 20 weeks’ and term gestation)
- **Fetal lie and presentation** (all after 36 weeks’ gestation)
- **Fetal heart tones** (after 20 weeks’ gestation)

Abdominal Examination (cont.)

- **Surface of abdomen** (1st visit)—no scars from previous cesarean or uterine surgery
  - Previous cesarean/uterine surgery requires further evaluation/additional care (special need)

Abdominal Examination (cont.)

- **Fundal height** (after 12 weeks’ gestation)
  - Uterus feels firm
  - Height increases and does not decrease between visits
  - Height is consistent with EDC and local standards
Slide 13

**Fundal Height Measurement**

**12–22 weeks**
- palpate above symphysis pubis
- distance between top of fundus and symphysis pubis or umbilicus

**22+ weeks**
- use tape measure
- from upper edge of symphysis pubis to top of fundus

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Slide 14

**Abdominal Examination (cont.)**

- Fetal parts and movements
  - After 24+ weeks, fetal parts are palpable
  - After 22+ weeks, fetal movements may be felt
    - If fetus is not palpable or pregnancy is in doubt, pregnancy should be confirmed through pelvic exam or urine pregnancy test

---

Slide 15

**Abdominal Examination (cont.)**

- Fetal lie and presentation (at/after 36 weeks’ gestation)
  - At 36 weeks—normally in longitudinal lie: cephalic/vertex presentation
  - After 36 weeks, head may be:
    - Fixed, engaged
    - Dipping into pelvis
    - Free and floating
Fundal Palpation
To determine which fetal part is at top of uterus:
• Place both hands on sides of fundus at top of abdomen
• Use finger pads to assess consistency/mobility of fetal part

Lateral Palpation
To feel for fetal back:
• Move hands smoothly down sides of uterus
• Smooth and firm versus knobby and moveable

Pelvic Palpation (Supra Pubic)
To feel presenting part:
• Place hands on sides of uterus, palms below umbilicus, fingers toward symphysis pubis
• Grasp fetal part
Abdominal Examination (cont.)

- Fetal heart tones (after 20 weeks' gestation)
  - By 12 weeks, fetal heart tones are heard with Doppler stethoscope or electronic fetal stethoscope
  - By 20+ weeks, fetal heart tones are heard with Pinard fetoscope
  - Normal fetal heart rate is from 120 to 160 beats per minute (during pregnancy only, not in labor)

Abdominal Examination (cont.)

- Abnormal or absent fetal heart tones require urgent further evaluation/additional care (life-threatening complication)

Genital Examination (1st Visit, as needed)

- Interpersonal skills reminders
  - Tell her what you are going to do before each step
  - Cover/drape woman to ensure privacy and respect modesty
  - Touch inside of thigh first

- Infection prevention reminders
  - Wash hands
  - Use new or high level-disinfected gloves on both hands
Genital Examination (cont.)

- **Vaginal opening**—no signs of female genital cutting
- **Skin**—no sores, ulcers, warts, nits, or lice
- **Labia**—soft, not painful
- **Vaginal secretions**—no blood or foul-smelling, yellow/green discharge; no urine or stool
- **Skene's and Bartholin's glands**—not painful, no discharge when milked

Genital Examination (cont.)

- Female genital cutting requires further evaluation/additional care (special need)
- Other abnormalities may require nonurgent referral/transfer

Summary

- A focused physical examination is part of basic assessment
- Assessment is the foundation upon which the care plan is designed and implemented
PRESENTATION 2D
BASIC ANTENATAL CARE III: ASSESSMENT—TESTING

Slide 1

Basic Antenatal Care III
Assessment: Testing

Slide 2

Session Objective
• By end of session, participants will be able to describe principles of lab tests required for providing basic antenatal care

Slide 3

Basic Antenatal Assessment
• History
• Physical Examination
• Testing
Note: Information gathered through history-taking and physical examination should be taken into consideration during testing
Testing
Focus testing on following:
• Hemoglobin levels (1st visit/as needed)
• RPR or VDRL for syphilis (1st visit)
• HIV (1st visit/as needed, if woman does not “opt out”)
• Blood group and RH (1st visit)
• Urine glucose (1st visit, if applicable)

Hemoglobin Levels
Conducted at 1st visit/as needed based on signs, symptoms and/or history
• Normal: 11 g/dL or more
• Levels less than 7 g/dL indicates severe anemia and requires urgent referral/transfer
• Levels 7–11 g/dL requires further evaluation/additional care (special need)

Hemoglobin Levels (cont.)
Using a Hemoglobinometer:
• Measure hemoglobin content by comparing color of light passing through hemolyzed blood sample with standard color
• Results expressed in grams of hemoglobin per 100 ml of blood
Slide 7

**Hemoglobin Levels (cont.)**
Using WHO Haemoglobin Colour Scale:
- Compare bloodstain on test paper with color scale in good light with colors in color scale booklet
- Each shade of color on scale has its own hemoglobin value

Slide 8

**Rapid Plasma Reagent (RPR)* Test**
Conducted at 1st visit
- Normal: negative
- Positive test indicates syphilis and requires further evaluation/additional care (special need)
  * Conduct VDRL (venereal disease research laboratory) if RPR not available

Slide 9

**RPR Test (cont.)**
Using test card and antigen:
- Test for reactivity by applying antigen to bloodstain on test card and checking for clumping in bright light
- Report as reactive or non-reactive
  - Reactive: Characteristic clumping
  - Non-reactive: Slight roughness or no clumping
HIV Counseling and Testing

Conducted at 1st visit, if woman does not "opt out"
- Positive test indicates HIV infection and requires further evaluation/additional care (special need)
- If woman opts out, test should be offered at all return visits
- Confidentiality of test and all HIV-related discussion essential

Pretest Counseling
- Assure confidentiality
- Help woman assess individual risk factors
- Discuss benefits of knowing status
- Explain how virus is transmitted
- Address local myths and rumors
- Provide information about test

Pretest Counseling (cont.)
- Provide information about results
  - Positive result indicates HIV infection
  - Negative indicates absence of HIV infection, but "window" may exist between infection and positive result
HIV Counseling and Testing

Post-test Counseling

If **negative**:
- Review risk factors
- Reinforce risk reduction practices
- Identify support for risk reduction

If **positive**:
- Provide emotional support
- Assess risk of abandonment/abuse
- Discuss issues of care, disclosure, impact on pregnancy, condom use, partner testing, immediate support needs

Blood Group and RH

Conducted at 1st visit:
- Most commonly: blood group is A, B, AB, or O; RH is positive
- If RH is negative, woman is candidate for anti-D immune globulin

Urine Glucose

Conduct at 1st visit/as needed if woman lives in area with high prevalence of diabetes:
- Normal: negative for glucose
- If negative, test early in 3rd trimester
- Positive for glucose requires nonurgent referral/transfer
Summary

- Focused testing is part of basic assessment
- Assessment is the foundation upon which the care plan is designed and implemented
PRESENTATION 3A
BASIC ANTENATAL CARE IV: CARE PROVISION

Slide 1

Basic Antenatal Care IV
Care Provision

Slide 2

Session Objective

• By end of session, participants will be able to describe main principles and elements of basic care provision during pregnancy

Slide 3

Basic Antenatal Care Provision

• Throughout care provision, provider adheres to principles of basic care and incorporates key tools:
  • Clinical decision-making
  • Interpersonal skills
  • Infection prevention practices
  • Record-keeping
Basic Antenatal Care Provision (cont.)

During every visit:
- Provide all elements of basic care package
- If abnormal s/s (based on assessment), provide additional care

Basic Antenatal Care Provision (cont.)

During return visit:
- Make necessary changes to care plan (based on assessment)
- Review and update birth and complication readiness plan
- Reinforce key messages
- Replenish supply of supplements and drugs/medications

Basic Antenatal Care Provision (cont.)

- Nutritional support
- Birth and complication readiness plan
- Self-care and other healthy practices
- HIV counseling and testing
- Immunizations and other preventive measures

Note: Information gathered through assessment should be taken into consideration during care provision.
Nutritional Support

- Eat balanced diet including variety of foods each day
- Have at least one extra serving of staple food per day
- Try smaller, more frequent meals if necessary
- Take micronutrient supplements as directed

Birth and Complication Readiness Plan

- 1st visit:
  - Introduce concept and each element
  - Assist in developing plan
- Return visits:
  - Check arrangements made
  - Note changes and problems
  - By 32nd week: finalize plan

Birth Plan Components

Overview—
- Skilled provider
- Items for clean and safe birth and for newborn
- Appropriate setting/healthcare facility
- Transportation/emergency transportation
- Funds/emergency funds
Slide 10

Birth Plan Components (cont.)

- Decision-maker / Decision-making process
- Support
  - Companion of choice
  - Care for family at home
- Blood donor
- Danger signs and signs of labor

Slide 11

Birth Plan Components (cont.)

- Skilled provider:
  - Assist woman in arranging for skilled provider to attend birth
  - Ensure that woman has contact information
- Items needed for clean and safe birth and for newborn:
  - Discuss appropriate items, depending on birth setting
  - Ensure that they are easily accessible

Slide 12

Birth Plan Components (cont.)

- Appropriate setting / healthcare facility
  - Assist in deciding:
    - Place of birth (e.g., home, hospital), depending on individual needs
    - For possible complications: facility woman should go to if danger signs arise
Birth Plan Components (cont.)

- Transportation / emergency transportation
  - Ensure reliable/accessible transportation to place of birth (for her or skilled provider) and to appropriate facility for emergency care

Birth Plan Components (cont.)

- Funds/emergency funds
  - Ensure availability of funds (private or community) for care during normal birth or emergency

- Decision-making
  - Identify:
    - Key decision-maker
    - Who makes decisions in that person’s absence

Birth Plan Components (cont.)

- Support
  - Help choose individuals to:
    - Support her during labor/birth
    - Accompany her during transport
    - Take care of household during her absence

- Blood donor
  - Help choose appropriate blood donor in case of emergency
### Slide 16

**Birth Plan Components (cont.)**

- **Danger signs**
  - Ensure that woman and family know danger signs, which indicate need to enact complication readiness plan.

### Slide 17

**Birth Plan Components (cont.)**

- **Danger signs:**
  - Vaginal bleeding
  - Breathing difficulty
  - Fever
  - Severe abdominal pain
  - Severe headache / blurred vision
  - Convulsions / loss of consciousness
  - Foul-smelling discharge / fluid from vagina
  - Decreased / absent fetal movements
  - Leaking of greenish / brownish (meconium-stained) fluid from vagina

### Slide 18

**Birth Plan Components (cont.)**

- **Signs of labor**
  - Ensure that woman and family know signs of labor, which indicate need to contact skilled provider and enact birth preparedness plan:
    - Regular, progressively painful contractions
    - Lower back pain radiating from uterus
    - Bloody show
    - Rupture of membranes
Slide 19

Self Care and Other Healthy Practices

Tips:
- Individualize messages based on woman’s history and other relevant findings
- Encourage woman’s partner to be present during these discussions
- Counseling on breastfeeding and other postpartum/newborn topics may be more effective later in pregnancy

Slide 20

Use of Potentially Harmful Substances

- Tobacco, alcohol, and drugs / medications may be harmful to pregnant woman and fetus
- Woman should inform provider of any currently taking; inquire before taking new ones
- Skilled provider will only prescribe drugs / medications that are necessary and safe

Slide 21

Prevention of Infection/Hygiene

- Good hygiene (handwashing, safe food and water preparation/handling, bathing and general cleanliness)—especially important for pregnant women because more vulnerable to germs
- Dental hygiene—hormonal changes cause gum swelling/sensitivity
Rest and Activity

- Increase rest time
- Avoid lying on back (lying on left side with legs elevated is best)
- Avoid sitting or standing for long periods
- Decrease workload; avoid overexertion and carrying heavy loads
- Use proper body mechanics

---

Sexual Relations and Safer Sex

- Having or contracting a STI (e.g., HIV, syphilis, gonorrhea, chlamydia) during pregnancy is dangerous to woman, her partner, and their unborn baby
- Practicing safer sex can reduce this risk

---

Sexual Relations and Safer Sex (cont.)

- Abstinence or mutually monogamous sex with uninfected partner—only sure protection
- Consistent use of condoms—important, even during pregnancy
- Avoidance of sexual practices that may further increase risk of infection (e.g., anal sex)
Slide 25

Sexual Relations and Safer Sex (cont.)

- During pregnancy, decrease or increase in woman’s sexual desire is common
- Sexual intercourse for normally progressing pregnancy will not harm woman or fetus

Slide 26

Early and Exclusive Breastfeeding*

- Benefits
- General principles
- Breastfeeding guidelines and breastfeeding support—provide as needed

*For HIV-negative women

Slide 27

Early and Exclusive Breastfeeding (cont.)

Benefits:
- Provides best nutrition for baby
- Is cost-effective/affordable
- Promotes mother-baby bonding
- Provides lactational amenorrhea, delaying return of fertility
General principles:
• Start within first hour after birth; continue to 6 months of age
• Colostrum is given to baby, not thrown away
• Breastfeed exclusively—give baby no other fluids or foods
• Breastfeed on demand—to stimulate adequate production of breastmilk

Family Planning
• Birthspacing—intervals of at least 3 years beneficial to women and babies
• Safe methods for postpartum women
• Return of fertility after birth
  • Not predictable
  • Can occur before menstruation resumes

HIV Counseling and Testing
• 1st visit:
  • Ensure confidentiality of testing and all HIV-related discussion
  • Provide pretest counseling
• Return visit (after testing): provide post-test counseling
HIV Counseling and Testing (cont.)

- Pretest counseling:
  - Individual risk factors
  - HIV transmission
  - Risk reduction
  - Local myths and false rumors
  - Testing

HIV Counseling and Testing (cont.)

- Post-test counseling:
  - For negative result:
    - Result
    - Individual risk factors—review
    - Risk reduction—review
    - Support for risk reduction
  - A positive result indicates HIV and requires special post-test counseling, plus further evaluation/additional care (special need)

Immunization and Other Preventive Measures

- Tetanus toxoid immunization
- Iron / folate supplementation
- Region / population-specific preventive measures
Slide 34

Immunization and Other Preventive Measures (cont.)

Tetanus toxoid (TT) immunization:
- Give 0.5 mL IM in upper arm, as needed according to schedule
- Update immunization card
- Provide related messages / counseling
- Adhering to TT schedule
- Planning for clean and safe birth
- Protecting newborn

Slide 35

Immunization and Other Preventive Measures (cont.)

<table>
<thead>
<tr>
<th>TT Injection</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT 1</td>
<td>At first contact with woman of childbearing age or as early as possible in pregnancy (at 1st ANC visit)</td>
</tr>
<tr>
<td>TT 2</td>
<td>At least 4 weeks after TT 1</td>
</tr>
<tr>
<td>TT 3</td>
<td>At least 8 months after TT 2</td>
</tr>
<tr>
<td>TT 4</td>
<td>At least 1 year after TT 3</td>
</tr>
<tr>
<td>TT 5</td>
<td>At least 1 year after TT 4</td>
</tr>
</tbody>
</table>

Slide 36

Immunization and Other Preventive Measures (cont.)

Iron / folate supplementation:
- To prevent anemia, prescribe: iron 60 mg + folate 400 mcg orally once daily throughout pregnancy
- Dispense supply to last until next visit
- Provide related messages/counseling...
Slide 37

Immunization and Other Preventive Measures (cont.)

- Eat foods rich in vitamin C, which help iron absorption
- Avoid tea, coffee, and colas, which inhibit iron absorption
- Possible side effects of iron/folate—black stools, constipation, and nausea
- Ways to lessen side effects

Slide 38

Immunization and Other Preventive Measures (cont.)

In areas of endemic disease / deficiency:

- Intermittent preventive treatment (IPT) and insecticide-treated nets (ITNs) for malaria
- Presumptive treatment for hookworm infection
- Vitamin supplements
- Iodine supplements

Slide 39

Scheduling Return Visit

- Schedule next visit; discuss its importance
- Provide contact information for facility/provider
- Address any final questions
- Advise her to bring:
  - records to each visit
  - partner or companion to at least one visit
- Ensure that she knows danger signs and to return for care if problems arise
- Thank her for coming
Summary

Focused antenatal care provision helps ensure:

- Nutritional support
- Birth preparedness and complication readiness
- Self-care and other healthy practices
- HIV counseling and testing
- Immunizations and other preventive measures
PRESENTATION 3B
ADDITIONAL CARE 1: COMMON DISCOMFORTS OF PREGNANCY

Slide 1

Additional Care 1
Common Discomforts of Pregnancy

Slide 2

Session Objective
By end of session, participants will be able to:
• explain some common discomforts of pregnancy
• describe additional care for women who have them

Slide 3

Overview
Common discomforts/concerns:
• changes, signs and symptoms, and physical and emotional behaviors that may occur during pregnancy, labor/childbirth, and postpartum/newborn period
• cause discomfort or concern but are usually normal
Overview

- Women who present with symptoms of common discomforts require care in addition to the core components of basic care. This may consist of:
  - Additional assessment
  - Additional care

Overview (cont.)

- During assessment: Confirm that woman’s discomfort is within normal range
- During care provision:
  - Reassure—no threat to her or fetus
  - Explain anatomic/physiologic basis in simple terms
  - Counsel on prevention and relief measures
  - Advise to return for care if symptoms worsen or danger signs or alert signs arise

Common Discomforts: Abdomen, Breasts, and Legs

- Abdominal (or groin) pain—cramps, twinges, pain on sides of lower abdomen
  - Cramps, twinges, pain on sides of lower abdomen (2nd-3rd trimester)
- Breast changes—size, tenderness or tingling, thin, clear/yellowish discharge (1st trimester)
Slide 7

**Common Discomforts: Abdomen, Breasts, and Legs (cont.)**

- Leg cramps—sudden in onset, of short duration (2nd–3rd trimester)
- Swelling (edema) of ankles and feet—appears after sitting standing long, disappears after rest and elevating feet (2nd–3rd trimester)

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Slide 8

**Example: Leg Cramps**

<table>
<thead>
<tr>
<th>Anatomical/physiologic basis</th>
<th>Prevention and relief measures—measures to prevent</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrombophlebitis/polythrombosis</td>
<td>Use warm cloth, straighten leg, flex foot upward</td>
<td>Localized pain over vein, swelling—superficial thrombophlebitis</td>
</tr>
<tr>
<td>Hyperpigmentation</td>
<td>Apply warm cloth</td>
<td>Calf tenderness, swelling with fever—deep-vein thrombosis</td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Massage, apply pressure</td>
<td></td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Apply warm cloth</td>
<td></td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Straighten leg, flex foot upward</td>
<td></td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Take frequent breaks from sitting or standing for long</td>
<td></td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Wear support hose</td>
<td></td>
</tr>
</tbody>
</table>

---

Slide 9

**Example: Swelling of Ankles and Feet**

<table>
<thead>
<tr>
<th>Anatomical/physiologic basis</th>
<th>Prevention and relief measures—measures to prevent</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache, blurred vision, other signs of pre-eclampsia/eclampsia</td>
<td>While lying down, he on left side</td>
<td>Headache, blurred vision—other signs of pre-eclampsia/eclampsia</td>
</tr>
<tr>
<td>Palmar, oedema, other signs of severe anemia</td>
<td>Elevate foot</td>
<td>Palmar, oedema—other signs of severe anemia</td>
</tr>
<tr>
<td>Pressure from enlarged uterus on veins</td>
<td>Change positions frequently</td>
<td>Pressure from enlarged uterus on veins—other signs of deep vein thrombosis</td>
</tr>
<tr>
<td>Pressure from enlarged uterus on veins</td>
<td>Increase intake of fluid</td>
<td>Pressure from enlarged uterus on veins—other signs of deep vein thrombosis</td>
</tr>
<tr>
<td>Pressure from enlarged uterus on veins</td>
<td>Avoid tight garters or bands around leg</td>
<td>Pressure from enlarged uterus on veins—other signs of deep vein thrombosis</td>
</tr>
<tr>
<td>Pressure from enlarged uterus on veins</td>
<td>Prolonged standing</td>
<td>Pressure from enlarged uterus on veins—other signs of deep vein thrombosis</td>
</tr>
</tbody>
</table>
Common Discomforts: Digestion and Elimination

- Bowel function changes—constipation or diarrhea (2nd–3rd trimester)
- Food cravings or pica (1st–3rd trimester)
- Gas, bloating, or loss of appetite (2nd–3rd trimester)
- Heartburn or indigestion (2nd–3rd trimester)

Common Discomforts: Digestion and Elimination (cont.)

- Nausea or vomiting (1st trimester)
- Salivation, increased (1st–3rd trimester)
- Urination, increased—increase in frequency (nocturnal), leaking of urine while sneezing, coughing or laughing (1st–3rd trimester)

Example: Bowel Function Changes

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measurement scale</th>
<th>Alert sign—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>Increase intake of fiber and fluids</td>
<td>Rapidly progressing difficulty in defecating, gas, vomiting and other signs of bowel obstruction</td>
</tr>
<tr>
<td></td>
<td>Defecate when urge is felt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avoid bileans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walk within 6 hours of normal birth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase exercise daily</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For diarrhea, also</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ensure intake of electrolytes</td>
<td></td>
</tr>
</tbody>
</table>
### Slide 13

**Example: Food Cravings or Pica**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures that may relieve</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclear etiology—probably influenced by tradition</td>
<td>Reinforce importance of eating balanced diet and avoiding unhealthy foods (e.g., candies) and nonfood substances (e.g., dirt, chalk, clay). Suggest alternative activity or foods</td>
<td></td>
</tr>
</tbody>
</table>

### Slide 14

**Example: Gas, Bloating, or Loss of Appetite**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures that may relieve</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormonal changes relax smooth muscles</td>
<td>Reinforce importance of balanced diet and adequate rest and exercise; advise to: Chew food thoroughly, maintain regular bowel habits, avoid gas-forming foods.</td>
<td>Fatigue, weakness, wasting—malnutrition or other chronic illness; s/s of bacterial or parasitic infection</td>
</tr>
<tr>
<td>Pressure from enlarged uterus on bowels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increased swallowing of air</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Slide 15

**Example: Heartburn or Indigestion**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures that may relieve</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastric reflux due to pressure from enlarging uterus</td>
<td>Eat smaller frequent meals, increase intake of fiber if needed; short course of nonprescription, low-sodium antacids. Avoid calcium, sodium bicarbonate.</td>
<td>Gastric pain, nausea, blurred vision—pre-eclampsia. Upper abdominal pain relieved by food but recurs 2-3 hours—peptic ulcer</td>
</tr>
<tr>
<td>Hormonal changes—relaxation of cardiac sphincter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Slide 16**

**Example: Nausea or Vomiting**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to take</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea/discomfort—may be related to</td>
<td>Eat crackers, dry bread, etc., before arising in morning</td>
<td>Signs of hyperemesis, appendicitis, gall bladder disease, pancreatitis, pre-eclampsia</td>
</tr>
<tr>
<td>Hormonal changes</td>
<td>Sit upright after meals</td>
<td></td>
</tr>
<tr>
<td>Smooth muscle relaxation</td>
<td>Eat short walks, get fresh air</td>
<td></td>
</tr>
<tr>
<td>Carbohydrate metabolism</td>
<td>Avoid fatty, spicy food</td>
<td></td>
</tr>
<tr>
<td>Fatigue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Slide 17**

**Example: Urination, Increased**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to take</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bladder pressure</td>
<td>Void when urge is felt</td>
<td>Bladder pain, burning—urinary tract infection, increased thirst—diabetes mellitus</td>
</tr>
<tr>
<td>Nudimentary release of trapped water</td>
<td>Limit intake of coffee, tea, cola but do not restrict fluid intake</td>
<td></td>
</tr>
<tr>
<td>Lower extremities</td>
<td>Increase of body fluid volume</td>
<td></td>
</tr>
</tbody>
</table>

**Slide 18**

**Common Discomforts: Genitals**

- Vaginal discharge (1st–3rd trimester)
Example: Vaginal Discharge

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures</th>
<th>Possible signs—may indicate problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in vascularity of genital tract, causing excessive mucus production.</td>
<td>Maintain hygiene and good hygiene practices.</td>
<td>Signs of STI, vaginitis, abruptio placenta, rupture of membranes.</td>
</tr>
</tbody>
</table>

Prevention and relief measures—reassurance and:

- Reassure importance of good hygiene and advise:
  - Maintain clean and dry perineum
  - Wear cotton underpants
  - Avoid douching
  - Increase in vascularity of genital tract, causing excessive mucus production.

Common Discomforts: Skin

- Itchiness (1st–3rd trimester)
- Perspiration, increased (2nd–3rd trimester)
- Skin changes—acne; blotchiness or darkening of skin on face, breasts, abdomen (chloasma); dryness or red/itchy palms or soles (1st–3rd trimester)

Common Discomforts: Skin (cont.)

- Spider nevi—vascular “spiders” (tiny, red, raised lines that branch out from flat or raised center) around eyes or on neck, throat, arms (1st–2nd trimester)
- Stretch marks—reddish or whitish streaks on breasts, abdomen, upper thighs (2nd–3rd trimester)
Common Discomforts: Skin (cont.)

- Varicose veins—swollen blue veins on legs or genitals, may be painful (2nd–3rd trimester)

Example: Itchiness

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures</th>
<th>Alert sign(s)—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papules, macules, pustules</td>
<td>Topical antipruritics or moisturizing cream</td>
<td>Itchiness</td>
</tr>
<tr>
<td>Dermatosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of appetite, nausea, intolerance of fatty foods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gall bladder disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enlarged uterus stretching skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure on skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familial tendency</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example: Varicose Veins

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures</th>
<th>Alert sign(s)—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure from enlarging uterus leads to venous congestion</td>
<td>When sitting up or lying down, slightly elevate feet/legs</td>
<td>Localized pain over vein, swelling—superficial thrombophlebitis</td>
</tr>
<tr>
<td>Familial tendency</td>
<td>Lie on left side</td>
<td>Calf tenderness, swelling with fever—deep vein thrombosis</td>
</tr>
<tr>
<td></td>
<td>Wears support hose</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Avoid sitting or standing for long periods</td>
<td></td>
</tr>
</tbody>
</table>
Slide 25

**Common Discomforts: Sleep and Mental State**

- Dreams (vivid) or nightmares (1st–3rd trimester)
- Fatigue or sleepiness (1st trimester)
- Feelings of worry or fear about pregnancy and labor (1st–3rd trimester)
- Insomnia (2nd trimester)
- Mood swings (1st trimester)

---

Slide 26

**Example: Fatigue or Sleepiness**

<table>
<thead>
<tr>
<th>Possible causes</th>
<th>Prevention and relief measures—resource page</th>
<th>Health signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in metabolism</td>
<td></td>
<td>Insomnia, decreased appetite or weight, inappropriate sadness or guilt—may indicate depression.</td>
</tr>
<tr>
<td>Increase in blood flow and pulse</td>
<td></td>
<td>Poor general condition, weakness, swelling—malnutrition or other chronic illness.</td>
</tr>
<tr>
<td>Emotional stress</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Reinforce importance of balanced diet, and adequate exercise and rest, and advise to:
  - Take supplements as directed
  - Avoid overexertion
  - Avoid smoking, alcohol

---

Slide 27

**Common Discomforts: Miscellaneous**

- Back pain (2nd–3rd trimester)
- Bleeding or painful gums (2nd trimester)
- Difficulty getting up/down (2nd–3rd trimester)
- Dizziness or fainting (1st–3rd trimester)
- Hair loss (3rd trimester)
- Headache (1st–3rd trimester)
Common Discomforts: Miscellaneous (cont.)

- Heart palpitations—fluttering or pounding sensation around the heart (1st trimester)
- Hemorrhoids—swollen veins in and around rectum, with pain, itching, and bleeding (2nd–3rd trimester)
- Hip pain—usually on one side only (3rd trimester)
- Hyperventilation or shortness of breath (3rd trimester)
- Nasal stuffiness or nasal bleeding (2nd–3rd trimester)
- Numbness/tingling of fingers and toes—may also occur in buttocks, hips, and thighs (2nd–3rd trimester)
- Walking awkwardly (waddling) or clumsiness (2nd–3rd trimester)

Example: Back Pain

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to prevent</th>
<th>Signs to watch for—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connective tissue changes</td>
<td>Practice good body mechanics, such as:when lifting, look down — Do not cross legs — Maintain good posture while standing/lying</td>
<td>Signs of SFL, such as labor, neurologic disease</td>
</tr>
<tr>
<td>Shift in woman's center of gravity</td>
<td>Sleep on firm mattress — Wear supportive bra — Practice “angry cat” exercises — If needed, prescription</td>
<td></td>
</tr>
<tr>
<td>Separation of anterior abdominal muscles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Example: Bleeding or Painful Gums

#### Anatomic/physiologic basis
- Hormonal changes—increased blood flow to mouth with edema in connective tissues

#### Prevention and relief measures—measures to take
- Encourage importance of good dental hygiene
- Rule out gingivitis

### Example: Difficulty Getting Up and Down

#### Anatomic/physiologic basis
- Hormonal changes—connective tissue softer and looser
- Other causes: changes in position—fatigue

#### Prevention and relief measures—measures to take
- When getting up from lying down, roll to one side and push up on knees
- Avoid lying flat on back
- Fatigue, weakness, swelling, difficulty urinating or defecating—neurologic disease

### Example: Dizziness or Fainting

#### Anatomic/physiologic basis
- Postural hypotension—hemodynamic changes
- Other factors: stress, fatigue, anxiety

#### Prevention and relief measures—measures to take
- Get up slowly from sitting or lying position
- Lie on side
- Eat frequent, small meals
- Avoid prolonged standing
- Fatigue, pallor, breathlessness, rapid heartbeat—severe anemia
- Sudden lower abdominal pain, followed by fainting, vaginal bleeding—ruptured ectopic pregnancy
### Example: Headache

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to avoid</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hormonal changes may cause headache, congestion, respiratory alkalosis, ocular changes</td>
<td>- Massage neck and shoulders</td>
<td>- Nausea, chills, fever</td>
</tr>
<tr>
<td>- Headache, emotional stress, fatigue</td>
<td>- If needed, short course of antihistamines</td>
<td>- Seizures of migraine, acute rhinitis, phlebitis</td>
</tr>
</tbody>
</table>

#### Prevention and relief measures—measures to avoid:
- Avoid aspirin, ibuprofen, narcotics, sedatives, hypnotics.
- Anatomic/physiologic basis:
  - S/s of migraine, acute rhinitis, phlebitis.

### Example: Heart Palpitation

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to avoid</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Shortness of breath, worsening on exertion</td>
<td>- Advise to return if 3 symptoms worsen</td>
<td>- Shortness of breath, worsening on exertion, heart disease</td>
</tr>
<tr>
<td>- Sweating, palpitation, tightness in chest—severe anxiety</td>
<td>- Danger/alert signs arise</td>
<td>- Sweating, palpitation, tightness in chest—severe anxiety</td>
</tr>
</tbody>
</table>

#### Prevention and relief measures—measures to avoid:
- Increase in blood flow to and from heart.
- Anxiety about possible heart disease.

### Example: Hemorrhoids

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures to avoid</th>
<th>Alert signs—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Constipation, anal pain, and/or bleeding on defecation—may indicate anal fissure</td>
<td>- Increase intake of fiber</td>
<td>- Constipation, anal pain, and/or bleeding on defecation—may indicate anal fissure</td>
</tr>
<tr>
<td>- Increase intake of fiber</td>
<td>- If needed, topical anesthetic cream</td>
<td></td>
</tr>
<tr>
<td>- Pressure of enlarging uterus on rectal veins</td>
<td>- Avoid becoming constipated</td>
<td></td>
</tr>
<tr>
<td>- Hemorrhoids enlarge and congest veins</td>
<td>- Constipation, anal pain, and/or bleeding on defecation</td>
<td></td>
</tr>
</tbody>
</table>

#### Prevention and relief measures—measures to avoid:
- Constipation, anal pain, and/or bleeding on defecation.
### Slide 37

**Example: Hyperventilation**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures the same</th>
<th>Alert s/s—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormonal changes causing lower levels of carbon dioxide and higher levels of oxygen</td>
<td>When lying down—lie on side with knees and hip bent; place pillow between knees and abdomen</td>
<td>Signs of respiratory disorder, severe anemia, heart disease, pulmonary edema</td>
</tr>
</tbody>
</table>

### Slide 38

**Example: Nasal Stuffiness or Nasal Bleeding**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures the same</th>
<th>Alert s/s—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormonal changes—capillary engorgement, vascular pooling, excessive mucous production, local trauma or nasal polyps</td>
<td>To stop nosebleed—sit up, do not lie down or tilt head back; gently pinch nostrils shut for a few minutes; repeat several times until bleeding stops</td>
<td>Bleeding is severe or more than three episodes of bleeding; bleeding disorder; SIs allergies, acute sinusitis</td>
</tr>
</tbody>
</table>

### Slide 39

**Example: Numbness of Fingers and Toes**

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—measures the same</th>
<th>Alert s/s—may indicate problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift in center of gravity—preference on sciatic nerve; compression of nerve by edematous tissue</td>
<td>Reinforce importance of good body mechanics; when numbness is bothersome—try lying down, soaking in warm tub</td>
<td>Numbness and pain in fingers—carpal tunnel syndrome; Weakness of hand or foot—nerve entrapment</td>
</tr>
</tbody>
</table>

---

*Basic Maternal and Newborn Care: Basic Antenatal Care*

JHPIEGO/Maternal and Neonatal Health Program
Example: Walking Awkwardly (Waddling)

<table>
<thead>
<tr>
<th>Anatomic/physiologic basis</th>
<th>Prevention and relief measures—reassurance and:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Shift in center of gravity—pressure on sciatic nerve</td>
<td></td>
</tr>
<tr>
<td>- Compression of nerve by edematous tissue</td>
<td></td>
</tr>
<tr>
<td>- Numbness in fingers—carpel tunnel syndrome</td>
<td></td>
</tr>
<tr>
<td>- Weakness of hand or feet—disc prolapse</td>
<td></td>
</tr>
</tbody>
</table>

- Reinforce good body mechanics
- When numbness is bothersome—try lying down, soaking in warm tub
- Shift in center of gravity—pressure on sciatic nerve
- Compression of nerve by edematous tissue

Summary

- Many women experience a variety of common discomforts during pregnancy
- The skilled provider should:
  - Reassure the woman
  - Explain the basis for her discomfort
  - Counsel the woman on prevention/relief measures
  - Advise her to return if condition worsens or danger or alert signs develop
PRESENTATION 4A
ADDITIONAL CARE II: SPECIAL NEEDS OF PREGNANCY

Slide 1

Additional Care II
Special Needs of Pregnancy

Slide 2

Session Objective
• By end of session, participants will be able to:
  • Explain some key special needs
  • Describe additional care for women who have these special needs

Slide 3

Overview
• Special needs are conditions or social/personal factors that should be taken into consideration when planning and implementing care
Overview (cont.)
- Women with special needs require care in addition to core components of basic care. This may consist of:
  - Additional assessment
  - Additional care provision

Overview (cont.)
During assessment:
- Focus on certain elements of assessment and/or add new elements (e.g., tests)
- Confirm and/or assess nature of need (e.g., severity, related factors)
- Confirm that woman does not have more serious condition/problem

Overview (cont.)
During care provision:
- Explain benefits of addressing need
- Emphasize certain elements of care plan and/or add new elements (e.g., drugs, messages)
- Make special recommendations regarding birth and complication readiness plan, if needed
Overview (cont.)
During care provision (cont.):
• Schedule additional ANC visits, if needed
• Link woman to appropriate local sources of support or specialists, as appropriate—maintain up-to-date list of local resources
• Advise to return for care if symptoms worsen or danger or alert signs arise

Presenting Special Needs
• Adolescence (19 years of age and under)
• Anemia (mild to moderate)
• Burning on urination
• Female genital cutting
• HIV

Presenting Special Needs (cont.)
• Living in area of endemic:
  • Hookworm infection
  • Malaria infection
  • Vitamin A deficiency
  • Iodine deficiency
• Living in area with high prevalence of diabetes
Slide 10

Presenting Special Needs (cont.)

- Poor obstetric history
- Size-date discrepancy
  - Through 22 weeks’ gestation
  - After 22 weeks’ gestation
- Syphilis
- Violence against women

Slide 11

Adolescence (19 years and under)

- Care for adolescent woman focuses on identifying and addressing:
  - Associated health risks
  - Lack of information/experience
  - Lack of support
  - Other barriers to care

Slide 12

Adolescence: Additional Assessment

- Determine circumstances surrounding pregnancy
  - Unprotected sex
  - Multiple partners
  - Incest, sexual abuse, rape
  - Sexual exploitation
  - Forced marriage, forced sex
- If due to abuse, further evaluation/additional care needed (special need)
Adolescence: Additional Assessment (cont.)

- May need to confirm pregnancy through pelvic exam or testing—she may not know she is pregnant; may happen before period starts

**Note:** If woman’s first pelvic exam:
- Obtaining consent
- Respecting modesty/privacy
- Explaining what to expect
- Listening to concerns may be especially important

---

Adolescence: Additional Care Provision

- Identification of personal support system
- Nutritional support
  - Involve family decision-makers to ensure:
    - Access to food
    - Avoidance of heavy physical labor
    - Adequate rest
  - Counsel her to:
    - Eat frequent meals with extra serving and snacks
    - Avoid skipping meals

---

Adolescence: Additional Care Provision (cont.)

- Birth and complication readiness plan
  - Involve family decision-makers (with her consent)
- Self care and other healthy practices
  - Encourage continuation of education
  - Encourage companion during ANC visits
  - Reinforce safer sex message
Slide 16

Adolescence: Additional Care Provision (cont.)

- Reinforce importance of:
  - Family planning/birth spacing
  - Successful breastfeeding
  - Newborn care
- Linkage to appropriate local sources of support
  - Woman’s advocacy group
  - Public health agencies
  - Peer support groups
  - Community service organization

Slide 17

Anemia

Care for woman with mild to moderate anemia focuses on preventing severe anemia

- During pregnancy and breastfeeding—body requires more iron than usual
- Severe anemia during pregnancy—associated with premature birth, increased perinatal and maternal mortality, infection

Slide 18

Anemia: Additional Assessment

In addition to basic assessment

- Recognize s/s of anemia:
  - Symptoms: Weakness, tiredness, shortness of breath, dizziness, fainting
  - Signs: Pallor of conjunctiva, hemoglobin levels below 11 g/dL
  - If hemoglobin levels less than 7 g/dL, woman has severe anemia and requires urgent referral/transfer
Slide 19

Anemia:
Additional Assessment (cont.)

Try to determine cause of anemia:
• Postpartum hemorrhage in last 2–3 years
• Living in area of endemic malaria or hookworm infection
• HIV
  • Any of above. Further evaluation/additional care
    (special need)
• Unknown—nonurgent referral/transfer

Slide 20

Anemia:
Additional Care Provision

• Reinforce importance of:
  • Eating iron-rich foods with vitamin C
  • Not eating iron-rich foods with foods that inhibit iron absorption—e.g., tea, coffee, bran
  • Taking iron/folate as prescribed and managing any side effects
• Retest woman’s hemoglobin levels in one month—to ensure good response to iron therapy

Slide 21

Burning on Urination:
Additional Assessment

• Perform culture and sensitivity on clean-catch specimen, if available
• Assess for fever and flank/ loin pain
• If either, provide urgent additional assessment/care (possible life-threatening complication)
Slide 22

**Burning on Urination: Additional Care Provision**

- Begin treatment for cystitis while awaiting test result (change treatment, if needed, when result is ready):
  - Amoxicillin 1 tab (500 mg) 8 hourly X 3 days, or
  - Trimethoprim/sulphamethoxazole (160 mg/800 mg) 1 tab 12 hourly X 3 days
- Encourage increased intake of fluids
- Advise to return for care if symptoms worsen or danger or alert signs arise

Slide 23

**Female Genital Cutting (FGC): Additional Assessment**

Determine type of FGC that woman has:

- Clitoridectomy (Type I): part/all clitoris removed
- Excision (Type II): part/all clitoris and prepuce removed; partial/total excision of labia minora
- Infibulation (Type III): clitoris and labia minora removed; incised sides of labia majora stitched together
- Unclassified procedure

Slide 24

**FGC—Type I: Area Cut (Left) and Healed (Right)**
FGC—Type 2: Area Cut (Left) and Healed (Right)

FGC—Type 3: Area Cut (Left) and Healed (Right)

FGC: Additional Assessment (cont.)
Determine whether scar is well healed or complicated by other factors
• If well-healed Type I or II, proceed to additional care provision
• If well-healed Type III, proceed to additional care provision, which must include defibulation
• If FGC scar complicated by other factors (large keloids, dermoid cysts, infected ulcers, cysts), woman requires nonurgent referral/transfer
Slide 28

FGC: Additional Care Provision

Well-healed Type I or II:
- Reassure woman—will not complicate childbirth

Well-healed Type III:
- Advise woman that defibulation is necessary for birth:
  - ideally during 2nd trimester of pregnancy
  - can be done during 2nd stage of labor—but increased chance of infection and bleeding.

Slide 29

FGC: Additional Care Provision (cont.)

- Counseling—include partner/decision-maker:
  - Inform them that reinfibulation is unnecessary
  - Discuss medical risks of reinfibulation
  - Support woman in her decision

Slide 30

HIV

- Pregnant woman with HIV should receive same basic care provided to all women plus additional care
- While caring for HIV-positive woman, always:
  - Respect her confidentiality
  - Provide reassurance and encouragement
  - Be empathetic and nonjudgmental
Main Goals of ANC for HIV-Positive Women
- Maximize and maintain health of mother
- Prevent mother-to-child-transmission (MTCT) of HIV
- Prevent HIV transmission to uninfected partners
- Linkage to appropriate healthcare or supportive services

Effects of HIV
Possible effects of HIV on pregnant woman:
- Opportunistic infections
- Malnutrition and specific vitamin deficiencies—increased nutritional requirements
- Depression, anxiety
- Abandonment, abuse, stigma

HIV: Additional Assessment
- Ensure that she is under care of HIV specialist
- Determine whether receiving ARV therapy
- Assess support systems; risk of abandonment or abuse
HIV: Additional Assessment (cont.)

- Assess for coexistent conditions and opportunistic infections:
  - Respiratory infections
  - Tuberculosis
  - Persistent diarrhea
  - Urinary tract infection
  - Enlarged lymph nodes
  - Skin eruptions and lesions

---

HIV: Additional Assessment (cont.)

- Coexistent conditions and opportunistic infections (cont.):
  - Sexually transmitted infections
  - Oral or vaginal candidiasis
  - Severe weight loss
  - Pallor, fatigue, and other s/s of anemia
  - If coexistent conditions and opportunistic infections, woman requires nonurgent referral/transfer

---

HIV: Post-Test Counseling

- Start with post-test counseling, if needed:
  - Provide results, reassuring confidentiality
  - Provide immediate emotional support—for denial, anger, or sadness
  - Be alert for destructive reactions
  - Ensure support during next hours/days
Slide 37

**HIV: Post-Test Counseling (cont.)**

- Assess risk of abandonment and abuse—stability of relationship, partner’s likely reaction
- Discuss/role play disclosure (e.g., timing, approach, who should know)
- Assess risk of abandonment and abuse—stability of relationship, partner’s likely reaction
- Discuss disclosure (e.g., timing, approach)

---

Slide 38

**HIV: Post-Test Counseling (cont.)**

- Outline methods of preventing HIV transmission to fetus and partner
- Discuss importance of promptly initiating care with HIV specialist (nonurgent referral/transfer)
- Inform her of local HIV programs, support groups, and other resources (linkage)
- Proceed with additional care provision

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Slide 39

**HIV: Additional Care Provision**

- Help identify personal support system
- Assist in planning for future
- Discuss newborn feeding options
- Discuss ARV treatment options
- Link to local HIV programs, support groups, and other resources (linkage)
HIV: Support System
Help woman identify friends, family, and other HIV-positive people who can:
• Provide emotional and practical support
• Help secure resources
• Help plan for future

HIV: Plans for Future
Assist in planning for long-term care needs
• Who will care for woman and children if she becomes ill?
• Is child at risk of neglect, abuse, abandonment?
• Does she have access to healthcare services and medications specifically for HIV-positive people?

HIV: Newborn Feeding
Counsel woman about feeding options: breastfeeding or replacement feeding (using breastmilk substitute)
• Discuss risks and benefits of each
• Support woman in her decision
HIV: Newborn Feeding (cont.)

Breastfeeding:
- Provides newborn with adequate nutrition and protection against infections and allergies
- Promotes bonding
- Provides woman with contraceptive protection
- Is usually more culturally appropriate, cost-effective, accessible

But:
- Increases risk of mother to child transmission (MTCT) of HIV

If use of breastmilk substitute is feasible, acceptable, safe, affordable, available/accessible, avoidance of all breastfeeding is recommended for HIV-positive women—but it is still her decision to make.

If woman decides to use replacement feedings—counsel her on safe preparation and administration of breastmilk substitute.

If woman decides to breastfeed—counsel on the following:
- Breastfeeding must be exclusive, not alternated with replacement feeds (mixed feeding carries higher risk of MTCT than exclusive breastfeeding or exclusive replacement feeding).
Slide 46

HIV: Newborn Feeding (cont.)
- Breastfeeding should be discontinued as early as possible, between 4 and 6 months after childbirth, to minimize risk of MTCT
- Discontinuation should be abrupt, not gradual, and followed by exclusive replacement feeding
- The woman should seek prompt medical attention for conditions such as mastitis, breast abscess, and fungal infection of nipples

Slide 47

HIV: Health Messages and Counseling
Reinforce importance of:
- Reducing workload and increasing periods of rest
- Consistent condom use during pregnancy and postpartum period
- Good nutrition
- Family planning
- Attending all ANC visits

Slide 48

HIV: Antiretroviral Therapy
- If woman is on ARV, advise her to continue therapy with HIV specialist
- If woman is not on ARV, provide therapy according local guidelines
  - If no local guidelines, use following guidelines
HIV: Antiretroviral Therapy (cont.)

For pregnant women, give zidovudine (ZDV, AZT, Retrovir):

- **Short course:**
  - 300 mg orally twice daily
  - from 36 weeks gestation to onset of labor (then 300 mg orally every 3 hours until birth)

- **Long course:**
  - 300 mg orally twice daily OR 200 mg orally 3 times daily
  - OR 100 mg orally 5 times daily
  - from 14 to 34 weeks gestation to onset of labor (then 2 mg/kg IV for first hour, then 1 mg/kg per hour until birth)
PRESENTATION 4B
ADDITIONAL CARE III: SPECIAL NEEDS OF PREGNANCY
(CONTINUED)

Slide 1

Additional Care III
Special Needs of Pregnancy (continued)

Slide 2

Living in Area of Endemic Disease/Deficiency
• Women living in endemic areas for following conditions require additional care
  • Malaria infection
  • Hookworm infection
  • Vitamin A deficiency
  • Iodine deficiency
  • Diabetes
• The goal of care is to prevent condition, or complications of condition, from developing

Slide 3

Malaria: Additional Assessment
Assess for s/s of malaria illness (e.g., fever, headache, muscle/joint pain)
• If s/s of malaria illness, treat according to local protocols or facilitate referral/transfer
• If no s/s of malaria illness, provide additional care
Slide 4

Malaria: Additional Care Provision

ANC in malaria endemic area must include following interventions:
- Intermittent preventive treatment (IPT)
- Use of insecticide-treated (bed) nets (ITNs)
- Health messages and counseling
- Management of malaria illness—if s/s develop

Slide 5

Malaria: Additional Care Provision (cont.)

Give sulphadoxine (500 mg) and pyrimethamine (25 mg) according to local protocols or following guidelines:
- Give first dose at first ANC visit after fetal movement begins, and
- Give dose at next two ANC visits—but not more often than monthly
- Do not give IPT to women less than 16 weeks pregnant or allergic to sulfa drugs

Slide 6

Malaria: Additional Care Provision (cont.)

Provide additional health messages and counseling:
- Malaria can cause problems including severe maternal anemia and stillbirth or low birth weight
- Other preventive measures:
  - Sleep under well-tucked net every night—have net re-dipped every 6 months
  - Avoid standing water, thick foliage, etc.; cover arms and legs, use repellent
- Seek immediate care if s/s of malaria illness arise
Slide 7

**Hookworm Infection: Additional Care Provision**

Provide presumptive antihelminthic treatment to women in 2nd and 3rd trimester of pregnancy—if woman has not received treatment in last 6 months or tested positive for hookworm infection:

- Give mebendazole 500 mg by mouth once, OR
- Give albendazole 400 mg by mouth once, OR
- Prescribe mebendazole 100 mg by mouth twice daily for 3 days
- In regions with high prevalence of hookworm infection, provide additional dose after 12 weeks

Slide 8

**Hookworm Infection: Additional Care Provision (cont.)**

Provide additional health messages and counseling:

- Hookworm infection can cause maternal anemia and protein deficiency
- Other preventive measures
  - Avoid walking bare foot to prevent infection
  - Dispose of human waste properly
  - Do not touch soil with bare hands
  - Use good general hygiene practices

Slide 9

**Vitamin A Deficiency: Additional Care Provision**

- Provide supplementation:
  - 1st to 3rd trimester—10,000 IU vitamin A once daily orally
  - 2nd to 3rd trimester—25,000 IU vitamin A once weekly orally
- Provide related health messages and counseling:
  - Increase dietary intake of local foods rich in vitamin A
  - In HIV+ woman, vitamin A deficiency can increase risk of mother-to-child transmission
Slide 10

Iodine Deficiency: Additional Care Provision

Provide supplementation—as early as possible in pregnancy
• Give one-time dose of 2–3 capsules of iodine 400–600 mg orally, OR
• Inject one-time dose of 240 mg (0.5 mL Lipiodol) intramuscularly

Slide 11

Iodine Deficiency: Additional Care Provision

Provide related health messages and counseling:
• Most prevalent cause of preventable mental retardation globally; can also result in other forms of brain damage, stillbirth, spontaneous abortions, increased neonatal mortality
• Other preventive measures: increasing dietary intake of iodine; using iodized salt

Slide 12

Diabetes Additional Care Provision

• During ANC test woman’s urine for glucose:
  • If urine is positive for glucose, facilitate nonurgent referral
  • If urine is negative for glucose, repeat test early in 3rd trimester (around 28 weeks gestation)
Poor Obstetric History

- Maternal, fetal, or newborn complications during previous pregnancy, labor/childbirth, postpartum/newborn period may indicate underlying medical or obstetric condition
- Reason to be vigilant, but may require no special intervention
- Provides opportunity to:
  - reassure woman in present pregnancy
  - emphasize importance of having skilled provider attend birth

Poor Obstetric History: Additional Assessment

- Determine nature of previous complications
- Perform additional assessment and appropriate follow-up for following conditions:
  - Convulsions
  - Three or more spontaneous abortions
  - Cesarean section or other uterine surgery
  - Third-or fourth-degree tears
  - Newborn complications or death
- For other previous complications, proceed with additional care provision

Previous Convulsions

Determine cause of convulsion based on history or medical records:

- Malaria—reinforce importance of IPT and bednets; be alert for s/s
- Eclampsia—reinforce regular ANC check up for blood pressure; be alert for s/s
- Tetanus—reinforce tetanus toxoid immunization
- Epilepsy or unknown cause—facilitate nonurgent referral/transfer
**Slide 16**

**Three or More Spontaneous Abortions**

Determine when abortions occurred based on history or medical records:
- If all were before 14 weeks—be alert for vaginal bleeding and severe abdominal pain
- If all were after 14 weeks—facilitate nonurgent referral/transfer

**Slide 17**

**Previous C-Section or Uterine Surgery**

Determine reason for surgery based on history or medical records:
- Ectopic pregnancy
- Ruptured uterus
- C-section due to:
  - Cephalicpelvic disproportion
  - Complications requiring immediate delivery
  - Twin or breech delivery
  - Fetal distress

**Slide 18**

**Previous C-Section or Uterine Surgery (cont.)**

Use information to guide development of birth plan:
- Arrange to give birth in facility equipped to perform emergency obstetric surgery
- With one previous C-section—may have "trial of labor" if judged safe by skilled provider
- With two previous C-sections or uterine rupture—must give birth by C-section
- Secure appropriate funds and transportation for surgical intervention
Previous 3rd or 4th Degree Tear

Determine whether repair is adequate and assess for related complications (e.g., fistula, rectal sphincter dysfunction):

• If repair adequate and no complications—reassure woman and proceed with additional care
• If repair inadequate or complications—facilitate urgent referral/transfer

---

Previous Newborn Complications or Death

Determine nature of newborn complication or death based on history or medical records:

• Complications during labor/birth (e.g., C-section, maternal convulsions)—provide further evaluation/additional care as appropriate
• Newborn jaundice, feeding difficulties, other problems
  - for jaundice, plan to closely observe baby for first 5 days
  - for others, use information to guide counseling and other care

---

Previous Newborn Complications or Death (cont.)

Determine nature of newborn complication or death based on history or medical records (cont.):

• Maternal chronic conditions, lifestyle (e.g., use of harmful substances), other problems
  - for chronic conditions, facilitate nonurgent referral/transfer
  - for others, use information to guide counseling and other care
Poor Obstetric History:
Additional Care Provision

- Listen to woman’s story and provide reassurance
- Emphasize importance of:
  - Birth and complication readiness plan
  - Skilled provider to attend birth
  - Adhering to plan of care
  - Practicing self-care and other healthy practices
  - Returning for continued care throughout childbearing cycle

Size-Date Discrepancy:
Through 22 Weeks Gestation

- Confirm measurement with second skilled provider
- Confirm pregnancy, if needed
- Confirm gestational age based on menstrual and contraceptive history, signs of pregnancy, physical examination
  - If error in calculation of dates—correct estimated date of childbirth and proceed with additional care
  - If no error in calculation of dates—rule out ectopic pregnancy, spontaneous abortion, molar pregnancy

Size-Date Discrepancy:
After 22 Weeks Gestation

- Confirm measurement with second skilled provider
- If small for dates—rule out malpresentation (if transverse lie), fetal death
- If large for dates—rule out multiple pregnancy, polyhydramnios
Size-Date Discrepancy: Through and After 22 Weeks Gestation

Additional care provision:
- Provide reassurance
- If pregnancy progressing normally, ask woman to return in 2 weeks and re-measure
  - If still more than 2 cm difference, facilitate nonurgent referral/transfer

Syphilis

Additional assessment:
- Check for s/s of infection
- Perform RPR/VDR if needed
- If diagnosed, determine whether treated and whether treatment was adequate

Syphilis

Additional care provision:
- Give emotional support
- Provide counseling regarding:
  - Mode of transmission
  - Possible effects on, and care of, baby
  - Importance of condom use
  - Importance of testing partners
Syphilis (cont.)

- If diagnosed with syphilis but not adequately treated:
  - If newly acquired s/s, give benzathine benzylpenicillin 2.4 million units IM
  - If s/s of unknown duration, give benzathine benzylpenicillin 2.4 million units IM weekly for 3 weeks
  - Follow local protocols for follow-up management of woman with positive RPR/VDRL

Violence against Women

- Freedom from violence is basic human right
- Pregnancy may be precipitating factor of violence—“punishment” for becoming pregnant
- Violence may be at hands of her partner or family members
- The woman may deny abuse even if it is occurring—make point to talk to her alone; give her time; let her know “door is open”

Main Goals of ANC for Women Suffering Violence

- Identify abuse-related condition or injury
- Help woman recognize abuse in her own life and take steps to protect herself and her children
- Ensure that she feels safe while receiving care
- Help her recognize her right to high-quality ANC services
- Linkage to appropriate healthcare or supportive services
Effects of Violence
Possible effects of violence on pregnant woman:
• Injury or death
• Emotional trauma
• Exposure to STIs
• Powerlessness
• Isolation
• Lack of support system

Additional/Emphasized Interpersonal Skills for Women Suffering Violence
• Demonstrate empathy and understanding
• Use kind, nonjudgmental approach
• Ensure complete confidentiality and privacy
• Respect her right to make decisions about her life
• Be aware of increased sensitivity to or fear of examination

Violence against Women: Additional Assessment
• Recognize s/s of violence, including:
  • History of abuse
  • History of depression/suicide attempts
  • Wounds, bruises, lesions on abdomen, chest, or genitals
• Determine nature of abuse:
  • What has been done to her? For how long? Has it gotten worse? How is it currently affecting her life?
Violence against Women: Additional Care Provision

If pregnancy is progressing normally—provide basic ANC with following additions/emphases:

- Health messages and counseling
- Safety action plan
- Linkage to appropriate local sources of support

Violence against Women: Health Message and Counseling

- Validate her experience
- Acknowledge injustice—it is not her fault
- Help her understand that she is not alone—other women also have this problem
- Empower her by sharing information

Violence against Women: Safety Action Plan

Help woman develop safety action plan:

- Identify neighbors, friends, or relatives who are willing to help
- Talk about abuse to trusted neighbor who can act in an emergency
- Keep local support contact information accessible
- Be prepared to leave home quickly: packed bag accessible, escape route planned
Slide 37

Violence against Women: Linkage to Sources of Support

Help woman identify local sources of support either within her family or community, including:

- Woman’s service and advocacy groups
- Public health agencies
- Peer support groups
- Community service organizations
- Religious leaders, churches, faith-based organizations
- Appropriate legal agencies

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Slide 38

Summary

- Be alert to special needs during pregnancy that require care in addition to basic care
- May need to include:
  - Special counseling and care
  - Scheduling additional visits
  - Advising other providers involved in her care
  - Linking woman to appropriate resources
PRESENTATION 5
ADDITIONAL CARE IV: LIFE-THREATENING COMPLICATIONS OF PREGNANCY

Slide 1

Additional Care IV
Life-Threatening Complications of Pregnancy

Slide 2

Session Objective
- By end of session, participants will be able to identify and respond to life-threatening complications encountered while caring for pregnant women

Slide 3

Overview
- A danger sign indicates a potentially life-threatening complication
- Women presenting with danger signs—during quick check OR in course of basic ANC—require care in addition to core components of basic care. This consists of:
  - Rapid initial assessment and, if necessary, stabilization
  - Additional assessment
  - Additional care provision
Overview (cont.)

- **Rapid initial assessment** determines:
  - Degree of illness
  - Need for emergency care/stabilization
  - Appropriate course of action to be taken
- If stabilization is not needed—provide additional care per presenting danger sign
- If stabilization is needed—follow appropriate stabilization procedure

Overview (cont.)

**Additional assessment** per presenting danger sign (after RIA/stabilization):
- Focus on certain elements of assessment and/or add new elements (e.g., tests)
- Confirm and/or assess nature of need (e.g., severity, related factors)
- Confirm that woman does not have more serious condition/problem requiring urgent referral/transfer

Overview (cont.)

**Additional care provision** per presenting danger sign (after RIA/stabilization and more serious conditions have been ruled out)
- Emphasize certain elements of care plan and/or add new elements (e.g., drugs, health messages)
- Make special recommendations regarding birth and complication readiness plan, if needed
- If appropriate, provide initial management of condition and/or facilitate referral/transport
Slide 7

Rapid Initial Assessment (RIA)
- Every woman presenting with a danger is assessed for:
  - Breathing difficulty (respiratory distress)
  - Convulsion/loss of consciousness
  - Shock
  - Hypertension with proteinuria
  - Fever

Slide 8

RIA: Breathing Difficulty
- Assess for s/s of breathing difficulty:
  - Not breathing
  - Rapid breathing (30 breaths/minute or more)
  - Obstructed breathing (gurgling or gasping)
  - Wheezing or rales
  - Pallor or cyanosis
- If any above s/s present—follow stabilization procedure per next two slides before proceeding
- If not, proceed with rapid initial assessment

Slide 9

Stabilization: Respiratory Distress
- If woman is not breathing:
  - Keep her in supine position with head tilted backwards
  - Lift chin to open airway
  - Inspect mouth for foreign body and remove if found
  - Clear secretions from throat
  - Ventilate with bag and mask until breathing
- Once stabilized—facilitate urgent referral/transfer
Slide 10

Stabilization: Respiratory Distress (cont.)

• If woman is breathing:
  • Rapidly evaluate her vital signs (pulse, blood pressure, breathing)
  • Prop on left side
  • Give oxygen at 6–8 liters/minute
  • Continually ensure that airway is clear
• Once stabilized—facilitate urgent referral/transfer

Slide 11

RIA: Convulsions or Loss of Consciousness

• Assess for convulsions or loss of consciousness
  • If either is present—follow stabilization procedure per next four slides before proceeding
  • If not, proceed with rapid initial assessment

Slide 12

Stabilization: Convulsions, Loss of Consciousness, or Diastolic BP More than 110 mmHg with Proteinuria 2+ or More

• Rapidly evaluate woman’s vital signs (pulse, blood pressure, breathing)
• Never leave her alone
• Protect her from injury, but do not actively restrain
• If unconscious:
  • Check airway
  • Prop on left side
  • Check for neck rigidity
  • If rigid neck, use appropriate precautions for possible meningitis
Stabilization: Convulsions, Loss of Consciousness, or Diastolic BP More than 110 mmHg with Proteinuria 2+ or More (cont.)

- If convulsing—turn her on side to minimize risk of aspiration
- Give loading dose of magnesium sulfate solution (or diazepam, if not available)
  - Give 4 g IV over 5 minutes
  - Follow promptly with 10 g: 5 g in each buttock as deep IM injection with 1 mL of 2% lidocaine in same syringe

Stabilization: Convulsions, Loss of Consciousness, or Diastolic BP More than 110 mmHg with Proteinuria 2+ or More (cont.)

- If convulsions persist or recur after 15 minutes, give magnesium sulfate solution 2 g IV over 5 minutes*
- Once stabilized—facilitate urgent referral/transfer
  - If referral/transfer is delayed—continue according to maintenance dose schedule*

*See precautions on next slide

Stabilization: Convulsions, Loss of Consciousness, or Diastolic BP More than 110 mmHg with Proteinuria 2+ or More (cont.)

- Before giving another dose of magnesium sulfate solution, ensure that woman's:
  - Respiratory rate is at least 16 breaths/minute
  - Patellar reflexes are present
  - Urinary output is at least 30 mL/hour over 4 hours
- If respiratory arrest occurs:
  - Assist ventilation with mask and bag
  - Give calcium gluconate 1 gm (10 ml of 10% solution) IV slowly over 10 minutes

*See precautions on next slide
RIA: Shock

• Measure woman’s blood pressure and take her temperature and pulse
• If systolic less than 90 mmHg, assess for other s/s of shock:
  • Pallor of conjunctiva
  • Perspiration
  • Cool and clammy skin
  • Rapid breathing
  • Anxiety or confusion
  • Unconscious or nearly unconscious
  • Scanty urine

RIA: Shock (cont.)

• If any above s/s present—follow stabilization procedure per next two slides before proceeding
• If not, proceed with rapid initial assessment

Stabilization: Shock

• Turn her on side to minimize risk of aspiration
• Ensure that she is breathing
• Keep woman warm, but do not overheat
• Elevate her legs to increase venous return (before and during transport)
• Start IV infusion or give oral rehydration solution (if woman is able to drink)
Stabilization: Shock (cont.)
- Monitor vital signs (pulse, blood pressure, breathing) and skin temperature every 15 minutes
- Once woman is stabilized—facilitate urgent referral/transport

RDa: Diastolic BP More than 110 mmHg with Proteinuria 2+ or More
- If diastolic more than 110 mmHg, test urine for protein
  - If protein 2+ or more, follow same stabilization procedure as for convulsions or loss of consciousness before proceeding
  - If not, proceed to additional care guidelines per presenting danger sign

Additional Assessment and Care per Presenting Danger Sign
If woman is not in need of stabilization or has been stabilized, follow specific guidelines for danger sign:
- Vaginal bleeding in early/late pregnancy (through/after 22 weeks)
- Severe headache, blurred vision, or elevated blood pressure
- Decreased or absent fetal movements, absent fetal heart tones, abnormal fetal heart rate
Slide 22

Additional Assessment and Care per Presenting Danger Sign (cont.)

- Fever or foul-smelling vaginal discharge
- Severe abdominal pain in early/later pregnancy (through/after 22 weeks)
- Contractions before 37 weeks’ gestation

Slide 23

Vaginal Bleeding in Early Pregnancy (through 22 weeks)

Assess for following alert s/s:

- Fainting
- History of expulsion of tissue
- Cramping/lower abdominal pain
- Tender uterus
- Tender adnexal mass
- Cervical motion tenderness
- Uterus soft and large for dates

Slide 24

Vaginal Bleeding in Early Pregnancy (through 22 weeks) (cont.)

- If any of above s/s—facilitate urgent referral/transfer
- If bleeding is heavy and referral/transfer is delayed—give 0.2 mg ergometrine IM or misoprostol 400 mcg by mouth
- If none of above s/s—proceed with additional care provision
Additional care:
- Provide reassurance
- Explain that she may be aborting
- Ensure sufficient supply of iron/folate
- Review complication readiness plan
- Ensure that she knows where to go for help if danger or alert signs arise

Vaginal Bleeding in Early Pregnancy (through 22 weeks) (cont.)

NEVER perform a pelvic examination on a woman who is more than 22 weeks gestation and who is bleeding

Assess for following alert s/s:
- Moderate/heavy bleeding
- Tender or tense uterus/abdomen
- Severe abdominal pain
- Intermittent or constant abdominal pain
- Easily palpable fetal parts
- Decreased or absent fetal movements
- Abnormal or absent fetal heart tones
Vaginal Bleeding in Late Pregnancy (after 22 weeks) (cont.)

- If any of above s/s:
  - Start IV infusion (or give ORS if conscious)
  - Facilitate urgent referral/transfer
  - If none of above s/s—proceed with additional care provision

Assess for labor:

- If woman is not in labor—facilitate urgent referral/transfer
- If woman is in labor:
  - If less than 37 weeks—facilitate urgent referral/transfer
  - If more than 37 weeks—proceed with basic care for labor and childbirth

Severe Headache, Blurred Vision, or Elevated Blood Pressure

Assess for following alert s/s:
- Diastolic BP more than 90 mmHg with proteinuria
- Difficulty chewing and opening mouth
- Fever/chills/shivers
- Stiff neck
- Muscle and joint pain
- Spasms of face, neck, trunk
- Arched back
- Board-like abdomen
Severe Headache, Blurred Vision, or Elevated Blood Pressure (cont.)

- If any of above s/s—facilitate urgent referral/transfer
- If none of above s/s—proceed with additional care provision

Severe Headache, Blurred Vision, or Elevated Blood Pressure (cont.)

- If diastolic BP is 90–110 mmHg with no proteinuria—recheck her BP in 1 hour
- If diastolic BP is still 90 mmHg or more after 1 hour—facilitate urgent referral/transfer

Severe Headache, Blurred Vision, or Elevated Blood Pressure (cont.)

- If BP is normal:
  - Provide reassurance—headache may be normal (common discomfort)
  - Review complication readiness plan
  - Ensure that she knows where to go for help if symptoms worsen or danger or alert signs arise
Decreased or Absent Fetal Movements, Absent Fetal Heart Tones, Abnormal Fetal Heart Rate

For decreased or absent fetal movements:
- Palpate abdomen
- Ask if woman has had sedative drug
  - If yes—wait until effect of drug has worn off and palpate again; listen to fetal heart tones
  - If woman has not had drugs, listen to fetal heart tones/rate

If absent fetal heart tones—follow guidelines on next two slides
If fetal heart tones are heard, but are abnormal—follow guidelines for abnormal fetal heart tones
If fetal heart tones are heard and rate is normal—provide reassurance and proceed with basic ANC

For absent fetal heart tones:
- Ask others to listen
- Use electronic fetal stethoscope
- Obtain obstetric ultrasound, if available
  - If not heard on obstetric ultrasound, manage as stillbirth or newborn death (special need)
Slide 37

Decreased or Absent Fetal Movements, Absent Fetal Heart Tones, Abnormal Fetal Heart Rate (cont.)

- If not heard using other methods—recheck in 1 hour
- If heard and rate is abnormal—follow specific guidelines for danger sign
- If heard and rate is normal—provide reassurance and proceed with basic ANC
- If not heard—manage as possible stillbirth or newborn death (spinal head); facilitate nonurgent referral/transport

Slide 38

Decreased or Absent Fetal Movements, Absent Fetal Heart Tones, Abnormal Fetal Heart Rate (cont.)

For abnormal fetal heart rate:
- Try to identify maternal cause
  - If maternal cause not identified, facilitate urgent referral/transfer
  - If maternal cause identified:
    - Initiate appropriate management
    - Provide reassurance and proceed with basic ANC, as appropriate

Slide 39

Fever (38°C or more)

Fever is never normal!

Assess for s/s of following:
- Amnionitis
- Acute pyelonephritis
- Septic abortion
- Malaria
- Pneumonia
- Typhoid
Slide 40

Fever (38°C or more) or Foul-Smelling Vaginal Discharge

- Start IV or give ORS
- Provide antibiotics appropriate to condition suggested by s/s
- Provide supportive care: use of fan or tepid sponge before and during transport
- Facilitate urgent referral/transport

Slide 41

Severe Abdominal Pain in Early Pregnancy (through 22 weeks)

Assess for alert s/s:

- Vaginal bleeding
- Nausea/vomiting
- Loss of appetite
- Fever/chills
- Rebound tenderness
- Size-date discrepancy
- Tender adnexal mass
- Cervical motion tenderness
- Burning on urination
- Increase in urinary frequency/urgency

Slide 42

Severe Abdominal Pain in Early Pregnancy (through 22 weeks) (cont.)

- If any of above s/s, facilitate urgent referral/transfer
- If none of above s/s, proceed with additional care provision
Severe Abdominal Pain in Early Pregnancy (through 22 weeks):
Additional Care

- Provide reassurance—abdominal pain may be normal (common discomfort)
- Review complication readiness plan
- Ensure that she knows where to go for help if danger or alert signs arise

Severe Abdominal Pain in Later Pregnancy (after 22 weeks):
Assess for alert s/s:
- Palpable contractions or cervical dilation before 37 weeks
- Blood-stained mucus/watery watery vaginal discharge before 37 weeks
- Foul-smelling, watery vaginal discharge
- Vaginal bleeding
- Nausea/vomiting
- Loss of appetite
- Fever/chills
- Rebound tenderness
- Tender uterus
- Easily palpable fetal parts
- Decreased or absent fetal movement
- Abnormal or absent fetal heart tones/rate
- Burning on urination
- Increase in urinary frequency/urgency

Severe Abdominal Pain in Later Pregnancy (after 22 weeks) (cont.)
- If any of above s/s:
  - Start IV infusion
  - Facilitate urgent referral/transfer
- If none of above s/s—proceed with additional care provision
Severe Abdominal Pain in Later Pregnancy (after 22 weeks) (cont.)

- Assess for labor
  - If woman is in labor:
    - If less than 37 weeks—facilitate urgent referral/transfer
    - If more than 37 weeks—provide basic care for labor and childbirth
  - If woman is not in labor—proceed with additional care provision

Severe Abdominal Pain in Later Pregnancy (after 22 weeks) (cont.)

Additional care:
- Provide reassurance—abdominal pain may be normal (common discomfort)
- Assess for constipation (common discomfort)
- Review complication readiness plan
- Ensure that she knows where to go for help if danger or alert signs arise

Contractions Before 37 Weeks

- Assess for alert s/s:
  - Cervical dilatation and effacement
  - Palpable contractions
  - Blood-stained mucus or watery discharge
  - Vaginal bleeding
  - If any of above s/s—facilitate urgent referral/transfer
  - If none of above s/s—proceed with additional care provision
Slide 49

**Contraction Before 37 Weeks (cont.)**

- Assess for false labor
- If false labor:
  - Manage as false labor (special need)
  - Conduct urine test and rule out urinary tract infection
- Review complication readiness plan
- Ensure that she knows where to go for help if danger or alert signs arise

Slide 50

**Summary**

- Women presenting with danger signs—during quick check OR in course of basic ANC—require care in addition to core components of basic care. This consists of:
  - Rapid initial assessment and, if necessary, stabilization
  - Additional assessment
  - Additional care provision
  - Possible referral/transfer
# BASIC ANTENATAL CARE COURSE EVALUATION

(To be completed by **Participants**)

Please indicate your opinion of the course components using the following rating scale:

5-Strongly Agree  4-Agree  3-No Opinion  2-Disagree  1-Strongly Disagree

<table>
<thead>
<tr>
<th>COURSE COMPONENT</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Precourse Questionnaire helped me to study more effectively during the course.</td>
<td></td>
</tr>
<tr>
<td>2. The illustrated lectures and discussions helped me to understand the course content.</td>
<td></td>
</tr>
<tr>
<td>3. The role play on interpersonal skills was helpful.</td>
<td></td>
</tr>
<tr>
<td>4. The exercise on calculating the EDC was helpful.</td>
<td></td>
</tr>
<tr>
<td>5. The case studies were useful for practicing clinical decision-making.</td>
<td></td>
</tr>
<tr>
<td>6. The skills practice sessions made it easier for me to perform the skills for antenatal assessment and care provision.</td>
<td></td>
</tr>
<tr>
<td>7. The emergency drill helped me understand the different roles of emergency team members and how to respond rapidly in an emergency situation.</td>
<td></td>
</tr>
<tr>
<td>8. There was sufficient time scheduled for practicing with clients at an antenatal clinic.</td>
<td></td>
</tr>
<tr>
<td>9. I feel confident about providing basic antenatal care.</td>
<td></td>
</tr>
<tr>
<td>10. I feel confident about using/applying the recommended infection prevention practices and interpersonal skills.</td>
<td></td>
</tr>
<tr>
<td>11. The interactive learning approach used in this course made it easier for me to learn how to provide basic antenatal care.</td>
<td></td>
</tr>
<tr>
<td>12. Six days was an adequate length of time for the course.</td>
<td></td>
</tr>
</tbody>
</table>
MODEL COURSE OUTLINE

The course outline presented here is a model plan of the training to be delivered. It presents objectives needed to accomplish the participant learning objectives described in the course syllabus. For each enabling objective, there are suggestions regarding appropriate learning activities and resources and materials needed. The trainer may develop other practice activities and prepare case studies, role plays or other learning situations which are specific to the country or group of participants.

The course outline is divided into four columns.

- **Time.** This section of the outline indicates the approximate amount of time to be devoted to each learning activity.

- **Objectives/Activities.** This column lists the enabling objectives and learning activities, which are presented here in order. The combination of the enabling objectives and activities (introductory activities, small-group exercises, clinical practice, breaks, etc.) outlines the flow of training.

- **Training/Learning Methods.** This column describes the various methods and strategies to be used to deliver the content and skills related to each enabling objective and activities.

- **Resources/Materials.** The fourth column in the course outline lists the resources and materials needed to support the learning activities.

Note that the course schedule is based on the course outline and that changes or modifications to one should be reflected in the other.
<table>
<thead>
<tr>
<th>TIME</th>
<th>OBJECTIVES/ ACTIVITIES</th>
<th>TRAINING/LEARNING METHODS</th>
<th>RESOURCE MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SESSON ONE: DAY 1, AM (210 MINUTES)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 minutes</td>
<td><strong>Activity:</strong> Welcome and introductions</td>
<td>Have participants divide into pairs, interview, and then introduce each other by name, position, and any unique characteristics. The trainers should also be involved in this activity.</td>
<td><strong>ANC Course Notebook:</strong> Refer to Instruments and Equipment in Course Syllabus</td>
</tr>
<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Identify participant expectations</td>
<td>Ask participants to share their expectations of the course and write their responses on a flip chart. Attach the flip chart page to the wall for reference throughout the course.</td>
<td><strong>ANC Course Notebook:</strong> Introduction</td>
</tr>
<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Provide an overview of the course</td>
<td>Outline the course syllabus and schedule. Discuss the goals of the course and participant learning objectives.</td>
<td><strong>ANC Course Notebook:</strong> Overview</td>
</tr>
</tbody>
</table>
| 20 minutes | **Activity:** Provide an overview of the learning approach used in the course and the course components | Outline competency-based training, assessment of knowledge and skills, use of simulations and anatomic models, supportive environment for learning, and transfer of learning. | **BMNC Manual**  
**ANC Course Notebook** (Participant’s Handbook and Trainer’s Notebook) |
| 10 minutes | **Activity:** Review course materials | Distribute, review, and discuss materials used in this course. | **BMNC Manual**  
**ANC Course Notebook:** Precourse Questionnaire |
| 40 minutes | **Activity:** Assess participants’ precourse knowledge | Ask participants to turn to the Precourse Questionnaire in their handbook and answer each of the questions. | **ANC Course Notebook:** Precourse Questionnaire |
| 15 minutes | **Break** | | |
| 20 minutes | **Activity:** Identify individual and group learning needs | Have participants grade questionnaires and complete the Individual and Group Assessment Matrix. Follow the directions in the ANC Trainer’s Notebook. | **ANC Course Notebook:** Precourse Questionnaire and Answer Key and The Individual and Group Assessment Matrix |
| 60 minutes | **Objective:** Describe the general principles of basic care | **Illustrated Lecture and Discussion:** Present and discuss the concepts of evidence-based care; skilled care and the skilled care provider; the care provision system; facility-community linkages; women- and newborn-friendly care; and culturally appropriate care. Pause at appropriate intervals to emphasize particular points and encourage discussion. | **BMNC Manual – Section One:** Fundamentals of Basic Care – Chapter 1  
**Presentation:** PPT1A |
### MODEL ANTENATAL CARE COURSE OUTLINE (Standard Course: 6 days, 12 sessions)

<table>
<thead>
<tr>
<th>TIME</th>
<th>OBJECTIVES/ ACTIVITIES</th>
<th>TRAINING/LEARNING METHODS</th>
<th>RESOURCE MATERIALS</th>
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<tbody>
<tr>
<td><strong>SESSION TWO: DAY 1, PM (210 MINUTES)</strong></td>
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<tr>
<td>50 minutes</td>
<td><strong>Objective:</strong> Describe the key tools in basic care</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Present and discuss clinical decision-making; interpersonal skills; and record keeping. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider the differences and similarities between the information presented and their present practices.</td>
<td>BMNC Manual – Section One: Fundamentals of Basic Care – Chapter 3 Presentation: PPTIB</td>
</tr>
<tr>
<td>25 minutes</td>
<td><strong>Activity:</strong> Role play to demonstrate the use of appropriate interpersonal skills when providing antenatal care</td>
<td><strong>Role Play:</strong> Use Role Play 1 to demonstrate the use of appropriate interpersonal skills. Use the Answer Key to guide discussion following the role play. Encourage all participants to contribute to the discussion.</td>
<td>ANC Course Notebook: Role Play 1 and Answer Key</td>
</tr>
<tr>
<td>15 minutes</td>
<td>Break</td>
<td></td>
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</tr>
<tr>
<td>50 minutes</td>
<td><strong>Objective:</strong> Describe infection prevention principles and practices</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Explain and discuss infection prevention principles and practices. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to compare the principles and practices presented with those currently used at their worksites.</td>
<td>BMNC Manual – Section One: Fundamentals of Basic Care – Chapter 3 Presentation: PPTIC</td>
</tr>
</tbody>
</table>
| 55 minutes | **Activity:** Demonstrate infection prevention practices. | **Demonstration:** The demonstration should be carried out in the classroom using the appropriate equipment. Drawing a tap on a piece of flip chart paper can simulate running water. Demonstrate each of the following practices, provide an explanation of the steps involved, and encourage participants to ask questions at any point during the demonstration:  
  - hand washing  
  - protective barriers  
  - decontamination  
  - sharps handling and disposal  
  - waste disposal | ANC Course Notebook: Refer to Instruments and Equipment in Course Syllabus |
| 15 minutes | **Activity:** Review of the day’s activities              | **Involve participants in review and discussion of the topics and activities covered during the day. Ask a participant to volunteer to write the agenda for next day on a flipchart, in preparation for the opening session. The schedule in the ANC Participant’s Handbook should be used to do this. Ask one or more of the other participants to plan an opening activity or warmup for next day.** | ANC Course Notebook: Model Antenatal Course Schedule |

**Reading Assignment:** BMNC—Section 1: Chapters 1 to 3; Section 2: Chapters 4 and 5 (through “Antenatal Assessment”); Section 4: Annexes 6 and 7
## TIME | OBJECTIVES/ ACTIVITIES | TRAINING/LEARNING METHODS | RESOURCE MATERIALS
--- | --- | --- | ---
10 minutes | **Activity:** Agenda and opening activity  
Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it. |  | 
50 minutes | **Objective:** Provide an introduction to antenatal care  
**Illustrated Lecture and Discussion:** Present and discuss the goals of antenatal care, the scope of basic antenatal care, and the components of the basic antenatal care visit. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider the differences and similarities between the information presented and their present practices: Are the goals consistent? Is the scope similar? Are the components of the basic visit the same? | BMNC Manual – Section One: Fundamentals – Chapters 1 and 2; Section Two: Core Components of Basic Care – Chapters 4 and 5  
Presentation: PPT2A

15 minutes | **Break** |  | 

50 minutes | **Objective:** Describe the components of the antenatal history  
**Illustrated Lecture and Discussion:** Explain and discuss the following components of the antenatal history: personal information, menstrual and contraceptive history, present pregnancy, daily habits and lifestyle, obstetric history, medical history, interim history. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider whether they cover each of the components presented when taking an antenatal history. If there are components that they do not include, ask them to explain why. | BMNC Manual – Section Two: Core Components of Basic Care – Chapters 5  
Presentation: PPT2B

25 minutes | **Activity:** Exercise to practice calculating the EDC  
**Exercise:** Use Exercise 1 and the Answer Key provided to have participants practice calculating the EDC. | ANC Course Notebook: Refer to Instruments and Equipment in Course Syllabus; Exercise 1 and Answer Key

60 minutes | **Activity:** Practice antenatal history  
**Skill Demonstration and Practice:** The skill is to be demonstrated by trainers and practiced by participants in a simulated setting, as described in Skills Practice Session 1. | ANC Course Notebook: Skills Practice Session 1 and Learning Guide 1  
BMNC Manual – Section Two: Core Components of Basic Care – Chapter 5
<table>
<thead>
<tr>
<th>TIME</th>
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</thead>
<tbody>
<tr>
<td>60 minutes</td>
<td><strong>Activity:</strong> Tour antenatal clinic facilities</td>
<td>Each trainer should take responsibility for one small group of participants and guide them through the clinic facilities. Participants and clinic staff should be introduced to each other.</td>
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<tr>
<td>15 minutes</td>
<td>Break</td>
<td></td>
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<tr>
<td>70 minutes</td>
<td><strong>Objective:</strong> Describe the components of antenatal physical examination</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Explain and discuss the following aspects of antenatal physical examination: assessment of general well-being, blood pressure measurement, visual inspection of breasts, abdominal examination, and genital examination. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider whether they cover each of the components presented when doing an antenatal physical examination. If there are differences, what are they and why?</td>
<td></td>
</tr>
<tr>
<td>50 minutes</td>
<td><strong>Objective:</strong> Describe antenatal testing</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Explain and discuss the following tests: hemoglobin, RPR, HIV, blood group and Rh, and urine testing for diabetes (if applicable). Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider the differences and similarities in the tests discussed and those they currently use. Also ask them whether they cover each of the components presented when providing antenatal care. If there are components that they do not include, ask them to explain why.</td>
<td></td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Activity:</strong> Review of the day’s activities</td>
<td>Involve participants in review and discussion of the topics and activities covered during the day. Ask a participant to volunteer to write the agenda for next day on a flipchart, in preparation for the opening session. The schedule in the ANC Participant’s Handbook should be used to do this. Ask one or more of the other participants to plan an opening activity or warmup for next day.</td>
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</tbody>
</table>

**Reading Assignment:** BMNC—Section 2: Chapter 5 (through “Antenatal Care Provision”); Section 3: Chapter 9 (pages 3-1 to 3-24—all pregnancy-related entries); Section 4: Annex 5
<table>
<thead>
<tr>
<th>TIME</th>
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<tbody>
<tr>
<td>10 minutes</td>
<td>Activity: Agenda and opening activity</td>
<td>Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it.</td>
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</tr>
<tr>
<td>130 minutes</td>
<td>Objective: Describe antenatal care provision</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Explain and discuss the following components of basic antenatal care: nutritional support, birth planning, HIV counseling and testing, additional health messages and counseling, immunization and other preventive measures, and scheduling a return visit. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants to consider the differences and similarities in the tests discussed and those they currently use. Also ask them whether they cover each of the components presented when providing antenatal care. If there are components that they do not include, ask them to explain why.</td>
<td>BMNC Manual – Section Two: Core Components of Basic Care – Chapter 5 Presentation: PPT3A</td>
</tr>
<tr>
<td>15 minutes</td>
<td>Break</td>
<td></td>
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<tr>
<td>50 minutes</td>
<td>Activity: Practice birth planning and counseling</td>
<td><strong>Skill Demonstration and Practice:</strong> The skill is to be demonstrated by trainers and practiced by participants in a simulated setting, as described in Skills Practice Session 2.</td>
<td>ANC Course Notebook: Skills Practice Session 2 BMNC Manual – Section Two: Core Components of Basic Care – Chapter 5</td>
</tr>
<tr>
<td>TIME</td>
<td>OBJECTIVES/ ACTIVITIES</td>
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<tr>
<td>90 minutes</td>
<td><strong>Objective:</strong> Describe the common discomforts of pregnancy</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Present an overview of the common discomforts of pregnancy. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants which common discomforts they see in current practice and the prevention and relief measures provided.</td>
<td>BMNC Manual – Section Three: Additional Care – Chapter 9 Presentation: PPT3B</td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
<td>ANC Course Notebook: Case Study 1 and Answer Key</td>
</tr>
<tr>
<td>90 minutes</td>
<td><strong>Activity:</strong> Complete case study relevant to antenatal assessment and care</td>
<td><strong>Case Study:</strong> Introduce participants to case studies in general and explain how they facilitate the development of problem solving and decision-making skills. Use Case Study 1 on antenatal assessment and care. Divide participants into groups of three or four. Allow approximately 20 minutes for the groups to work on the case studies, then allow five to ten minutes for one participant from each group to report back to the class as a whole. Use the case study answer keys to guide discussion.</td>
<td>ANC Course Notebook: Case Study 1 and Answer Key</td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Activity:</strong> Review of the day’s activities</td>
<td><strong>Review of the day’s activities</strong></td>
<td>ANC Course Notebook: Case Study 1 and Answer Key</td>
</tr>
</tbody>
</table>

**Reading Assignment BMNC**—Section 3: Additional Care: Chapter 10 (pages 3-35 to 3-73—all entries except “Breech presentation” and “Postpartum sadness”; 3-81 and 3-82)
## MODEL ANTENATAL CARE COURSE OUTLINE (Standard Course: 6 days, 12 sessions)

<table>
<thead>
<tr>
<th>TIME</th>
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<tbody>
<tr>
<td><strong>SESSION SEVEN: DAY 4, AM (210 MINUTES)</strong></td>
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<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Agenda and opening activity</td>
<td>Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it.</td>
<td></td>
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</tbody>
</table>
| 180 minutes | **Activity:** Practice assessment and care provision | **Clinical Practice with Clients Under Guidance of Trainers:** Participants should continue to work in pairs and practice taking an antenatal history, performing an antenatal physical examination, conducting testing, and providing care. | **ANC Course Notebook:** Learning Guide 1: Antenatal Assessment and Care  
**BMNC Manual—Section Two: Core Components of Basic Care**—Chapter 5 |
| 20 minutes | **Activity:** Review of morning practice | **Discussion:** Review and discuss participants’ clinical experience, including history, physical examination, testing, and care provision. Also discuss factors that facilitated and barriers that hindered the provision of care. The discussion can take place either at the clinical site or back at the classroom. | |

| **SESSION EIGHT: DAY 4, PM (210 MINUTES)** | | | |
| 120 minutes | **Objective:** Describe special needs relevant to pregnancy and childbirth | **Illustrated Lecture and Discussion:** Present an overview of the special needs relevant to pregnancy. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants which special needs they see in current practice and how they respond to these needs. | **BMNC Manual—Section Three: Additional Care**—Chapter 10  
**Presentation:** PPT4A  
**Presentation:** PPT4B |
| 15 minutes | **Break** | | |
| 60 minutes | **Activity:** Complete case studies relevant to antenatal assessment and care | **Case Studies:** Reiterate how case studies facilitate the development of problem solving and decision-making skills. Use Case Studies 2 and 3 on antenatal assessment and care. Divide participants into groups of three or four. Allow approximately 20 minutes for the groups to work on the case studies, then allow five to ten minutes for one participant from each group to report back to the class as a whole. Use the case study answer keys to guide discussion. | **ANC Course Notebook:** Case Studies 2 and 3: Antenatal Assessment and Care and Answer Keys |
| 15 minutes | **Activity:** Review of the day’s activities | Involve participants in review and discussion of the topics and activities covered during the day. Ask a participant to volunteer to write the agenda for next day on a flipchart, in preparation for the opening session. The schedule in the ANC Participant’s Handbook should be used to do this. Ask one or more of the other participants to plan an opening activity or warmup for next day. | |

**Reading Assignment:** **BMNC—Section 3: Additional Care:** Chapter 11 (pages 3-89 to 3-102, 3-108, 3-110 to 3-113, 3-115 to 3-121 except “Pus, redness…” and “Severe abdominal pain after childbirth”).

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8 - *Section Two: Guide for Trainers*
<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Agenda and opening activity</td>
<td>Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it.</td>
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</tr>
<tr>
<td>180 minutes</td>
<td><strong>Activity:</strong> Practice antenatal assessment and care provision</td>
<td><strong>Clinical Practice with Clients under Guidance of Trainers:</strong> Participants should continue to work in pairs and practice taking an antenatal history, performing an antenatal physical examination and proving care.</td>
<td>ANC Course Notebook: Learning Guide 1: Antenatal Assessment and Care BMNC Manual – Section Two: Core Components of Basic Care – Chapters 5</td>
</tr>
<tr>
<td>20 minutes</td>
<td><strong>Activity:</strong> Review of morning practice</td>
<td><strong>Discussion:</strong> Review and discuss participants’ clinical experience, including history, physical examination and care provision. Also discuss factors that facilitated and barriers that hindered the provision of care. The discussion can take place either at the clinical site or back at the classroom.</td>
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</tr>
<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Agenda and opening activity</td>
<td>Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it.</td>
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<tr>
<td><strong>SESSION TEN: DAY 5, PM (210 MINUTES)</strong></td>
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<tr>
<td>120 minutes</td>
<td><strong>Objective:</strong> Describe common life-threatening complications of pregnancy</td>
<td><strong>Illustrated Lecture and Discussion:</strong> Present an overview of the common life-threatening complications of pregnancy, including rapid initial assessment and stabilization procedures. Pause at appropriate intervals to emphasize particular points and encourage discussion. For example, ask participants which life-threatening complications they have seen, how they have responded to these, and what the outcome was.</td>
<td>BMNC Manual – Section Three: Additional Care – Chapter 11 Presentation: PPT5A</td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
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</tr>
<tr>
<td>55 minutes</td>
<td><strong>Activity:</strong> Emergency drill on eclampsia and severe pre-eclampsia/</td>
<td><strong>Emergency Drill:</strong> The purpose of this activity is to provide participants with the opportunity to observe and participate in an emergency drill.</td>
<td>ANC Course Notebook: Emergency Drill 1 and Answer Key</td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Activity:</strong> Review of the days activities</td>
<td>Involve participants in review and discussion of the topics and activities covered during the day. Ask a participant to volunteer to write the agenda for next day on a flipchart, in preparation for the opening session. The schedule in the ANC Participant’s Handbook should be used to do this. Ask one or more of the other participants to plan an opening activity or warmup for next day.</td>
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<tr>
<td><strong>SESSION ELEVEN: DAY 6, AM (210 MINUTES)</strong></td>
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<tr>
<td>10 minutes</td>
<td><strong>Activity:</strong> Agenda and opening activity</td>
<td>Review the agenda with participants, as outlined on the flipchart. Have the participant(s) who volunteered for the opening activity or warmup conduct it.</td>
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</table>
### MODEL ANTENATAL CARE COURSE OUTLINE (Standard Course: 6 days, 12 sessions)

<table>
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</thead>
<tbody>
<tr>
<td>45 minutes</td>
<td><strong>Activity:</strong> Assess participants’ knowledge</td>
<td>Have participants complete the Knowledge Assessment Questionnaire. Trainers should then mark the questionnaires in preparation for individual discussion with participants.</td>
<td><a href="#">ANC Course Notebook: Knowledge Assessment Questionnaire, Answer Sheet and Answer Key</a></td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140 minutes</td>
<td><strong>Activity:</strong> Practice antenatal history, physical examination and care provision</td>
<td><strong>Clinical Practice with Clients Under Guidance of Trainers:</strong> Participants should continue to work in pairs and practice taking an antenatal history, performing an antenatal physical examination, conducting tests, and proving care.</td>
<td><a href="#">ANC Course Notebook: Learning Guide 1: Antenatal Assessment and Care BMNC Manual – Section Two: Core Components of Basic Care – Chapters 5</a></td>
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</tbody>
</table>

**SESSION TWELVE: DAY 6, PM (210 MINUTES)**

<table>
<thead>
<tr>
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<th>TRAINING/LEARNING METHODS</th>
<th>RESOURCE MATERIALS</th>
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</thead>
<tbody>
<tr>
<td>50 minutes</td>
<td><strong>Clinical conference:</strong> Review and discuss clinical practice experience from morning</td>
<td><strong>Discussion:</strong> Trainers discuss individual cases, learning opportunities, and experiences from the morning’s activities.</td>
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</tr>
<tr>
<td>90 minutes</td>
<td><strong>Activity:</strong> Discuss participants’ ongoing learning needs</td>
<td><strong>Discussion:</strong> The results of the knowledge assessment questionnaire should be reviewed with the class as a whole, emphasizing collective strengths and weaknesses. The trainer can review any previous presentation topic that the majority of participants missed questions on. Trainers must then meet with individual participants who scored less than 85% and discuss missed items and/or incorrect responses.</td>
<td><a href="#">Basic Maternal and Newborn Care Manual – All relevant sections and chapters</a></td>
</tr>
<tr>
<td>15 minutes</td>
<td><strong>Break</strong></td>
<td></td>
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</tr>
<tr>
<td>60 minutes</td>
<td><strong>Activity:</strong> Discuss participants’ individual ongoing learning needs</td>
<td><strong>Discussion:</strong> Trainers meet with participants individually to discuss and identify ongoing learning needs, based on performance during the course and results of knowledge assessment.</td>
<td></td>
</tr>
<tr>
<td>30 minutes</td>
<td><strong>Activity:</strong> Identify course strengths and weaknesses</td>
<td><strong>Course Evaluation:</strong> Have participants complete the course evaluation form. Then discuss briefly with participants whether the course has met their expectations, as outlined on Day 1.</td>
<td><a href="#">Participant’s Handbook: Course Evaluation Form</a></td>
</tr>
<tr>
<td>40 minutes</td>
<td><strong>Closing</strong></td>
<td><strong>Certificates are handed out and congratulations given</strong></td>
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PRE COURSE QUESTIONNAIRE

USING THE INDIVIDUAL AND GROUP ASSESSMENT MATRIX

The precourse questionnaire is not intended to be a test but rather an assessment of what the participants, individually and as a group, know about the course content. Participants, however, are often not aware of this and may become anxious about being “tested” in front of their colleagues on the first day of a course. The clinical trainer should be sensitive to this attitude and administer the questionnaire in a neutral and nonthreatening way, as indicated in the following guidelines:

- Participants draw numbers to assure anonymity (e.g., from 1 to 20 if there are 20 participants in the course).
- Participants complete the precourse questionnaire.
- The trainer gives the answers to each question.
- The trainer passes around the individual and group assessment matrix for each participant to complete according to her/his number.
- The trainer posts the completed matrix.
- The trainer and participants discuss the results of the questionnaire as charted on the matrix and jointly decide how to allocate course time.
# PRECOURSE QUESTIONNAIRE ANSWER KEY

## FUNDAMENTALS OF BASIC CARE

1. The single most critical intervention for saving the lives of women and newborns is the presence of a skilled caregiver at birth, supported by transport if emergency referral is required. **TRUE** Participant Objective 1 (Section 1: Chapter 1)

2. The clinical decision-making process is based entirely on the information obtained from the client and her record. **FALSE** Participant Objective 2 (Section 1: Chapter 3)

3. Effective communication is critical to the development of a trusting relationship with clients. **TRUE** Participant Objective 3 (Section 1: Chapter 3)

4. Handwashing should be carried out only after contact with clients known to be infectious. **FALSE** Participant Objective 4 (Section 1: Chapter 3)

## BASIC ANTENATAL ASSESSMENT

5. The estimated date of childbirth (EDC) should be calculated based on the last day of the woman’s last menstrual period. **FALSE** Participant Objective 5 (Section 2: Chapter 5)

6. The fundus is palpable just above the symphysis pubis at 16 weeks’ gestation. **FALSE** Participant Objective 6 (Section 2: Chapter 5)

7. If the systolic blood pressure of a pregnant woman is less than 90 mmHg, it is considered normal. **FALSE** Participant Objective 6 (Section 2: Chapter 5)

8. The normal fetal heart rate range during pregnancy (before labor) is 120-160 beats per minute. **TRUE** Participant Objective 6 (Section 2: Chapter 5)

9. At 36 weeks’ gestation, the fetus is normally longitudinal in lie and in cephalic/vertex presentation. **TRUE** Participant Objective 6 (Section 2: Chapter 5)

10. A hemoglobin level of 7-11 g/dL indicates severe anemia. **FALSE** Participant Objective 7 (Section 2: Chapter 5)

11. HIV testing should be offered on each subsequent visit, even if the woman told you at her visit that she does not want to be tested. **TRUE** Participant Objective 7 (Section 2: Chapter 5)
12. The birth plan should be developed at the first antenatal visit and reviewed and updated on return visits. **TRUE** Participant Objective 8 (Section 2: Chapter 5)

13. Knowing the danger signs of pregnancy and childbirth will help the woman and her family recognize and respond to complications. **TRUE** Participant Objective 8 (Section 2: Chapter 5)

14. Health messages and counseling should be individualized and aim at helping the woman to stay healthy during pregnancy. **TRUE** Participant Objective 9 (Section 2: Chapter 5)

15. Early and exclusive breastfeeding provides the best nutrition for the newborn. **TRUE** Participant Objective 9 (Section 2: Chapter 5)

16. Foods rich in vitamin C may inhibit iron absorption. **FALSE** Participant Objective 10 (Section 2: Chapter 5)

17. A woman should wait until after her first trimester (3 months) of pregnancy to receive her first tetanus toxoid immunization. **FALSE** Participant Objective 10 (Section 2: Chapter 5)

18. One relief measure for dizziness and fainting during pregnancy is to advise the woman to get up slowly from a sitting or lying position. **TRUE** Participant Objective 11 (Section 3: Chapter 9)

19. Abdominal cramps and twinges during pregnancy are almost always associated with a serious complication. **FALSE** Participant Objective 12 (Section 3: Chapter 9)

20. If a woman reports abuse, acknowledge her situation by making a statement such as “Many women face abuse at home, so you should not be afraid or let it affect your pregnancy.” **FALSE** Participant Objective 13 (Section 3: Chapter 10)

21. If an HIV-positive mother wants to breastfeed, but wants to minimize the risk of transmitting the infection to her baby, she should use “mixed feeding” (alternating breastfeeding with replacement feeding). **FALSE** Participant Objective 13 (Section 3: Chapter 10)
LIFE-THREATENING COMPLICATIONS

22. Rapid initial assessment and, if necessary, stabilization procedures are essential for responding to women who experience life-threatening complications during pregnancy and childbirth.  

TRUE  Participant Objective 14  (Section 3: Chapter 11)


FALSE  Participant Objective 14  (Section 3: Chapter 11)

24. The emergency treatment of choice for a pregnant woman with eclampsia is 10 mg diazepam IV.  

FALSE  Participant Objective 14  (Section 3: Chapter 11)
KNOWLEDGE ASSESSMENT QUESTIONNAIRE

USING THE QUESTIONNAIRE

The questionnaire should be administered at the time in the course when all subject areas have been presented. A score of 85% or more correct indicates knowledge-based mastery of material presented in the reference manual. For those participants who score less 85% on their first attempt, the trainer should review the results with the participant individually and guide her/him in using the reference manual to learn the required information. Repeat testing should be done only after the participant has had sufficient time to study the reference manual.
KNOWLEDGE ASSESSMENT QUESTIONNAIRE

Instructions: Write the letter of the single best answer to each question in the blank next to the corresponding number on the attached answer sheet.

FUNDAMENTALS OF BASIC CARE

1. The single most critical intervention for saving the lives of women and newborns is:
   a. the presence of a support person during childbirth and the immediate postpartum/newborn period
   b. the presence of a doctor during childbirth and the immediate postpartum/newborn period
   c. the presence of a skilled provider during childbirth and the immediate postpartum/newborn period, supported by transport if emergency referral is required
   d. for all births to take place in a hospital

2. The first step in the clinical decision making process is:
   a. gathering information
   b. developing a care plan
   c. checking the woman’s record
   d. asking the woman questions

3. Effective communication involves:
   a. listening to what the woman has to say
   b. encouraging the woman to express her concerns
   c. letting the woman know she is being listened to and understood
   d. all of the above

4. The most practical procedure for preventing the spread of infection is:
   a. wearing gloves
   b. wearing a mask
   c. handwashing
   d. all of the above

BASIC ANTENATNAL ASSESSMENT

5. The estimated date of childbirth (EDC) is calculated:
   a. from the first day of the last normal menstrual period
   b. from the last day of the last normal menstrual period
   c. from the middle of the month of the last normal menstrual period
   d. from the beginning of the month of the last normal menstrual period
6. The fundus usually is palpable just above the symphysis pubis at:
   a. 22 weeks
   b. 22 to 24 weeks
   c. 16 weeks
   d. 12 weeks

7. The woman's blood pressure should be taken:
   a. at the first antenatal visit
   b. at the second antenatal visit
   c. at each antenatal visit
   d. only if she has protein in her urine

8. During pregnancy (before labor) the normal fetal heart range is:
   a. 100-160 beats per minute
   b. 120-160 beats per minute
   c. 120-180 beats per minute
   d. 100-180 beats per minute

9. The lie of the fetus should be checked:
   a. in the first trimester of pregnancy
   b. in the second trimester of pregnancy
   c. at 36 weeks gestation
   d. all of the above

10. Severe anemia is defined as hemoglobin below:
    a. 11 g/dl
    b. 10 g/dl
    c. 7 g/dl
    d. 6 g/dl

11. HIV testing should be:
    a. preceded by, but not necessarily followed by, counseling
    b. followed by, but not necessarily preceded by, counseling
    c. offered at each visit even if the woman told you at the first visit that she does not want to be tested
    d. offered only to women who considered “at risk” for HIV
BASIC ANTENATAL CARE PROVISION

12. A birth plan should be developed:
   a. only if the woman says she wants one
   b. only for women who are likely to experience a complication
   c. in consultation with each antenatal client at the first antenatal visit
   d. in consultation with each antenatal client at the last antenatal visit

13. An important part of an individualized birth plan involves:
   a. preparation for possible complications related to pregnancy, labor, and birth
   b. ensuring compliance with malaria prophylaxis
   c. ensuring compliance with anemia prophylaxis
   d. preventing neonatal tetanus

14. Health messages and counseling on a range of topics should be provided:
   a. for all antenatal clients
   b. only for antenatal clients who request information and counseling about keeping healthy
during pregnancy
   c. for antenatal clients who are in their third trimester of pregnancy
   d. none of the above

15. The benefits of early and exclusive breastfeeding should be discussed with the woman:
   a. after the birth of her baby
   b. during antenatal visits
   c. only if she says she is going to breastfeed
   d. only if she says she is not going to breastfeed

16. To prevent anemia in pregnancy:
   a. 1 tablet of iron 60 mg + folate 400 mcg should be taken daily
   b. 2 tablets of iron 60 mg + folate 400 mcg should be taken daily
   c. 1 tablet of iron 60 mg + folate 400 mcg should be taken weekly
   d. 2 tablets of iron 60 mg + folate 400 mcg should be taken weekly

17. If a woman has her first tetanus toxoid vaccination (TT1) at her first antenatal visit, she
should be advised to have the next vaccination (TT2):
   a. in at least six months
   b. in at least four weeks
   c. in at least one year
   d. in one week
ADDITIONAL CARE: COMMON DISCOMFORTS

18. Non-pathologic dizziness and fainting may be relieved by:
   a. getting up slowly from a sitting or lying position
   b. avoiding standing for long periods of time
   c. avoiding lying on one’s back
   d. all of the above

19. Abdominal or groin pain in the 2nd and 3rd trimesters of pregnancy may be due to:
   a. excessive weight gain
   b. stretching of the ligaments and muscles surrounding the enlarging uterus
   c. sexually transmitted disease
   d. lack of exercise

ADDITIONAL CARE: SPECIAL NEEDS

20. If a woman reports abuse, you should:
   a. Help calm her by a statement such as “It’s probably not as bad as it seems now.”
   b. Acknowledge her situation by a statement such as “Many women face abuse at home, so
you shouldn’t be afraid or let this affect your pregnancy.”
   c. Acknowledge the injustice by a statement such as “although some people feel it is okay
to be abused, it is not, and no one deserves to be hit or abused in any way.”
   d. Help direct her to help by a statement such as “Rather than tell me about this, would be
better if you talk to a professional counselor or social worker.”

21. An important component of antenatal care for the HIV-positive woman involves:
   a. counseling her about breastfeeding and replacement feeding so that she can make an
informed choice
   b. telling her that she must not to breastfeed
   c. telling her that she must not to bottle feed
   d. advising her to use a commercial formula

ADDITIONAL CARE: LIFE-THREATENING COMPLICATIONS

22. A rapid initial assessment should be carried out:
   a. when a pregnant woman presents with a danger sign
   b. to determine the pregnant woman’s degree of illness
   c. to determine the pregnant woman’s need for emergency care/stabilization
   d. all of the above
23. The first action that must be taken when a woman presents with vaginal bleeding in early pregnancy:

a. she should be referred immediately to a higher level of care
b. a rapid initial assessment should be carried out
c. a full history should be taken
d. a physical examination should be performed

24. Emergency treatment of eclampsia includes:

a. Going immediately to find help
b. Restraining the woman to protect her from injury
c. Giving the woman a 4 gm IV of magnesium sulfate over 5 minutes
d. Giving the woman 20 mg IV of diazepam slowly
KNOWLEDGE ASSESSMENT QUESTIONNAIRE ANSWER SHEET

LEARNER’S NAME: ____________________________

FUNDAMENTALS OF BASIC CARE

1. ____ Learning Objective 1 (Section 1: Chapter 1)
2. ____ Learning Objective 2 (Section 1: Chapter 3)
3. ____ Learning Objective 3 (Section 1: Chapter 3)
4. ____ Learning Objective 4 (Section 1: Chapter 3)

BASIC ANTENATAL ASSESSMENT

5. ____ Learning Objective 5 (Section 2: Chapter 5)
6. ____ Learning Objective 5 (Section 2: Chapter 5)
7. ____ Learning Objective 5 (Section 2: Chapter 5)
8. ____ Learning Objective 6 (Section 2: Chapter 5)
9. ____ Learning Objective 6 (Section 2: Chapter 5)
10. ____ Learning Objective 7 (Section 2: Chapter 5)
11. ____ Learning Objective 7 (Section 2: Chapter 5)

BASIC ANTENATAL CARE PROVISION

12. ____ Learning Objective 8 (Section 2: Chapter 5)
13. ____ Learning Objective 8 (Section 2: Chapter 5)
14. ____ Learning Objective 9 (Section 2: Chapter 5)
15. ____ Learning Objective 9 (Section 2: Chapter 5)
16. ____ Learning Objective 10 (Section 2: Chapter 5)
17. ____ Learning Objective 10 (Section 2: Chapter 5)
ADDITIONAL CARE: COMMON DISCOMFORTS

18. ___ Learning Objective 11 (Section 3: Chapter 9)
19. ___ Learning Objective 12 (Section 3: Chapter 9)

ADDITIONAL CARE: SPECIAL NEEDS

20. ___ Learning Objective 13 (Section 3: Chapter 10)
21. .___ Learning Objective 13 (Section 3: Chapter 10)

ADDITIONAL CARE: LIFE-THREATENING COMPLICATIONS

22. ___ Learning Objective 14 (Section 3: Chapter 11)
23. ___ Learning Objective 14 (Section 3: Chapter 11)
24. ___ Learning Objective 14 (Section 3: Chapter 11)
KNOWLEDGE ASSESSMENT QUESTIONNAIRE

ANSWER KEY

FUNDAMENTALS OF BASIC CARE

1. The single most critical intervention for saving the lives of women and newborns is:
   a. the presence of a support person during childbirth and the immediate postpartum/newborn period
   b. the presence of a doctor during childbirth and the immediate postpartum/newborn period
   C. THE PRESENCE OF A SKILLED PROVIDER DURING CHILDBIRTH AND THE IMMEDIATE POSTPARTUM/NEWBORN PERIOD, SUPPORTED BY TRANSPORT IF EMERGENCY REFERRAL IS REQUIRED
   d. for all births to take place in a hospital

2. The first step in the clinical decision making process is:
   
   A. GATHERING INFORMATION
   b. developing a care plan
   c. checking the woman’s record
   d. asking the woman questions

3. Effective communication involves:
   
   a. listening to what the woman has to say
   b. encouraging the woman to express her concerns
   c. letting the woman know she is being listened to and understood
   D. ALL OF THE ABOVE

4. The most practical procedure for preventing the spread of infection is:
   
   a. wearing gloves
   b. wearing a mask
   C. HANDWASHING
   d. all of the above

BASIC ANTENATAL ASSESSMENT

5. The estimated date of childbirth (EDC) is calculated:
   
   A. FROM THE FIRST DAY OF THE LAST NORMAL MENSTRUAL PERIOD
   b. from the last day of the last normal menstrual period
   c. from the middle of the month of the last normal menstrual period
   d. from the beginning of the month of the last normal menstrual period
6. The fundus usually is palpable just above the symphysis pubis at:
   a. 22 weeks
   b. 22 to 24 weeks
   c. 16 weeks
   D. 12 WEEKS

7. The woman's blood pressure should be taken:
   a. at the first antenatal visit
   b. at the second antenatal visit
   C. AT EACH ANTENATAL VISIT
   d. only if she has protein in her urine

8. During pregnancy (before labor) the normal fetal heart range is:
   a. 100–160 beats per minute
   B. 120–160 BEATS PER MINUTE
   c. 120–180 beats per minute
   d. 100–180 beats per minute

9. The lie of the fetus should be checked:
   a. in the first trimester of pregnancy
   b. in the second trimester of pregnancy
   C. AT 36 WEEKS GESTATION
   d. all of the above

10. Severe anemia is defined as hemoglobin below:
    a. 11 g/dL
    b. 10 g/dL
    C. 7 g/dL
    d. 6 g/dL

11. HIV testing should be:
    a. preceded by, but not necessarily followed by, counseling
    b. followed by, but not necessarily preceded by, counseling
    C. OFFERED AT EACH VISIT EVEN IF THE WOMAN TOLD YOU AT THE FIRST VISIT THAT SHE DOES NOT WANT TO BE TESTED
    d. offered only to women who considered “at risk” for HIV
BASIC ANTENATAL CARE PROVISION

12. A birth plan should be developed:
   a. only if the woman says she wants one
   b. only for women who are likely to experience a complication
   C. IN CONSULTATION WITH EACH ANTENATAL CLIENT AT THE FIRST ANTENATAL VISIT
   d. in consultation with each antenatal client at the last antenatal visit

13. An important part of an individualized birth plan involves:
   A. PREPARATION FOR POSSIBLE COMPLICATIONS RELATED TO PREGNANCY, LABOR, AND BIRTH
   b. ensuring compliance with malaria prophylaxis
   c. ensuring compliance with anemia prophylaxis
   d. preventing neonatal tetanus

14. Health messages and counseling on a range of topics should be provided:
   A. FOR ALL ANTENATAL CLIENTS
   b. only for antenatal clients who request information and counseling about keeping healthy during pregnancy
   c. for antenatal clients who are in their third trimester of pregnancy
   d. none of the above

15. The benefits of early and exclusive breastfeeding should be discussed with the woman:
   a. after the birth of her baby
   B. DURING ANTENATAL VISITS
   c. only if she says she is going to breastfeed
   d. only if she says she is not going to breastfeed

16. To prevent anemia in pregnancy:
   A. 1 TABLET OF IRON 60 MG + FOLATE 400 MCG SHOULD BE TAKEN DAILY
   b. 2 tablets of iron 60 mg + folate 400 mcg should be taken daily
   c. 1 tablet of iron 60 mg + folate 400 mcg should be taken weekly
   d. 2 tablets of iron 60 mg + folate 400 mcg should be taken weekly

17. If a woman has her first tetanus toxoid vaccination (TT1) at her first antenatal visit, she should be advised to have the next vaccination (TT2):
   a. in at least six months
   B. IN AT LEAST FOUR WEEKS
   c. in at least one year
   d. in one week
ADDITIONAL CARE: COMMON DISCOMFORTS

18. Non-pathologic dizziness and fainting may be relieved by:

   a. getting up slowly from a sitting or lying position
   b. avoiding standing for long periods of time
   c. avoiding lying on one’s back
   D. ALL OF THE ABOVE

19. Abdominal or groin pain in the 2nd and 3rd trimesters of pregnancy may be due to:

   a. excessive weight gain
   B. STRETCHING OF THE LIGAMENTS AND MUSCLES SURROUNDING THE ENLARGING UTERUS
   c. sexually transmitted disease
   d. lack of exercise

ADDITIONAL CARE: SPECIAL NEEDS

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   a. Help calm her by a statement such as “It’s probably not as bad as it seems now.”
   b. Acknowledge her situation by a statement such as “Many women face abuse at home, so you shouldn’t be afraid or let this affect your pregnancy.”
   C. ACKNOWLEDGE THE INJUSTICE BY A STATEMENT SUCH AS “ALTHOUGH SOME PEOPLE FEEL IT IS OKAY TO BE ABUSED, IT IS NOT, AND NO ONE DESERVES TO BE HIT OR ABUSED IN ANY WAY.”
   d. Help direct her to help by a statement such as “Rather than tell me about this, would be better if you talk to a professional counselor or social worker.”

21. An important component of antenatal care for the HIV-positive woman involves:

   A. COUNSELING HER ABOUT BREASTFEEDING AND REPLACEMENT FEEDING SO THAT SHE CAN MAKE AN INFORMED CHOICE
   b. telling her that she must not to breastfeed
   c. telling her that she must not to bottle feed
   d. advising her to use a commercial formula

ADDITIONAL CARE: LIFE-THREATENING COMPLICATIONS

22. A rapid initial assessment should be carried out:

   a. when a pregnant woman presents with a danger sign
   b. to determine the pregnant woman’s degree of illness
   c. to determine the pregnant woman’s need for emergency care/stabilization
   D. all OF THE ABOVE
23. The first action that must be taken when a woman presents with vaginal bleeding in early pregnancy:
   
a. she should be referred immediately to a higher level of care
   B. **A RAPID INITIAL ASSESSMENT SHOULD BE CARRIED OUT**
c. a full history should be taken
d. a physical examination should be performed

24. Emergency treatment of eclampsia includes:
   
a. Going immediately to find help
b. Restraining the woman to protect her from injury
   C. **GIVING THE WOMAN A 4 GM IV OF MAGNESIUM SULFATE OVER 5 MINUTES**
d. Giving the woman 20 mg IV of diazepam slowly
ROLE PLAY AND EXERCISE ANSWER KEY

ROLE PLAY 1 ANSWER KEY:
LISTENING TO THE ANTENATAL CLIENT

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

1. The midwife should greet Mrs. A respectfully and with kindness. She should then give her full attention to Mrs. A and avoid giving the impression that she has other work to do/clients to see. Conveying the message that you are available and that you have time to listen are important characteristics of good listening.

2. The midwife should be nonselective in listening to Mrs. A (i.e., she should listen to everything Mrs. A says and not just what she wants to hear). In addition, she should avoid interrupting Mrs. A. These listening behaviors acknowledge clients as people with important things to say.

3. The midwife should acknowledge what Mrs. A has said (e.g., by repeating it) and should be open and nonjudgmental about it. Seeing things from the client's perspective encourages understanding and trust between the healthcare provider and client, and helps ensure that the client will adhere to the midwife’s recommendations and return for continued care.

4. The midwife should sit facing Mrs. A, leaning slightly forward to show interest. She should maintain eye contact and appear relaxed and comfortable with the interaction. These nonverbal or attending behaviors convey to the client the midwife’s readiness to and interest in listening to her.
EXERCISE 1 ANSWER KEY:
CALCULATING THE ESTIMATED DATE OF CHILDBIRTH (EDC)

1. Mrs. A comes to antenatal clinic on 3 January. She tells you that her last normal menstrual period started on 10 October. What is her EDC? **July 25 of the following year**

2. Mrs. B comes to antenatal clinic on 15 May. She tells you that her last normal menstrual period started on 10 March. What is her EDC? **December 22 of the same year**

3. Mrs. C comes to antenatal clinic on July 11. She tells you that her last normal menstrual period started on 10 March. What is her EDC? **December 22 of the same year**

4. Mrs. D comes to antenatal clinic on 15 May. She tells you that her last normal menstrual period started on 1 January. What is her EDC? **October 22 of the same year**

5. Mrs. E comes to antenatal clinic on 30 April. She tells you that her last normal menstrual period started on 15 December. What is her EDC? **September 29 of the same year**
CASE STUDIES

USING THE CASE STUDIES

The purpose of the case studies is to help participants develop and practice clinical decision-making skills. While it is suggested in the course outline that the case studies be completed in small groups in the classroom, they can also be completed individually in the classroom or at the clinical site or as homework assignments.

There are three case studies in this course:

- **Case Study 1: Antenatal Assessment and Care (Nipples that Appear Inverted)**
- **Case Study 2: Antenatal Assessment and Care (Anemia)**
- **Case Study 3: Antenatal Assessment and Care (HIV)**

The case studies follow the clinical decision-making framework presented in Section 1: Chapter 3 of the reference manual used for the course. The technical content of the case studies is taken from Section 2: Chapter 5 and Section 3: Chapter 10. Each case study has a key containing the expected responses. The trainer should be thoroughly familiar with these responses before introducing the case studies to participants. Although the keys contain “likely” responses, other responses provided by participants may be equally acceptable.
CASE STUDY 1: ANTENATAL ASSESSMENT AND CARE
(NIPPLES THAT SEEM INVERTED)

ANSWER KEY

DIRECTIONS

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

CLIENT PROFILE

Mrs. A is a 34-year-old Gravida 2/Para 1 with no living children. Her first child died at 3 months of age from “diarrhea.” Mrs. A presents today for her first antenatal visit.

PRE-ASSESSMENT

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

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

   - You should confirm (through written records and/or verbal communication) with the clinic staff member who received Mrs. A when she first arrived at the clinic that she has undergone a Quick Check. If she has not, you should conduct a Quick Check now. The Quick Check detects signs/symptoms of life-threatening complications so that a woman requiring emergency care receives it without delay, before proceeding with routine basic assessment and care.

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

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

   - Because this is her first visit, you should take a complete history (i.e., personal information, menstrual history, contraceptive history/plans, history of present pregnancy, daily habits and lifestyle, obstetric history, medical history) to guide further assessment and help individualize care provision. Some responses may point toward the underlying reason for the death of her first child, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

   - Mrs. A’s EDC may be especially important to help gauge normal fetal development during abdominal examination.
• Her breastfeeding history (whether she breastfed and for how long, breastfed exclusively, had any problems, etc.) may point toward the underlying reason for the death of her first child and help guide individualization of health messages on breastfeeding.

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

• Because this is her first visit, you should perform a complete physical examination (i.e., well-being, blood pressure, breasts, abdomen [fundal height, lie and presentation if 36 weeks or more, fetal heart rate if 20 weeks or more], and genital examination) to guide further assessment and help individualize care provision. Some findings may point toward the underlying reason for the death of her first child, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

• Abdominal exam, including fetal heart auscultation, may indicate a problem with fetal well-being, and provides baseline for further assessment during the pregnancy.

• Breast inspection might indicate any structural abnormalities of the breasts that may interfere with successful breastfeeding.

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

• Because this is her first visit, you should conduct all routine laboratory tests (i.e., hemoglobin for anemia, RPR for syphilis, HIV [if she does not “opt out”], Rh factor and blood group, and other applicable tests, to guide further assessment and help individualize care provision. Some findings may point toward the underlying reason for the death of her first child, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

• Maternal syphilis, severe anemia, or HIV infection could have put her first child at increased risk of morbidity or mortality.

DIAGNOSIS (interpreting information to identify problems/needs)

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

History:

• According to Mrs. A’s menstrual history, she is 16 weeks pregnant.

• She reports that she did not breastfeed her first baby, nor did she try, because she was told that something was wrong with her nipples. She believes she will not be able to breastfeed this baby either. Mrs. A also says that after her first baby was born, she did not have the funds to buy the recommended amount of breastmilk substitute, and she did not always have access to clean water to prepare it.
All other aspects of Mrs. A’s history are normal or without significance.

- She denies any problems during the previous pregnancy, labor, and birth. She reports that her baby was “very healthy” at birth.
- She denies any problems during this pregnancy.

### Physical Examination:

- Mrs. A’s breast exam is normal except that her nipples appear to be inverted. However, when the areola is gently squeezed on either side of the nipple, the nipple protrudes and the inversion is corrected.

- All other aspects of her physical examination are within normal range.
  - Mrs. A appears well-nourished and healthy.
  - Her blood pressure is 108/78.
  - The conjunctiva are pink.
  - The fundal height is approximately halfway between the symphysis pubis and umbilicus, consistent with the EDC.
  - The genital exam is normal.

### Testing:

- Test results were: HIV – negative; RPR – non-reactive; Hemoglobin – 11.5 Gm/dl; Blood type O, Rh positive.

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

- Mrs. A's pregnancy seems to be progressing normally as all findings were within normal range.

- Mrs. A has a “special need”: Her nipples “appear” to be inverted, but are not truly inverted. Nevertheless, Mrs. A believes/fears that she is not able to breastfeed and thus is likely to use a breastmilk substitute, which would increase her child’s risk of death during infancy.

### CARE PROVISION (implementing plan of care and interventions)

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

- Mrs. A should receive basic care provision (i.e., nutritional support, birth planning, HIV counseling, additional health messages and counseling on self-care and other healthy behaviors [e.g., hygiene/prevention of infection, sexual relations and safer sex, rest and activity, use of potentially harmful substances, use of insecticide-treated nets in malaria-endemic areas], immunizations, intermittent preventive treatment for malaria and other preventive measures if applicable), which will help support and maintain her normal
pregnancy, and ensure a healthy labor/childbirth and postpartum/newborn period. The following emphases may be appropriate:

- Mrs. A should be counseled concerning the benefits of breastfeeding to her and her baby. She should be reassured that she is able to breastfeed, and shown how she can help the baby attach to the breast by gently squeezing the areola so that the nipple protrudes. You should also assure her that the skilled provider who attends the birth will help her put the baby to her breast immediately after birth. Counseling, reassurance, and support are necessary to empower her, allay her fears about breastfeeding, and ensure that Mrs. A is able to successfully breastfeed.

- To help allay Mrs. A’s anxiety that her nipples may prevent her from breastfeeding, demonstrate to Mrs. A, during the physical exam, that the apparent inversion can be corrected by gently compressing the areola between thumb and fingers so that the nipples protract.

- You should also give her opportunity to express any anxiety concerning newborn care, including breastfeeding.

**EVALUATION/FOLLOW-UP**

- Mrs. A returns for her scheduled antenatal care visits. She reports that she has decided to breastfeed, and even tells you that she knows she must breastfeed so that this baby will live and be healthy.

- Mrs. A is also adhering to the care plan and following other recommendations discussed on previous visits.

7. **Based on these findings, what is your continuing plan of care for Mrs. A?**

- You should continue with basic care provision.

- You should continue to reassure Mrs. A that she is able to breastfeed and that her breastmilk is the best possible food for her baby.

- In case you are not present during Mrs. A’s labor, you should ensure (through written records and/or verbal communication) that the skilled provider who attends Mrs. A’s labor knows her history and need for additional breastfeeding support.

**REFERENCES**

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10; Section Four: Annexes, Annex 5
CASE STUDY 2: ANTENATAL ASSESSMENT AND CARE (ANEMIA)
ANSWER KEY

DIRECTIONS

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

CLIENT PROFILE

Mrs. B, a 26-year-old Gravida 3/Para 2, presents for her first antenatal clinic visit. Her children are 18 months and 8 months of age. Both are well. She and her family live in a rural village that is in a malaria-endemic area. You note that Mrs. B looks pale and tired.

PRE-ASSESSMENT

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

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

- You should confirm (through written records and/or verbal communication) with the clinic staff member who received Mrs. B when she first arrived at the clinic that she has undergone a Quick Check. If she has not, you should conduct a Quick Check now. The Quick Check detects signs/symptoms of life-threatening complications so that a woman receives the emergency care she requires before receiving routine assessment/care.

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

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

- Because this is her first visit, you should take a complete history (i.e., personal information, menstrual history [including calculating the EDC], contraceptive history/plans, history of present pregnancy, daily habits and lifestyle, obstetric history, medical history) to guide further assessment and help individualize care provision. Some responses may point toward the underlying reason for her pale/tired appearance, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

- Ask Mrs. B if she is experiencing weakness, tiredness, dizziness, breathlessness, or fainting to help determine severity of anemia; ask about fever, chills/rigor, headache, or muscle/joint ache to ascertain whether she may currently have malaria.
When asking about contraceptive history/plans: Because Mrs. B has had three pregnancies in three years, it will be important to determine whether she has ever used a modern method of contraception and what her perceptions are about doing so in the future. Pregnancies that are closer together than 3 years increase the risk of maternal complications such as anemia, infection, and hemorrhage; and increase the risk of newborn death.

When asking about medical history and obstetric history:

- It will be important to know whether Mrs. B has been treated for anemia and/or malaria, during or since her last pregnancy and, if so, how her condition was treated. Living in a malaria-endemic area and/or episodes of (even uncomplicated malaria can lead to anemia) malaria in pregnancy may lead to anemia, and while the malaria may have been treated, the associated anemia may not have been.
- It will also be important to determine whether Mrs. B was anemic during her previous pregnancies and, if so, how her condition was managed. If she does not know whether she was anemic during her previous pregnancies, she should be asked whether she had symptoms of anemia (e.g., tiredness, breathlessness).
- Ask whether she had fever/infection during previous pregnancies/childbirths or postpartum hemorrhage, and whether her previous babies were preterm or of low birth weight, as these factors can also be associated with anemia in pregnancy.
- When asking about medications, it will be important to know whether Mrs. B is taking iron tablets and, if so, how often and for how long she has been taking them. Pregnant women require increased iron intake to prevent anemia and for their bodies to use in forming fetal red blood cells. If she has been taking an adequate dose of iron supplementation, it is less likely that her anemia is caused by dietary deficiency. In addition, because Mrs. B lives in a malaria-endemic area, it will be important to ask whether she is taking IPT.
- When asking about daily habits and lifestyle: Mrs. B should be asked about her social situation, in particular to determine whether she has anyone to help with child care, cooking, cleaning, etc., and whether she has access to nutritious foods, especially those rich in iron. A poor diet, especially one that lacks iron-rich foods, could lead to anemia, and a heavy workload could increase an already high level of fatigue.

3. **What physical examination will you include in your assessment of Mrs. B and why?**

- Because this is her first visit, you should perform a complete physical examination (i.e., well-being, blood pressure, conjunctiva, breasts, abdomen [fundal height, lie and presentation after 36 weeks, fetal heart rate after 20 weeks], and genital examination) to guide further assessment and help individualize care provision. Some findings may point toward the underlying reason for her pale/tired appearance, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.
Mrs. B should be checked carefully for conjunctival pallor, abnormal respiratory rate, rapid pulse, and breathlessness. Conjunctival pallor is a sign of anemia. When it is accompanied by a respiratory rate of 30 or more or breathlessness at rest, severe anemia should be suspected.

Mrs. B should be checked for fever, which might indicate current malaria infection.

It will also be important to determine whether fetal growth is consistent with EDC, because anemia in pregnancy is associated with low birth weight.

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

Because this is her first visit, you should conduct all routine laboratory tests if available (i.e., RPR for syphilis, HIV [if she does not “opt out”], Rh factor and blood group, hemoglobin, and tests for other conditions if applicable to guide further assessment and help individualize care provision. Some findings may point toward the underlying reason for her pale/tired appearance, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

DIAGNOSIS (interpreting information to identify problems/needs)

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

History:

- According to Mrs. B's menstrual history, she is 28 weeks pregnant.
- She admits to feeling weak, tired, and dizzy.
- She reports that she has been treated for malaria twice in the past 12 months; the most recent episode was 4 months ago, during which she was treated with antimalarial drugs. She denies any symptoms of malaria now.
- She reports that she had no signs or symptoms of anemia during her previous pregnancies.
- She is not taking any medication at present.
- She and her family have an adequate food supply at present, but Mrs. B’s appetite has been poor lately.
- Mrs. B’s mother-in-law provides some help with childcare and housework.
- All other aspects of her history are normal or without significance.
Physical examination:

- Mrs. B has mild conjunctival pallor.
- All other aspects of her physical examination are within normal range.
  - Her blood pressure is 100/68, and her temperature is 37.6°C. (Although temperature is not a routine part of antenatal care, because she comes from a malarious area, this is part of the assessment.)
  - Her breast exam is normal.
  - Mrs. B’s fundal height measurement is 28 weeks, consistent with the EDC.
  - Fetal heart rate is 136 beats/minute and regular.
  - The genital exam is normal.

Testing:

- Hemoglobin is 9 g/dL
- Other test results: RPR – non-reactive; HIV – negative; blood type - O, Rh - positive.

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

- Mrs. B has a “special need”: She has signs/symptoms consistent with mild to moderate anemia and Hb level confirms this diagnosis.
- Hemoglobin test confirms that Mrs. B has mild/moderate anemia.
- Mrs. B’s anemia is likely to be associated with the episode of malaria she had earlier in her pregnancy. Women who live in malaria-endemic areas or who have malaria during pregnancy are particularly prone to anemia; however, Mrs. B was not started on iron at the time of her most recent episode of malaria.
- Mrs. B’s anemia is not likely chronic because she reports that she has an adequate food supply and that she was not anemic during her previous pregnancies.
- The fetus appears to be growing at a rate consistent with EDC.
- Otherwise, Mrs. B is healthy and her pregnancy is progressing normally.
6. Based on your diagnosis (problem/need identification), what is your plan of care for Mrs. B and why?

- Mrs. B should receive basic care provision (i.e., nutritional support, birth planning, HIV counseling, additional health messages and counseling on self-care and other healthy behaviors [e.g., hygiene/prevention of infection, sexual relations and safer sex, rest and activity, use of potentially harmful substances], immunizations and other preventive measures), which will help support and maintain her normal pregnancy, and ensure a healthy labor/childbirth and postpartum/newborn period.

- Iron/folate supplementation and related counseling are especially important:
  - Mrs. B should be given iron/folate, 1 tablet 2 times daily. Taking iron/folate on a regular basis for the remainder of her pregnancy (and for three months postpartum) should rectify Mrs. B’s anemia.
  - She should be advised to take the iron/folate with meals, at the same time each day, or at night, with water or fruit juice. Iron/folate should not be taken with tea, coffee, or cola as these interfere with its absorption.
  - Some women experience constipation when taking iron tablets, so side effects such as constipation and nausea should be discussed. Mrs. B should be encouraged to continue taking the iron/folate if these symptoms occur. Adding more fruits and vegetables to the diet and drinking more water can help avoid constipation.
  - A sufficient supply of iron/folate should be dispensed to last until her next antenatal visit.

- Intermittent preventive treatment (IPT) for malaria should be commenced, in accordance with country/local policy. Mrs. B should be also counseled about other protective measures, such as sleeping under an insecticide-treated bed net and wearing protective clothing.

- In counseling about rest and activity. It is especially important to encourage Mrs. B to rest when possible and lighten her workload. Again, a heavy workload and not enough rest could increase an already high level of fatigue.

- In counseling about nutrition: The importance of eating foods that are rich in iron, as well as foods rich in vitamin C (because vitamin C helps iron to be absorbed), should be emphasized. Foods rich in iron include lean meat, liver, dried beans, peas, lentils, egg yolks, fish, nuts, and raisins. Foods rich in Vitamin C include citrus fruits (lemons, limes, oranges, and grapefruits), tomatoes, cabbage, potatoes, cassava leaves, peppers, and yams. Again, a diet, that lacks iron-rich foods, could lead to anemia or worsen existing anemia.

- In family planning counseling: Child spacing and family planning methods should be discussed to encourage Mrs. B to think about child spacing for the future. Evidence shows that outcomes for mothers and babies improve if pregnancies are spaced at least three years apart and that the risk of maternal anemia, infection, and hemorrhage is decreased. In scheduling a return visit: Mrs. B should be asked to return for a follow-up visit in one month,
but told that she can return to the clinic any time before then, if she has any concerns. Because Mrs. B needs to be monitored closely until her anemia has resolved, the minimum of four ANC visits are not sufficient in her case.

EVALUATION

Mrs. B comes back to the antenatal clinic on the appointed date and on assessment your findings are as follows:

- She has taken her iron/folate tablets as directed, even though she has had mild constipation.
- She has been able to rest more because her mother-in-law has provided more help than usual. She also reports that her appetite has improved.
- She appears less tired and is not as pale, generally, as she was at her first antenatal visit. She says that she "feels much better."
- On physical examination, you find that she still has mild conjunctival pallor.
- She does not have a fever.
- The fetal heart rate is normal, and Mrs. B says that the fetus is active.
- Mrs. B’s hemoglobin is now 10 g/dL. It was also measured at the last visit.

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

- Mrs. B should be counseled about continuing to take iron/folate. A sufficient supply of iron/folate tablets should be dispensed to last until her next antenatal visit. She should be encouraged to add more vegetables, fruits, and fluids to her diet, to help lessen her constipation.
- She should be encouraged to continue to eat iron-rich and vitamin C-rich foods, and to rest as much as possible.
- Mrs. B should continue to be monitored closely until her hemoglobin is 11 g/dL; she should be asked to return for a follow-up visit in two weeks, but told that she can return to the clinic any time before then, if she has danger signs, cannot comply with instructions, or has any concerns.
- Mrs. B should continue to receive IPT based on country policy.
- When Mrs. B's hemoglobin reaches 11 g/dL, providing there are no other danger signs or concerns, she can resume the normal schedule of antenatal visits.

REFERENCES

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10
CASE STUDY 3: ANTENATAL ASSESSMENT AND CARE (HIV)
ANSWER KEY

DIRECTIONS

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

CLIENT PROFILE

Mrs. C, a 27-year-old Gravida 3/Para 2, presents for her second regularly scheduled antenatal care visit at 26 weeks’ gestation. Her first visit was at 16 weeks. At that time, Mrs. C chose not to be tested for HIV, a test that is recommended for all pregnant women. Her other laboratory tests were normal. She lives with her husband and children in a suburb of the capital city of a country where the prevalence of HIV infection in pregnant women has increased over the past few years. You note that she looks anxious and unhappy.

PRE-ASSESSMENT

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

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

   ● You should confirm (through written records and/or verbal communication) with the clinic staff member who received Mrs. C when she first arrived at the clinic that she has undergone a Quick Check. If she has not, you should conduct a Quick Check now. The Quick Check detects signs/symptoms of life-threatening complications so that a woman requiring emergency care receives it without delay, before proceeding with routine basic assessment and care.

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

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

   ● Because Mrs. C appears anxious and unhappy, she should be asked if there is anything worrying her or anything that she would like to talk about. Her response may point toward the underlying reason for her apparent anxiety/unhappiness.

   ● Because this is Mrs. C’s second visit and her first visit was normal, an interim history can be taken (i.e., a complete history is not needed): Mrs. C should be asked if anything has changed (e.g., personal information, daily habits or lifestyle) or if she has experienced any danger signs or had any problems since her last visit. She should also be asked if she has received
care from any other caregiver since her last visit, and if she has been able to follow the plan of care discussed at her first visit. Some responses may point toward the underlying reason for her apparent anxiety/unhappiness, or may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

3. **What physical examination will you include in your assessment of Mrs. C and why?**

- Because this is Mrs. C’s second visit and her first visit was normal, a shortened physical examination can be performed (i.e., well-being, blood pressure, and abdomen [fundal height, lie, presentation, fetal heart rate], but breast and genital examination only as needed) to guide further assessment and help individualize care provision. Some findings may indicate a special need/condition that requires additional care or a life-threatening complication that requires immediate attention.

4. **What laboratory tests will you include in your assessment of Mrs. B and why?**

- Because she “opted out” of HIV testing during the first visit, you should encourage Mrs. C to be tested for HIV (as well as for other sexually transmitted infections [STIs], such as gonorrhea and chlamydia, if available) at this visit. HIV testing should be offered at every visit, even if the woman has chosen not to be tested in the past. This is especially important given Mrs. C’s history.

- Because this is Mrs. C’s second visit and at her first visit lab tests were normal, you do not need to conduct other tests.

**DIAGNOSIS (interpreting information to identify problems/needs)**

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

**History:**

- During the first antenatal visit, all aspects of Mrs. C’s history were normal, except that she opted out of HIV testing.
- During this visit, when you ask whether there is anything worrying her or anything that she would like to talk about, she reports that:
  - She is very concerned about her family history of HIV: Her brother-in-law has AIDS and his wife and their youngest child are both HIV-positive.
  - She felt embarrassed to talk about this with you at her first antenatal visit, even though you provided an opportunity for her to do so when you asked about her HIV status, offered HIV testing, and provided HIV counseling.
  - She knows that her husband has sexual relations with at least one other woman; however, he refuses to use a condom during intercourse with his wife. Mrs. C has no sexual partners other than her husband.
  - She is very distraught, as she fears that she may be HIV-positive.
- During this visit, all other aspects of Mrs. C’s history are normal.
Physical Examination:

- During the first antenatal visit, all findings on physical examination were within normal range.
- During this visit, all findings on physical examination are within normal range.

Testing:

- During the first antenatal visit, she “opted out” of HIV testing; all other test results were normal as mentioned above in client profile.
  - Hemoglobin 11 gm/dL.
  - RPR non-reactive.
  - Blood type O, Rh positive

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

- Mrs. C's pregnancy is progressing normally; however, she has a very real fear of being HIV-positive, especially given the prevalence of HIV in her country and the fact that her husband is not monogamous and does not practice safer sex with her.

CARE PROVISION (implementing plan of care and interventions)

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

- Provide information on the advantages and disadvantages of knowing her HIV status, how the test is performed, when and how results are given, how confidentiality is maintained, and how the results will help to manage the pregnancy and birth. This will encourage Mrs. C to opt for HIV and STI testing, which will provide information she needs to allay her anxiety and to take good care of herself. By knowing her status, Mrs. C can take steps to remain uninfected (if negative) or begin appropriate care (if positive)—either of which can have positive health benefits during this pregnancy.

- You should also discuss the advantages and disadvantages of involving her partner in the decision for her and/or him to be tested. This will help Mrs. C decide how to involve her family.

- Mrs. C should be provided with key information about HIV/AIDS and other STIs, including risk assessment, prevention, and safer sex practices. Counseling should be provided in a respectful, kind manner, while encouraging Mrs. C to ask questions and ensuring that she understands the information provided. This will encourage Mrs. C to opt for HIV and STI testing.

- If testing and counseling for HIV are not part of antenatal care services offered at your facility, information should be provided on how to gain access to them. If the test for HIV is performed elsewhere, Mrs. C should be encouraged to share her test results with (you) the
healthcare provider at the antenatal clinic, because knowledge of her HIV status will help guide her care during the pregnancy and birth.

- Because this is not Mrs. C’s first visit, key elements of the care plan have already been carried out or initiated. During this visit, reinforce key messages (e.g., about nutrition, hygiene/prevention of infection, sexual relations and safer sex, rest and activity, use of potentially harmful substances); review and update the birth plan (including complication readiness); provide or replenish supplies of iron/folate (and any other supplements/drugs), IPT if in a malaria-endemic area, and other preventive measures as needed. These routine interventions will help support and maintain her normal pregnancy, and ensure a healthy labor/childbirth and postpartum/newborn period.

EVALUATION

- Mrs. C agreed to HIV testing on her last visit and now comes back to see you with the result of her HIV test, which is positive. Her tests for gonorrhea and chlamydia were negative.
- She tells you that some counseling was provided at the testing site, which was helpful, but she wants to discuss her situation further with you.
- She is very distraught.

7. **Based on these findings, what is your continuing plan of care for Mrs. C?**

- Mrs. C should be provided emotional support.
- Any concerns or questions she has should be addressed in a kind and caring manner.
- The possibility of disclosure to her husband and family should be discussed.
- Mrs. C should be assessed for signs/symptoms of complications related to the HIV infection (e.g., opportunistic infections, diarrhea, weight loss) and nonurgent referral/transfer should be facilitated if necessary.
- Information about and/or referral to an HIV specialist should be provided so that Mrs. C can receive the appropriate care.
- Information should be provided about any available psychosocial and practical support services for people living with HIV/AIDS, as well as about how to access these services.
- A follow-up appointment should be made for 1 week to discuss the following issues: the psychosocial implications of the positive result for herself, her unborn child, and her partner; prevention of mother-to-child transmission; antiretroviral (ARV) prophylaxis, if available; nutrition; safer sex; newborn feeding; family planning; and planning for the future. It will also be important to emphasize the need for a skilled provider to attend the birth and having the birth at a facility where PMTCT services, including ARV prophylaxis for Mrs. C and her newborn, are available.
After the next visit, if Mrs. C is coping well with her situation, has appropriate support, shows no signs of complications related to the HIV infection (e.g., opportunistic infections, diarrhea, weight loss), and is adhering to the care plan and other recommendations, she can resume the normal schedule of antenatal visits. There is no evidence that HIV-positive women, whose pregnancies are progressing normally and who are otherwise healthy, require additional antenatal visits. Most HIV-positive women will be asymptomatic and have no increased incidence of obstetrical problems during their pregnancies; however, ongoing counseling and support, in addition to ongoing care with an HIV specialist, are an integral part of care during pregnancy for the HIV-positive woman.

REFERENCES

BMNC—Section Two: Core Components of Basic Care, Chapters 4 and 5; Section Three: Additional Care, Chapter 10
SKILLS PRACTICE SESSIONS

CONDUCTING SKILLS PRACTICE SESSIONS

Skills practice sessions provide participants with opportunities to observe and practice clinical skills, either in a simulated setting or at a clinical site. 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 session, such as anatomic models, supplies, equipment, learning guides, and checklists. Before conducting a skills practice session, the trainer should review the session and ensure that she/he can perform the skill or activity. It will also be important to ensure that the necessary resources are available and that an appropriate site has been reserved.

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 groups of two or three 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 using the relevant checklist.

There are two skills practice sessions in the course:

- **Skills Practice Session 1: Antenatal History**
- **Skills Practice Session 2: Birth Planning and Counseling**
EMERGENCY DRILL

The purpose of a simulated emergency drill is to provide participants with an opportunity to observe and take part in an emergency drill. By the end of the course, they should be able to conduct a drill in their own facility.

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

FIRST DRILL

- Trainers decide on a scenario, such as one in which a woman suffers an eclamptic seizure/fit. In the first drill, trainers play all roles except client. Trainers should practice their roles prior to conducting the drill.

- The roles are as follows:

**Role 1: Charge person**
- Conduct rapid initial assessment
- Stabilize client (massage uterus, give magnesium sulfate, give directions to others on team)
- Assist skilled provider when s/he arrives

**Role 2: Runner**
- Telephones skilled provider
- Returns to bedside and assists as needed, e.g. takes vital signs, takes specimens to lab, gathers equipment, etc.
- Follows additional instructions of person in charge

**Role 3: Supplier**
- Checks emergency tray at beginning of each shift
- Brings emergency tray to bedside during emergency
- Gives needed supplies/medications to skilled provider
- Replenishes supplies/medications after use

**Role 4: Assistant**
- Assists with crowd control
- Escorts family members away from bed; keeps client and family informed of situation

At a pre-designated time a small bell is rung; the participant selected to play the role of client lies down on a table prepared ahead with sheet and pillow. Another participant may act as the client’s family. The charge person (Role 1) goes directly to the bedside and begins the rapid initial
assessment. The runner (Role 2) telephones the skilled provider 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 magnesium, starting an IV, etc. The assistant (Role 4) tells the family what is happening. All of this is happening simultaneously, as though it were a real situation. The charge person protects the woman from injury without restraining her and turns her on her left side; the runner takes BP, pulse, and respiration, and reports to the charge person; the assistant “gives” magnesium sulfate if directed, etc. Upon arrival of the skilled provider, the charge person gives him/her a report of the client’s status and follows further directions until the client is stable. After the emergency, the supplies are replenished and equipment is disposed of using correct infection prevention procedures.

SECOND AND SUBSEQUENT DRILLS

- At each subsequent drill, a participant takes one more of the trainer’s roles. At the beginning of the day, one or more participants are assigned a role, and when the bell rings signaling an emergency, roles are assumed and played. By the end of the course, the drill should be run entirely by participants. Different scenarios can be used for each drill.
BASIC ANTENATAL CARE
COURSE NOTEBOOK FOR TRAINERS

SECTION THREE: TIPS FOR TRAINERS

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BEING AN EFFECTIVE TRAINER
IN THE CLASSROOM

Health professionals conducting clinical training courses are continually changing roles. They are trainers or instructors when presenting illustrated lectures and giving classroom demonstrations. They act as facilitators when conducting small group discussions and using role plays, case studies, and clinical simulations (e.g., emergency drill in a summated setting). Once they have demonstrated a clinical procedure, they then shift to the role of the coach as the participants begin practicing.

CHARACTERISTICS OF AN EFFECTIVE TRAINER AND COACH

Coaching is a training technique in which the trainer:

- **Describes** the skills and client interactions that the participant is expected to learn
- **Demonstrates** (models) the skill in a clear and effective manner using learning aids such as slide sets, videotapes, and simulations
- Provides detailed, specific **feedback** to participants as they practice the skills and client interactions using the actual instruments in a simulated clinical setting and as they provide services to clients

An effective trainer:

- Is **proficient** in the skills to be taught
- **Encourages** participants in learning new skills
- Promotes **open (two-way) communication**
- Provides **immediate feedback**:
  - Informs participants whether they are meeting the objectives
  - Does not allow a skill or activity to be performed incorrectly
  - Gives positive feedback as often as possible
  - Avoids negative feedback and instead offers specific suggestions for improvement
Is able to receive feedback:

- **Asks for it.** Find trainers who will be direct with you. Ask them to be specific and descriptive.
- **Directs it.** If you need information to answer a question or pursue a learning goal, ask for it.
- **Accepts it.** Do not defend or justify your behavior. Listen to what people have to say and thank them. Use what is helpful; quietly discard the rest.

Recognizes that training can be stressful and knows how to regulate participant as well as trainer stress:

- Uses appropriate humor
- Observes participants and watches for signs of stress
- Provides for regular breaks
- Provides for changes in the training routine
- Focuses on participant success as opposed to failure

The characteristics of an effective coach are the same as those of an effective trainer. Additional characteristics especially important for the coach include:

- Being patient and supportive
- Providing praise and positive reinforcement
- Correcting participant errors while maintaining participant self-esteem
- Listening and observing

**SKILL TRANSFER AND ASSESSMENT: THE COACHING PROCESS**

The process of learning a clinical skill within the coaching process has three basic phases: demonstration, practice and evaluation. These three phases can be broken down further into the following steps:

- First, during interactive classroom presentations, **explaining** the skill or activity to be learned
- Next, using a videotape or slide set, **showing** the skill or activity to be learned
Following this, **demonstrating** the skill or activity using a role play (e.g., counseling demonstration) or clinical simulation

Then, allowing the participants to **practice** the demonstrated skill or activity in a simulated environment (e.g., role play, clinical simulation) as the trainer functions as a coach

After this, **reviewing** the practice session and giving constructive feedback

After adequate practice, **assessing** each participant’s performance of the skill or activity on models or in a **simulated situation**, using the competency-based checklist

After competence is gained with models or practice in a simulated situation, having participants begin to **practice** the skill or activity with clients under a trainer’s guidance

Finally, **evaluating** the participant’s ability to perform the skill according to the standardized procedure as outlined in the competency-based checklist

During initial skill acquisition, the trainer demonstrates the skill as the participant observes. As the participant practices the skill, the trainer functions as a coach and observes and assesses performance. When demonstrating skill competency, the participant is now the person performing the skill as the trainer evaluates performance.
CREATING A POSITIVE LEARNING ENVIRONMENT
IN THE CLASSROOM

A successful training course does not come about by accident, but rather through careful planning. This planning takes thought, time, preparation and often some study on the part of the trainer. The trainer is responsible for ensuring that the course is carried out essentially as it was designed. The trainer must make sure that the clinical practice sessions, which are an integral part of a clinical skills course, as well as the classroom sessions, are conducted appropriately. In addition to taking responsibility for the organization of the course in general, the trainer must also be able to give presentations and demonstrations and lead other course activities, all of which require prior planning. Well-planned and executed classroom and clinical sessions will help to create a positive learning environment.

PREPARING FOR THE COURSE

To prepare for the course, the following steps are recommended:

- Review the course syllabus, including the course description, goals, learning methods, training materials, methods of evaluation, course duration and suggested course composition.

- Review the course schedule.

- Study the course outline. The course outline provides detailed suggestions regarding the teaching of each objective and the facilitation of each activity. Based on suggestions in the course outline and the trainer’s own ideas, the trainer will gather the necessary equipment, supplies and materials. The trainer should also compare time estimates in the course outline to the schedule to ensure that sufficient time has been allotted for all sessions and activities.

- Read and study the reference manual to ensure complete familiarity with the content to be presented during the course.

- Review the pre- and midcourse questionnaires and make copies of the questionnaires, matrix and answer sheets if needed.

- Check all audiovisual equipment (e.g., overhead projector, video player, flipchart stand).
• **Practice all clinical procedures** using the learning guides and checklists found in the trainer’s notebook and participant’s handbook.

• **Obtain information about the participants who will be attending the course.** It is important for the trainer to know basic information about participants such as:
  
  • The **experience and educational background** of the participants. The trainer should attempt to gather as much information about participants as possible before training. If this is not possible, the trainer should inquire about their backgrounds and expectations during the first day of the course.

  • The types of **clinical activities** the participants will perform in their daily work after training. Knowing the exact nature of the work that participants will perform after training is critical for the trainer. The trainer must use appropriate, job-specific examples throughout the course so that participants can draw connections between what is being taught and what they will need to do. This is an excellent way to reinforce the importance of what is being learned.

• **Prepare the classroom and make sure** that:
  
  • Tables arranged in a U-shape or other formation that will allow as many of the participants as possible to see one another and the trainer (this may be difficult in a lecture hall where chairs are attached to the floor).

  • A table in the front of the room where the trainers can place their course materials.

  • Space for audiovisual equipment (e.g., flipchart, screen, overhead projector, video player, monitor); the trainer should make sure that participants will be able to see the projection screen and other audiovisuals.

  • Space for participants to work in small groups (i.e., either arrange chairs in small circles or work around the tables), unless separate breakout rooms (see below) are available.

  • Space to set up simulated clinics (e.g., for counseling practice).

  • Breakout rooms for small group work (e.g., case studies, role plays, clinical simulations, problem-solving activities) are
available if necessary, and are set up with tables, chairs and any materials that the participants will need.

- The room is properly heated or cooled and ventilated.

- The lighting is adequate, and the room can be darkened enough to show audiovisuals and still permit participants to take notes or follow along in their learning materials.

- There will be adequate electric power throughout the course, and contingency plans have been made in case the power fails.

- Furniture such as tables, chairs and desks is available. The chairs are comfortable and tablecloths are available.

- There is a writing board with chalk or marking pens, as well as an information board available for posting notes and messages for participants.

- There is audiovisual equipment in working order, with spare parts such as bulbs readily available. The video monitor is large enough so that all participants can see it well. There are sufficient electrical connections, and extension cords, electrical adaptors and power strips (multi-plugs) are available, if necessary.

- There are toilet facilities that are adequately maintained.

- Telephones are accessible and in working order, and emergency messages can be taken.

**UNDERSTANDING HOW PEOPLE LEARN**

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

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

- Are highly motivated if they believe learning is relevant. People bring high levels of motivation and interest to learning. Motivation can be increased and channeled by the trainer who provides clear learning goals and objectives. To make the best use of a high level of participant interest, the trainer should explore ways to incorporate the needs of each participant into the learning sessions. This means that the trainer needs to know quite a bit about the participants, either from studying background information about them or by allowing participants to talk early in the course about their experience and learning needs.

- Need participation and active involvement in the learning process.

- Few individuals prefer just to sit back and listen. The effective trainer will design learning experiences that actively involve the participants in the training process. Examples of how the trainer may involve participants include:
  
  - Allowing participants to provide input regarding schedules, activities and other events
  - Questioning and feedback
  - Brainstorming and discussions
  - Hands-on work
  - Group and individual projects
  - Classroom activities

- Desire a variety of learning experiences.

- Participants attending courses desire variety. The trainer should use a variety of learning methods including:
  
  - Audiovisual aids
  - Illustrated lectures
  - Demonstrations
  - Brainstorming
  - Small group activities
• Group discussions
• Role plays, case studies
• Clinical simulations and hands-on skills practice

• Desire positive feedback. Participants need to know how they are doing, particularly in light of the objectives and expectations of the course. Is their progress in learning clinical skills meeting the trainer’s expectations? Is their level of clinical performance meeting the standards established for the procedure? Positive feedback provides this information. Learning experiences should be designed to move from the known to the unknown, or from simple activities to more complex ones. This progression provides positive experiences and feedback for the participant. To maintain positive feedback, the trainer can:

  • Give verbal praise either in front of other participants or in private
  • Use positive responses during questioning
  • Recognize appropriate skills while coaching in a clinical setting
  • Let the participants know how they are progressing toward achieving learning objectives

• Have personal concerns. The trainer must recognize that many participants fear failure and embarrassment in front of their colleagues. Participants often have concerns about their ability to:

  • Fit in with the other participants
  • Get along with the trainer
  • Understand the content of the training
  • Perform the skills being taught

• Need an atmosphere of safety. The trainer should open the course with an introductory activity that will help participants feel at ease. It should communicate an atmosphere of safety so that participants do not judge one another or themselves. For example, a good introductory activity is one that acquaints participants with one another and helps them to associate the names of the other participants with their faces. Such an activity can be followed by learning experiences that support and encourage the participants.

• Need to be recognized as individuals with unique backgrounds, experiences and learning needs. People want to be treated as individuals, each of whom has a unique background, experience...
and learning needs. A person’s past experiences is a good foundation upon which the trainer can base new learning. To help ensure that participants feel like individuals, the trainer should:

- Use participant names as often as possible
- Involve all participants as often as possible
- Treat participants with respect
- Allow participants to share information with others during classroom and clinical instruction

- Must maintain their **self-esteem**. Participants need to **maintain high self-esteem** to deal with the demands of a clinical training course. Often the clinical methods used in training are different from clinical practices used in the participants’ clinics. It is essential that the trainer show respect for the participants, no matter what practices and beliefs they hold to be correct, and continually support and challenge them. This requires the trainer to:

  - Reinforce those practices and beliefs embodied in the course content
  - Provide corrective feedback when needed, in a way that the participants can accept and use with confidence and satisfaction
  - Provide training that adds to, rather than subtracts from, their sense of competence and self-esteem
  - Recognize participants’ own career accomplishments

- Have **high expectations** for themselves and their trainer. People attending courses tend to set **high expectations both for the trainers and for themselves**. Getting to know their trainers is a real and important need. Trainers should be prepared to talk modestly, and within limits, about themselves, their abilities and their backgrounds.

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

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

- **Follow a plan and use trainer’s notes**, which include the session objectives, introduction, body, activity, audiovisual reminders, summary and evaluation.

- **Communicate in a way that is easy to understand.** Many participants will be unfamiliar with the terms, jargon and acronyms of a new subject. The trainer should use familiar words and expressions, explain new language and attempt to relate to the participants during the presentation.

- **Maintain eye contact with participants.** Use eye contact to “read” faces. This is an excellent technique for establishing rapport and getting feedback on how well participants understand the content.

- **Project your voice** so that those in the back of the room can hear clearly. Vary volume, voice pitch, tone and inflection to maintain participants’ attention. Avoid using a monotone voice, which is guaranteed to put participants to sleep!

- **Avoid the use of slang or repetitive words, phrases or gestures** that may become distracting with extended use.

- **Display enthusiasm about the topic and its importance.** Smile, move with energy and interact with participants. The trainer’s enthusiasm and excitement are contagious and directly affect the morale of the participants.

- **Move around the room.** Moving around the room helps ensure that the trainer is close to each participant at some time during the session. Participants are encouraged to interact when the trainer moves toward them and maintains eye contact.

- **Use appropriate audiovisual aids** during the presentation to reinforce key content or help simplify complex concepts.

- Be sure to ask both **simple and more challenging questions**.
- **Provide positive feedback** to participants during the presentation.

- **Use participants’ names as often as possible.** This will foster a positive learning climate and help keep the participants focused on the presenter.

- Display a **positive use of humor** related to the topic (e.g., humorous stories, cartoons on transparency or flipchart, cartoons for which participants are asked to create captions).

- **Provide smooth transitions between topics.** Within a given presentation, a number of separate yet related topics may be discussed. When shifts between topics are abrupt, participants may become confused and lose sight of how the different topics fit together in the bigger picture. Before moving on to the next topic, the trainer can ensure that the transition from one topic to the next is smooth by:
  - providing a brief summary,
  - asking a series of questions,
  - relating content to practice, or
  - using an application exercise (case study, role play, etc.).

- **Be an effective role model.** The trainer should be a positive role model in appearance (appropriate dress) and attitude (enthusiasm for the course), and by beginning and ending the session at the scheduled times.
CONDUCTING LEARNING ACTIVITIES
IN THE CLASSROOM

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

DELIVERING INTERACTIVE PRESENTATIONS

Introducing Presentations

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

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

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

- **Reviewing the session objectives.** Introducing the topic by a simple restatement of the objectives keeps the participant aware of what is expected of her/him.

- **Asking a series of questions about the topic.** The effective trainer will recognize when participants have prior knowledge concerning the course content and encourage their contributions. The trainer can ask a few key questions, allow participants to respond, discuss answers and comments, and then move into the body of the presentation.

- **Relating the topic to previously covered content.** When a number of sessions are required to cover one subject, relate each
session to previously covered content. This ensures that participants understand the continuity of the sessions and how each relates to the overall topic. Where possible, link topics so that the concluding review or summary of one presentation can introduce the next topic.

- **Sharing a personal experience.** There are times when the trainer can share a personal experience to create interest, emphasize a point or make a topic more job-related. Participants enjoy hearing these stories as long as they relate to the topic and are used only when appropriate.

- **Relating the topic to real-life experiences.** Many training topics can be related to situations most participants have experienced. This technique not only catches the participants’ attention, but also facilitates learning because people learn best by “anchoring” new information to known material. The experience may be from the everyday world or relate to a specific process or piece of equipment.

- **Using a case study, clinical simulation or other problem-solving activity.** Problem-solving activities focus attention on a specific situation related to the training topic. Working in small groups generally increases interest in the topic.

- **Using a videotape or other audiovisual aid.** Use of appropriate audiovisuals can be stimulating and generate interest in a topic.

- **Giving a classroom demonstration.** Most clinical training courses involve equipment, instruments and techniques that lend themselves to demonstrations, which generally increase participant interest.

- **Using a game, role play or simulation.** Games, role plays and simulations generate tremendous interest through direct participant involvement and therefore are useful for introducing topics.

- **Relating the topic to future work experiences.** Participants’ interest in a topic will increase when they see a relationship between training and their work. The trainer can capitalize on this by relating objectives, content and activities of the course to real work situations.
Using Questioning Techniques

Questions can be used at anytime to:

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

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

- **Ask a question of the entire group.** The advantage of this technique is that those who wish to volunteer may do so; however, some participants may dominate while others may not participate.

- **Target the question to a specific participant by using her/his name prior to asking the question.** The participant is aware that a question is coming, can concentrate on the question, and respond accordingly. The disadvantage is that once a specific participant is targeted, other participants may not concentrate on the question.

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

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

- **Use participants’ names** during questioning. This is a powerful motivator and also helps ensure that all participants are involved.

- **Repeat a participant’s correct response.** This provides positive reinforcement to the participant and ensures that the rest of the group heard the response.

- **Provide positive reinforcement for correct responses** to keep the participant involved in the topic. Positive reinforcement may take the form of praise, displaying a participant’s work, using a participant as an assistant or using positive facial expressions, nods or other nonverbal actions.
When a participant’s response is partially correct, the trainer should reward the correct portion and then improve the incorrect portion or redirect a related question to that participant or to another participant.

When a participant’s response is incorrect, the trainer should make a noncritical response and restate the question to lead the participant to the correct response.

When a participant makes no attempt to respond, the trainer may wish to follow the above procedure or redirect the question to another participant. Come back to the first participant after receiving the desired response and involve her/him in the discussion.

When participants ask questions, the trainer must determine an appropriate response by drawing upon personal experience and weighing the individual’s needs against those of the group. If the question addresses a topic that is relevant but has not been previously discussed, the trainer can either:

- answer the question and move on, or
- respond with another question, thereby beginning a discussion about the topic.

**Summarizing Presentations**

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

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

Many summary techniques are available to the trainer:

- Asking the participants for questions gives participants an opportunity to clarify their understanding of the instructional content. This may result in a lively discussion focusing on those areas that seem to be the most troublesome.
- Asking the participants questions that focus on major points of the presentation
- Administering a practice exercise or test gives participants an opportunity to demonstrate their understanding of the material. After the exercise or test, use the questions as the basis for a
discussion by asking for correct answers and explaining why each answer is correct.

- **Using a game to review main points** provides some variety, when time permits. One popular game is to divide participants into two teams, give each team time to develop review questions, and then allow each team to ask questions of the other. The trainer serves as moderator by judging the acceptability of questions, clarifying answers and keeping a record of team scores. This game can be highly motivational and serve as an excellent summary at the same time.

### FACILITATING GROUP DISCUSSIONS

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

Group discussion is useful:

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

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

- Provide positive feedback
- Stress key points
- Develop critical thinking skills
- Create a positive learning climate
The facilitator must consider a number of factors when selecting group discussion as the learning strategy:

- Discussions involving **more than 15 to 20 participants** may be difficult both to lead and may not give each participant an opportunity to participate.

- Discussion requires **more time** than an illustrated lecture because of extensive interaction among the participants.

- A **poorly directed discussion may move off target** and never reach the objectives established by the facilitator.

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

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

- **General discussion** that addresses participant questions about a learning event (e.g., why one type of episiotomy is preferred over another)

- **Panel discussion** in which a moderator conducts a question and answer session between panel members and participants

Follow these key points to ensure successful group discussion:

- **Arrange seating to encourage interaction** (e.g., tables and chairs set up in a U-shape or a square or circle so that participants face each other).

- **State the topic** as part of the introduction.

- **Shift the conversation** from the facilitator to the participants

- **Act as a referee** and intercede only when necessary.

  Example: “It is obvious that Alain and Ilka are taking two sides in this discussion. Alain, let me see if I can clarify your position. You seem to feel that....”
• **Summarize the key points** of the discussion periodically.

  Example: “Let’s stop here for a minute and summarize the main points of our discussion.”

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

• **Use the contributions of each participant** and provide positive reinforcement.

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

• **Minimize arguments** among participants.

• **Encourage all participants to get involved.**

• **Ensure that no one participant dominates the discussion.**

• **Conclude the discussion with a summary** of the main ideas. The facilitator must relate the summary to the objective presented during the introduction.

**FACILITATING A BRAINSTORMING SESSION**

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

The following guidelines will facilitate the use of brainstorming:

• **Establish ground rules.**

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

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

- **Maintain a written record** of the ideas and suggestions on a flipchart or writing board. This will prevent repetition and keep participants focused on the topic. In addition, this written record is useful when it is time to discuss each item.

- **Involve the participants and provide positive feedback** in order to encourage more input.

- **Review written ideas and suggestions periodically** to stimulate additional ideas.

- **Conclude brainstorming by reviewing all of the suggestions** and clarifying those that are acceptable.

**FACILITATING SMALL GROUP ACTIVITIES**

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

- **Reacting to a case study**, which may be presented in writing, orally by the trainer or introduced through videotape or slides

- **Preparing a role play** within the small group and presenting it to the entire group as a whole

- **Dealing with a clinical situation/scenario**, such as in a clinical simulation, that has been presented by the trainer or another participant

- **Practicing a skill** that has been demonstrated by the trainer

Small group activities offer many advantages including:

- Providing participants an opportunity to **learn from each other**

- **Involving** all participants

- Creating a sense of **teamwork** among members as they get to know each other

- Providing for a **variety of viewpoints**
When small group activities are being conducted, it is important that participants are not in the same group every time. Different ways the trainer can create small groups include:

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

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

Activities assigned to small groups should be **challenging, interesting, relevant**; should require **only a short time to complete**; and should be **appropriate for the background of the participants**. Each small group may be working on the same activity or each group may be taking on a different problem, case study, clinical simulation or role play. Regardless of the type of activity, there is usually a time limit. When this is the case, inform groups when there are 5 minutes left and when their time is up.

Instructions to the groups may be presented:

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

Instructions for small group activities typically include:

- **Directions**
- **Time** limit
- A **situation or problem** to discuss, resolve or role play
- Participant **roles** (if a role play)
- **Questions** for a group discussion
Once the groups have completed their activity, the clinical training facilitator will bring them together as a large group for a discussion of the activity. This discussion might involve:

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

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

**CONDUCTING AN EFFECTIVE CLINICAL DEMONSTRATION**

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

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

- Perform **role plays** in which a participant or surrogate client simulates a client and responds much as a real client would.

- Demonstrate the procedure with **clients** in the clinical setting (clinic or hospital).

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

- Demonstrate the **whole procedure** from beginning to end to give the participant a visual image of the entire procedure or activity.

- **Isolate or break down the procedure** into activities (e.g., pre-operative counseling, getting the client ready, pre-operative tasks, performing the procedure, etc.) and allow practice of the individual activities of the procedure.

- Demonstrate the **whole procedure** again and then allow participants to practice the procedure from beginning to end.
When planning and giving a demonstration of a clinical procedure (with clients, if appropriate), the trainer should use the following guidelines:

- **Before beginning,** state the objectives of the demonstration and point out what the participants should do (e.g., interrupt with questions, observe carefully, etc.).

- **Make sure that everyone can see** the steps involved.

- **Never** demonstrate the skill or activity incorrectly.

- Demonstrate the procedure in as **realistic** a manner as possible, using instruments and materials in a simulated clinical setting.

- Include **all steps** of the procedure in the **proper sequence** according to the approved performance standards. This includes demonstrating “nonclinical” steps such as pre- and postoperative counseling and communication with the client during surgery, use of recommended infection prevention practices, etc.

- During the demonstration, explain to participants what is being done, especially any difficult or hard-to-observe steps.

- **Ask questions** of participants to keep them involved.

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

- **Encourage** questions and suggestions.

- **Take enough time** so that each step can be observed and understood. Remember that the objective of the demonstration is learning the skills, not for the trainer to show her/his dexterity and speed.

- **Use equipment and instruments properly** and make sure participants clearly see how they are handled.

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

- Familiarizes the participant with the use of competency-based learning guides

- Reinforces the standard way of performing the procedure
• Communicates to participants that the trainer, although very experienced, is not absolutely perfect and can accept constructive feedback on her/his performance.

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

Clinical decision-making is the systematic process by which skilled providers make judgments regarding a patient’s condition, diagnosis and treatment. Despite the importance of sound clinical decision-making to the provision of high quality services, it is not well taught in either preservice education or inservice training. There is so much basic knowledge to be acquired that it leaves little time for complex skills such as clinical decision-making. And even when there is enough time, decision-making is a difficult skill to teach and learn.

Until recently, very little was known about how decisions are made. For experienced providers, decision-making is an intuitive process based on knowledge and experience. Many of the steps necessary to arrive at a decision can be completed rapidly and unconsciously. Such providers are unable to explain how they make decisions, which in turn makes it difficult to teach this skill to others. Nor is it easy for learners to identify how a decision is made when simply observing other providers in action. Consequently, they have nothing to model for developing their own skill.

It is now known, however, that there is a process to clinical decision-making that can be broken down into a series of steps that help the provider to gather the information needed to form accurate judgments, begin appropriate care and evaluate the effectiveness of that care. There are a number of different ways to name these steps, but they describe the same process. Two such approaches are illustrated below.

- **Assessment**, or Gathering information
- **Diagnosis**, or Interpreting the information
- **Planning**, or Developing the care plan
- **Intervention**, or Implementing the care plan
- **Evaluation**, or Evaluating the care plan

An important strategy in teaching clinical decision-making is to be sure that learners are aware of this step-by-step process and what occurs in each step. They also must understand that, although there is a sequence of steps for clinical decision-making, movement through the steps is rarely linear or sequential. Rather, it is an ongoing, circular process, in which the provider moves back and forth between the steps as the clinical situation changes and different needs or problems emerge.
Learners should be introduced to the steps in clinical decision-making early in their education. After that, these steps should receive continual emphasis and be used in a variety of situations. Throughout the curriculum, learners should be given opportunities and appropriate situations in which to apply these steps and practice their decision-making skills. Whether they are actively practicing their own skills or observing more experienced providers, learners should focus on understanding the reasoning and judgment that are the basis for each step in the process. How a decision is made is as important as what decision is made. Explaining how a decision is made usually requires the active involvement of the teacher because the process of decision-making is not easy to observe or identify.

Another key strategy in teaching clinical decision-making is to provide as much experience and practice in decision-making as possible. This experience, together with clinical knowledge, is a key component of successful decision-making. Teachers should:

- Expose learners to as many and as wide a **variety of patients** as possible.
- Put learners in the **clinical setting** as early as possible and provide careful guidance as they gain their experience.
- Give learners as much **structured independence** as possible; they must be given the opportunity and time to draw their own conclusions and consider their own decisions.
- Provide learners with a forum, for example, case reviews or clinical conferences, for comparing their decisions with the decisions made by more experienced providers.

It is important that the teacher discuss the decision-making process with each learner, and that learners share their experiences with one another. By sharing experiences, learners get that many more cases or approaches to the same case to “file away” for future use, even though they may not have been directly involved in the cases themselves.

Finally, the teacher should give learners feedback on how the clinical decision-making process was applied in a given situation. This will strengthen future performance more effectively than focusing on whether or not the “correct answer” was identified. In fact, a wrong answer for the right reason should receive more positive feedback than a right answer for the wrong reason.

Often, it is not possible to give learners experience with all the types of situations they will encounter as independent practitioners. Their
“memory files” of experience can nevertheless be built up in other ways. Extensive use of case studies, role plays and simulations, in which specific clinical situations are acted out, can contribute significantly to learners’ experience. For example, true shoulder dystocia during childbirth is uncommon, but repeated drilling or practice on models of the corrective maneuvers for shoulder dystocia will help learners respond to the emergency when it happens.

Tools for teaching clinical decision-making are presented throughout this learning resource package. The case studies and clinical simulations have been designed to facilitate the teaching of decision-making by reinforcing the steps involved in the process. The partograph exercises are also effective tools for decision-making. Their purpose is not simply to help learners plot data on the partograph, but rather to use those data for identifying and responding to problems as soon as, or even before, they occur. The tools alone, however, will not effectively teach clinical decision-making. The teacher must take an active role in discussing, questioning, explaining and challenging the learners about how decisions are being made each time one of these tools is used. And this interaction must continue as the learners move into the clinical area and work with patients.

Clinical decision-making is still a difficult skill to teach. But by beginning early in the curriculum and continually providing practice opportunities and guidance—whether by using the tools included in this learning resource package or through experience with patients—teachers will help learners more fully understand the decision-making process and develop their decision-making skills. As a result, the quality of care received by patients will be improved.
MANAGING CLINICAL PRACTICE

Getting the most out of clinical practice requires that the trainer be well acquainted with the clinical practice sites. Being familiar with the healthcare facility before training begins allows the trainer to develop a relationship with the staff, overcome any inadequacies in the situation, and prepare for the best possible learning experience for participants. Even the best planning, however, is not always enough to ensure a successful clinical practice experience. In the classroom, the trainer is able to control the schedule and activities to a large extent; whereas in the clinic, the trainer must always be alert to unplanned learning opportunities that may arise at any time, and be ready to modify the schedule accordingly.

PERFORMING CLINICAL PROCEDURES WITH CLIENTS

The final stage of clinical skill development involves practicing procedures with clients. When possible and appropriate, participants should be allowed to work with clients only after they have demonstrated skill competency and some degree of skill proficiency in a simulated situation.

The rights of clients should be considered at all times during a clinical training course. The following practices will help ensure that clients’ rights are routinely protected during clinical training.

- The right to bodily privacy must be respected whenever a client is undergoing a physical examination or procedure.

- The confidentiality of any client information obtained during counseling, history taking, physical examinations or procedures must be strictly observed. Clients should be reassured of this confidentiality. Confidentiality can be difficult to maintain when specific cases are used in learning exercises such as case studies and clinical meetings. Such discussions always should take place in a private area where other staff and clients cannot overhear and should be conducted without reference to the client by name.

- When receiving counseling, undergoing a physical examination or receiving maternal and neonatal health services, the client should be informed about the role of each person involved (e.g., trainers, individuals undergoing training, support staff, researchers).
- The **client’s permission should be obtained** before having a clinician-in-training observe, assist with or perform any procedures. Understanding the right to refuse care from a clinician-in-training is important for every client. Furthermore, care should not be rescheduled or denied if the client does not permit a clinician-in-training to be present or provide services. In such cases, the trainer or other staff member should perform the procedure.

- The **trainer should be present during any client contact** in a training situation and the client should be made aware of the trainer’s role. Furthermore, the trainer should be ready to intervene if the client’s safety is in jeopardy or if the client is experiencing severe discomfort.

- The **trainer must be careful how coaching and feedback are given** during practice with clients. Corrective feedback in the presence of a client should be limited to errors that could harm or cause discomfort to the client. Excessive negative feedback can create anxiety for both the client and the clinician-in-training.

- **Clients should be chosen carefully** to ensure that they are appropriate for clinical training purposes. For example, participants should not practice with “difficult” clients until they are proficient in performing the procedure.

**CREATING OPPORTUNITIES FOR LEARNING**

**Planning for Learning**

The trainer should **develop a plan for each day spent in the healthcare facility**. The plan will provide a daily focus that is consistent with the learning objectives and help to ensure that all required skills will be adequately addressed. When preparing the plan, the trainer should consider the following points.

- Clinical practice should progress from **basic to more complex skills**. This not only helps ensure the safety and quality of care provided by participants, but also allows them to gain self-confidence as they demonstrate competency in the basic skills.

- **There may be more participants than can be accommodated** comfortably in one area of the healthcare facility at the same time. Generally, three or four participants are the most that a specific area of a facility can absorb without affecting service delivery. If there are more, the trainer should plan a rotation system that allows
each participant to have equal time and opportunity in each clinical area.

- Some clinical experiences, such as obstetrical emergencies (e.g., eclampsia, postpartum hemorrhage, obstructed labor), cannot be planned or predicted. The trainer must be alert to identify appropriate clinical situations and distribute them equally among the participants. Before each day’s practice, the trainer should ask the staff to notify him/her of any clients that may be of particular interest, so that participants can be assigned to work with them.

- In addition to daily practice of specific clinical skills, the trainer’s plan should include other areas of focus such as infection prevention, facility logistics or client flow. Although these topics may not be directly assessed with a checklist or other competency-based assessment tool, they play an important role in the provision of high quality maternal and neonatal health services. To make sure that participants give adequate attention to these topics, the trainer should design and develop activities that address each one, such as:
  - Observing the infection prevention practices used in the facility. Which recommended practices are being used, and which are not? Are they being used consistently and correctly? Why or why not?
  - Reviewing facility records for the past several months to identify the types of obstetrical clients seen. Additional information could be obtained, such as the most common complaints and, in individual cases, course of labor (partograph review), progression of a specific condition, treatment provided, response to treatment, etc.
  - Taking an inventory of the supplies, equipment and drugs available in the service provision area to ensure rapid access when needed.
  - Inevitably there will be times when there are few or no clients in the facility. The trainer should have ready additional activities, such as those described above, for the participants. Case studies and role plays also are very useful at such times. Even without clients, learning must continue. Taking extended breaks or leaving the clinical site early is not an acceptable option.
**In the Healthcare Facility**

As has been mentioned, planning alone is not sufficient to guarantee a successful clinical practice. There are several key strategies that a trainer can use in the healthcare facility to increase the likelihood of success.

- **The trainer must actively monitor** the skills each participant is able to practice, and with what frequency, so that each participant has adequate opportunities to develop competency. A participant who demonstrates competency in performing a cesarean section operation or in administering spinal anesthesia should not be assigned additional patients requiring this operation or procedure until other participants have had an opportunity to develop such competency.

- **It is essential that the trainer be flexible and constantly alert** to learning opportunities as they arise. This requires knowing about the healthcare facility—how it is set up and functions, the client population, etc.—as well as having a good working relationship with the staff. The trainer will need to rely on the staff’s cooperation in notifying her/him of unique or unusual clients and allowing participants to provide services to these clients. This relationship is most easily established beforehand, during site preparation and other visits made by the trainer.

- **The participants also should be encouraged to watch** for such learning opportunities. The trainer may then decide which, and how many, of the participants will be assigned to a particular client. The trainer and participants should remember that clinical experiences need to be shared equally. Therefore, the participant who identifies a case may not be assigned to it if this participant has had a similar case before. It is not appropriate to subject the client to a procedure multiple times simply so that all participants can practice a skill.

- **To take advantage of opportunities as they occur may require that the trainer modify the plan for that day and subsequent days**, but with as little disruption as possible to the provision of services. Participants should be notified of any changes as soon as possible so that they can be well prepared for each clinical day.

- **Rarely will all participants have the opportunity to work with all types of clients. The trainer will need to supplement, with case studies and role plays, the work done with clients.** The trainer should rapidly identify important but rare events or conditions, such as severe pre-eclampsia, and prepare activities in advance.
Actual cases seen in the healthcare facility may also serve as the basis for such activities. These can then be used during clinical sessions to expand the participants’ range of experiences.

**CONDUCTING PRE- AND POST-CLINICAL PRACTICE MEETINGS**

Although every healthcare facility will not have a meeting room, the trainer must make every effort to find a space that:

- Allows free discussion, small group work and practice on models
- Is away from the client care area if possible, so as to not interfere with efficient client care or other staff duties

**Pre-Clinical Practice Meetings**

The trainer and participants should meet at the beginning of each clinical practice session. The meeting should be brief. Items to be covered include:

- The learning objectives for that day
- Any scheduling changes that may be needed
- Participants’ roles and responsibilities for that day, including the work assignments and rotation schedule if applicable
- Special assignments to be completed that day
- The topic for the post-clinical practice meeting, so that the participants can take special note of anything happening during the day that would contribute to the discussion
- Questions related to that day’s activities or from previous days if they can be answered concisely; if not, they should be deferred until the post-clinical practice meeting

**Post-Clinical Practice Meetings**

The trainer should end each clinical day with a meeting to review the day’s events and build on them as learning experiences. A minimum of 1 hour is recommended. These meetings are used to:

- Review the day’s learning objectives and assess progress toward their completion
• Present cases seen that day, particularly those that were interesting, unusual or difficult

• Respond to clinical questions concerning situations and clients in the healthcare facility or information in the reference manual

• Plan for the next clinical session, making changes in the schedule as necessary

• Conduct additional practice with models if needed

• Review and discuss case studies, role plays or assignments that have been prepared in advance by the participants. These activities should complement the sessions conducted during the classroom portion of the course, especially when classroom time is limited and clinical experience is necessary to gain a better understanding of the issues to be discussed. Topics for case studies, role plays and assignments include:

  • Quality of care
  • Clinical services provided
  • Preventive care measures
  • Medical barriers to providing high quality services
  • Recommended follow up
  • Assessment, diagnosis, planning, intervention, and evaluation in the care of an individual client

THE TRAINER AS SUPERVISOR

In the role of supervisor, the trainer must monitor participant activities in the healthcare facility so that:

• Each participant receives appropriate and adequate opportunities for skill practice,

• Participants do not disrupt the efficient provision of services within the facility or interfere with staff and their duties, and

• The care provided by each participant does not harm clients or place them in an unsafe situation.
The trainer must always be with participants when they are working with clients, especially when they are performing clinical procedures. Trainers may have more than one or two participants to supervise. Because the trainer cannot be with all of them at the same time, other methods of supervision must be used.

- Participants must understand what they can do independently and what requires trainer supervision, so that they can keep busy when the trainer is involved with another participant. Participants should be made responsible for ensuring that they are supervised when necessary. The trainer, however, still holds the ultimate responsibility.

- Additional activities that require no direct supervision will give participants the opportunity to be actively engaged in learning when they are not with clients.

- Clinical staff also can act as supervisors if the trainer is confident of their clinical skills and ability to provide appropriate feedback. The possibility of having clinical staff supervise participants is another reason why the trainer should get to know the staff before the training begins. During clinical site preparation, the trainer can observe the skills of the staff members, and verify that they are competent, if not proficient, service providers. The trainer may also have the opportunity to assess their coaching skills. There may even be time to work with staff members to improve their skills so that they can serve as role models and support participant learning.

- The more participants there are in the facility, the more the trainer relies upon the staff also to act as trainers. Nevertheless, the ultimate responsibility for each participant, including that of final assessment of skill competency, is the trainer’s. For this reason, if multiple clinical sites are used during a course, a trainer must be assigned to each site.

- Because clinical staff may not be involved in the classroom portion of a course, they do not have an opportunity to get to know the participants and their abilities before they arrive at the facility. Therefore, it is a good idea to share such information with the clinical staff whenever they will have to take over a large part of the participant supervision. Clinical staff should also be encouraged to do an initial assessment of participants’ skills before allowing them to work with clients so that they can feel confident that the participants are well prepared.
• Clinical staff should also be aware of the feedback the trainer would like to receive from them about participants.

• Will it be oral, written or both? If written feedback is needed, the trainer should design an instrument or form to guide the clinical staff. The trainer should furnish a sufficient number of copies of the form and instruct the staff in its use. The trainer should develop a form that staff members can complete quickly and easily.

• How frequently will feedback be provided? Daily? Weekly? Only at the end of training?

• Should both positive and corrective feedback be provided?

• Are there appropriate administrative channels through which the feedback should be transmitted? In some clinics, for example, staff members provide their feedback to the individual in charge of the healthcare facility who then prepares a report for the trainer.

• When designing the feedback system, the trainer should keep in mind the time required to prepare and provide feedback. This will be extra work for the clinical staff, who already have a very busy schedule. It is best to keep the system as simple and easy to use as possible.

THE TRAINER AS COACH

One of the most difficult tasks for the trainer, and one with which even experienced trainers struggle, is to be a good coach and provide feedback in the clinical setting. No matter how comfortable a trainer may be in giving feedback in the classroom or while working with models, the situation changes in the facility. The clients, staff and other participants are nearby and the emergency services need to keep running smoothly and efficiently. The trainer often feels pressured to keep things moving because other clients need to be seen and the trainer needs to be available to all the participants. Spending “too much time” with any one client or participant has an impact on everyone.
Feedback Sessions

The feedback sessions before and after practice are often skipped in an effort to save time. These sessions, however, are very important for the continued development of the participant’s psycho-motor or decision-making skills. Without adequate feedback and coaching, the participant may miss an important learning opportunity and take longer to achieve competency. Keep in mind that by this time the participant has already demonstrated competency on a model and may not need extensive feedback. To minimize disruption of services, the pre- and post-practice feedback sessions can take place in just a few minutes in a location away from the client care areas.

The structure of the feedback session is essentially the same regardless of whether the session takes place before or after practice, and whether it is for a participant’s performance with models or with clients.

- The participant should first identify personal strengths and the areas where improvement is needed.
- Next, the trainer should provide specific, descriptive feedback that includes suggestions of not only what, but also how, to improve.
- Finally, the participant and the trainer should agree on what will be the focus of the practice session, including how they will interact while they are with the client. For example, they may agree that if the trainer places a hand on the participant’s shoulder, it is a signal to stop and wait for further instructions.

The feedback session before practice should be given before entering the room to work with the client. The feedback session after practice can be delayed until the client’s care has been completed or the client is in stable condition so that continuous care is no longer needed. The trainer should try not to delay feedback any longer than necessary. Feedback is always more effective when given as soon after care as possible. This will also allow the participant to use the feedback with the next client for whom services are provided, if appropriate.

Feedback during a Procedure

Be sure the client knows that the participant, although already a service provider, is also a learner. Reassure the client that the participant has had extensive practice and mastered the skill on models. The client should expect to hear the trainer talk to the participant and understand that it does not mean that something is wrong. Finally, the client should clearly understand that the trainer is a
proficient service provider and is there to ensure that the procedure is completed safely and without delay.

**Positive Feedback**

Positive feedback is often easy to give and can be provided in the presence of the client. Trainers often think that hearing feedback, even positive feedback, will disturb the client. Many clients, however, find it comforting to hear the service provider being given positive feedback.

- Keep the feedback restrained and low-key; overly exuberant praise can be as worrisome to the client as hearing negative comments. Too much praise may cause the client to wonder, “What is being hidden?” “Why is it so surprising that this person is doing a good job?”

- Positive feedback can be conveyed by facial expression and tone of voice rather than words, and still be highly effective.

At the same time, the **absence** of feedback of any kind can be disturbing to the participant. By this phase of skill development the participant is expected to do a good job even with the first client, and is accustomed to hearing positive comments. Therefore, in order to maintain the participant’s confidence, it is still important to give positive feedback.

**Corrective Feedback**

Corrective feedback is difficult to give under any circumstances, but particularly when a client is present. It is important to keep such feedback low-key and restrained. There are a number of techniques that will make it easier.

- Often a look or hand gesture (e.g., a touch on the shoulder) can be as effective as words and less worrisome to the client.

- Simple suggestions to facilitate the procedure can be made in a quiet, direct manner. Do not go into lengthy explanations of why you are making the suggestion or offering an observation—save that for the post-practice feedback session.

- To help a participant avoid making a mistake, the trainer can calmly ask a simple, straightforward question about the procedure itself. If a step in a procedure is about to be missed, for example, asking the participant to name the next step before doing anything further could help avoid an error. This is **not** the time to ask
hypothetical questions about potential side effects and complications, as this may distract the participant and alarm the client.

● Sometimes, even though they have had extensive practice on models, participants make mistakes that can potentially harm the client. In these instances, the trainer must be prepared to step in and take over the procedure at a moment’s notice. This should be done calmly and with complete control to avoid unnecessarily alarming the client.