

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY



Facilitator's Guide

Second Edition



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Access to clinical and community
maternal, neonatal and women's health services

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Jhpiego

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The ACCESS Program is the U.S. Agency for International Development's global program to improve maternal and newborn health. The ACCESS Program works to expand coverage, access and use of key maternal and newborn health services across a continuum of care from the household to the hospital—with the aim of making quality health services accessible as close to the home as possible. Jhpiego implements the program in partnership with Save the Children, Constella Futures, the Academy for Educational Development, the American College of Nurse-Midwives and IMA World Health.

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This publication was made possible in part 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 the Leader with Associates Cooperative Agreement GHS-A-00-04-00002-00. The opinions expressed herein are those of the editors and do not necessarily reflect the views of the U.S. Agency for International Development.

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INTRODUCTION

WORKSHOP OVERVIEW

This workshop will be conducted based on the assumption that people participate in training workshops because they:

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

For these reasons, the workshop materials focus on the participant. The facilitator and the participant use a similar set of learning materials. The facilitator works with the participants as an expert on the workshop topic and guides the learning activities.

TRAINING APPROACH

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

For CBT to be accomplished successfully, the clinical skill or activity to be taught must be broken down into its essential steps. Each step is then analyzed to determine the most efficient and safe way to perform and learn it. The process is called standardization. Once a procedure, such as carrying out a focused antenatal care (ANC) visit, has been standardized, competency-based learning guides and evaluation checklists can be developed to make learning the necessary steps or tasks easier and evaluating the learner's performance more objective.

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

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

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

WORKSHOP SYLLABUS

Workshop Description

The *Prevention and Control of Malaria in Pregnancy* workshop is intended for skilled providers (including midwives, nurses, clinical officers and medical assistants) who provide antenatal care. The workshop is designed to provide learners with the knowledge and skills needed to prevent, recognize and treat malaria in pregnancy as they provide focused ANC services.

Some workshops may be organized to include 1 or more days of guided clinical observation and practice. In such cases, the facilitator will provide information regarding that component separately.

Workshop Goals

- To prepare skilled providers to educate and counsel women about how to prevent malaria in pregnancy
- To prepare skilled providers to administer appropriate intermittent preventive treatment (IPTp) to pregnant women
- To provide skilled providers with the knowledge necessary to recognize and treat uncomplicated malaria in pregnancy
- To provide skilled providers with the knowledge necessary to recognize and refer women with severe malaria in pregnancy

Participant Learning Objectives

By the end of this workshop the participant will be able to:

1. Explain the differences between basic, additional and initial specialized care.
2. Describe the four main goals of focused ANC.
3. Describe the essential elements of birth preparedness and complication readiness plans.

4. Discuss the frequency and timing of focused ANC visits.
5. Describe the components of record keeping for focused ANC.
6. Define malaria and how it is transmitted.
7. Describe the effects of malaria in Africa in general, and in their own country.
8. Compare the effects of malaria in areas of stable and unstable transmission.
9. List the effects of malaria on pregnant women and their unborn babies.
10. Describe the effects of malaria on pregnant women with HIV/AIDS.
11. List the three elements of malaria prevention and control according to the World Health Organization (WHO) malaria in pregnancy (MIP) strategy.
12. List the elements of counseling women about the use of insecticide-treated nets (ITNs), intermittent preventive treatment in pregnancy (IPTp) and other means of malaria prevention.
13. Describe the use of sulfadoxine-pyrimethamine (SP) for IPTp including dosage, timing and contraindications.
14. Describe why self-diagnosis/treatment may lead to treatment failure or recurring infection.
15. Identify other causes of fever during pregnancy.
16. List the signs and symptoms of uncomplicated and severe malaria in pregnancy.
17. Describe the treatment for uncomplicated malaria in pregnancy.
18. Explain the steps to appropriately refer a pregnant woman who has severe malaria.

Training/Learning Methods

- Illustrated lectures
- Large and small group discussions
- Case studies
- Role plays
- Group activities

Learning Materials

The learning materials for this workshop include:

- Resource manual for learners and facilitators: *Prevention and Control of Malaria in Pregnancy*
- Participant's Handbook containing the course syllabus, schedule, questionnaires, case studies, role plays, learning guides and checklists
- Facilitator's Guide containing the content of the Participant's Handbook as well as the course outline, answer keys and guidelines for conducting the workshop
- Presentation graphics:
 - Chapter 1: Focused Antenatal Care
 - Chapter 2: Transmission of Malaria
 - Chapter 3: Prevention of Malaria
 - Chapter 4: Diagnosis and Treatment of Malaria

Participant Selection Criteria

Workshop participants must be practicing health care providers or administrators of health care facilities providing ANC services.

Workshop Duration

The workshop duration is 2 days. The optional clinical observation and practice may last for 1 or more days, depending on needs of the participants and availability of the clinical facility.

Suggested Workshop Composition

- 20 participants
- 1–2 facilitators

SAMPLE WORKSHOP SCHEDULE

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP	
DAY 1	DAY 2
AM (4 hours)	AM (4 hours)
<p>Welcome; introductions; participants' expectations</p> <p>Workshop overview and objectives</p> <p>Review workshop materials</p> <p>Pre-workshop questionnaire</p> <p>Identify individual and group learning needs</p> <p>Break</p> <p>Focused ANC</p> <ul style="list-style-type: none"> • Illustrated lecture, brainstorming, discussion • Role play • Demonstration and skills practice <p>Recordkeeping exercise</p>	<p>Review agenda</p> <p>Discussion: Initial and follow-up ANC visits</p> <p>Malaria diagnosis</p> <ul style="list-style-type: none"> • Illustrated lecture • Discussion • Brainstorming activity <p>Break</p> <p>Malaria treatment</p> <ul style="list-style-type: none"> • Illustrated lecture • Discussion • Case study <p>Malaria diagnosis and treatment</p> <ul style="list-style-type: none"> • Skills practice
PM (3 hours)	PM (3 hours)
<p>Malaria transmission</p> <ul style="list-style-type: none"> • Illustrated lecture • Group discussion <p>Malaria prevention: ITNs</p> <ul style="list-style-type: none"> • Illustrated lecture • Group activity <p>Break</p> <p>Malaria prevention: IPTp</p> <ul style="list-style-type: none"> • Illustrated lecture • Case study <p>Birth preparedness/complication readiness</p> <ul style="list-style-type: none"> • Case study <p>Review day's activities</p>	<p>Referring a woman with severe malaria</p> <ul style="list-style-type: none"> • Illustrated lecture • Discussion • Clinical drill <p>Implications for practice</p> <ul style="list-style-type: none"> • Discussion <p>Prepare action plans</p> <p>Post-workshop questionnaire</p> <p>Workshop evaluation</p> <p>Closing</p>
<p>Assignment: read Reference Manual; Compare Initial and Follow-up ANC Visits; Learning Guides</p>	

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE		
TIME	OBJECTIVES/ACTIVITIES	LEARNING METHODS
DAY 1, AM (240 minutes)		
20 minutes	Activity: Welcome, introductions, participants' expectations	Welcome by the representatives of the organization(s) sponsoring the workshop. Participants introduce themselves, giving their names, institutions and positions, and briefly stating what they hope to gain from the workshop.
15 minutes	Activity: Provide an overview of the workshop (goals, objectives, schedule).	Review the workshop syllabus and schedule.
15 minutes	Activity: Review workshop materials.	Distribute, review and discuss materials used in the workshop. Review the Table of Contents of the <i>Prevention and Control of Malaria in Pregnancy</i> reference manual.
15 minutes	Activity: Assess participants' pre-workshop knowledge.	Complete pre-workshop questionnaire.
20 minutes	Activity: Identify individual and group learning needs.	Group grades questionnaires.
15 minutes	Break	
45 minutes	Chapter 1: Focused Antenatal Care Objective: Explain the differences between basic, additional and initial specialized care. Objective: Describe the four main goals of focused antenatal care. Objective: Describe the essential elements of birth preparedness and complication readiness plans. Objective: Discuss the frequency and timing of focused ANC visits. Objective: Describe components of record keeping for focused ANC.	Illustrated lecture Brainstorming Discussion Reference Manual: Pages 1–14 Presentation graphics: Slides 1–43 Facilitator's Guide: Brainstorming Activity for Focused Antenatal Care and Discussion Guide for Focused Antenatal Care
30 minutes		Role Play for Focused Antenatal Care
		Participant's Handbook: Workshop syllabus and schedule Reference Manual Participant's Handbook Participant's Handbook: Pre-Workshop Questionnaire Participant's Handbook: Role Play for Focused ANC

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE			
TIME	OBJECTIVES/ACTIVITIES	LEARNING METHODS	RESOURCES
45 minutes	Activity: Conduct an ANC visit.	<p>Demonstration: Facilitator demonstrates how to conduct an initial ANC visit using good interpersonal skills, with a participant playing the role of the pregnant woman. Participants follow the demonstration using the Learning Guide for Initial Antenatal Care Visit.</p> <p>Skills practice: Participants divide into teams of three:</p> <ul style="list-style-type: none"> • Skilled provider • Pregnant woman • Observer <p>“Provider” conducts an initial ANC visit following the steps in the Learning Guide. “Observer” assesses performance using the Checklist for Initial Antenatal Care Visit.</p> <p>Participants change roles until each has played the role of the skilled provider.</p> <p>Group activity</p>	<p>Participant’s Handbook: Learning Guide for Initial Antenatal Care Visit Checklist for Initial Antenatal Care Visit</p>
20 minutes	Activity: Recordkeeping		Participant’s Handbook: Exercise for Recordkeeping
LUNCH (60 minutes)			
DAY 1, PM (180 minutes)			
60 minutes	<p>Chapter 2: Transmission of Malaria</p> <p>Objective: Define malaria and how it is transmitted.</p> <p>Objective: Describe the effects of malaria in Africa, in general and in their own country.</p> <p>Objective: Compare the effects of malaria in areas of stable and unstable transmission.</p> <p>Objective: List the effects of malaria on pregnant women and their unborn babies.</p> <p>Objective: Describe the effects of malaria on pregnant women with HIV/AIDS.</p>	<p>Illustrated lecture Group discussion</p>	<p>Reference Manual: Pages 15–26</p> <p>Presentation graphics: Slides 44–69</p> <p>Facilitator’s Guide: Group Discussion for Malaria Transmission</p>

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE			
TIME	OBJECTIVES/ACTIVITIES	LEARNING METHODS	RESOURCES
45 minutes	<p>Chapter 3: Prevention of Malaria</p> <p>Objective: List the three elements of malaria prevention and control according to the WHO malaria in pregnancy (MIP) strategy.</p> <p>Objective: List the elements of counseling women about the use of insecticide-treated nets (ITNs), intermittent preventive treatment (IPTp) and other means of malaria prevention.</p>	<p>Illustrated lecture</p> <p>Group activity</p>	<p>Reference Manual: Pages 27–32</p> <p>Presentation graphics: Slides 70–85</p> <p>Facilitator’s Guide: Activity Guide for Malaria Prevention Session</p>
15 minutes	<p>Break</p>		
30 minutes	<p>Objective: Describe the use of sulfadoxine-pyrimethamine (SP) for IPTp, including dosage, timing and contraindications; discuss IRS and other ways to prevent malaria.</p>	<p>Illustrated lecture</p> <p>Case Study 1: Conducting an ANC Visit</p>	<p>Reference Manual: Pages 32–36</p> <p>Presentation graphics: Slides 86–92</p> <p>Participant’s Handbook: Case Study 1: Conducting an ANC Visit</p>
20 minutes	<p>Objective: Assist the pregnant woman to prepare a birth preparedness and complication readiness plan.</p>	<p>Case Study 2: Conducting an ANC Visit</p>	<p>Participant’s Handbook: Case Study 2: Conducting an ANC Visit</p>
10 minutes	<p>Objective: Review day’s activities.</p>	<p>Facilitator reviews day’s activities and answers any questions.</p>	
<p>Assignment: Read Reference Manual. Compare Learning Guides for Conducting an Initial ANC Visit and for Conducting Follow-Up ANC Visits.</p>			

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE		
TIME	OBJECTIVES/ACTIVITIES	LEARNING METHODS
DAY 2, AM (240 minutes)		
10 minutes	Objective: Review day's activities.	Facilitator reviews day's agenda and answers any questions.
15 minutes	Objective: Discussion of Case Study 2	Facilitator leads discussion of answers to Case Study 2.
45 minutes	<p>Chapter 4: Diagnosis and Treatment of Malaria</p> <p>Objective: Explain why self-diagnosis/treatment may lead to treatment failure or recurring infection.</p> <p>Objective: Describe the types of diagnostic tests available for malaria and their advantages and disadvantages.</p> <p>Objective: Identify other causes of fever during pregnancy.</p> <p>Objective: List the signs and symptoms of uncomplicated and severe malaria in pregnancy.</p>	<p>Illustrated lecture</p> <p>Reference Manual: Pages 37–49</p> <p>Presentation graphics: Slides 93–124</p> <p>Facilitator's Guide: Brainstorming Activity for Malaria Diagnosis</p>
45 minutes	Objective: Describe the treatment for uncomplicated malaria.	<p>Illustrated lecture</p> <p>Discussion</p> <p>Case study</p> <p>Reference Manual: Pages 49–51</p> <p>Presentation graphics: Slides 125–138</p> <p>Participant's Handbook: Case Study 3: Treating a Client Who Has Malaria</p> <p>Learning Guide and Checklist for Treatment of Uncomplicated Malaria</p>
15 minutes	Break	

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE		
OBJECTIVES/ACTIVITIES	LEARNING METHODS	RESOURCES
110 minutes	<p>Objective: Conduct an ANC visit for a woman with signs and symptoms of uncomplicated malaria.</p>	<p>Group Activity</p> <p>Practice Simulated prenatal visit: Participants divide into teams of 3.</p> <ul style="list-style-type: none"> • Skilled provider • Pregnant woman • Observer <p>“Provider” conducts an ANC visit focusing on history and physical examination for signs and symptoms of uncomplicated malaria and its treatment following the steps in the Learning Guide for Treatment of Uncomplicated Malaria. “Observer” assesses performance using the corresponding Checklist.</p> <p>Participants change roles until each has played the role of a skilled provider.</p>
LUNCH (45 MINUTES)		
DAY 2, PM (175 MINUTES)		
75 minutes	<p>Objective: Explain the steps to take to refer a pregnant woman who has severe malaria.</p>	<p>Illustrated lecture</p> <p>Discussion</p> <p>Clinical drill</p>
30 minutes	<p>Objective: Discuss implications of including malaria prevention and treatment interventions.</p>	Group discussion
35 minutes	<p>Objective: Assess participants’ post-workshop knowledge.</p>	Complete Post-Workshop Questionnaire. Facilitator leads review and discussion of questionnaire answers.
15 minutes	<p>Objective: Evaluate workshop accomplishments with respect to objectives.</p>	Discussion
20 minutes	<p>Closing</p>	Present participants with certificates of attendance and close the workshop.
		<p>Facilitator’s Guide: Group Activity for Malaria Diagnosis and Treatment</p> <p>Participant’s Handbook: Learning Guide and Checklist for Treatment of Uncomplicated Malaria</p>
		<p>Reference Manual: Pages 51–53 Presentation graphics: Slides 139–142</p> <p>Facilitator’s Guide: Clinical Drill for Severe Malaria</p> <p>Facilitator’s Guide: Group Discussion: Implications for Practice</p> <p>Participant’s Handbook: Post-Workshop Questionnaire</p>
		<p>Facilitator’s Guide Sample Certificate of Attendance</p>

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP MODEL OUTLINE		
TIME	OBJECTIVES/ACTIVITIES	RESOURCES
OPTIONAL TIME FOR CLINICAL OBSERVATION AND PRACTICE		
DAY 1, AM (240 MINUTES)		
60 minutes	Objective: Orient participants to clinical practice facility.	Tour of Clinical Facilities: Conduct a tour of the facility where participants will observe and practice ANC visits. The tour should include brief presentations by clinic staff (clinic manager, counselor, health care provider) on clinic practices for the prevention and treatment of uncomplicated malaria.
180 minutes	Objective: Practice conducting initial and follow-up ANC visits focusing on prevention, diagnosis and treatment of uncomplicated malaria.	<p>Guided Clinical Activities</p> <p>If appropriate, divide participants into teams of 2 or 3. One participant will conduct an ANC visit, focusing on prevention, diagnosis and treatment of uncomplicated malaria. The other participant(s) will use the Checklists to follow the visit and assess provider's performance. Participants change roles until each has conducted an ANC visit and counseled the woman about the prevention and treatment of uncomplicated malaria.</p> <p>Participant's Handbook</p>
LUNCH (60 MINUTES)		
DAY 1, PM (180 MINUTES)		
90 minutes	Objective: Review selected cases from morning clinic session.	Clinical Conference Note: If there were no cases of uncomplicated malaria seen in the morning session, facilitator should obtain copies of client records (with the woman's name and identifying information deleted) to use for discussion. Review the client's presenting symptoms, diagnosis, treatment provided and referral, if any. Compare with content in MIP Reference Manual.
90 minutes	Objective: Describe the importance of keeping complete and accurate ANC records.	Facilitator's Handbook: Exercise for Record Keeping

LEARNING METHODS

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 *Prevention and Control of Malaria in Pregnancy* reference manual.

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

Presentation graphics are provided for the facilitator to use when giving an illustrated lecture. The content of these presentation graphics is drawn from the *Prevention and Control of Malaria in Pregnancy* reference manual. Each set corresponds to one chapter.

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

CASE STUDIES

Case studies help participants practice clinical decision-making skills. For each case study, there is a key listing the expected responses. The facilitator should be thoroughly familiar with these responses before introducing the case studies. Although the key contains “likely” answers, other answers provided by participants during the discussion may be equally acceptable. The technical content of the case studies is taken from the reference manual *Prevention and Control of Malaria in Pregnancy*.

ROLE PLAYS

Role plays help participants practice interpersonal communication skills. Each role play requires the participation of two or three participants, while the other participants observe the role play. Following completion of the role play, the facilitator asks questions to guide discussion.

SKILLS PRACTICE

This portion of the workshop focuses on observation and classroom practice of the skills needed to educate clients about malaria and recognize, treat and refer clients with malaria.

The learning guides contain the individual steps or tasks, in sequence (if necessary), required to perform a skill or activity in a standardized way. They outline the correct steps and the sequence in which they should be performed (skill acquisition), and measure progressive learning in small steps as the learner gains confidence and skill (skill competency).

The checklists focus only on the key steps or tasks and enable learners to practice assessing each other's overall performance of a particular skill or activity. Once learners become confident in performing the skill during classroom practice, they can use the checklists to rate each other's performance.

If the workshop includes clinical observation and practice sessions with clients, learners are grouped together in teams. One learner acts as the skilled provider and carries out the focused ANC visit while the other learner(s) observe(s) and use(s) the checklist to evaluate the "skilled provider's" performance. During this phase, the facilitator is always present in the clinic to supervise the initial client encounter for each learner.

CLINICAL DRILLS

Clinical drills provide learners with opportunities to observe and take part in an emergency rapid response system. Frequent drills help to ensure that each member of the emergency team knows her/his role and is able to respond **rapidly**. By the end of the workshop, participants should be able to conduct drills in their own facilities.

PRE-WORKSHOP QUESTIONNAIRE

The objective of the Pre-Workshop Questionnaire is to assist the facilitator and the participants by assessing what the participants, individually and as a group, know about malaria in pregnancy. This allows the facilitator to identify topics needing additional emphasis during the workshop. The individual results help the participants focus on their learning needs and also alert them to the content that will be presented in the workshop.

The relevant learning objectives are noted for each question.

PRE-WORKSHOP QUESTIONNAIRE ANSWER KEY

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

T or F

FOCUSED ANTENATAL CARE

- | | | |
|---|--------------|----------------------|
| 1. A minimum of four antenatal visits is advised for women who register for care late in pregnancy. | FALSE | Learning Objective 4 |
| 2. When providing health education, first address the woman's specific questions, problems or concerns. | TRUE | Learning Objective 2 |
| 3. Recognizing early signs of problems or disease is an essential part of focused antenatal visits. | TRUE | Learning Objective 2 |

MALARIA TRANSMISSION

- | | | |
|--|--------------|----------------------|
| 4. Flies can transmit malaria by landing on food to be eaten by pregnant women. | FALSE | Learning Objective 6 |
| 5. Malaria parasites can attack the baby's placenta and interfere with its function, leading to poor growth of the baby. | TRUE | Learning Objective 9 |
| 6. Women in their first pregnancy are at higher risk of developing complications of malaria in pregnancy when compared with women who have more than two babies. | TRUE | Learning Objective 9 |

MALARIA PREVENTION

- | | | |
|--|-------------|-----------------------|
| 7. Insecticide-treated nets reduce the number of mosquitoes in the house, both inside and outside the net. | TRUE | Learning Objective 12 |
| 8. Intermittent preventive treatment should be given to all pregnant women whether or not they have symptoms of malaria. | TRUE | Learning Objective 13 |

MALARIA TREATMENT

- | | | |
|--|--------------|-----------------------|
| 9. Changes in behavior such as drowsiness or confusion are symptoms of severe malaria. | TRUE | Learning Objective 16 |
| 10. Pregnant women who have clinical malaria should be given only paracetamol to avoid damage to the baby. | FALSE | Learning Objective 17 |

BRAINSTORMING ACTIVITY FOR FOCUSED ANTENATAL CARE

TIME NEEDED: (5–10 MINUTES)

Ask participants to name practices performed routinely in antenatal clinics and list them on a flipchart. Discuss each of these practices to determine their contribution to improved outcomes for the mother and her newborn. Encourage participants to talk about how to eliminate these practices in their own settings to make more time for focused ANC and counseling about birth planning and malaria. Some of the routine practices done for all women out of habit or tradition, regardless of gestational age or individual circumstances, which participants may include in their brainstorming are:

- Weighing
- Measuring height
- Checking for edema (it is normal for pregnant women to have dependent edema)
- Checking fetal position at every visit
- Performing vaginal examination at every visit (when a woman has no complaints)
- Scheduling antenatal visits:
 - Once per month for first and second trimesters
 - Every 2 weeks for third trimester
 - Every week starting at 36 weeks

DISCUSSION GUIDE FOR FOCUSED ANTENATAL CARE

TIME NEEDED: (5–10 MINUTES)

Have participants briefly discuss other factors affecting ANC services and attendance in their area or region. These may include things like cultural beliefs and other factors such as:

- Status of women
- Marital status: Pregnancy shameful if woman is not married
- Economy/economic status:
 - General economy of country/community
 - Economic well-being of family
 - Who controls finances in family/household
- General beliefs about pregnancy:
 - Pregnancy should not be revealed or discussed until evident
 - Taboos
 - Religious beliefs: ANC clinics may not be open during certain days or times
 - Men reluctant to participate in visits/counseling
 - Antenatal care not useful until late pregnancy
- Beliefs/perceptions about health facility or providers:
 - Waiting times/crowdedness
 - Availability of audio and/or visual privacy
 - Accessibility of facility/provider
 - Reputation of facility/provider
 - Experiences of peers/other women
 - Previous experience with ANC and/or specific facility/provider
 - Preference for traditional providers

ROLE PLAY FOR FOCUSED ANTENATAL CARE

PURPOSE

The purpose of the role play is to provide an opportunity for participants to understand the importance of individual counseling and health education, use of good interpersonal skills, and support/encouragement to the woman for seeking information.

DIRECTIONS

Select two participants to perform the following roles: *skilled provider* and *ANC client*. Give these participants a few minutes to prepare for the activity by reading the background information provided below. The remaining participants, who will observe and discuss the role play, also should read the background information.

ROLES

Skilled Provider: The provider is an experienced provider who has good interpersonal skills.

ANC Client: Ngone, a 21-year-old woman, who is pregnant for the first time. She is 28 weeks pregnant.

SITUATION

Ngone has come to the ANC clinic 5 days before her second antenatal appointment. She appears very anxious and explains that the midwife advised her to return if she had any concerns. She tells the provider that she has several questions about changes and discomforts in her body. Ngone describes the symptoms of one or two common discomforts of pregnancy (such as constipation or low back pain). The provider takes a targeted history and “performs” a targeted physical exam to rule out conditions requiring care beyond the scope of basic ANC. The provider determines that Ngone has some common discomforts of pregnancy and gives her the information necessary to deal with her symptoms.

POINTS FOR DISCUSSION

Discuss the importance of providing individual counseling information and health education in order to meet the needs of the client, using good interpersonal skills, and supporting and encouraging the woman. Reinforce the importance of describing danger signs and noting any discomforts or concerns on the antenatal record for follow-up at the next visit.

LEARNING GUIDE FOR INITIAL ANTENATAL CARE VISIT

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

- 1 Needs Improvement:** Step not performed correctly and/or out of sequence (if necessary) or is omitted
- 2 Competently Performed:** Step performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step efficiently and precisely performed in proper sequence (if necessary)

Participant's Name: _____ **Date:** _____

LEARNING GUIDE FOR INITIAL ANTENATAL CARE VISIT				
STEP/TASK	CASES			
GETTING READY				
1. Prepare the necessary equipment and supplies.				
2. Greet the woman respectfully and with kindness.				
3. Ask if she has or has recently had danger signs or symptoms and address them immediately: <ul style="list-style-type: none"> ● Vaginal bleeding ● Severe headache/blurred vision ● Convulsions/loss of consciousness ● Difficulty breathing ● Fever ● Severe abdominal pain ● Labor pains 				
4. If there are none, ask about her general well-being and any specific problem she wants to address during this visit.				
5. Listen to the woman and respond attentively to her questions and concerns.				
6. Ask about any previous ANC during this pregnancy and where she has received it.				
7. Explain what you are going to do and obtain verbal consent.				
COMPREHENSIVE HISTORY-TAKING				
1. Obtain the woman's personal information: <ul style="list-style-type: none"> ● Name ● Age ● Phone number and address ● Purpose of visit ● Transportation ● Income/financial support ● Number of previous pregnancies and births 				

LEARNING GUIDE FOR INITIAL ANTENATAL CARE VISIT				
STEP/TASK	CASES			
2. Obtain the woman's menstrual and contraceptive history: <ul style="list-style-type: none"> • Date of her last normal menstrual period • Previous contraceptive use • Number of children desired 				
3. Calculate estimated date of childbirth.				
4. Obtain the history of the present pregnancy: <ul style="list-style-type: none"> • Fetal movements • Any problems • Previous ANC during this pregnancy 				
5. Obtain information about the woman's daily habits and lifestyle: <ul style="list-style-type: none"> • Nutrition • Activity • Use of harmful substances (e.g., alcohol, tobacco) • Use of ITNs 				
6. Obtain the woman's obstetric history: <ul style="list-style-type: none"> • Previous complications during pregnancy, birth or postpartum period • Problems breastfeeding 				
7. Obtain information about the woman's medical history: <ul style="list-style-type: none"> • HIV status • History of/treatment for sexually transmitted infections (STIs) • History of anemia • Chronic illness (e.g., tuberculosis, diabetes, etc.) • Previous hospitalizations or surgery (e.g., cesarean section) • Current drugs/medications; history of IPTp this pregnancy and date of last dose • Date of last tetanus toxoid immunization 				
PHYSICAL EXAMINATION				
1. Allow the woman to empty her bladder; save urine specimen if needed.				
2. Wash hands thoroughly with soap and water and dry them with a clean, dry cloth or air dry.				
General Examination				
3. Perform a focused head-to-toe examination: <ul style="list-style-type: none"> • Note gait and movements • General appearance (cleanliness) • Skin • Color of conjunctiva 				
4. Measure her blood pressure.				
5. Inspect breasts for obvious abnormalities (inverted nipples, lesions).				
Abdominal Examination				
6. Inspect the abdomen and note the presence of surgical scars.				
7. Palpate the abdomen and note: <ul style="list-style-type: none"> • Fundal height • Fetal movements (if any) • Fetal position (at or after 36 weeks gestation) • Fetal heart tones (after 20 weeks gestation) 				

LEARNING GUIDE FOR INITIAL ANTENATAL CARE VISIT				
STEP/TASK	CASES			
External Genital Examination				
8. Wash hands thoroughly with soap and water and dry with clean dry towel or air dry.				
9. Put new examination or high-level disinfected surgical gloves on both hands.				
10. Explain to the woman what is to be done and why. Respectfully obtain her verbal consent.				
11. Lift the drape to uncover the genitals.				
12. Inspect the vulva and vagina for: <ul style="list-style-type: none"> ● Rashes ● Abnormal swellings ● Ulcers ● Vaginal bleeding ● Vaginal discharge ● Episiotomy scars 				
13. Palpate the Bartholin's and Skene's glands and check for swelling and discharge.				
14. Perform speculum examination, if necessary.				
15. Perform a bimanual examination, if necessary.				
16. Cover the genitals at the completion of the exam.				
POSTEXAMINATION TASKS				
1. Before removing gloves, dispose of waste materials in a leak-proof container or plastic bag.				
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.				
3. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning inside out. <ul style="list-style-type: none"> ● If disposing of gloves, place them in a leak-proof container or plastic bag. ● If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination. 				
4. Wash hands thoroughly with soap and water and dry with clean, dry cloth or air dry.				
5. Help the woman into a sitting position.				
6. Tell the woman about your findings and the next steps.				
7. If a rubber sheet was used, wipe with 0.5% chlorine solution.				
TESTING				
1. Obtain blood for: <ul style="list-style-type: none"> ● Hemoglobin test ● RPR test for syphilis ● HIV testing (if woman has been counseled and does not "opt out") 				
2. Obtain a specimen of urine and send for analysis to detect presence of protein.				

LEARNING GUIDE FOR INITIAL ANTENATAL CARE VISIT				
STEP/TASK	CASES			
COUNSELING AND HEALTH EDUCATION				
1. Educate the woman about nutritional support.				
2. Discuss the following with the woman about her birth plan: <ul style="list-style-type: none"> ● Who will attend the birth (explain importance of skilled provider) ● Where she plans to deliver ● Transportation ● Funds ● Decision-making ● Support ● Blood donor ● Items needed ● Danger signs 				
3. Educate the woman about: <ul style="list-style-type: none"> ● Use of harmful substances ● Personal hygiene ● Rest and activity ● Sexual relations and safer sex ● Child spacing ● Early and exclusive breastfeeding ● Prevention of malaria in pregnancy: <ul style="list-style-type: none"> – What causes malaria and how it is transmitted – Effects of malaria on mothers and babies – Benefits of sleeping under insecticide-treated nets – Benefits of intermittent preventive treatment – Danger signs of uncomplicated and severe malaria – Importance of seeking immediate care when experiencing symptoms of malaria – Need to complete the course of anti-malarial drugs 				
4. Give immunizations and other prophylaxis: <ul style="list-style-type: none"> ● Tetanus toxoid immunization (if not already done) ● Iron 60 mg plus folate 400 µg daily (or according to country protocols) ● Preventive treatment of malaria with sulfadoxine-pyrimethamine according to country protocol (e.g., two doses after quickening and at least 1 month apart) ● DO NOT GIVE SULFADOXINE-PYRIMETHAMINE BEFORE 16 WEEKS ● Directly observe the woman swallowing the tablets to ensure she has taken the drugs. ● Provide prophylaxis for hookworm infection: <ul style="list-style-type: none"> – 500 mg of mebendazole as a one-time dose, OR – 100 mg twice daily for 3 days ● Vitamin A according to country protocol ● Iodine according to country protocol 				
5. Discuss her schedule of return visits: <ul style="list-style-type: none"> ● Around 20–24 weeks ● Between 28–32 weeks ● Around 36 weeks ● Unscheduled visits can occur at any time (if complications arise or she has concerns) 				
6. Record all findings and medications prescribed/dispensed in the woman's ANC card and clinic card.				

CHECKLIST FOR INITIAL ANTENATAL CARE VISIT

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

Satisfactory: Performs the step or task according to the standard procedure or guidelines

Unsatisfactory: Unable to perform the step or task according to the standard procedures or guidelines

Not Observed: Step or task not performed by learner during evaluation by facilitator

Participant's Name: _____ Date Observed: _____

CHECKLIST FOR INITIAL ANTENATAL CARE VISIT					
STEP/TASK	CASES				
GETTING READY					
1. Prepare the necessary equipment and supplies.					
2. Greet the woman respectfully and with kindness.					
3. Ask if she has experienced any danger signs or symptoms and address them immediately. Ask about her general well-being.					
4. Listen to the woman and respond attentively to her questions and concerns.					
5. Ask about any previous antenatal care during this pregnancy.					
6. Explain what you are going to do and obtain her verbal consent.					
STEP/TASK PERFORMED SATISFACTORILY					
COMPREHENSIVE HISTORY-TAKING					
1. Obtain the woman's personal information.					
2. Obtain the woman's menstrual and contraceptive history.					
3. Calculate the estimated date of childbirth.					
4. Obtain the history of the present pregnancy.					
5. Obtain information about the woman's daily habits and lifestyle.					
6. Obtain the woman's obstetric history.					
7. Obtain the woman's medical history.					
STEP/TASK PERFORMED SATISFACTORILY					
PHYSICAL EXAMINATION					
1. Ask the woman to empty her bladder. Save urine specimen, if needed.					
2. Wash hands thoroughly.					
General Examination					
3. Perform a focused head-to-toe examination. Measure her blood pressure.					
4. Inspect her breasts.					

CHECKLIST FOR INITIAL ANTENATAL CARE VISIT					
STEP/TASK	CASES				
Abdominal Examination					
5. Inspect the abdomen.					
6. Palpate the abdomen and note fundal height, fetal movements, position and heart tones.					
External Genital Examination					
7. Wash hands thoroughly and put on examination or high-level disinfected surgical gloves.					
8. Inspect the vulva and vagina for any abnormalities.					
9. Palpate the Bartholin's and Skene's glands for any swelling or discharge.					
10. Perform a speculum and bimanual examination, if necessary.					
STEP/TASK PERFORMED SATISFACTORILY					
POSTEXAMINATION TASKS					
1. Dispose of waste materials in a leak-proof container or plastic bag.					
2. Remove gloves and discard them in a leak-proof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.					
3. Wash hands thoroughly.					
STEP/TASK PERFORMED SATISFACTORILY					
TESTING					
1. Obtain blood for hemoglobin, RPR test and HIV testing (if counseled and does not "opt out").					
2. Obtain urine specimen to check for protein.					
STEP/TASK PERFORMED SATISFACTORILY					
COUNSELING AND HEALTH EDUCATION					
1. Educate the woman about nutritional support.					
2. Discuss the birth plan with her.					
3. Educate the woman about hygiene, breastfeeding, birth spacing and preventing malaria infection.					
4. Give immunizations and other prophylaxis (e.g., tetanus toxoid, iron/folate, SP, etc.).					
5. Discuss schedule of return visits.					
6. Record all findings and medications prescribed/dispensed in the woman's ANC card and clinic card.					
STEP/TASK PERFORMED SATISFACTORILY					

LEARNING GUIDE FOR FOLLOW-UP ANTENATAL CARE VISITS

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

- 1 Needs Improvement:** Step not performed correctly and/or out of sequence (if necessary) or is omitted
- 2 Competently Performed:** Step performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step efficiently and precisely performed in proper sequence (if necessary)

Participant's Name: _____ **Date:** _____

LEARNING GUIDE FOR FOLLOW-UP ANTENATAL CARE VISITS				
STEP/TASK	CASES			
GETTING READY				
1. Prepare the necessary equipment and supplies.				
2. Greet the woman respectfully and with kindness.				
3. Ask if she has or has recently had danger signs or symptoms and address them immediately: <ul style="list-style-type: none"> • Vaginal bleeding • Severe headache/blurred vision • Convulsions/loss of consciousness • Difficulty breathing • Fever • Severe abdominal pain • Labor pains 				
4. If there are none, ask about her general well-being and any specific problem she wants to address during this visit.				
5. Listen to the woman and respond attentively to her questions and concerns.				
HISTORY-TAKING				
1. Ask if the woman has had any problems since her last visit.				
2. Ask whether her personal information or daily habits have changed since the last visit.				
3. Ask the woman if she has received care from another provider.				
4. Ask the woman if she has been unable to carry out any part of the plan of care.				
PHYSICAL EXAMINATION				
1. Wash hands thoroughly with soap and water and dry with clean, dry cloth or air dry.				

LEARNING GUIDE FOR FOLLOW-UP ANTENATAL CARE VISITS				
STEP/TASK	CASES			
General Examination				
2. Assess her general well-being: <ul style="list-style-type: none"> • Gait and movements • General appearance (cleanliness) • Skin • Color of conjunctiva 				
3. Measure her blood pressure.				
Abdominal Examination				
4. Inspect the abdomen and note the presence of surgical scars.				
5. Palpate the abdomen and note: <ul style="list-style-type: none"> • Fundal height • Fetal movements (if any) • Fetal position (at or after 36 weeks gestation) • Fetal heart tones (after 20 weeks gestation) 				
External Genital Examination				
6. Perform an external genital examination, if needed. (Wear examination or high-level disinfected surgical gloves.)				
7. Perform a speculum and bimanual examination, if needed.				
POSTEXAMINATION TASKS				
1. Dispose of any waste materials in a leak-proof container or plastic bag.				
2. Place all instruments in 0.5% chlorine solution for 10 minutes for decontamination.				
3. Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out. <ul style="list-style-type: none"> • If disposing of gloves, place them in a leak-proof container or plastic bag. • If reusing surgical gloves, submerge them in 0.5% chlorine solution for 10 minutes for decontamination. 				
4. Wash hands thoroughly with soap and water and dry with clean dry towel or air dry.				
TESTING				
1. Conduct tests as indicated or needed (hemoglobin, HIV).				
COUNSELING AND HEALTH EDUCATION				
1. Educate the woman about nutritional support.				
2. Discuss with the woman about her birth plan: <ul style="list-style-type: none"> • Who will attend delivery (explain importance of skilled provider) • Where she plans to deliver • Transportation • Funds • Decision-making • Support • Blood donor • Items needed • Danger signs 				

LEARNING GUIDE FOR FOLLOW-UP ANTENATAL CARE VISITS				
STEP/TASK	CASES			
<p>3. Educate the woman about:</p> <ul style="list-style-type: none"> ● Use of harmful substances ● Personal hygiene ● Rest and activity ● Sexual relations and safer sex ● Child spacing ● Early and exclusive breastfeeding ● Control of malaria in pregnancy: <ul style="list-style-type: none"> – What causes malaria and how it is transmitted – Effects of malaria on mothers and babies – Benefits of sleeping under insecticide-treated nets – Benefits of intermittent preventive treatment – Danger signs of uncomplicated and severe malaria – Importance of seeking immediate care when experiencing symptoms of malaria – Need to complete the course of anti-malarial drugs 				
<p>4. Give immunizations and other prophylaxis:</p> <ul style="list-style-type: none"> ● Tetanus toxoid immunization (according to schedule) ● Iron 60 mg plus folate 400 µg daily (or according to country protocol) ● Preventive treatment for malaria with sulfadoxine-pyrimethamine if it has been at least one month since first dose (for a total of two doses after quickening) <ul style="list-style-type: none"> – Directly observe the woman swallowing the tablets to ensure she has taken the drugs. ● Provide prophylaxis for hookworms, as appropriate <ul style="list-style-type: none"> – Mebendazole 500 mg one-time dose, OR – Mebendazole 100 mg twice daily for 3 days ● Vitamin A according to country protocol ● Iodine according to country protocol 				
<p>5. Discuss her schedule of return visits:</p> <ul style="list-style-type: none"> ● Around 20–24 weeks ● Around 28–32 weeks ● Around 36 weeks ● Unscheduled visits can occur at any time (if complications arise or she has concerns) 				
<p>6. Record all findings and medications prescribed/dispensed in the woman's ANC card and clinic card.</p>				

CHECKLIST FOR FOLLOW-UP ANTENATAL CARE VISITS

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

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Participant's Name: _____ **Date Observed:** _____

CHECKLIST FOR FOLLOW-UP ANTENATAL CARE VISITS				
STEP/TASK	CASES			
GETTING READY				
1. Prepare the necessary equipment and supplies.				
2. Greet the woman respectfully and with kindness.				
3. Ask if she has experienced any danger signs or symptoms and address them immediately. Ask about her general well-being.				
4. Listen to the woman and respond attentively to her questions and concerns.				
5. Ask about any previous antenatal care during this pregnancy.				
STEP/TASK PERFORMED SATISFACTORILY				
HISTORY-TAKING				
1. Ask the woman whether she has had any problems since her last visit.				
2. Ask whether her personal information or daily habits have changed and whether she has been unable to carry out any part of the plan of care. Also, ask whether she has received care from another provider.				
STEP/TASK PERFORMED SATISFACTORILY				
PHYSICAL EXAMINATION				
1. Wash hands thoroughly.				
2. Perform a focused head-to-toe examination. Measure her blood pressure.				
3. Inspect the abdomen.				
4. Palpate the abdomen and note fundal height, fetal movements, position, and heart tones.				
5. Perform an external genital examination, if needed.				
6. Perform a speculum and bimanual examination, if needed.				
STEP/TASK PERFORMED SATISFACTORILY				

CHECKLIST FOR FOLLOW-UP ANTENATAL CARE VISITS				
STEP/TASK	CASES			
POST EXAMINATION TASKS				
1. Dispose of waste materials in a leak-proof container or plastic bag.				
2. Remove gloves and discard them in a leak-proof container or plastic bag if disposing of or decontaminate them in 0.5% chlorine solution if reusing.				
3. Wash hands thoroughly.				
STEP/TASK PERFORMED SATISFACTORILY				
TESTING				
1. Conduct tests as indicated or needed.				
STEP/TASK PERFORMED SATISFACTORILY				
COUNSELING AND HEALTH EDUCATION				
1. Educate the woman about nutritional support.				
2. Discuss with the woman about her birth plan.				
3. Educate the woman about hygiene, breastfeeding, and preventing malaria infection.				
4. Give immunizations and other prophylaxis (e.g., tetanus toxoid, iron/folate, SP, etc.).				
5. Discuss schedule of return visits.				
6. Record all findings and medications prescribed/dispensed in the woman's ANC card and clinic card.				
STEP/TASK PERFORMED SATISFACTORILY				

EXERCISE FOR RECORD KEEPING

This exercise may be used as a small or large group activity, or as an evening assignment to be discussed as a group the next day.

Small group activity. Participants should read the case scenario individually and answer the questions as a group. Groups will share and discuss their answers.

Large group activity. Participants should read the case scenario individually. Brainstorm and discuss their answers.

Assignment. Participants should read the case scenario and answer the questions. The next day, the facilitator will lead a group discussion about the answers.

CASE SCENARIO

Jasmine is 21 years old and is about 20 weeks pregnant. This is her second pregnancy. She had one spontaneous abortion. Jasmine goes to the clinic for her first ANC visit. She has not experienced any problems during this pregnancy.

Jasmine has never had any serious disease in the past. The first day of her last menstrual period was about 5 months ago. Her periods had been regular and lasted for about 4 days. Jasmine's body temperature is normal, her blood pressure is 120/80 mm Hg and her pulse is 80 beats per minute. Jasmine's conjunctivae are slightly pale. She says that she has been bitten many times by mosquitoes.

The health care provider palpates her abdomen and finds her uterus at the level of the umbilicus. Jasmine states that she feels the baby's movements. These findings confirm a gestational age of 20 weeks.

The health care provider completes Jasmine's physical examination and gives her the first dose of tetanus toxoid immunization and some iron tablets. The provider also gives her three tablets of sulfadoxine-pyrimethamine (SP) tablets for prevention of malaria, which Jasmine swallows with a cup of clean water as the provider observes. The provider tells Jasmine that she will receive a total of two doses of intermittent preventive treatment (IPTp) during the pregnancy to decrease the risk of getting malaria. The health care provider explains the possible complications that can arise with the mother and baby if the mother contracts malaria while pregnant. The health care provider emphasizes the need to use insecticide-treated nets (ITNs) every night to avoid being bitten by mosquitoes that carry malaria.

The health care provider informs Jasmine about the next ANC visit. Jasmine will go to her mother's home for 6 weeks. The health care provider and Jasmine agree that the next visit will be around 24–28 weeks of pregnancy, or earlier if Jasmine experiences danger signs.

QUESTIONS

1. Is it necessary for the provider to fill out information about Jasmine's visit in any register or individual record forms? Why or why not?

Yes, the provider should complete whatever individual records and registers are routinely used in the health facility. Information should include findings about the woman's medical history, results of her physical exam, and all medications and treatments given to the woman, such as tetanus toxoid injection, iron/folate tablets and IPTp to prevent malaria. Counseling provided about important topics like malaria in pregnancy should be noted as well. This is the best way for all providers to ensure that women are receiving appropriate and complete care during their pregnancies.

2. How would the provider benefit by maintaining information about Jasmine? How would Jasmine benefit? What is the benefit to the district health management team?

When the provider completes the record with the dates and results of Jasmine's medical history and physical exam, she will supply vital information for use by all the skilled providers who will take care of Jasmine for the entire antenatal period, as well as during childbirth and the postpartum period. This information will help to correctly determine when to give the next dose of tetanus toxoid and the next dose of IPTp. This benefits Jasmine because she will receive the correct medications at the appropriate times, thus decreasing her risk of acquiring tetanus and malaria. The district health management team can perform audits of these records to make sure that providers are giving medications at the proper times in pregnancy and in the appropriate amounts. They can also ascertain that women are receiving important counseling about preventive measures such as the use of ITNs, and thus be able to gather statistics on the number of pregnant women in their district who are benefiting from these interventions.

3. Identify all of the information that the provider should record:
 - The woman's medical history, past obstetrical history and date of last menstrual period in order to calculate gestational age, as well as whether the woman feels fetal movement.
 - Information from the physical exam, especially in relation to the size of the uterus to confirm gestational age.
 - Counseling given to the mother about how to avoid malaria in pregnancy by taking IPTp and using ITNs. Also, counseling given in relation to birth preparedness and complication readiness.
 - Medications and treatments given, such as tetanus toxoid, iron/folate and IPTp.
 - Identification of problems and treatment provided; documentation of any referrals made.
 - Date of next antenatal care visit.

GROUP DISCUSSION FOR MALARIA TRANSMISSION

DIRECTIONS

Participants should read the question and list their responses individually. The facilitator asks participants to share their responses and leads the discussion.

QUESTION

An 18-year-old woman who is 26 weeks pregnant with her first child has come to the clinic to register. She tells you that she heard on the radio that malaria can cause problems during pregnancy. In the space provided below, list at least four key issues you will discuss with this young woman about malaria in pregnancy and why.

POSSIBLE RESPONSES

Responses should focus on counseling points outlined in the chapter. Asking why participants would include these points helps them to understand the issues. Possible answers include:

1. Pregnant women (especially those in their first or second pregnancies) are at higher risk of getting malaria.

Rationale: These women especially need IPTp to avoid malaria.

2. Pregnant women with malaria may have no symptoms.

Rationale: A pregnant woman may have malaria parasites in her blood but not have symptoms of malaria. If the woman does not receive treatment, the parasites in her blood will attack the placenta and cause problems for the baby. IPTp will prevent the parasites from attaching to the placenta so that the baby develops normally.

3. Malaria causes maternal anemia.

Rationale: Severe anemia is a major cause of maternal death and causes low birth weight in babies.

4. Malaria can cause preterm birth or low birth weight.

Rationale: Preterm and low birth weight babies have a much higher risk of dying than full-term and normal weight babies. Low birth weight is the single greatest risk factor for infant death during the first month of life.

5. HIV-infected women have a higher risk of getting malaria than HIV-negative women.

Rationale: HIV infection makes it easier for a woman to get malaria.

6. Malaria can be prevented and treated.

Rationale: Malaria in pregnancy can cause many problems for both the mother and baby, but it can be prevented and treated. IPTp is recommended for all pregnant women after 16 weeks gestation. IPTp is easy to administer and does not cost a lot. A woman with malaria in pregnancy should see a skilled provider for treatment. Teaching women ways of preventing malaria can help them avoid life-threatening problems for themselves and their unborn children.

ACTIVITY GUIDE FOR MALARIA PREVENTION SESSION

The facilitator may choose one or more of the following activities to supplement the illustrated lecture on malaria prevention.

GROUP DISCUSSION

- Participants share experiences of the most common ways to repel mosquitoes in their home regions. Talk about what does and what does not work.
- Brainstorm common reasons given by clients for not using ITNs and list appropriate responses. (This discussion could be done as a small group activity.)
- If participants are from the same country or city, identify places where women can buy nets or receive them free of charge. Include type and cost.
- Include long-lasting nets (LLINs) in the discussion if applicable in your setting.

ROLE PLAY

The purpose of the role play is to discuss common reasons given by clients for not using ITNs. One participant acts as a client and gives common reasons or excuses for not using ITNs. Another participant acts as the provider and responds to each reason or excuse.

CASE STUDY 1: CONDUCTING AN ANC VISIT

ANSWER KEY

DIRECTIONS

Divide the participants into small groups. Participants should read and analyze this case study individually and then answer the case study questions as a group. The groups should then share their answers.

CASE STUDY

Hawa is 24 years old. She is 4 months pregnant with her second child. Her last pregnancy was 2 years ago, and uneventful. She lives in a small town, about 5 km from the maternity clinic. She is a part-time teacher at a nursery school 3 km from her home. Her husband works 45 km away, and returns home late in the evening. Hawa arrives today for her first ANC visit with a complaint of slight dizziness. She has walked to the clinic.

BASIC ASSESSMENT

- 1. What will you include in your initial assessment of Hawa, and why?**
 - Greet Hawa respectfully and with kindness in order to establish rapport.
 - To identify and treat life-threatening illnesses as rapidly as possible, perform a quick check to determine her condition. If she has no danger signs such as vaginal bleeding or severe headache, she can be seen for routine ANC.
 - Tell her what will happen during this visit. Listen to her carefully and answer her questions in a calm and reassuring way. She will be more likely to share her concerns if she knows that she is being listened to.
 - Ask questions to determine: the onset and duration of her dizziness; whether it has occurred previously; accompanying symptoms; and relief measures taken. A targeted history helps you to gather the most pertinent information about the current problem.
 - Because it is her first visit, obtain a complete history, including date of last menstrual period to confirm gestational age, and record your findings.

2. What particular aspects of Hawa’s physical examination will help you make an evaluation or identify her problems/needs, and why?

- Measure Hawa’s temperature, blood pressure and pulse to help determine the degree of illness.
- Check the color of her conjunctiva for signs of anemia.
- Check her eyes, mouth, tongue and skin for signs of dehydration.
- Palpate her abdomen to help determine gestational age and assess whether it corresponds to the gestational age based on the date of her last menstrual period.

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

- Because this is Hawa’s first ANC visit, check her hemoglobin, and perform a test for syphilis. Perform a test for HIV after counseling takes place, if she does not “opt out.”

EVALUATION

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

Hawa’s temperature is 37° C, her blood pressure is 110/72 mm Hg, and her pulse is 84 beats per minute. Her hemoglobin is 11 g/dL. She states that she left home this morning without eating breakfast so she would not be late for her ANC visit. She had slight nausea earlier in her pregnancy but this has stopped. She explains that she eats irregular meals due to her work and the distances she must walk. Hawa has felt fetal movement (quickenings) for the last several days.

Her physical examination is normal, and the size of her uterus corresponds to the gestational age based on last menstrual period.

4. Based on these findings, what is Hawa’s evaluation, and why?

- Since Hawa’s general appearance, vital signs, and hemoglobin are normal, Hawa’s symptoms are most consistent with dizziness caused by walking a long distance without eating enough food.

CARE PROVISION

5. **Based on your diagnosis, what is your plan of care for Hawa, and why?**
 - Reassure Hawa that her pregnancy is progressing normally.
 - Counsel her about the need to eat regular, nutritious meals to avoid further episodes of dizziness. Give her some suggestions as to how she can do this, given her work and the long distances she walks (e.g., packing meals and snacks to take with her).
 - Because she is 16 weeks pregnant and has felt fetal movement, give her the first dose of SP (three tablets). Watch her take the tablets. Counsel Hawa about malaria in pregnancy, prevention of malaria, including the use of ITNs, and about danger signs that could indicate malaria. Discuss the importance of her returning for her next IPTp dose. Ways to prevent malaria include: covering doors and windows at night; wearing protective clothing that cover arms and legs; using mosquito repellent and coils; spraying rooms with insecticide; etc.
 - Provide testing for syphilis and HIV according to local protocols; provide other preventive measures such as iron/folate tablets, tetanus toxoid immunization and presumptive treatment for hookworm.
 - Involve her in her own care by counseling her about other danger signs, and what to do if they occur.
 - Begin to discuss with her the need for a birth preparedness and complication readiness plan. Ask her where she wants the birth to take place and who will attend the birth. Explain to her that it is important to have transportation to the place of birth or to a referral center if there are complications. Discuss the need to have funds set aside to pay for this transportation.
 - Give Hawa an appointment for her second ANC visit (between 24 and 28 weeks). Tell her to come to the clinic immediately if she has any danger signs.
 - Record your findings and the IPTp treatment on the ANC card and/or antenatal record.

FOLLOW-UP

Hawa returns for her second ANC visit at 24 weeks. She reports no danger signs, and states that she is eating nutritious foods regularly throughout the day. She has had no further episodes of dizziness. She sleeps under an ITN every night. She and her husband have asked a neighbor with a car if they would be willing to take Hawa to the health center where she has chosen to have her baby. This same neighbor would be willing to take her to the district hospital in case of complications.

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

- Perform a targeted history and physical exam. Provide care based on these findings.
- Congratulate Hawa on her healthy behaviors, particularly the changes she has made in her diet and sleeping consistently under an ITN.
- Congratulate Hawa for finding transportation to health facilities at the time of her baby's birth. Note this plan on her ANC card and/or antenatal record.
- Assist Hawa in the development of her birth preparedness and complication readiness plans by continuing to discuss them with her. Note any decisions in the antenatal record.
- Since it has been at least a month since her last visit, give Hawa three tablets of SP today and watch her take the tablets. Record the information on her ANC card and/or antenatal record.
- Give Hawa health education information based on her needs and any questions she has. Provide testing for syphilis and HIV according to local protocols and give tetanus toxoid immunization and iron/folate as needed. Discuss danger signs and what to do if they occur.
- Give Hawa an appointment for another ANC visit at around 32 weeks; record the appointment on her ANC card and/or antenatal record.
- Thank Hawa for coming to the clinic.

CASE STUDY 2: CONDUCTING AN ANC VISIT

ANSWER KEY

DIRECTIONS

Divide the participants into small groups. Participants should read and analyze this case study individually and then answer the case study questions as a group. The groups should then share their answers.

CASE STUDY

Thandi is 19 years old and has been married for 1 year. She arrives for her first visit to the ANC clinic 20 weeks after her last menstrual period. Thandi's husband works in a distant city and is home only on weekends. His mother lives nearby and comes often to check on Thandi. Her mother-in-law has already advised her son and Thandi to have the traditional birth attendant, who lives very close, attend the birth.

BASIC ASSESSMENT

- 1. What will you include in your initial assessment of Thandi, and why?**
 - Greet Thandi respectfully and with kindness in order to establish rapport.
 - To identify and treat life-threatening illnesses as rapidly as possible, perform a quick check to determine her condition. If she has no danger signs such as bleeding or severe headache, she can be seen for routine ANC.
 - Tell her what will happen during this visit. Listen to her carefully and answer her questions in a calm and reassuring way. She will be more likely to share her concerns if she knows that she is being listened to.
 - Because this is Thandi's first ANC visit, obtain a complete history and record your findings on the ANC card and/or antenatal record. A complete history will enable you to identify and manage problems immediately. It will also help you tailor health messages to Thandi's needs.
 - Calculate the gestational age based on her last menstrual period.
 - Ask Thandi about where she wants to give birth and whom she wants to attend the birth. Discuss how decisions are made in her family and the suggestion made by her husband and mother-in-law to have the TBA as the birth attendant. Ask whether her mother-in-law is willing

to come to the antenatal clinic with Thandi during a visit. Ask whether she has made arrangements for transportation to the place of birth or to a referral hospital if there are complications. Ask whether she has funds to pay for care during birth or for emergency care. Asking these questions will assist Thandi in formulating a birth plan and making preparations for possible complications.

2. What particular aspects of Thandi’s physical examination will help you make an evaluation or identify her problems/needs, and why?

- Perform a physical examination and record the results on the ANC card and/or antenatal record. Findings from the physical exam will help you to plan for Thandi’s care.
- Palpate the abdomen to assess uterine size and whether it is consistent with the gestational age you calculated based on the date of the last menstrual period. Listen to fetal heart tones.

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

- Obtain routine laboratory tests (RPR, hemoglobin and, if she consents, testing for HIV after counseling unless she “opts out”) and record the results on the ANC card and/or antenatal record. Abnormal test results should be treated according to local protocols.

EVALUATION

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

Thandi’s history and physical examination reveal no abnormalities. The size of the uterus is compatible with the date of her last menstrual period (20 weeks). Fetal heart tones are 144 beats per minute. Her RPR is negative, and her hemoglobin is 10.5 g/dL.

4. Based on these findings, what is Thandi’s diagnosis, and why?

- Thandi’s pregnancy is progressing normally, except for mild anemia (mild anemia is defined by a hemoglobin of 7–11 g/dL).
- Thandi needs information about how to plan for the birth, including the need to have a skilled provider attend the birth.
- Based on the information gathered in the initial assessment, she may also need to begin planning for possible complications, including decision-making, funds and transportation.

CARE PROVISION

5. **Based on your diagnosis, what is your plan of care for Thandi, and why?**
 - Provide Thandi with basic ANC, including testing for RPR and HIV according to local protocols, iron/folate tablets, counseling about nutrition to increase sources of iron in her diet, and tetanus toxoid immunization if needed.
 - Give her the first dose of IPTp. Watch her take the tablets. Counsel Thandi about malaria in pregnancy, importance of using ITNs and other preventive measures and about danger signs that could indicate malaria. Advise her that she will need to have her second IPTp dose at her next visit, or at least one month later.
 - Counsel her about danger signs and what to do if they occur so that possible problems are identified and treated immediately.
 - Begin to discuss with her the need for a birth preparedness and complication readiness plan. Suggest that her mother-in-law accompany her to the next antenatal visit so that she, too, can learn of the importance of these plans.
 - Give Thandi other information based on her questions and individual needs. Individualizing health messages are an important component of focused ANC.
 - Give Thandi an appointment for her second antenatal visit (between 24 and 28 weeks of pregnancy). Tell her to come to the clinic immediately if she has any danger signs.
 - Thank Thandi for coming to the clinic.

FOLLOW-UP

Thandi returns to the antenatal clinic at 28 weeks of pregnancy, accompanied by her mother-in-law. She states that she feels well, and the results of her history and physical examination are normal. She is given another dose of SP (three tablets) and observed while taking it. She uses an ITN every night. She states that she and her mother-in-law have discussed the provider's suggestions about making a birth plan and using a skilled provider at the time of birth. Her mother-in-law would like to ask the provider some questions about these points.

6. **Based on these findings, what is your continuing plan of care for Thandi, and why?**
 - Listen respectfully to Thandi and her mother-in-law as they discuss the birth plan and use of a skilled provider. Answer their questions as fully as possible and give them time to make their decisions.

- Suggest making a plan for complication readiness, including setting aside money for emergency transport and making arrangements for transportation. Note on the ANC card and/or antenatal record any decisions made at this visit about the birth plan, use of skilled provider, and complication readiness plan.
- Provide health education according to Thandi's specific needs and answer all of her questions about the pregnancy. Review danger signs and what to do if they occur. This will reinforce information given in the previous visit.
- Give Thandi an appointment for her third antenatal visit (between 32 and 36 weeks) and record it on her ANC card and/or antenatal record.
- Thank her for coming to the clinic.

GROUP DISCUSSION

Based on the case study above, the facilitator can lead a group discussion about how to build time for discussing birth preparedness/complication readiness plans into the antenatal sessions. Facilitators and participants can share examples from their experiences and brainstorm about the changes they could make in their sites to encourage focused ANC and birth preparedness/ complication readiness planning.

BRAINSTORMING ACTIVITY FOR MALARIA DIAGNOSIS

This activity may be used with the entire group of participants or as a small group activity. If used as a small group activity, allow time for the groups to share their results.

- On a piece of flipchart paper, make two columns: one titled “Complaints” and one titled “History/Physical,” as shown below.
- Ask participants to share the complaints made by patients that suggest that they have malaria; record these in Column A: Complaints.
- Then ask the participants to identify the findings from the history and physical examination that would confirm the diagnosis of malaria.
- Review these lists to find out whether the complaints and findings are consistent with the symptoms and signs of clinical malaria.

ANSWER KEY

COLUMN A: COMPLAINTS	COLUMN B: HISTORY/PHYSICAL
1. Fever	<ul style="list-style-type: none"> • Body temperature 38° C or above • No signs of other infection
2. Weakness and dizziness	<ul style="list-style-type: none"> • Pale conjunctivae/tongue/hands; breathlessness, tiredness (anemia)
3. Headaches	<ul style="list-style-type: none"> • Diastolic blood pressure <90 mm Hg (excluding hypertension/pre-eclampsia)
4. Very yellow urine	<ul style="list-style-type: none"> • Yellow eyes (jaundice)
5. Joint pains	<ul style="list-style-type: none"> • Normal findings; no visible swelling or palpable tenderness

CASE STUDY 3: TREATING A CLIENT WHO HAS MALARIA ANSWER KEY

DIRECTIONS

Divide the participants into small groups. Participants should read and analyze this case study individually and then answer the case study questions as a group. The groups should then share their answers.

CASE STUDY

Aminah is 30 years old. She is approximately 24 weeks pregnant with her second baby. She comes to the antenatal clinic for her first ANC visit complaining of severe headache, fever and dizziness. Aminah and her family moved to the area 6 months ago. She has never suffered from malaria.

BASIC ASSESSMENT

- 1. What will you include in your initial assessment of Aminah, and why?**
 - Greet Aminah respectfully and with kindness in order to establish rapport.
 - To identify and treat life-threatening illnesses as rapidly as possible, perform a quick check to determine her degree of illness. Check Aminah's temperature, pulse, blood pressure and respiratory rate. If shock is present, it should be treated immediately.
 - Tell her what will happen during this visit. Listen to her carefully and answer her questions in a calm and reassuring way. She will be more likely to share her concerns if she knows that she is being listened to.
 - Obtain a targeted history and record your findings. Gather information about onset, duration, and severity of headache, fever and dizziness, and any medications taken. Ask about previous history of headache, dizziness, recent illness, signs of other infection (pain when passing urine, chest pain, painful cough, abdominal pain/tenderness), history of any other danger signs, signs of uncomplicated and complicated malaria, and history of the pregnancy (e.g., last menstrual period, symptoms of pregnancy, quickening, presence of contractions, leaking of fluid). Every pregnant woman living in malaria-endemic areas who

presents with a fever should be suspected of having malaria. However, other causes of fever in pregnancy should be considered.

2. What particular aspects of Aminah’s physical examination will help you make an evaluation or identify her problems and needs, and why?

- Perform a physical examination and record the results on the ANC card and/or antenatal record. The examination should be based on information obtained in the history. Evaluate Aminah’s general appearance, and measure her blood pressure, temperature, respiration and pulse. Look for pallor of conjunctivae (to check for anemia) and for signs of dehydration (loose, dry skin, sunken eyes). Perform an abdominal examination to determine fundal height and estimate gestational age. Listen for fetal heart tones and determine position and lie if 36 weeks or more gestation.

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

- Hemoglobin to check for anemia if pallor is present; syphilis screening; malaria test; urine for protein (if diastolic blood pressure is greater than 90 mm Hg, to rule out pre-eclampsia).
- HIV after counseling if she does not “opt out.”

EVALUATION

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

Aminah states that she has felt well during this pregnancy, and began having fever and headache yesterday morning. She states that she does not have other symptoms such as cough, difficulty urinating, abdominal pain or leaking of fluid. She has not had convulsions or loss of consciousness. She has not taken any medication.

Aminah’s temperature is 38.7° C, her blood pressure is 122/68 mm Hg, pulse rate is 92 beats per minute and her respiration rate is 18 breaths per minute. Aminah is pale, her mouth and tongue are dry, and her eyes are mildly sunken. Her fundal height is 23 cm (which is compatible with the dates of her last menstrual period) and fetal heart tones are 140 beats per minute.

Her hemoglobin is 10.5 g/dl; the thick blood film test for malaria is positive.

4. Based on these findings, what is your evaluation of Aminah, and why?

- Aminah is 24 weeks pregnant (determined by last menstrual period and uterine size).
- She has uncomplicated malaria (based on her positive blood film, symptoms and vital signs).

CARE PROVISION

5. Based on your evaluation, what is your plan of care for Aminah, and why?

- Begin treatment for uncomplicated malaria according to your local protocols: prescribe and observe her as she takes the first dose.
- Instruct her on how to take the medication for Days 2 and 3.
- Instruct her on the use of paracetamol for fever: 2 tablets every 6 hours until her temperature returns to normal.
- Tell her to return to the clinic in 48 hours if she is not feeling better or immediately if she has signs and symptoms of complicated malaria (e.g., convulsions, loss of consciousness).
- Tell her that she must take all of her medication even if she feels better.
- Tell her about the causes of malaria and how to prevent it, including the use of ITNs.
- Talk to her about her need to prepare a birth plan.
- If her treatment does not include SP, give iron and folate tablets and counsel her to eat locally available foods with adequate sources of iron.
- If treatment contains SP, follow local protocols about use of iron/folate during treatment.
- Schedule an appointment for her second ANC visit to receive her first IPTp dose and tetanus toxoid immunization if needed. A pregnant woman who has been treated with ACTs for malaria illness should wait 2 weeks after completing this treatment before receiving her scheduled dose of IPTp with SP. If she was treated with SP for malaria illness she should wait at least 1 month after completing treatment before receiving her scheduled dose of IPTp.
- Record all findings and treatments on her ANC card and/or antenatal record.
- Thank her for coming to the clinic.

LEARNING GUIDE FOR TREATMENT OF UNCOMPLICATED MALARIA

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

- 1 Needs Improvement:** Step not performed correctly and/or out of sequence (if necessary) or is omitted
- 2 Competently Performed:** Step performed correctly in proper sequence (if necessary) but participant does not progress from step to step efficiently
- 3 Proficiently Performed:** Step efficiently and precisely performed in proper sequence (if necessary)

Participant's Name: _____ **Date:** _____

LEARNING GUIDE FOR TREATMENT OF UNCOMPLICATED MALARIA				
STEP/TASK				
GETTING READY				
1. Greet the woman respectfully and with kindness.				
2. Ask if she has or recently has had danger signs or symptoms. If there are none, ask about her general health and current pregnancy.				
HISTORY OF PROBLEMS IN CURRENT PREGNANCY				
1. If she has presented with any complaints, ask about each one specifically.				
2. If she complains of fever , ask her if she also has any of the following complaints: <ul style="list-style-type: none"> ● Shivering/Chills/Rigors ● Headaches ● Muscle/Joint pains ● Loss of appetite ● Nausea and vomiting ● False labor pains (uterine contractions) 				
3. If she does, suspect uncomplicated malaria in pregnancy and treat (see Treatment of Uncomplicated Malaria below).				
4. Ask about allergies to antimalarials. Also determine if she has other symptoms suggestive of severe malaria by asking her if she has any of these other complaints: <ul style="list-style-type: none"> ● Confusion, drowsiness, coma ● Fast or difficult breathing ● Vomiting every meal or unable to eat ● Pale hands , tongue and conjunctivae ● Dryness of tongue and mouth ● Jaundice 				
5. Ask anyone accompanying her if the woman has at any time been unconscious or had fits (convulsions).				
6. Listen to the woman/family and respond to their concerns and questions.				

LEARNING GUIDE FOR TREATMENT OF UNCOMPLICATED MALARIA				
STEP/TASK	CASES			
7. If she has had any of the complaints listed under Step 4 above or has experienced fits, suspect severe malaria and refer. Also refer if she is allergic to antimalarials (see Referral of Severe Malaria below).				
PHYSICAL EXAMINATION				
1. Wash your hands thoroughly with soap and water and dry with a clean, dry cloth or air dry.				
2. Perform a focused physical examination: <ul style="list-style-type: none"> ● Does the woman look abnormally drowsy/sleepy? ● Check the body temperature. Does she have a fever (temperature above 38° C)? ● Check blood pressure, pulse and respiration rate. ● Check the eyes for: <ul style="list-style-type: none"> - Pallor of the conjunctivae - Yellowness of the eyes - Do the eyes appear sunken? ● Check the mouth for: <ul style="list-style-type: none"> - Dryness - Pallor of tongue/mucous membranes - Bleeding from the gums ● Check the legs for swelling (edema) ● Check the skin for: <ul style="list-style-type: none"> - Dryness - Looseness - Spontaneous bleeding 				
3. If the woman is attending routine antenatal clinic, complete other ANC tasks (see learning guides for ANC).				
TREATMENT OF UNCOMPLICATED MALARIA				
1. If the woman does not have any of the danger signs listed above , diagnose uncomplicated malaria and treat as follows (or according country protocol): <ul style="list-style-type: none"> ● First trimester: quinine 10 mg salt 3 times daily + clindamycin 10 mg/kg twice daily for 7 days. If clindamycin is not available, use quinine only. ACTs should be used only if it is the only effective treatment available. ● Second and third trimesters: use the ACT known to be effective in the country OR artesunate + clindamycin (10 mg/kg twice daily) for 7 days OR quinine + clindamycin for 7 days. ● Wait for 2 weeks or follow local protocol regarding when to start IPTp after malaria treatment. ● If treatment contains SP, follow local protocol about iron/folate use during treatment. 				
2. Instruct her about completing treatment and any additional medications prescribed such as paracetamol: <ul style="list-style-type: none"> ● Paracetamol: two tablets every 6 hours until the temperature returns to normal 				

LEARNING GUIDE FOR TREATMENT OF UNCOMPLICATED MALARIA				
STEP/TASK	CASES			
3. Educate her about: <ul style="list-style-type: none"> • How mosquitoes transmit malaria • The effects of malaria on pregnant women and their babies • The benefits of using insecticide-treated nets and wearing protective clothing • Eliminating sources of stagnant water in the area where she lives • The importance of taking the drugs as prescribed 				
4. Advise the woman to come back to the facility if she does not feel better within 48 hours. She should return at anytime if symptoms become worse and/or she has signs of complicated malaria.				
5. Record relevant information and medications given in woman's ANC card and clinic card.				
REFERRAL OF COMPLICATED MALARIA				
1. If she is allergic to antimalarials, refer to a higher level of care for appropriate treatment. If she has any of the danger signs listed under physical examination Step 2 above, diagnose severe malaria and: <ul style="list-style-type: none"> • Give pre-referral treatment as per local protocol, if she has not yet taken any medication. • Give first dose of paracetamol (if she can swallow tablets). • Write a referral note. • Arrange transportation. 				
2. Refer immediately.				
3. Record all relevant information in woman's ANC card and clinic card.				

CHECKLIST FOR TREATMENT OF UNCOMPLICATED MALARIA

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

Satisfactory: Performs the step or task according to the standard procedure or guidelines

Unsatisfactory: Unable to perform the step or task according to the standard procedures or guidelines

Not Observed: Step or task not performed by learner during evaluation by facilitator

Participant’s Name: _____ **Date Observed:** _____

CHECKLIST FOR TREATMENT OF UNCOMPLICATED MALARIA				
STEP/TASK	CASES			
GETTING READY				
1. Greet the woman respectfully and with kindness.				
2. Ask if she has experienced any danger signs or symptoms and address them immediately. Ask about her general well-being.				
STEP/TASK PERFORMED SATISFACTORILY				
HISTORY OF PROBLEMS IN CURRENT PREGNANCY				
1. Ask her if she has any complaints.				
2. If she complains of fever , ask her if she also has any symptoms suggesting uncomplicated malaria infection (e.g., chills, headache, false labor pains, etc.).				
3. If she does, suspect uncomplicated malaria infection and treat as appropriate after completing history/physical examination.				
4. Ask her if she has other symptoms that suggest complicated malaria (e.g., dizziness, vomiting).				
5. Ask the person accompanying her if the woman has been unconscious or had fits (convulsions).				
6. Listen to the woman/family and respond to their concerns and questions.				
7. If she has had other complaints that suggest complicated malaria or has experienced fits, suspect complicated malaria .				
STEP/TASK PERFORMED SATISFACTORILY				
PHYSICAL EXAMINATION				
1. Wash your hands thoroughly.				
2. Note general appearance and measure body temperature. Check for pallor, dry mouth, swelling in legs, etc.				
3. If the woman is attending routine antenatal clinic, complete other ANC tasks (see checklists for antenatal care).				
STEP/TASK PERFORMED SATISFACTORILY				

CHECKLIST FOR TREATMENT OF UNCOMPLICATED MALARIA				
STEP/TASK	CASES			
TREATMENT OF UNCOMPLICATED MALARIA				
If the woman does not have any of the danger signs listed above , diagnose uncomplicated malaria and treat according to country protocol.				
1. Instruct her on how to take additional drugs that are prescribed: <ul style="list-style-type: none"> Paracetamol: two tablets every 6 hours until the temperature returns to normal. 				
2. Also educate her about malaria prevention and control, possible side effects of drugs, etc.				
3. Advise her to come back to the facility if she does not feel better within 48 hours or at any time if she feels worse.				
4. Record relevant information and medications given in the woman's ANC card and clinic card.				
STEP/TASK PERFORMED SATISFACTORILY				
REFERRAL OF SEVERE MALARIA (or allergies to antimalarials)				
1. If she is allergic to antimalarials, refer to a higher level of care for appropriate treatment. If she has any of the danger signs listed under physical examination Step 2 above, diagnose severe malaria and: <ul style="list-style-type: none"> Explain the situation to the client and her family. Give pre-referral treatment according to local protocol if she has not yet taken any medication. Give first dose of paracetamol (if she can swallow tablets). Help arrange transport if needed. Write a referral note. Record information on ANC card and clinic record. 				
2. Refer immediately.				
3. Record relevant information in the woman's ANC card and clinic card.				
STEP/TASK PERFORMED SATISFACTORILY				

GROUP ACTIVITY FOR MALARIA DIAGNOSIS AND TREATMENT

The purpose of this activity is to help participants become used to asking key questions and looking for key physical signs when a pregnant woman presents with symptoms of malaria. The activity will also help them know how to give the correct medication and when to refer the woman.

Divide the learners into four groups as follows:

- Group 1—History
- Group 2—Physical exam
- Group 3—Treatment
- Group 4—Referral

Groups 3 and 4 will receive additional information about the case. Write the information listed below on a card and give it to each group.

Read the case description to the groups.

Each group will have 10 minutes to list the actions to be performed for their category of care. For example, Group 1 lists all relevant and important questions to ask a woman who may have malaria. Group 2 lists the necessary components of an examination for a woman who may have malaria. Group 3 lists treatment options based on the additional information provided to them. Group 4 lists diagnosis and management plan based on the additional information provided to them.

Each group will present their list to the larger group, who will suggest additional actions to complete the list, if necessary.

Case description: A 32-year-old woman who is 28 weeks pregnant with her second child attends the antenatal clinic for the first time and complains of fever and headaches.

Give Group 3 data about the client to indicate uncomplicated malaria (i.e., temperature 38° C, blood pressure 120/70 mm Hg, mild dehydration, no convulsions or loss of consciousness, etc.).

Give Group 4 the following information: You treated this woman for uncomplicated malaria 2 days ago. She returns to the clinic complaining of fever and extreme weakness. She looks dehydrated. Her relatives say that she has been behaving in a “funny way.” She seems confused, has been vomiting and the inner surfaces of her eyelids appear to be yellow. What is your evaluation and how will you manage her now?

MODEL ANSWERS FOR GROUP 1

- For how long has she had fever?
- Is she having joint pains and/or backaches?
- Has she had any convulsions or fits?
- Has she noticed any yellowness of the eyes?
- Is she passing adequate amounts of urine and what is the color of her urine?
- Has she been vomiting repeatedly?
- Has she had any medication? If so, what medication?
- Is she allergic to sulfa drugs such as cotrimoxazole ?
- Have the relatives noticed any significant change in her behavior?
- Has she been eating normally and drinking enough fluids?
- How many months pregnant is she?
- How many children has she had?

MODEL ANSWERS FOR GROUP 2

- Measure her vital signs: Temperature, blood pressure, pulse and respiration.
- A rapid pulse rate may be normal when there is a fever.
- A rapid respiratory rate and pattern or breathing difficulties may suggest severe malaria or other chest and heart problem.
- Low blood pressure with a **systolic** pressure lower than 90 mm Hg may indicate shock, but **diastolic** blood pressure higher than 90 mm Hg may indicate hypertension or pre-eclampsia.
- Examine her inner eyelids, tongue and palms for pallor that could indicate anemia.
- Examine her eyes, tongue and skin for signs of dehydration.
- Measure the fundal height and listen to fetal heart tones, etc.

MODEL ANSWERS FOR GROUP 3

- Directly observe her as she swallows treatment according to local protocol, plus two tablets of paracetamol.
- Provide more pain-relieving drugs (paracetamol two tablets every 6 hours for 2–3 days).
- Provide iron/folate tablets with instructions on how to take them according to local protocol.
- Educate her on the benefits and use of ITNs.

- Advise her on how to prevent mosquito bites (appropriate clothing that covers hands and legs, use of repellents, elimination of mosquito breeding places, etc.).
- Schedule follow-up appointment in 2 days.

MODEL ANSWERS FOR GROUP 4

- Diagnosis: severe malaria
- Management plans:
 - Immediate referral to a higher level clinic or hospital, where she will be provided with:
 - Second-line anti-malarial drugs (oral or injection quinine), with or without single dose of SP depending on allergy OR third-line anti-malarial drug (e.g., Artemether)
 - If dehydrated, re-hydration with oral or IV fluids but watch for renal failure
 - Correction of any anemia (if necessary, with blood transfusion)
 - Close monitoring for improvement or deterioration, etc.

CLINICAL DRILL FOR SEVERE MALARIA

Clinical drills provide participants with opportunities to observe and take part in an emergency rapid response system. Ideally, unscheduled emergency drills should be included in the workshop. Frequent drills help ensure that each member of the emergency team knows her/his role and is able to respond rapidly. By the end of the workshop, participants should be able to conduct drills in their own facilities.

DIRECTIONS

The facilitator should write each role on a separate card (see below). Select participants to play the roles. The day before the simulation is scheduled, give the cards to those participants so that they have time to prepare.

At the time the simulation is scheduled, the facilitator rings a small bell. The participants should immediately assume their roles and demonstrate the actions needed to respond to the patient's condition.

At the end of the simulation, the facilitator and participants should discuss the simulation and identify any steps or tasks that could be done more effectively or rapidly.

ROLES

Role 1: Thandiwe, the patient

Thandiwe is 32 weeks pregnant. She was treated for uncomplicated malaria 2 days ago and returns to the clinic complaining of symptoms that are getting worse. While the provider is obtaining her history, Thandiwe collapses and begins convulsing.

Role 2: Family member accompanying Thandiwe to the clinic

Role 3: Skilled Provider

- Conducts rapid initial assessment.
- Directs health staff (see below).
- Gives diazepam to treat convulsions.
- Begins treatment with quinine if available or gives pre-referral treatment according to local protocol.
- Writes referral note on flipchart (include patient's name, age, gravidity, parity, and number of weeks pregnant; presenting

symptoms; diagnosis; treatment provided; facility to which patient is being referred).

Role 4: Health Staff

- Takes vital signs frequently.
- Starts IV fluids.
- Escorts family members away from bed; keeps patient and family informed of situation.
- Arranges transportation for referral.
- Replenishes supplies/medications on emergency tray after use.

GROUP DISCUSSION: IMPLICATIONS FOR PRACTICE

Discuss implications of applying malaria prevention and treatment practices in the participants' country, community and facility.

- What are some of the constraints and barriers?
- What will facilitate implementing these measures?
- What things are not realistic, and why?

Ask participants to develop an action plan for addressing malaria prevention and treatment in their facilities and communities using the Action Plan form in the Participant's Handbook. Each plan should have no more than two or three goals.

ACTION PLAN FOR PARTICIPANTS

Participant Name: _____ Country of Residence: _____ Name of Facility: _____

Workshop Attended: _____ Date: _____

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

Goal #1 _____

Goal #2 _____

Goal #3 _____

My Support Team Network: _____

Supervisor: _____ Trainer: _____ Co-worker(s): _____

Problems to Overcome: (Describe the barriers that must be eliminated or reduced and how this will be done.)

Goal #1 _____

Activities/Steps	Date Planned	Responsible Person	Resources	Date Completed
1.				
2.				
3.				

Goal #2 _____

Activities/Steps	Date Planned	Responsible Person	Resources	Date Completed
1.				
2.				
3.				

Goal #3 _____

Activities/Steps	Date Planned	Responsible Person	Resources	Date Completed
1.				
2.				
3.				

POST-WORKSHOP QUESTIONNAIRE

This knowledge assessment is designed to help the participants check their progress. By the end of the workshop, all participants are expected to achieve a score of 85% or better.

FOCUSED ANTENATAL CARE

1. What is the best time for the first antenatal visit?
 - a) When the woman has vaginal bleeding
 - b) Before the sixth month of pregnancy
 - c) As soon as the woman knows she is pregnant
 - d) When the woman is 28 weeks pregnant
2. Topics for antenatal health education and counseling should:
 - a) Be appropriate for the time in pregnancy
 - b) Address the woman's individual needs and concerns
 - c) Include a variety of subjects
 - d) All of the above
3. Early detection of complications and disease involves:
 - a) Obtaining the history
 - b) Goal-directed physical examination
 - c) Screening procedures
 - d) All of the above

TRANSMISSION OF MALARIA

4. Mosquitoes transmit malaria by:
 - a) Laying eggs with mosquito parasites
 - b) Biting people
 - c) Contaminating food that people eat
 - d) All of the above

5. Malaria parasites in the blood of a pregnant woman:
 - a) Interfere with transfer of nutrients (food) to the baby
 - b) Improve the blood flow to the placenta
 - c) Improve the flow of oxygen to the baby
 - d) All of the above

6. Among pregnant women, those at highest risk of malaria are:
 - a) Women having their fifth pregnancy
 - b) Women having their third pregnancy
 - c) Women having their first pregnancy
 - d) HIV-negative women

PREVENTION OF MALARIA

7. The benefit(s) of insecticide-treated nets include(s):
 - a) Reduces number of mosquitoes in the house, both inside and outside the net
 - b) Kills other insects like bedbugs and lice
 - c) Reduces the number of fevers during pregnancy
 - d) All of the above

8. Sulfadoxine-pyrimethamine should not be given to pregnant women who are:
 - a) Allergic to sulfa drugs
 - b) Less than 24 weeks pregnant
 - c) More than 30 weeks pregnant
 - d) A and C

TREATMENT OF MALARIA

9. The treatment of uncomplicated malaria in pregnancy should include:
 - a) First-line treatment according to national guidelines
 - b) Paracetamol
 - c) Iron supplementation
 - d) All of the above

10. If a woman with complicated malaria is referred for treatment, the provider should:
 - a) Explain the situation to the client or her family
 - b) Help to arrange transportation to the referral site
 - c) Write a referral note
 - d) All of the above

POST-WORKSHOP QUESTIONNAIRE ANSWER KEY

FOCUSED ANTENATAL CARE

1. What is the best time for the first antenatal visit?
 - a) When the woman has vaginal bleeding
 - b) Before the sixth month of pregnancy
 - C) AS SOON AS THE WOMAN KNOWS SHE IS PREGNANT**
 - d) When the woman is 28 weeks pregnant

2. Topics for antenatal health education and counseling should:
 - a) Be appropriate for the time in pregnancy
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 - c) Include a variety of subjects
 - D) ALL OF THE ABOVE**

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TRANSMISSION OF MALARIA

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 - b) Improve the blood flow to the placenta
 - c) Improve the flow of oxygen to the baby
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 - b) Women having their third pregnancy
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 - D) ALL OF THE ABOVE**

PREVENTION AND CONTROL OF MALARIA IN PREGNANCY WORKSHOP EVALUATION

Please answer all questions by circling the letter that corresponds to your answer.

1. Please indicate your occupation:

- A. Nurse
- B. Midwife
- C. Obstetrician/doctor
- D. Other health care worker
- E. Administrator

2. Please indicate the extent to which this workshop met your expectations:

- A. Exceeded my expectations
- B. Met my expectations
- C. Did not meet my expectations

Please explain: _____

3. List the presentation(s) that you found most useful: _____

4. List the presentation(s) that you found least useful: _____

5. List other topics you would like to be included: _____

6. List two practices that you learned in this workshop that you will try to implement in your own clinical sites:

7. Was the workshop (please circle one):

- A. Too long?
- B. Too short?
- C. The right length?

8. Please rate the usefulness of the following learning tools by checking the appropriate box.

Learning Tools	VERY USEFUL	USEFUL	NOT USEFUL	COMMENTS
Large group discussions				
Small group discussions				
Role plays				
Case studies				
Clinical practice (if you went to a clinical site)				

9. Please rate the usefulness of the workshop materials by checking the appropriate box.

	VERY USEFUL	USEFUL	NOT USEFUL	COMMENTS
Participant's Handbook				
Reference Manual				
Learning Guides and Checklists				

10. The facilitators used a variety of training techniques including demonstration, coaching, feedback, group discussion, etc. Which did you find the most useful?

11. Were any of the training techniques useful or helpful? Which ones? Why?

12. What suggestions do you have for improving the workshop? Please be specific.

SAMPLE CERTIFICATE OF ATTENDANCE

[Name of Organization Conducting Workshop]

acknowledges that

has participated in the

Prevention and Control of Malaria in Pregnancy Workshop

Conducted in (location)

(dates)

Organization

Facilitator

Facilitator

