



## **DIAGNOSIS AND COMMUNITY-BASED MONITORING OF PREGNANCY**

## **Trainer guide:**

1. Sentences in *italics* are instructions for the trainer. Sentences in *italics* and quotation marks can be read verbatim by the trainer.
2. Before the training, words in brackets [ ] should be replaced by words that match the context; for example, replace [COUNTRY] with “Mali” if the training is to be implemented in Mali.
3. The training is organized around different types of activities: brainstorming, simulation/role-plays, practice exercises (individual or group), and case studies.
4. **General training tips:**
  - Encourage the participation of all participants, at all times, and encourage them to comment on different topics.
  - Listen to all answers without judgment and make sure all participants have the opportunity to speak.
  - Encourage participants to share their experiences as a parent or caregiver when applicable.
  - Share a summary statement at the end of an activity to review the important points or the main idea that the activity was intended to highlight.
  - Ask participants regularly if they have any questions or would like a concept to be clarified.
  - For group work:
    - Form groups based on the total number of participants, small enough to encourage participation, but large enough to meet the requirements of the activity.
    - Ask each group to present their work to the other groups.
    - Ask participants to share their reflections about the other groups’ work.
    - Point out the strengths and areas for improvement of each group’s work.
    - Wrap up the group work by summarizing the key takeaways.
5. **Tips for brainstorming:** Brainstorming is a technique that involves asking questions before presenting concepts to initiate reflection and discussion on the training topic. It allows you to take stock of participants’ proficiency in a topic as well as their knowledge gaps in advance in order to frame the training and target certain concepts.
  - Emphasize that the purpose of a brainstorming discussion is to help encourage reflection among participants rather than to identify the best answers.
  - If possible, write participants’ answers on a large sheet of paper to encourage discussion and give value to everyone’s comments.
  - Ask the questions one at a time, and pause after each question to encourage participation.
  - Make sure that the correct answers are clearly identified after each discussion.
6. **Tips for simulation/role-plays:** Simulation and role-plays put participants in real-life situations to practice a procedure, method, or communication technique. They help create a realistic environment for anticipating and preventing possible errors in a setting with no harmful consequences for the patient.

- Clearly describe the simulated situation or role-play.
  - Provide time for participants to immerse themselves in the situation/their role.
  - Encourage everyone to participate as realistically possible.
  - Do not intervene until the simulation or role-play is complete.
  - At the end of each role-play, congratulate the actors.
  - Have other actors repeat the role-play again as many times as necessary.
7. **Tips for practice exercises:** practice exercises require participants to apply theoretical concepts to practical situations. They help check participants' level of understanding of an abstract concept in the way that will be expected in the field.
- Prepare the materials and tools needed for the exercise in advance.
  - Clearly define the instructions for the exercise.
  - Make sure the correct answer is clearly identified at the end of the exercise.
8. **Tips for case studies:** Case studies describe a story/situation to introduce or dig deeper into a theoretical concept. They help illustrate abstract concepts through familiar situations to make them more understandable and easier to remember.
- Share the case study clearly.
  - Ask the questions one at a time, pausing after each question to encourage participation.
  - Make sure the correct answers are clearly identified after each discussion.
  - Summarize the concept illustrated by the case study.
9. Review the tips for each activity type above before starting an activity of that type.

### **Abbreviations and acronyms:**

<b>ANC</b>	Antenatal consultation
<b>CHW</b>	Community Health Worker
<b>FP</b>	Family planning
<b>HCG</b>	Human chorionic gonadotropin
<b>HIV</b>	Human immunodeficiency virus
<b>HV</b>	Home visit
<b>LLIN</b>	Long-lasting insecticide-treated net
<b>PMTCT</b>	Prevention of mother-to-child transmission

<b>PNC</b>	Postnatal consultation
<b>VTP</b>	Voluntary termination of pregnancy
<b>WHO</b>	World Health Organization

## **Course Introduction:**

- **Inform participants:**
  - *This module covers reproductive health, specifically diagnosis and community-based monitoring of pregnancy.*
  - *In this module, some words, situations, pictures, and/or videos may make participants uncomfortable, be troubling, or cause emotions such as sadness. All these emotions are normal and welcome in the room.*
  - *If a participant feels uncomfortable and wishes to take a break, they should feel free to do so.*
- **Encourage participants to:**
  - *Commit to ensuring confidentiality, as some could share sensitive or personal information with the group, and we want to create a space where all participants will feel safe and comfortable. Any personal information shared during this training should not be shared with anyone outside of this training.*
  - *Share their thoughts on this issue of confidentiality.*

*Present the training objectives, plan, and activities. Make sure all the necessary materials are present.*

## **Objectives:**

*At the end of this session, participants should be able to:*

- Define pregnancy, maternal and infant mortality.
- Administer and interpret a urine pregnancy test through an active door-to-door research process.
- Explain the benefits and aspects of ANC and know how to encourage women to regularly attend ANC.
- Discuss the importance of interpregnancy intervals with pregnant women and help them choose a FP method before childbirth.
- Carry out a community-based monitoring of pregnant women and women after childbirth.
- Explain the importance of PNCs and convince pregnant women to attend PNC.

## **Plan:**

1. Define pregnancy, maternal mortality, and infant mortality
2. Diagnosis of pregnancy
3. Administering the urine pregnancy test

4. What to do with the results of the urine pregnancy test
5. Discuss the result of a urine pregnancy test
6. ANC
7. Home-monitoring of pregnant women
8. Home follow-up after childbirth
9. Practice community-based monitoring of pregnancy and postpartum
10. Summary of the protocol for community-based monitoring of pregnancy and postpartum
11. Assessment

**Activities:** brainstorming; practice exercise; simulation/role-plays; case studies.

**Materials:**

- Common to all activities: video projector; laptop; large sheet of paper; multicolored markers; multimedia tools (images, forms, videos, etc.), suggestion box.
- Additional: pregnancy test; ANC and PNC logbook; forms for community-based monitoring of pregnancy and after childbirth.

## **Pre-test:**

*“We will proceed with the pretest before diving into the subject in order to assess participants’ level of understanding before and after the session is completed.”*

*Provide a copy of the pretest to all participants. Remind them that the pretest is not a judgment and that it is a private exercise that helps us have a better idea of their basic level of understanding of the topic that will be discussed. Read and explain the questions one at a time pausing (30 seconds/question) to encourage participation. At the end of the pretest, thank the participants, collect the forms, and move forward with the training.*

**First and Last Name:** \_\_\_\_\_

**Some of the following statements are false and some are true.** In the first column, circle (T) for those that are “true” and (F) for those that are “false.” The correct answer is listed in the second column.

1	Through their intervention, the CHW can significantly reduce maternal mortality.	T F	T
2	Pelvic ultrasound is the only way to diagnose pregnancy.	T F	F
3	If a CHW has a woman take a urine pregnancy test and it is positive, the CHW informs the family members of the good news.	T F	F
4	The result of a urine pregnancy test for a young girl must be communicated to her mother without her consent.	T F	F
5	ANC is a simple practice to protect the mother and her future baby.	T F	T
6	In Mali or Côte d’Ivoire, it is recommended that a pregnant woman attend a single ANC.	T F	F
7	Regular monitoring of the pregnant woman by the CHW alone is sufficient and prevents the woman from attending ANC’s at the health center.	T F	F
8	A well-trained CHW can perform an ANC at home.	T F	F
9	Pregnant women should not learn to recognize the warning signs that may occur during pregnancy, as this is something reserved for CHWs and healthcare workers.	T F	F
10	There is no need to discuss warning signs during pregnancy with other family members because it is something that affects only the pregnant woman.	T F	F
11	PNC is not required at the health center if the woman does not have complaints after childbirth.	T F	F
12	A woman who gives birth at the health center and does not have any complications from childbirth cannot experience complications related to childbirth a few days later.	T F	F
13	Screening for pregnancy in women has no connection with FP.	T F	F
14	After childbirth, the woman undergoes follow-up at the same time as the newborn.	T F	T

*The form above contains the answers. Before printing the forms for participants, make sure to remove the last column which contains the answers.*

## **Section 1: Define pregnancy, maternal mortality, and infant mortality**

*"We will now discuss together the definition of a set of concepts that must be understood to ensure very good understanding that is useful after training."*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

### **Questions:**

1. What is pregnancy?
2. What are the signs of pregnancy?
3. What is maternal mortality?
4. How do you feel about the extent of maternal mortality?
5. What are the main causes of maternal mortality?
6. What is neonatal mortality?
7. How do you feel about the extent of neonatal mortality?
8. What factors promote maternal and neonatal mortality? Why do you think mortality is higher in Mali than in some Western countries?

### **Answers:**

1. Pregnancy is the condition of a pregnant woman that is carrying a fetus. Pregnancy follows sexual intercourse and begins with fertilization (the fusion of an egg and a sperm) until the fetus is expelled. Pregnancy typically lasts an average of nine months.
2. The list of signs of pregnancy is long and differs for each woman. The general signs observed in almost all pregnant women are:
  - Delayed/No menstrual periods (amenorrhea).
  - Nausea and/or vomiting.
  - Breast tenderness, with or without pain.
3. Maternal mortality rate is the number of deaths during pregnancy, childbirth or 42 days after childbirth per 1,000 live births.  
Note: the cause of death must be related to the pregnancy or worsened by it.
  - *Ask participants if they know any women who have lost their life during pregnancy, childbirth or 42 days after childbirth, and if they can share the story with the group.*
  - *Then encourage those who almost lost their life or almost lost their wife during pregnancy, childbirth or 42 days after childbirth to share their story with the entire group.*
4. *Use the information below to discuss the extent of maternal mortality worldwide and in your country:*  
**Worldwide [1]:**
  - Each day, 830 women die from complications related to pregnancy or childbirth, and almost all of these deaths are due to preventable causes.
  - About 99% of all maternal deaths occur in developing countries.
  - The risk of complications and death due to pregnancy is higher in young adolescents than in older women.

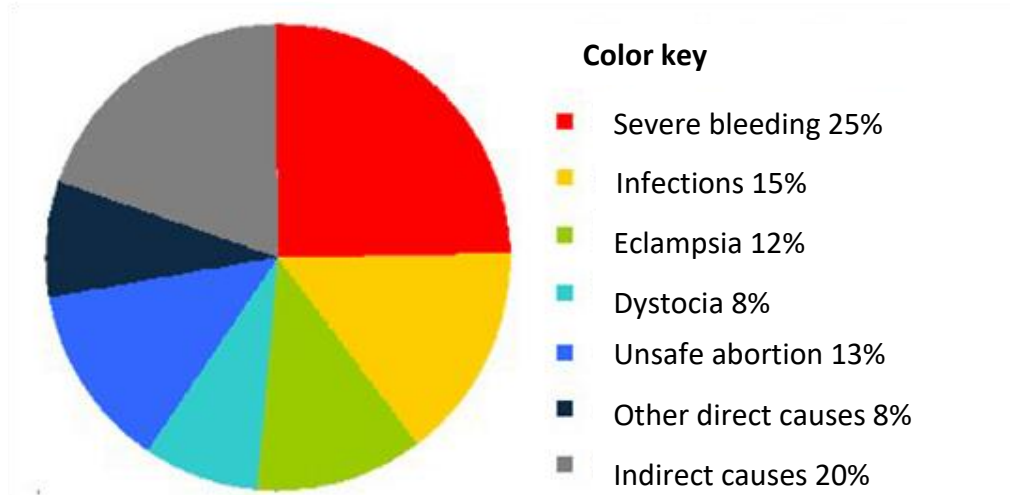


- The assistance of trained personnel before, during, and after childbirth can save the lives of women and newborns.

For example, in Mali [2]: 325 women died during pregnancy or during childbirth per 100,000 live births in the seven years preceding 2018.

For example, in Côte d'Ivoire [3]: there were 614 maternal deaths per 100,000 live births in the seven years preceding 2012.

5. *Using the information below, discuss the causes of maternal mortality. Conclude that the majority of maternal deaths are preventable because the medical solutions to prevent or manage these causes are known. By allowing access to care before, during, and after pregnancy, the CHW can play a role in reducing these deaths.*



**Figure 1:** Causes of Maternal Mortality Worldwide (WHO 2005)

*Refer to the definitions below to fully explain the causes of maternal mortality.*

- **Severe bleeding:** blood flow that can occur during pregnancy, during and after childbirth.
- **Infection:** multiplication of a microbe (bacteria, parasites, mycoses, etc.) in the human body that may cause various organs to malfunction.
- **Note:** It is important to note that a large proportion of infections are related to abortions performed in poor conditions.
- **Eclampsia and complications of preeclampsia:** seizure or stroke or complications in the liver, kidneys, or with clotting ability during pregnancy or immediately after childbirth. This happens when you have high blood pressure and too much protein in your urine (preeclampsia).
- **Dystocia:** difficult childbirth.

6. According to the WHO, neonatal mortality is defined as any death of a newborn that occurs from birth through 28 days of life.

7. *Using the information below, discuss the extent of neonatal mortality worldwide and in [YOUR COUNTRY]:*

**Worldwide [4]:**

- There are three million stillbirths and approximately three million neonatal deaths during the first week of life each year.
  - In 2016, 15,000 children under the age of five died daily, including 46% during the first 28 days of life. For example, in Mali [2]: there were 109.08 infant deaths per 1,000 live births in the five years preceding 2018.  
For example, in Côte d'Ivoire [3]: there were 68 infant deaths per 1,000 live births in the five years preceding 2012.
8. The predisposing factors for maternal and neonatal mortality are classified into different categories:
- Sociocultural factors:**
- Age of the woman (under 18 years and over 35 years).
  - High number of pregnancies (more than five).
  - Short interval between pregnancies (less than two years between two births).
  - Insufficient means.
  - Use of traditional medicine or traditional midwives.
  - Certain sociocultural beliefs, such as: excision, food taboos, work overload, etc.
  - Illiteracy.
  - Lack of knowledge in terms of preparation for childbirth.
  - Unsafe abortions (either with drugs or with instruments).
- Delay in access to care:**
- Insufficient financial means preventing communities from paying for their healthcare costs.
  - Geographic distance to access care.
  - Insufficient personnel, lack of adequate equipment and drugs in healthcare facilities.
- Delay in the recognition of warning signs and decision making:**
- Lack of awareness of warning signs.
  - Slow decision making to seek care.
  - Women having low decision-making power.
- Certain diseases:**
- Malaria
  - Tuberculosis
  - HIV

*“We will deepen our knowledge of maternal health by discussing ANC, childbirth, and PNCs.”*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. Define ANC, childbirth, and PNCs.
2. What are your experiences with each of these types of visits in the healthcare system?

Answers:

1. **ANC:** overall management of the pregnant woman and the child she is carrying, by qualified personnel and in a healthcare facility.  
**Childbirth:** the act of bringing a baby into the world with expulsion of the fetus from the uterus.  
**PNC:** important time intended to assess the mother's physical and mental health after childbirth and the child's health, to offer contraception tailored to the mother's and/or couple's needs, to ensure exclusive breastfeeding for the baby up to six months. This visit is often performed between the 4<sup>th</sup> and 6<sup>th</sup> week after childbirth, but the number of visits, location of visits, and timing are often country specific.
2. Review the participants' responses.

## **Section 2: Diagnosis of pregnancy**

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. What are the different ways to diagnose pregnancy?

Answers:

1. There are several ways to diagnose pregnancy, including:
2. Pelvic ultrasound;
3. Urine tests;
4. Blood tests, etc.

*Clarify that during our activities we will use urine tests to diagnose the pregnancy at home.*

### **1. Overview of urine pregnancy tests:**

*“We will present and describe a urine pregnancy test.”*

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

Preparation: give a urine test to some participants.

Instructions:

1. Ask all participants with a different test to present their test to the other participants.
2. Ask participants who have had or have been present for a urine pregnancy test to share their experiences.

Urine pregnancy tests are tests for the rapid diagnosis of pregnancy. Most urine tests have two zones:

- The first zone is called the control zone in which a colored line appears after use to prove that the test is functional.
- The second zone gives the test result. A pattern should appear in this window if you are pregnant: it is often a colored line, but this may depend on the test.

There are different types of urine pregnancy tests on the market that have their own method of use and way of displaying the results.

Note: During our activities, we will use tests that will be dipped in the urine collected in a container for 10 seconds. These tests display a colored line to indicate a pregnancy or not.

## 2. How does a urine pregnancy test work?

A urine pregnancy test can detect the presence of a hormone that is secreted specifically in pregnant women when the egg implants in the uterus and that is eliminated through the urine.

This hormone is called the  $\beta$ -hCG hormone (HCG).

## 3. When should a urine pregnancy test be done?

*Ask participants when they think a woman should take a urine pregnancy test. Then provide the information below.*

The CHW should administer an on-demand test to any woman of childbearing potential who has had amenorrhea (no menstrual period) for six to eight weeks, regardless of marital status (married, single, or otherwise), and without discrimination and without bias.

*Emphasize “without discrimination” and “without bias.”*

## 4. How reliable is the urine pregnancy test?

*Ask participants if they trust the urine pregnancy tests, then encourage participants to share their experiences or any stories they have heard on how reliable individual urine tests are.*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

### Questions:

1. Do you trust the tests? How reliable do you think they are?
2. What are “false positive” or “false negative” results?

### Answers:

1. The reliability of urine pregnancy tests depends more on the conditions in which the test is administered (instructions for use and when to administer the test).
2. A “false positive” (positive test result when the woman is not pregnant) is extremely rare. On the other hand, a “false negative” (negative test result when the woman is pregnant) can sometimes happen. In general, this is the result of poor use of the test (administering it too soon or not following the instructions for use).

## 5. How is a urine pregnancy test administered?

*“We will now look at how to administer a urine pregnancy test. Before you start with the procedures, share the points below with the participants.”*

Urine testing is a medical procedure, so maintaining confidentiality is MANDATORY for the CHW regarding both the test and the test result.

The CHW should inform the woman that the test result will be STRICTLY CONFIDENTIAL.

The CHW should explain to the woman how the test is administered and allow her to meet the conditions she feels are appropriate for the test to be administered, since, in the majority of cases, the CHW will be at her home.

As a reminder, prior to handling urine, it is MANDATORY that the CHW wear protective gloves. Like blood, urine also contains infectious agents that are transmitted when there is no protection.

## 6. Procedure to perform a urine pregnancy test:

Provide each participant with a form that includes the table below. Encourage a participant to read and explain each item in the table. Then go over each point, ask participants if they have any questions, and answer each question.

- Put on a pair of protective gloves.
- Collect a urine sample in a clean, dry container (such as a plastic cup).
- Check the test expiration date before using it.
- Open the package.
- Remove the test from the package when you are ready.
- Dip the strip in the urine with the arrow pointing down.  
Note: do not allow the urine level to exceed the MAX line.
- Remove the test after 10 seconds and lay the test flat on a clean surface (e.g., place it across the urine container).
- Wait for the colored lines to appear. Depending on the concentration of hormones in the urine, a positive result can sometimes be seen in 40 seconds. However, you should wait at least five minutes to confirm a negative result.  
Note: do not read the result after 10 minutes, as this test is only designed for a rapid reaction. Once the reaction time has elapsed, the result may be invalid.

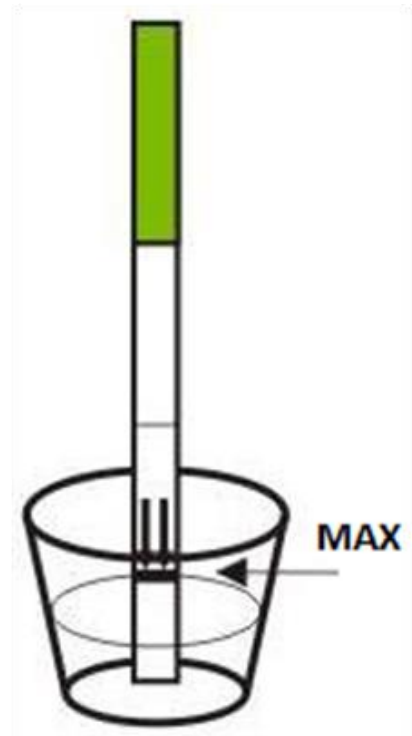


Figure: The “MAX” line

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.  
Preparation: provide the kit needed for a urine pregnancy test (gloves, pregnancy test, a jar with water to replace urine, etc.).  
Simulation: simulate administering a urine pregnancy test.

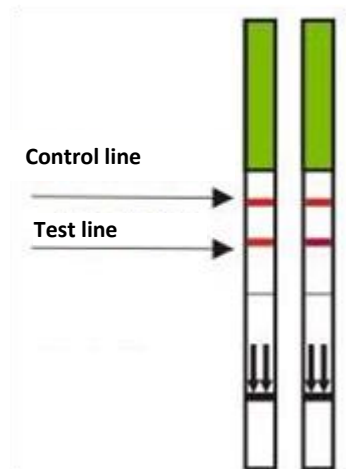
## 7. Interpretation of urine pregnancy test results:

*“After the pregnancy test has been successfully administered, the result should still be interpreted correctly.”*

Give each participant a form that includes the table below. Encourage a participant to explain the three options for a pregnancy test result. Then, go over each result option, ask for and answer all questions.

**Positive test:**

Two colored lines are visible: the “control line” and the “test line.”

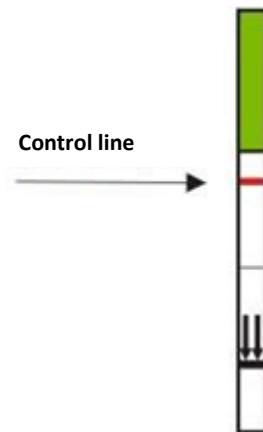


**Figure: Positive test**

**Negative test:**

Only one colored line appears in the control zone (control line).

**Note:** if the “test line” appears very clearly compared to the control line, the test must be repeated one week later.

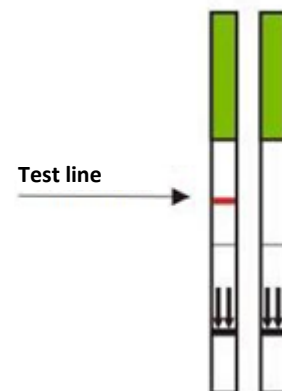


**Figure: Negative test**

**Invalid test:**

- No colored line visible in the test and control zones.
- No colored line visible in the control zone, but line visible in the test zone.

Note: make sure you have followed the instructions correctly. Repeat a test.



**Figure: Invalid tests**

## 8. Precautions for use:

*"To get a reliable result, it is imperative to take the following precautions for use:"*

Precautions for use to be observed before and during a urine test are as follows:

- Do not use the tests after the expiration date.
- Do not use the test if the protective packaging is damaged.
- Protect tests from moisture and sunlight, and keep them out of the reach of children (urine is infectious).

## 9. A few frequently asked questions by providers and their responses:

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

Preparation: separate participants into groups of five and provide the questions below.

Directions: each group should provide answers to the frequently asked questions.

Questions	Answers
The control band color is different between two tests. Is this important?	No. The color of the control band does not matter.
Are test results valid after more than 10 minutes?	No. Results should be read within 10 minutes or less. A negative result may change to a false positive result after 10 minutes.
A pink background or vertical line appears in the result zone. Is this important?	No. Differences in urine and humidity can cause this. If the control band appears within 10 minutes, the test is valid.



### **Section 3: Performing the urine pregnancy test**

*Tell participants that the purpose of these exercises is to enable them to apply their knowledge of how to perform and interpret the urine pregnancy test.*

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

**Preparation:**

1. Provide a copy of a document with images of the urine test results.
2. Project onto the screen the 10 images of the urine test results numbered from one to 10 and display the images one by one for approximately one minute.

**Instructions:**

1. Ask participants to individually interpret each projected image by writing down the image number followed by (+) for a positive test, (-) for a negative test, or (0) for an invalid test.
2. Ask three participants to share their results with the other participants.

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

**Preparation:**

1. Look for four anonymous volunteers (two pregnant and two non-pregnant women) who consent to donating urine samples that you will collect in labeled tubes (A, B, C, and D).
2. Divide participants into four groups and give a large sheet of paper to each group.
3. Pass the labeled tubes one by one to each group.

**Instructions:**

1. Instruct the groups to perform a urine pregnancy test for each urine sample and write the result on the large sheet of paper.
2. Ask the representative from each group to share their results for each sample.

## **Section 4: Steps to follow after performing the urine pregnancy test.**

*"We will discuss the steps to follow after getting the urine test result."*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. List each of the possible results and situations after performing a urine pregnancy test.

Answers:

1. At the end of the urine pregnancy test, four situations may occur:
  - Positive test
  - Negative test
  - Invalid test
  - Uncertain test

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

Preparation:

1. Divide participants into four groups and give a large sheet of paper to each group.
2. Ask each group to divide their large sheet of paper into four columns: "Positive test," "Negative test," "Invalid test," "Uncertain test."

Instructions:

1. Ask each group to write down how to proceed in each of the four situations.
2. Ask the representative from each group to share their results for each situation.

After performing the urine pregnancy test, there may be four situations in which the CHW must take the appropriate course of action:

### **1. The test is positive:**

The CHW should ask the woman about her feelings regarding this news.

#### **a. If the woman is HAPPY, the CHW should:**

- Congratulate the woman.
- Go over the ANC with her and, particularly, its importance.
- Note her concerns.
- Help her schedule her first ANC within no longer than one week (seven days).
- Inform the woman that he/she will regularly come by (every two weeks during the first few months until seven months of pregnancy and every week from the 8<sup>th</sup> month of pregnancy) to visit her until the end of her pregnancy and for some time after childbirth.
- Enter the woman in the pregnancy follow-up logbook and schedule her home follow-up, taking her availability into account.

**b. If the woman IS NOT HAPPY or if she is WORRIED, the CHW should:**

- Apply listening skills and take note of any concern the woman may have.
- Confirm his/her availability to support and accompany her regardless of the decision she makes. Explain to her that Muso shall ensure her care regardless of her decision and that the support of her CHW will not be lacking.
- Ask the woman if she is considering an abortion. If yes:
  - If abortion is not possible due to legal or health system restrictions:
    - Inform the woman of her rights. For example, the CHW should inform the woman in Mali that VTP is not allowed in this country, unless the mother's life is at risk or in cases of rape or incest (Law no. 02 – 044 of 24JUN2002 on reproductive health). [REPLACE THIS INFORMATION WITH COUNTRY SPECIFIC INFORMATION]
    - Try to validate and address any concern the woman may have. Support her so that she keeps her child, explain that the CHW will be there to accompany her via regular HVs and her medical care.
    - Encourage the woman to go to the health center for more information and guidance as needed.
  - If abortion is allowed and possible in your country: refer the woman to the indicated health center for a consultation.
  - A properly performed abortion is generally safe and not risky - less risky than a full-term pregnancy.
  - If done improperly, an abortion can have the following life-threatening consequences, including:
    - Damage to the uterus (for example, the uterus may be accidentally torn by a surgical instrument).
    - Infection.
    - Bleeding.
  - Discuss with the woman the fatal risks and consequences of an unsafe abortion (if personnel are not qualified or if equipment is not sanitary enough and methods are less effective).

**1. The test is negative:**

The CHW should ask the woman if she wants to become pregnant.

- If Yes, encourage the woman and inform her that she can ask the CHW for another urine test at the appropriate time.
- If No, ask if she needs information about FP methods:
- If Yes, continue and follow the instructions described in the FP manual.
- If No, give the woman enough time to explain herself, note her concerns.

**2. The test is invalid:**

The CHW should reassure the woman and explain that these things can happen and that it will not affect the final result.

Administer the test again and ensure that the instructions are properly followed.

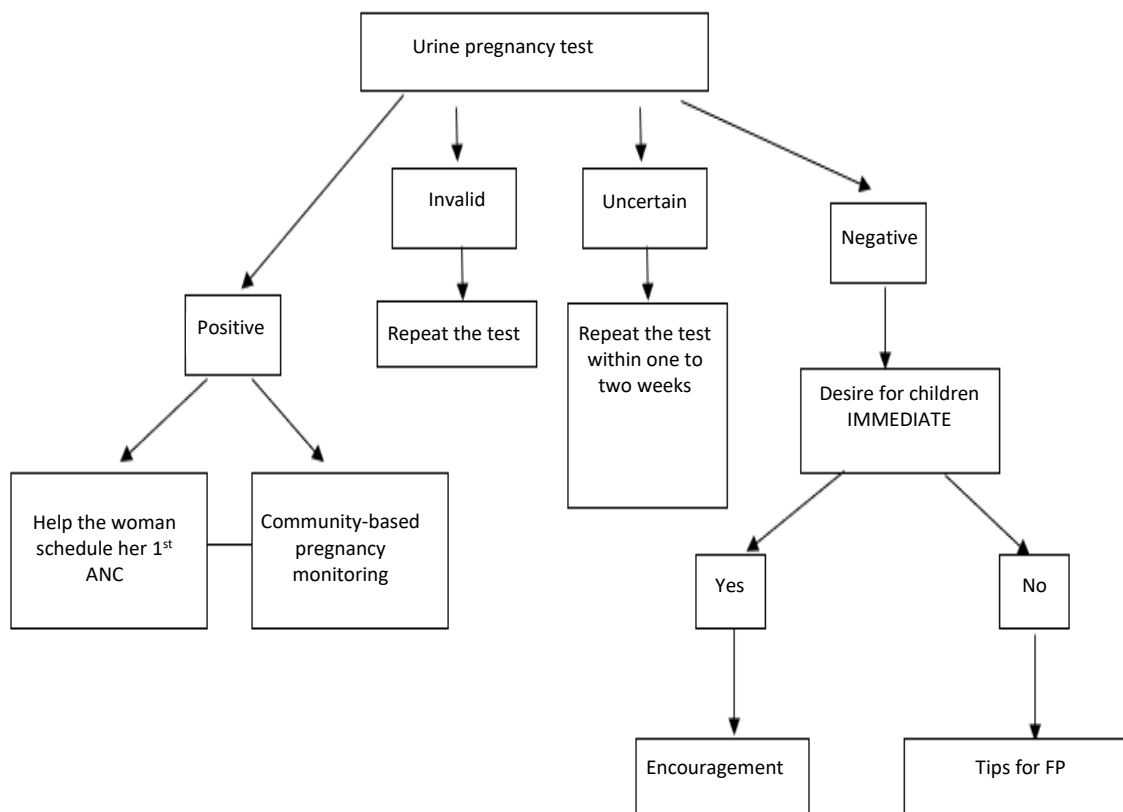
### 3. The test is uncertain:

The CHW should schedule an appointment with the woman within one to two weeks and repeat the urine pregnancy test.

*“We just shared a lot of information that won’t be easy to remember; therefore, you will have tools available, such as the app with pictures, logic jumps, decision tree cards, etc.”*

*“We will now look at the decision tree for the diagnosis of pregnancy.”*

*Provide a copy of the decision tree to each participant. Go over how to use the tree until the decision is made. Encourage a few participants to go in front of the group and explain the decision tree.*



**Figure 2:** Decision tree after administering a urine pregnancy test

## **Section 5: Discussion of the urine pregnancy test result.**

*"We will now begin to apply our knowledge of the different possible results after a urine pregnancy test is performed."*

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.

Preparation: select eight volunteers and pair them up. Assign one of the following four situations to each pair: positive result with desire to have a child, positive result without desire to have a child, negative result, and invalid result.

Roles:

1. Mariam TOURÉ: you live in Yirimadio, you haven't had your menstrual period for two months. You asked the CHW of your intervention area during their HV for a home diagnosis of a possible pregnancy.
  2. Fatoumata TRAORÉ: you are the CHW. You performed the urine test for Mariam TOURÉ following the procedures (test performed on demand and confidentiality respected).
- Give Mariam the test result.

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.

Preparation: select two volunteers to start and repeat this role-play with other participants as many times as necessary for everyone to understand.

Roles:

1. Fanta TRAORÉ: you are a mother of seven children and have been married for more than 15 years to Ousmane DIALLO. You have not had your menstrual period for two months. You asked the CHW of your area during their HV for a home diagnosis of a possible pregnancy.  
When the CHW tells you that the test is positive and asks you what you think, you say "I have seven children and we can't feed them properly. My last child is less than one year old. What have I done to deserve this? How will I tell my husband? What will my neighbors think of me? I really don't think I'm going to keep this pregnancy, I'm going to see the old lady in the market right away, she'll give me some plant leaves so I can abort it."
  2. Fatoumata TRAORÉ: you are the CHW. You performed the urine test for Fanta TRAORÉ following the procedures (test performed on demand and confidentiality respected). The test is positive.
- Ask Fanta how she feels about this result.
  - Once Fanta has told you that she wants an abortion, what will you tell her?

## **Section 6: ANC**

*"We will now talk more about ANCs."*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. What is the definition of an ANC?
2. What are the goals of ANC?
3. What is the recommended timeline for ANC and what are the interests/objectives of each visit?

Answers:

1. The ANC involves care of the pregnant woman and fetus by qualified personnel in a healthcare facility. This care requires specific procedures that a provider (doctor or midwife, etc.) must take for the well-being of the pregnant woman and the child she is carrying.

2. ANC is a medical practice organized around a set of technical procedures to ensure the well-being of the woman and the child. These include:

**Monitoring and screening for:**

- Progression of the pregnancy.
- Diseases that can affect the pregnancy (malaria, etc.).
- High-risk pregnancies in view of managing them or referring the women to a reference center.
- Placental insertion abnormality.

**Preventing:**

- Tetanus via tetanus vaccination.
- Malaria by intermittent preventive treatment during pregnancy with sulfadoxine/pyrimethamine and the use of LLIN.
- HIV through screening and PMTCT.
- Iron deficiencies.
- Post-term pregnancy. Post-term pregnancy is one of the causes of stillbirth.

**Treating:**

- Diseases that can affect pregnancy (malaria, urinary tract infections, etc.).
- Complications that may occur during pregnancy (gestational hypertension, gestational diabetes, placental problems, bleeding, etc.).
- Cases of parasitosis.

**Informing:**

- The woman, family, and community about warning signs and also about recognizing labor.
- The community, family, husband, and woman about the birth plan.
- The woman about FP.

Management of all these aspects can greatly reduce the risk of illness and death in pregnant women and their fetuses.

3. Make sure to present only your country specific ANC schedule.
  - As soon as a woman is diagnosed as pregnant, she must attend ANCs.

**For example, in Mali:** a pregnant woman is advised to attend at least four ANC according to the following schedule **[Childbirth and Parenting Preparation]**:

- First **ANC**: after early home diagnosis of pregnancy by the CHW, he/she should help the woman schedule the first ANC within no longer than seven days, ideally between the 8<sup>th</sup> and 12<sup>th</sup> week of pregnancy.
- The purpose of this first consultation is to confirm the pregnancy, determine the likely age of the pregnancy, and prescribe the necessary work-up for better management of the pregnancy and of potential cases of complications.
- Second **ANC**: performed between the 4<sup>th</sup> and 6<sup>th</sup> month (24<sup>th</sup> week to 26<sup>th</sup> week) of pregnancy (during the second trimester).
- The main purpose of the ANC at this time is to check for risk factors and implement their preventive or curative treatment in a timely manner.
- Third **ANC**: in the 8<sup>th</sup> month (32<sup>nd</sup> week) of pregnancy.
- The main purpose of the ANC at this time is to ensure normal progression of the pregnancy and to attempt to establish the prognosis of the childbirth.
- Fourth **ANC**: in the 9<sup>th</sup> month of pregnancy (36<sup>th</sup> week to 38<sup>th</sup> week).
- The main purpose of ANC at this time is to ensure normal progression of the pregnancy and to attempt to establish the prognosis of the childbirth.

**Note:** if a woman experiences one or more problems between ANC appointments, she should IMMEDIATELY go to the health center.

The CHW should help the woman schedule an appointment for the first ANC and ensure that the woman has attended the consultation. This date should not be imposed on the woman, the CHW should take all factors into account and let the woman select a date that suits her, taking into account the timing of this consultation.

CHWs must inform the family of the costs related to access to care, including ANCs, which is MUSO's responsibility for all persons residing in our intervention sites.

*"We will apply some of our knowledge, particularly about the various possible outcomes after a urine pregnancy test is performed."*

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.

Preparation: select two volunteers to start and repeat this role-play with other participants as many times as necessary for everyone to understand.

Roles:

1. **Oumou COULIBALY:** you are a mother of a 17-month old boy and have not had a menstrual period for two months, so you would like to take a pregnancy test. The rest of information on ANCs and other details is of no interest to you. You delivered your first child in "Dialadjambougou". It was a home birth

without any complications. In addition, you did not attend an ANC given the distance between your village and a health center.

2. **Muso DIARRA:** you are the CHW. During one of your HV, Oumou COULIBALY asks you for a home pregnancy test after not having had her period for two months. She tells you that she just wants confirmation and that she is not interested in other pregnancy-related questions about the ANC and other information. She also states the arguments cited above. You administer the test, and the result is positive.
- What should be the course of action for this situation?
  - What are the key arguments to convince this woman to attend ANCs?
  - Discuss with her the overall schedule of ANCs and specify that any related costs will be Muso's responsibility.
  - If she agrees, help Oumou schedule her first ANC.
  - Schedule your next HVs with her.



## **Section 7: Home-monitoring of pregnant women**

*“We will discuss home follow-up of pregnant women by the CHW, which is a large part of the work.”*

After confirming a woman is pregnant, the CHW must see her several times during her pregnancy. The CHW should inform the pregnant woman that these visits should not prevent ANC and are complementary to the ANC and vice versa.

Visits should take place bi-weekly (every other week) for the first seven months of pregnancy and weekly (every week) starting at week 35 (approximately in the 8<sup>th</sup> month) of the pregnancy.

During these visits, the CHW should:

- Answer questions from the pregnant woman and family members as best as possible.
- Look for warning signs in pregnant women during pregnancy and after childbirth.
- Conduct discussions with the woman and her loved ones on topics such as recognizing warning signs during pregnancy, benefits of childbirth at a health center, birth plan, recognizing labor, benefits of and compliance with the ANC and PNC schedule, and FP.

### **1. Looking for and recognizing warning signs during pregnancy and after childbirth:**

*“We will now discuss warning signs during pregnancy.”*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. What are the warning signs that could occur in a pregnant woman?

Answers:

1. Give each participant a copy of the table below:

**Table of warning signs during pregnancy and after childbirth**

Warning signs	Description	Periods of occurrence
<b>SIGNS REQUIRING IMMEDIATE SUPPORT</b>		
<b>Heavy vaginal bleeding</b>	Heavy bleeding similar to menstrual cycles, especially during the 3 <sup>rd</sup> and 4 <sup>th</sup> month of pregnancy, may indicate “a miscarriage.”	During pregnancy, at any stage of the pregnancy, but especially during the first trimester.
	Bleeding that occurs beyond the first trimester, even if minimal, may indicate “placental abruption or a placental insertion abnormality.”	From the 4 <sup>th</sup> month of pregnancy

	Bleeding may also occur after childbirth: blood loss greater than or equal to 500 mL or that affects the patient's health. (Need to change the pagne [traditional African clothing] two or more times in 30 minutes or the bleeding increases instead of decreasing after childbirth.)	After childbirth
<b>Abdominal pain</b>	Abdominal pain during the first three months of pregnancy may indicate an extrauterine pregnancy or a serious infection.	At any stage of the pregnancy, but especially during the first trimester.
	Severe pain experienced later in pregnancy or during labor may also be a sign of "placental abruption," "intrauterine infection," or "early labor."	At stage of the pregnancy, but especially beyond the first trimester.
	It is a painful feeling in the woman's belly that persists and becomes more intense. Usually, it suggests a serious problem with the uterus, the woman's liver, or another organ in the abdomen.	After childbirth
<b>Fever (<math>T^{\circ} \geq 37.5^{\circ}\text{C}</math>) or episode of fever within 24 to 48 hours.</b>	Fever is a sign of infection with multiple origins: malaria, liver infection, uterine infection, or any other disease that causes fever flare-ups.	At any stage of the pregnancy.
	A high fever after childbirth suggests an infection, the origin of which is usually in the uterus, vagina, or bladder.	After childbirth
<b>Headache that does not improve after taking Paracetamol and/or visual disturbances and/or epigastric pain radiating to the right side with or without episode of hypertension.</b>	These are signs of severe preeclampsia that can rapidly progress to eclampsia. They are medical emergencies.	Any stage of the pregnancy after the 5 <sup>th</sup> month of pregnancy. Especially during the 7 <sup>th</sup> month, during labor, or the first two= weeks after childbirth.
<b>Seizures</b>	Seizures may be caused by eclampsia, which is also caused by severe hypertension.	At stage of the pregnancy, but more frequent from the 5 <sup>th</sup> month and during the first two weeks after childbirth.

<b>Stopping or decrease in fetal movements.</b>	Sign of fetal distress.	From the 7 <sup>th</sup> month of pregnancy.
<b>Significant vomiting with inability to eat or drink. Dizziness. Weight loss. Note: nausea and vomiting during the 1<sup>st</sup> trimester of pregnancy without dizziness or weight loss are common. CHWs should reassure women in these cases.</b>	These symptoms may cause changes in general condition or notable weaknesses.	At any stage of the pregnancy, particularly during the first few months.
<b>Uterine contractions.</b>	Signs of labor or threatened preterm delivery.	At any stage of the pregnancy, but especially at the end.
<b>Loss of consciousness.</b>	A loss of consciousness, also called fainting, refers to a loss of contact with the outside world, with a change in mental status. This can occur after childbirth, especially when the woman has lost a lot of blood or if she has very high blood pressure, but it can also be another serious disease.	At any stage of the pregnancy and after childbirth.
<b>Calf pain, redness, or swelling.</b>	This is localized pain in the calf. The pain worsens during movement or palpation of the part that becomes red and swollen. Usually, this suggests that a clot is located in the blood vessels of the leg. An emergency consultation is needed.	This usually occurs in the first few weeks after childbirth.
<b>Chest pain or rapid, difficult breathing.</b>	This is a symptom that can also occur after childbirth. Usually, it is a sign that a blood clot is in the blood vessels in the lungs or heart.	It usually occurs after childbirth but can also occur during pregnancy.
<b>Sadness, indifference, insomnia; thoughts about hurting</b>	These are signs of depression.	Any time during pregnancy, especially during the first few months after childbirth.

<b>oneself or her newborn.</b>		
<b>SIGNS THAT REQUIRE REFERRAL.</b>		
<b>Difficulty emptying the bladder or urinary incontinence.</b>	This is either retention of urine or an involuntary discharge of urine. Both may occur after childbirth, especially with complications.	It usually occurs after a childbirth with dystocia.
<b>Painful and red breast.</b>	Often, the breast may enlarge; it becomes sore to the touch, and it is often red. Usually, this is a sign of a germ in the breast.	
<b>Severe pallor</b>	This is when the eyes, palms of the hands, or soles of the feet turn white. It occurs when there is a lack of blood in the body.	It can occur during pregnancy or after childbirth.
<b>Infected tears.</b>	This is an infection of the tears (wounds) whether they are sutured or not.	After childbirth (episiotomy or tear with sutures).
<b>Inability to move.</b>	This is usually due to pain (episiotomy) or severe trauma (dystocia) that limits the woman's movement after childbirth. Also, anemia, severe depression, or other serious diseases after childbirth can make the woman very weak to the point that she no longer wants to (depression) or can leave (anemia) the bed.	During pregnancy, this may be severe anemia, severe depression; severe gestational vomiting or other serious diseases.
		After childbirth; typically, this is pain due to an episiotomy or severe trauma that occurred during childbirth (dystocia). Also, anemia, severe depression, or other serious diseases can cause these symptoms.
<b>Symptoms of domestic violence.</b>	These are signs of physical violence that can lead to medical complications as well as emotional and psychological stress during pregnancy or after childbirth.	Any time during pregnancy or after childbirth.
<b>Burning with urination</b>	Signs of bladder infections, risk of early childbirth.	At any stage of the pregnancy.

<b>Vaginal discharge with purulent odor.</b>	Signs of vaginal or intrauterine infections with a high risk of early childbirth.	Any time during pregnancy or after childbirth.
<b>Water breaking</b>	Risk of infection or early childbirth.	At any stage of the pregnancy.

At each HV, the CHW should complete the “Follow-up of Pregnant Women” form. Using this form, the CHW will ask the woman or her loved ones questions to check if she has experienced any of the warning signs.

If the woman has not experienced any of the warning signs, the CHW should continue the visit by discussing the warning signs to help the woman or her relatives recognize the warning signs.

This discussion on warning signs should take place during the first visits, as some warning signs may appear at this time. These discussions should continue until childbirth and after childbirth.

The CHW should ask the woman if she agrees to other family members joining this discussion because recognizing warning signs is everyone’s responsibility (the pregnant woman herself, the husband, the mother-in-law, the sisters-in-law, the neighbors, and others).

**Note:** the CHW must be able to clearly explain the warning signs by specifying the periods of pregnancy at which she experienced them.

**Note:** Warning signs should be addressed throughout the pregnancy, at every visit, with emphasis on warning signs that may occur during the pregnant woman’s current stage of her pregnancy.

The CHW should, if possible, share a picture board indicating warning signs with the pregnant woman and her loved ones. They should remind the pregnant woman and her loved ones that having at least one of these signs can be fatal to the woman and the baby she is carrying.

## 2. Course of action in response to warning signs during pregnancy and after childbirth:

The warning signs are divided into two groups: signs requiring IMMEDIATE SUPPORT and signs requiring REFERRAL.

- If there is at least one sign requiring IMMEDIATE SUPPORT, the CHW must absolutely accompany the pregnant woman to the health center or call the motorcycle ambulance if immediate transportation is not available from the woman or her loved ones.
- If there is at least one sign requiring REFERRAL, the CHW may accompany the woman to the health center or give a reference sheet to the woman or her loved ones specifying the reason(s) for the referral.

If the pregnant woman herself notices a sign requiring IMMEDIATE SUPPORT, she must go to a health center IMMEDIATELY if she is unable to contact her CHW.

**Note:** in case of domestic violence, the CHW should support the woman and, with her agreement, speak with stakeholders (husband and other close family members [mother-in-law, husband’s sisters/brothers, others]).

This discussion should focus on the physical and psychological complications that domestic violence can cause during pregnancy. The CHW should avoid being judgmental or taking sides as much as possible. If necessary, if the situation is beyond (his/her capabilities), he/she must IMMEDIATELY inform his/her supervisor.

### 3. Giving Birth at a Health Center

*“We will now discuss the benefits of giving birth at a health center. This knowledge is needed to convince pregnant women to go to a health center for delivery.”*

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. What are the benefits of giving birth at a health center?
2. What are the techniques for convincing a pregnant woman to deliver at a health center?
3. What is a birth plan?

Answers:

1. Giving birth at a health center has benefits at various levels, including the following:

**Benefits related to the health center:**

- Medicines and equipment to address complications.
- Technical equipment needed for childbirth.
- First vaccines for the newborn.
- The birth to be declared to the City Hall for the birth certificate to be granted.

**Benefits related to support by a qualified provider:**

- Provider trained to help the woman give birth in the best conditions possible.
- Monitoring labor to assist if it is taking too long because fetus is stuck or blocked in the mother’s pelvis.
- Screening and management of complications that are detected.
- Helps reduce complications during childbirth, such as infections, bleeding, high blood pressure and its (associated) complications (seizures and strokes).
- Prevents vesicovaginal and rectovaginal fistulas (a connection between the bladder or rectum and vagina resulting in a constant leakage of urine or stool).
- Knows his/her limitations and seeks guidance in case of complications.
- Knows the warning signs during labor, childbirth and after childbirth.
- Provides counseling for the woman and the newborn.

2. The CHW should lead this discussion from the second trimester (ideally at the end of the 2<sup>nd</sup> trimester visits) and continue until childbirth.
  - This discussion should start with attentive listening on the CHW’s part.
  - The CHW should ask a number of questions to facilitate the discussion and encourage the woman share her concerns, challenges and barriers she faces. These questions should include, but are not limited to:
    - Have you thought about where you will give birth?
    - How do you feel about giving birth at a health center?
    - How do you feel about giving birth at home?
    - What do you think are the reasons a woman would not give birth at a health center?

- The CHW should guide the discussion based on the responses given by the woman. During these discussions, he/she should be able to convince/accompany the pregnant woman who does not intend to give birth at a health center as well as her family; and reinforce the knowledge of the woman who intends to give birth at a health center about the benefits of childbirth at a health center.
3. The birth plan refers to all the arrangements made by the pregnant woman, the family and the community before and after childbirth. The CHW should discuss this plan during the third trimester visits. The discussion elements of this birth plan are the following:
- Who will accompany the woman?
  - Who will watch the children and the house?
  - With what means of transport will she go to the health center?
  - What are the concerns of the woman and her family?

Note: all of these aspects should be discussed with the family.

“We will now discuss labor and FP.”

Labor is a set of processes that result in one or more fetuses and the placenta being expelled from the female reproductive tract.

The CHW should clearly explain the signs of labor to the woman and her family and should clarify that recognizing these signs significantly reduces the risk of giving birth at home or on the way to the health center.

This discussion should take place from the second trimester of pregnancy until childbirth (between the 5<sup>th</sup> and 9<sup>th</sup> month of pregnancy) because labor can begin very early in some cases.

**BRAINSTORMING** – Ask each question to participants. Write their answers on a large sheet of paper. Then present the corresponding answer.

Questions:

1. What are the signs of labor?
2. What do you know about FP?
3. What are the benefits of FP?

Answers:

1. Signs of labor include the following:
  - Loss of the mucosal plug:
    - This is a sign that the cervix is starting to open. The mucous plug consists of secretions that block the cervix during pregnancy.
    - In addition, expulsion of the mucosal plug does not necessarily require immediately leaving for the health center.
  - Painful contractions increasing in intensity and frequency.
  - Water breaking usually occurs in the delivery room but can occur before.
  - A strong urge to have a bowel movement with or without liquid stool.
2. FP is the set of methods of birth control that allow women to choose whether or not to have children and when.
3. The benefits of FP and interpregnancy interval include the following:

**For the mother:**

- Recovery after giving birth and allowing the uterus to regain its elasticity.
- Reduce the risk of unintended pregnancies.
- Reduce the need for induced abortions in poor conditions.
- Foster economic and social growth.
- Reduce maternal mortality during pregnancy and childbirth.
- Reduce bleeding and tearing of the uterus during childbirth.

**For the child:**

- Reduce infant mortality.
- Allow healthy growth.
- More affection from the parents.

**For the father and entire family:**

- More financial savings and the completion of certain projects.
- Good mental health.

The FP discussion should take place with the woman and/or her husband during the start of the third trimester of pregnancy and continue after childbirth.

This discussion may take place in the presence of the husband or in his absence depending on the woman's preference.

The CHW should ask the pregnant woman these questions regarding FP:

- Do you want to have any other children? If so, how many and when?
- Have you ever used a planning method? If so, were you satisfied?
- Do you already have a planning method in mind?
- Do you have concerns about FP?
- Do you want to have information about FP? If so, use your knowledge of FP to offer good counseling.

Based on the woman's responses to the various questions, the CHW should guide the discussion and provide the benefits of FP and interpregnancy interval.

Note: a separate training module on FP will allow exploration of these concepts in more detail.

*"We will now review the activities to be conducted by a CHW during community-based pregnancy monitoring visits."*

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

Preparation: hand out a copy of the table below to all participants.

Instructions: for each row on the table, select a participant who will be responsible for explaining the content of that row to the other participants.

This table summarizes the activities to be conducted by a CHW during a woman's pregnancy monitoring according to the age of the pregnancy.



This table should be used as a memory aid for the CHW. He/she should review the table to prepare his/her presentation before going to visit the woman.

Period of Pregnancy	Activities to be Conducted by the CHW	Stakeholders
<b>First Trimester</b>	Look for warning signs and complete the home follow-up form for pregnant women.	Pregnant woman
	Discussion about recognizing warning signs in pregnant women.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Discuss the importance and schedule of ANC, schedule first ANC if she has not done so.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Husband</li> <li>● Loved ones</li> </ul>
	Remind the date of the next ANC and confirm the previous one was kept.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Confirm prenatal assessment was performed. If it was not done, ask why. Note challenges associated with it.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Husband</li> </ul>
<b>Second Trimester</b>	Look for warning signs and complete the home follow-up form for pregnant women.	Pregnant woman
	Discussion about recognizing warning signs in pregnant women.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Remind the date of the next ANC and confirm the previous one was kept.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Discuss benefits of giving birth at a health center.	Pregnant woman
	Confirm prenatal assessment was performed. If it was not done, ask why. Note challenges associated with it.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Husband</li> </ul>
	Recognizing labor.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Look for warning signs and complete the home follow-up form for pregnant women.	Pregnant woman
	Discussion about recognizing warning signs in pregnant women.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>
	Remind the date of the last ANC and confirm the previous one was kept.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>

<b>Third Trimester</b>	Discuss FP.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Husband</li> </ul>
	Discuss the birth plan.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Husband</li> <li>● Loved ones</li> </ul>
	Recognizing labor.	<ul style="list-style-type: none"> <li>● Pregnant woman</li> <li>● Loved ones</li> </ul>

Note: Looking for warning signs, completing the home follow-up form for pregnant women, and discussing the recognition of warning signs in pregnant women are ongoing activities to be performed throughout the follow-up process.

## **Section 8: Home Follow-Up for Women after Childbirth**

*“Today we are going to discuss the home follow-up of women by the CHW after childbirth.”*

The CHW should continue HVs even after childbirth.

The CHW should inform the woman who has just given birth that these visits should not prevent the PNC from being kept and that they are complementary to the PNC and vice versa.

Visits must be performed by the CHW:

- 24 hours after childbirth.
- 48 hours after childbirth.
- Five days after childbirth.
- Then weekly until 48 days after childbirth.

During these visits, the CHW should:

- Answer any questions from the pregnant woman and family members as best as possible.
- Look for warning signs after childbirth in the woman.
- Look for warning signs in the newborn.
- Conduct discussions with the woman and her loved ones on topics such as recognizing warning signs in the woman after childbirth, the benefits of breast-feeding exclusively, FP, the benefits of and compliance with the PNC schedule, etc.

The warning signs after childbirth are included in the table of pregnancy warning signs presented above. The course of action when a woman experiences at least one warning sign after childbirth is the same as the course of action for a pregnant woman.

The CHW should complete the form for the follow-up of women after childbirth. Using this form, the CHW should ask the woman or her family questions to check for any warning signs in her.

At the time of follow-up of the woman after childbirth, the CHW should also monitor the newborn according to the recommended schedule. All follow-up information about the newborn is covered in a separate training module.

## **Section 9: Practice Community-Based Pregnancy Monitoring after Childbirth.**

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.

**Preparation:** select two volunteers to start and repeat this role-play with other participants as many times as necessary for everyone to understand, changing the pregnancy trimester (first, second, and third trimester).

**Roles:**

1. **Oumou TESSOUGUÉ:** you are married and live in [LOCATION]. You have been pregnant for two months. You are monitored by Salimata TOURE, the CHW in charge of your area. At the same time, you went to the health center for your first ANC last Friday, with the help of Salimata. Your next ANC will take place in one month. In addition, the midwife gave you an examination slip for the antenatal assessment. You have discussed this with your husband who tells you to wait to pay the expenses. You are waiting for Salimata's 2<sup>nd</sup> follow-up visit that was scheduled two weeks ago.
2. **Salimata ARAMA:** you are the CHW and you are monitoring Oumou during her pregnancy. This is your 2<sup>nd</sup> visit today. Start by reassuring Oumou.
  - Using your memory aid, conduct the necessary activities (search/completion of the follow-up form, discussions, etc.) during this follow-up visit.
  - Share a picture board about the warning signs with Oumou and her family and explain how to use the board.
  - Emphasize common warning signs during the first trimester of pregnancy.

**SIMULATION/ROLE-PLAY** - Review what the participants should simulate or the role(s) they should play. Provide a timeframe for when participants should share their simulation or act out the situation.

**Preparation:** select two volunteers to start and repeat this role-playing (exercise) with other participants as many times as necessary for everyone to understand, changing warning signs.

**Roles:**

1. **Alimata TOURE:** you just gave birth to a beautiful boy. You are monitored by Djeneba KEÏTA, the CHW in charge of your area. You are waiting for Djeneba KEÏTA who should be arriving for a visit. For a few hours, you have had a severe headache despite taking paracetamol and feel extremely tired. When Djeneba KEÏTA arrives, you explain your discomfort.
2. **Djeneba KEÏTA:** you are the CHW and have been monitoring Alimata for a few days since her childbirth. You arrive at her home and she tells you about her discomfort.
  - Clearly and effectively explain to Alima what is happening to her.
  - Follow the appropriate course of action.

## **Section 10: Summary of the protocol for community-based monitoring of pregnancy and of postpartum**

*"We will now look at a summary of all the information in this module that will also help us in making decisions."*

*Hand out a copy of the diagram below to each participant.*

*Explain how to use the diagram.*

*Encourage a few participants to present the diagram to the group.*

*Give the other participants the floor for comments and positive criticism.*

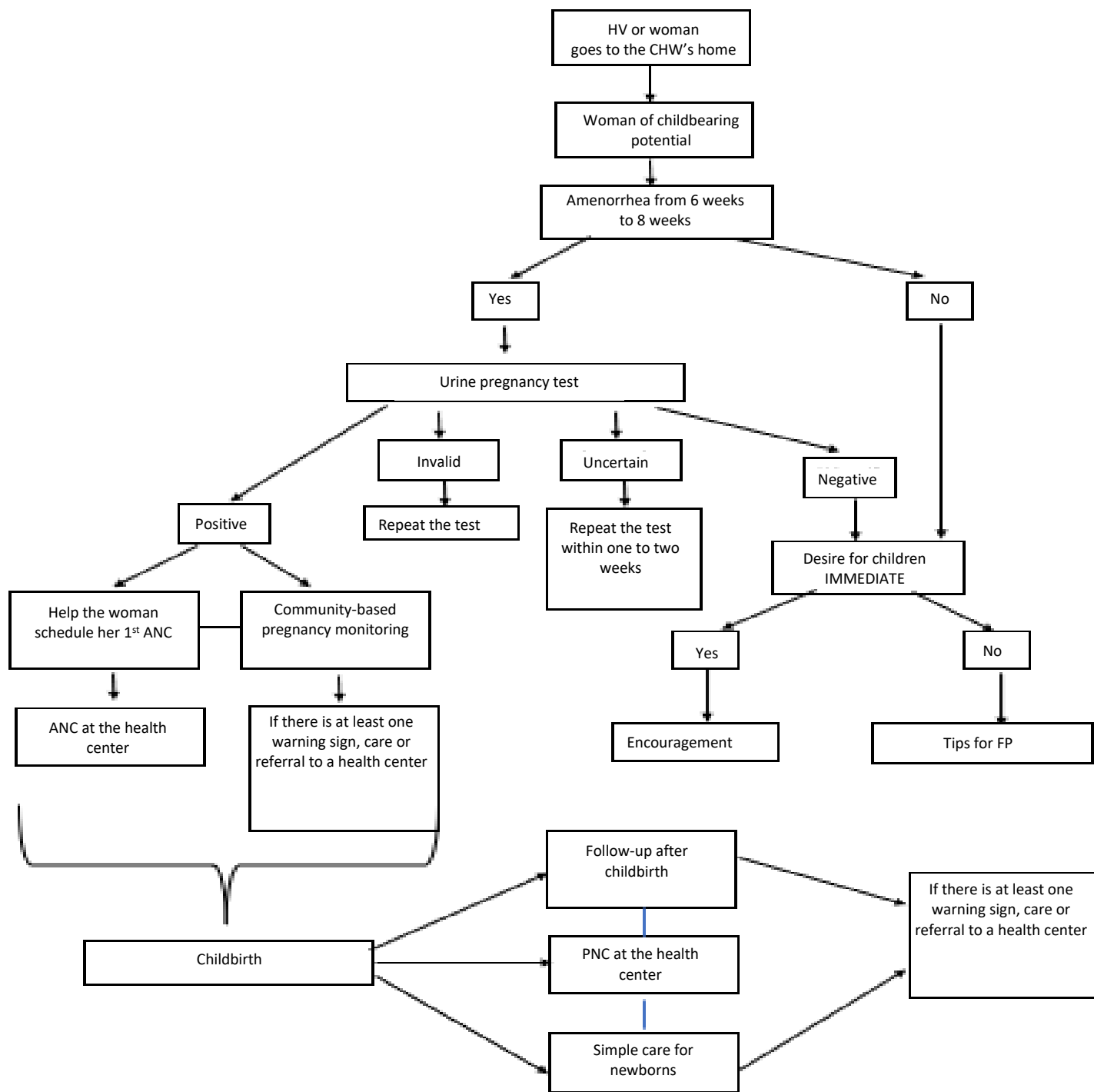
*Then ask for their impressions of this exercise.*

*Thank and congratulate the participants for their progress.*

**PRACTICE EXERCISE** - Go over the exercise instructions. Specify whether the exercise should be done individually or in teams. Advise participants as to whether they should share their answers. Provide the answer during or at the end of the exercise.

Preparation: hand out a copy of the diagram below to all participants.

Instructions: select one participant to present the diagram to the others. Repeat this exercise several times with other participants, as many times as necessary for everyone to understand.



**Figure 3:** Summary of the pregnancy protocol, of community-based pregnancy monitoring and follow-up after childbirth.

*"We will now take some time to discuss a story inspired by a real situation that occurred at one of our intervention sites."*

- *Through this story, you will understand that you will be able to save a lot of lives, reduce the impact of disease on populations, and that your actions in diagnosing pregnancy, community-based pregnancy monitoring, follow-up after childbirth, and simple care for newborns will be very important, as will the rest of the aspects of the package.*
- *You are not a doctor or midwife, but you are a member of the healthcare staff now, and you will make a significant contribution through a synergy of actions with the health center teams to reduce mortality and morbidity in your intervention areas.*
- *Tell participants to state out loud, "We can do it and we will do it."*

**CASE STUDY** - Share the story with the participants. Make sure to answer all the comprehension questions. Then ask one question at a time to the participants. Specify whether the work should be done together, as a team, or individually. Advise participants as to whether they should share their answers. Provide a timeframe in which to do this work. Summarize the concept illustrated by this story at the end of the study.

Story:

This is the story of a 30-year-old woman who was giving birth for the second time.

She gave birth to two lovely babies (one boy and one girl). She was initially diagnosed by a CHW (her area's CHW). The same CHW monitored the woman throughout the pregnancy to help her regularly attend ANC's at the center and also paid regular visits until childbirth.

After childbirth, the CHW continued to monitor the woman and provided monitoring and simple care for the newborns.

At the 3<sup>rd</sup> follow-up visit after childbirth (follow-up on the 5<sup>th</sup> day), the CHW found that the woman showed a warning sign (headaches that did not subside despite taking paracetamol).

The CHW immediately explained to the new mother that she should go to the health center for a consultation for further investigation.

As the mom trusted the CHW, she followed the CHW to the health center for a consultation.

Despite a thorough consultation with the providers at the health center, no hypertension or other causes were identified to explain the mother's headaches. This could be explained by the fact that the elevated blood pressure in this situation may be fluctuating (going up and down). After the consultation, the provider reassured both people and asked them to come back if the headaches persist and/or the woman experiences another sign; he told the woman to continue taking paracetamol as needed.

The mother and CHW went home, and the CHW asked the mom to contact her if needed.

Hours later (at night), the CHW received a call from the father saying that his wife (the twins' mother) was not feeling well.

The CHW immediately went to the mother's home and found her having seizures. She was immediately transported to the health center, then to a hospital for more care and was hospitalized for about two weeks. The husband had to leave his business during this time to be at his wife's bedside.

Because the mother was very sick and could not feed the babies, the exclusive breastfeeding of the babies was unfortunately disrupted, and they were given formula because the father could not afford to buy any.

Feedback and arrangements were provided to reinforce the capacity of the center staff.

After two weeks, the mother went home.

The babies who have since grown up, now live happily with their mother.

Questions:

- In what way does this story inspire you?
- How do you feel about the CHW's actions? Do you think you can fully perform your role as CHW like the CHW in the story?
- What was the impact of this hospitalization?
- Could this hospitalization have been avoided? If so, how?
- If the woman had died, what might have been the consequences?



## **Section 11: Assessment and post-test**

### **1. Assessment:**

*"We are going to do an assessment of this training module."*

1. ASK participants what their thoughts are on this training module.
2. Then ASK the following questions:
  - a. What aspects did you find most useful, and which should be maintained or even reinforced for the remainder of this training or for future training?
  - b. What aspects were not beneficial to you and did not help you understand the concepts?
  - c. What aspects can we improve?
3. REMIND participants that there is a suggestion box, and they should not hesitate to use it.
4. REVIEW the module objectives and ask participants if they achieved these objectives. If this is not the case, ask them why and summarize these objectives to achieve a better understanding.

### **2. Post-test:**

- *Advise the participants that we are moving on to the post-test.*
- *Hand out a copy of the post-test to all participants.*
- *Read and go over the questions one at a time pausing (30 seconds/question) to encourage participation.*
- *At the end, thank all participants and collect the forms.*

## **Bibliographic References**

1. World Health Organization. "Maternal Mortality." 22FEB2023. Available at: <https://www.who.int/fr/news-room/fact-sheets/detail/maternal-mortality>
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