Maternal Mortality Reduction
Program Assistant Training

PARTICIPANT HANDBOOK
Partners In Health (PIH) is an independent, non-profit organization founded over twenty years ago in Haiti with a mission to provide the very best medical care in places that had none, to accompany patients through their care and treatment, and to address the root causes of their illness. Today, PIH works in fourteen countries with a comprehensive approach to breaking the cycle of poverty and disease – through direct health care delivery as well as community-based interventions in agriculture and nutrition, housing, clean water, and income generation.

PIH’s work begins with caring for and treating patients, but it extends far beyond to the transformation of communities, health systems, and global health policy. PIH has built and sustained this integrated approach in the midst of tragedies like the devastating earthquake in Haiti, in countries still scarred from war, like Rwanda, Guatemala, and Burundi, and even in inner-city Boston. Through collaboration with leading medical and academic institutions like Harvard Medical School and the Brigham & Women’s Hospital, PIH works to disseminate this model to others. Through advocacy efforts aimed at global health funders and policymakers, PIH seeks to raise the standard for what is possible in the delivery of health care in the poorest corners of the world.

PIH works in Haiti, Russia, Peru, Rwanda, Lesotho, Malawi, Kazakhstan, and the United States. PIH supports partner projects in Mexico, Guatemala, Burundi, Mali, Nepal, and Liberia. For more information about PIH, please visit www.pih.org.

Many PIH staff members and external partners contributed to the development of this training. We cannot individually thank all of them, but we are indebted to them for their commitment, passion, and hard work.


© Text: Partners In Health, 2011.

Cover photograph: Partners In Health

Design: Mechanica, Annie Smidt, and Partners In Health

Printing: ACME Books, Inc.

English version 1 published January 2012
This manual is dedicated to the thousands of community health workers whose tireless efforts make our mission a reality, and who are the backbone of our programs to save lives and improve livelihoods in poor communities. Every day, they visit community members to offer services, education, and support, and they teach all of us that pragmatic solidarity is the most potent remedy for pandemic disease, poverty, and despair.
# TABLE OF CONTENTS

## UNIT 1
### Introduction and MMRPA Roles and Responsibilities
1. Background, Objectives, Key Points
2. Importance of MMRPAs
3. Selection Criteria and Protocols for MMRPAs
4. MMRPA Roles and Responsibilities
5. MMRPA Work Flow Diagram
6. Introduction to Partners In Health
7. Notes

## UNIT 2
### Pregnancy, Prenatal Care, and Postnatal Care
8. Background, Objectives, Key Points
9. Reproductive Processes
10. Prenatal Care (ANC)
11. Major and Minor Ailments of Pregnancy
12. Anemia
13. Labor and Delivery
14. Postnatal Care (PNC)
15. Role Play
16. Notes
UNIT 3
HIV/AIDS and STIs

53   Background, Objectives, Key Points
56   What are HIV and AIDS?
62   Stages and Symptoms of HIV/AIDS
73   Transmission of HIV/AIDS
77   HIV Testing and Prevention
80   Male and Female Condoms
85   HIV/AIDS Education Checklist
86   HIV/AIDS Treatment
98   Side Effects of ARVs
104  Sexually Transmitted Infections (STIs)
109  HIV/AIDS Treatment and STIs Checklist
110  HIV Education Role Plays
112  Notes

UNIT 4
Preventing Mother-to-Child Transmission of HIV (PMTCT)

113  Background, Objectives, Key Points
116  PMTCT and MMRPA Responsibilities
126  Infant Formula Program
128  How to Prepare Infant Formula
131  PMTCT Checklist
132  PMTCT Role Plays
135  Notes
UNIT 5
Tuberculosis (TB)

137  Background, Objectives, Key Points
140  TB Transmission, Diagnosis, and Groups at Risk
145  Symptoms of TB
147  Preventing TB Transmission
150  TB Treatment
158  Side Effects of TB Medications
162  TB Treatment Checklist
163  TB Case Studies
166  Notes

UNIT 6
Family Health

167  Background, Objectives, Key Points
170  What is family planning?
171  Family Planning Benefits and Obstacles
175  Birth Control Methods
184  Side Effects of Birth Control
185  Birth Control and Women’s Health
187  Immunizations
189  Nutrition and Malnutrition
194  Diarrhea and Vomiting
198  Personal and Household Hygiene
199  Good Hygiene Practices Checklist
200  Notes
UNIT 7
Reporting and Evaluation

201  Background, Objectives, Key Points
202  MMRPA Oath
203  Notes
205  Evaluation Form
It is very important for women to stay healthy during pregnancy and deliver safely, both for their own health and safety and that of their babies. Doing this maintains healthy communities and builds a healthy next generation.

To stay healthy during pregnancy and deliver safely, all pregnant women should attend the correct number of prenatal visits, deliver at a health facility, complete postnatal visits, and have their babies immunized. Pregnant women with HIV must also take antiretroviral medicine (ARVs), get their babies tested for HIV at 6 weeks after the birth, and give their babies NVP drops.

In Lesotho, where clinicians and human resources have been scarce, many women give birth at home, often with the help of traditional birth attendants. In the past, traditional birth attendants were trained by clinicians to do this. But despite the help of traditional birth attendants, many women in our communities have serious problems during labor, and sometimes they or their babies die.

Also, in Lesotho there is an HIV/AIDS epidemic and up to 23.7 percent of the population has HIV. When women with HIV give birth at home, they often pass HIV to their babies, and the traditional birth attendants also risk becoming infected with HIV.

To address these serious problems, Partners In Health Lesotho (PIHL) is starting a new program, the Maternal Mortality Reduction Program (MMRP). Through this program, health workers formerly known as traditional birth attendants will become Maternal Mortality Reduction Program Assistants (MMRPAs).

MMRPAs’ main responsibility is to accompany all pregnant women to the health facility for each and every clinical service, from booking the first prenatal visit through
delivery and the 6-weeks postnatal visit. MMRPAs will accompany all pregnant women regardless of their HIV status. During this training, participants will learn how to carry out these responsibilities.

Through the MMRP, PIHL will reduce serious health problems, disease, and deaths during pregnancy and birth. In other words, PIHL will reduce maternal morbidity (disease or health problems) and mortality (deaths).

MMRPAs’ work is vital to improving women’s, newborns’, and families’ health. MMRPAs can save lives by educating and accompanying pregnant women.

**OBJECTIVES**

By the end of this unit, you will be able to:

a. Explain the importance of MMRPAs to the health of pregnant women, families, and communities.

b. Describe the qualifications and characteristics required of MMRPAs.

c. Name the roles and responsibilities of MMRPAs.

d. Explain the mission and vision of Partners In Health (PIH), and how PIH helps the poor gain access to the basic human rights of health care, housing, food, water, education, and economic opportunities.
**Key Points**

- To stay healthy during pregnancy and deliver safely, all pregnant women should attend the correct number of prenatal visits, deliver at a health facility, complete postnatal visits, and have their babies immunized. Pregnant women with HIV must also take antiretroviral medicine (ARVs) if needed, get their babies tested for HIV after the birth, and give their babies NVP drops.

- Through the work of Maternal Mortality Reduction Program Assistants (MMRPAs), the Maternal Mortality Reduction Program (MMRP) will help pregnant women to access prenatal care, health facility delivery, and postnatal care.

- MMRPAs must accompany all pregnant women to the health facility for each and every clinical service, from booking the first prenatal visit through delivery and the 6-weeks postnatal visits. They will accompany all pregnant women regardless of their HIV status.

- Through the MMRP, PIHL will reduce serious health problems, disease, and deaths during pregnancy and birth.

- Your MMRPAs’ work is vital to improving women’s, newborns’, and families’ health. MMRPAs can save lives by educating and accompanying pregnant women.

- MMRPAs must meet the following selection criteria: should be people who are loved and trusted by the community, be selected by the chief and villagers during a public gathering, be less than 60 years of age, able to read and write, dedicated and very committed to her work, honest and truthful, clean, a non-drinker and non-smoker, and a role model in the village.

- MMRPAs must keep patient information in confidence at all times.

- MMRPAs help to carry out the mission and vision of PIHL to help the poor gain access to the basic human rights of health care, housing, food, water, education, and economic opportunities.
CONFIDENTIALITY

As you know, confidentiality is an important requirement of an MMRPA’s job. You must keep everything that community members tell you, and everything you know about their medical conditions, confidential. You should only share such information with the person’s doctors and nurses. You should not share this information even with the person’s spouse, siblings or children, or with your own spouses, siblings, or children.

Some of you may need to share information about your assigned households during the training or ask questions about specific cases. You must share or ask in a way that maintains confidentiality. For example, do not use the person’s name, say where the person lives, or give any other information that would reveal the person’s identity. Everyone in this room must do this. Also, you must not talk about confidential information outside of this training.
Importance of MMRPAs

Your main responsibility as MMRPAs is to accompany all pregnant women to the health facility for each and every clinical service, from booking the first prenatal visit through delivery the 6-weeks postnatal visit. You will accompany all pregnant women regardless of their HIV status.

Through the MMRP, we will reduce serious health problems, disease, and deaths during pregnancy and birth. In other words, we will reduce maternal morbidity (disease or health problems) and mortality (deaths).

Your work as MMRPAs is vital to improving women’s, newborns’ and families’, health. As MMRPAs, you can save lives by educating and accompanying pregnant women daily.

As MMRPAs, you will visit pregnant women regularly, educate them about important health topics, and accompany them through prenatal care, delivery, and postnatal care. Women must be able to trust you with private information about their health and their needs. As an MMRPA, you must also be non-judgmental and respectful so that women and their families trust you and feel comfortable with you. You must be a role model in the village.
Selection Criteria and Protocols for MMRPAs

The MMRPA will be selected by the chief and villagers during a public gathering and must meet the village health worker selection criteria:

- Must not be over 60 years of age
- Should be able to read and write
- Should be dedicated and very committed to her work
- Should be honest and truthful at all times
- Should be clean at all times
- Should be a non-drinker and non-smoker
- Should be a role model in the village
- Should be trusted to keep patient information in confidence at all times
- Should be loved and trusted by the community

All of these qualities and characteristics are important, and you have been chosen as MMRPAs because you have these characteristics. You must work hard to earn and keep the respect and trust of families, villagers, chiefs, and clinicians by doing your job well at all times.
MMRPA Roles and Responsibilities

**MAJOR MMRPA ROLES AND RESPONSIBILITIES**

- Hold public gatherings at different villages for raising awareness of the Maternal Mortality Reduction Program.
- Identify all pregnant women in the villages, and encourage them to attend ANC (prenatal visits).
- Accompany all pregnant women to the health facility for early booking of the initial prenatal visit and subsequent visits.
- Recognize the major ailments of pregnancy, and accompany any pregnant woman experiencing a major ailment to the health facility immediately. Teach pregnant women to recognize the major ailments of pregnancy so they know when to go for help.
- Accompany pregnant women to the health facility for extra visits when needed.
- Accompany all pregnant women to their monthly follow-ups.
- Accompany pregnant women to the shelters 2 weeks before their estimated delivery dates (EDDs), or directly to the health facility if labor starts before the woman is at a shelter.
- Accompany all women who have delivered accidentally at home to the health facility within 48 hours (2 days) of delivery.
- Provide Directly Observed Therapy (DOT) to all pregnant women who are on TB medication, ART, or ARV prophylaxis.
- Accompany mothers and their new babies to the 7-day and 6-week (6/52) postnatal visits.
- Ask about and identify mild and severe side effects of ARVs or TB medication in women taking ARVs or TB medication, and accompany women suffering from severe side effects to the health facility immediately. Remind women to report to you any side effects they experience while taking these medications.
- Accompany babies born to mothers with HIV in the infant formula program up until the baby has finished the program.
- Accompany babies to the Under-5s Clinic until they are declared fully immunized.
- Educate all women under your care about family planning, nutrition, treatment of diarrhea, and good personal and household hygiene practices.
☐ Provide home-based care for any woman under your care who is ill and needs help, including bathing, cooking, feeding, and cleaning, especially if the woman does not have family to take care of her.

☐ Take part in all surveys that are conducted in your village.

**MMRPA ADMINISTRATIVE AND OUTREACH RESPONSIBILITIES**

☐ Attend all formal trainings.

☐ Attend almost all monthly informal trainings every year.

☐ Attend all monthly meetings and emergency meetings.

☐ Give health education sessions to the community every month.

☐ Inform your supervisors about any health-related issues that are occurring in the village.

☐ Participate in all outreach campaigns and outreach activities.

☐ Remember that the incentives that MMRPAs receive are performance based.

☐ Ensure timely reporting to MMRPA supervisors when a patient dies (within 48 hours of the death).

☐ Report on time to MMRPA supervisors when you will be away so that your caseload can be shifted to another MMRPA for that time period.

☐ Complete and submit all required forms accurately and on time.

**MMRPAS SHOULD NOT**

☐ Talk about or share a family’s personal information with anyone except a doctor or nurse.

☐ Ask for or accept money, gifts, or favors from families.

☐ Hide information about a family’s health problems from MMRPA supervisors or health facility staff.

☐ Give incorrect information in reports or forms.

☐ Drink alcohol.

☐ Deliver pregnant women in the community.
MMRPA Workflow Diagram

MMRPAs are selected and approved by chiefs. MMRPAs receive identification cards. MMRPAs receive training.

MMRPAs accompany pregnant women under their care to:
- Booking visit
- Subsequent visits
- Extra visits if needed

MMRPAs follow up with pregnant women regularly and accompany them to the health facility immediately if they are suffering from any major ailments.

MMRPAs accompany pregnant women to the shelter 2 weeks before EDD. MMRPAs accompany pregnant women directly to the health facility if labor starts early.

MMRPAs accompany women to the 6-week postnatal visit.

This diagram shows how MMRPAs work under and report to MMRPA Supervisors. MMRPA Supervisors work under and report to the MMRPA Coordinator.
MMRPA PROGRAM ORGANIZATIONAL STRUCTURE

- MMRPA Coordinator
- MMRPA Supervisor
- MMRPA
Introduction to Partners In Health

THE PIH STORY

More than twenty years ago, PIH began delivering health care in central Haiti. We wanted to provide health care to people who did not have access to it – poor people. Our founding principles were to provide health care to those most in need, accompany them throughout their illness, and never abandon the communities where we work. Over the years, PIH grew, so that now PIH employs thousands of clinicians, social workers, hospital administrators, and community health workers around the world. Today, PIH works in over a dozen different countries.
PIH AROUND THE WORLD

PIH currently has programs in Haiti, Peru, Russia, Rwanda, Lesotho, Malawi, Kazakhstan, and the United States, and supports projects in Mexico, Guatemala, Burundi, Mali, Nepal, and Liberia. PIH's main offices are in Boston in the United States. That office supports all of PIH's programs.
PIH IN ACTION

These photos will give you an idea of the type of work that we do.

- The photo in the upper left-hand corner is of our project in Peru, which focuses on improving treatment and control of tuberculosis (TB).

- The photo below that is our project in Russia, which was started to help people in prison who have multidrug-resistant tuberculosis (MDR TB) and alcoholism. (MDR TB is TB that can fight off several kinds of medicine that normally work well against the disease.)

- The upper right-hand photo is of an accompagnateur in Haiti delivering medication to a patient, and the photo below that is of a Haitian PIH doctor in Lesotho conducting home visits.

- Boston’s project, which is not shown, addresses the health needs of Boston’s poorest neighborhoods.

- Each of PIH’s sites has many people working there: doctors, nurses, pharmacists, lab technicians, social workers, drivers, administrative staff, accompagnateurs, and community health workers. As an MMRPA, you are part of this committed group of people.
Access to Comprehensive Health Care

The central focus of PIH is providing access to comprehensive health care. Our work includes prevention and care of HIV/AIDS as part of everyday health care, detection and prevention of tuberculosis, detection and treatment of sexually transmitted infections (STIs), and women’s health.

Health care is a human right – everyone deserves it. No one should be denied health care because they cannot afford it. When individuals are healthy, their communities are healthy: healthy adults can work and provide for their families; healthy children can go to school and learn; healthy families can build homes and grow food. Access to health care helps the entire community.

Health Facility Improvements

These are before-and-after photos of a clinic in Rwanda. We believe that our patients deserve the best health care possible in the best facilities possible. At PIH, we do whatever it takes to make someone well. If a member of your family was sick, wouldn’t you do everything necessary to make him or her well? We believe that those who are the poorest deserve high-quality health care. We aim to provide them with the same quality of health care that we would want for our family members or for ourselves. In partnership with governments and other organizations, we provide free, high-quality health care and frequently help rebuild or refurbish hospitals and clinics.
Access to Education

Another part of PIH’s mission is providing access to education. Education is also a human right. Education is an important tool for strengthening communities and achieving social justice. PIH helps provide school fees for families that cannot afford to send their children to school. PIH also conducts training programs for patients, doctors, nurses, accompagnateurs, government health workers, and employees from other organizations. This MMRPA training course is an example of the training that PIH conducts.

Access to Housing

This is a photo of a housing improvement project in Haiti. PIH also addresses the social and economic needs of our patients who are most in need. The expression “social and economic needs” refers to shelter, food, water, and jobs. Shelter from the cold and rain is a fundamental human right. Without proper shelter, people can become very sick, so we try to provide housing for our patients whenever possible.
Access to Food and Water

Other basic social and economic needs are food and water. People cannot become healthy or stay healthy without food, so PIH offers food packages and nutritional support to patients starting treatment for HIV or TB. We also work with members of the community to start agricultural projects and teach farming methods, because access to food and water are also human rights.

Economic Opportunities

Many of our patients are sick and hungry because they have no jobs and thus no way to earn money. PIH tries to teach skills to patients so that they can generate income from jobs such as construction, selling produce, and sewing. We also try to employ patients as drivers, assistants, or MMRPAs whenever we can.
Community Partnerships

PIH believes that it is essential to partner with the community. We hire and train local staff. We work with governments to reinforce national health services so that more people receive services. We collaborate with other health workers, such as traditional birth attendants and government health workers, because together we can have a stronger impact. These partnerships ensure that PIH is well integrated into the community and addresses its greatest needs.

All of these things, including health care, education, food, water, and work, are basic human rights. PIH works to provide access to all of these rights for those most in need. This is how PIH works for social justice for the poorest people. We can and do help many people, but we place an emphasis on helping those who are the poorest.

If people do not have good health, food, water, education, or opportunities, then we must work for social justice so that all people have these things. The work of PIH – your work – is to help to create a more just world.
MMRPAs

MMRPAs are vital to the mission of Partners In Health (PIH). By visiting and accompanying pregnant women, MMRPAs help keep women, babies, and whole communities healthy. They act as a link between communities and health facilities. By doing this work, MMRPAs stand in solidarity with the poor and sick.
Among the main responsibilities of MMRPAs are to accompany pregnant women through all aspects of prenatal care (ANC), accompany them to the health facility for delivery, and accompany them through postnatal care. MMRPAs must also look for major ailments of pregnancy, and accompany women to the health facility immediately if they are suffering from any of these ailments.

ALL pregnant women must go to the health facility for prenatal care (ANC) to help themselves and their growing babies stay healthy, even if they do not have HIV or other illnesses. During prenatal visits, the nurse or doctor will check the pregnant woman and her growing baby to make sure they are healthy.

In this unit, you will learn the specific responsibilities related to the accompaniment of pregnant women through prenatal care, delivery, and postnatal care. You will also review pregnancy and birth processes, and the major and minor ailments of pregnancy, so that you can educate women under your care.
OBJECTIVES

By the end of this unit, you will be able to:

a. Describe the basic processes of pregnancy and delivery, and educate pregnant women about these things.

b. Explain to and educate pregnant women about why prenatal care (ANC) and Voluntary Counseling and Testing (VCT) are important, and what happens during prenatal visits.

c. Describe when pregnant women should have prenatal visits and describe the MMRPA’s role in accompanying pregnant women through all aspects of prenatal care (ANC).

d. Identify major and minor ailments related to pregnancy.

e. Educate pregnant women about major and minor ailments so that they can recognize them and seek the MMRPA’s help if they experience major ailments.

f. Accompany pregnant women with major ailments to the health facility immediately. For minor ailments, give appropriate advice.

g. Define anemia and identify its symptoms.

h. Educate pregnant women so that they recognize the symptoms of anemia and can seek the MMRPA’s help if they experience symptoms.

i. Refer pregnant women with anemia to the health facility.

j. Identify the signs that mean a pregnant woman is starting labor.

k. Describe the benefits to the mother and baby of delivering at a health facility, and educate pregnant women about these benefits.

l. Accompany pregnant women to the shelter 2 weeks before their estimated date of delivery (EDD), or directly to the health facility if labor has started.

m. Describe the benefits to the mother and baby of attending the 6-week postnatal visit (6 weeks after delivery).

n. Accompany mothers and their new babies to the 6-week (6/52) postnatal visit (6 weeks after delivery).
**Key Points**

- All pregnant women should attend prenatal visits, get tested for HIV (Voluntary Counseling and Testing or VCT), go to the shelters 2 weeks before their estimated delivery date (EDD), deliver at the health facility, attend postnatal visits, and have their babies immunized.

- MMRPAs must accompany women through all aspects of prenatal care, travel with them to the shelter or health facility, and accompany them during postnatal care.

- Major ailments related to pregnancy include: dizziness, persistent headaches, absence of fetal movement, epigastric pain (pain in the upper abdomen), bleeding, premature rupture of membranes, edema of feet and legs, swelling and pain in the lower abdomen, and symptoms of anemia.

- If a pregnant woman experiences any of these major ailments, she must go to the health facility immediately, accompanied by the MMRPA.

- Minor ailments of pregnancy include: nausea, heartburn, constipation, muscle cramps, body pains such as stomachache or backache, cravings, chloasma, and hemorrhoids. MMRPAs must give appropriate advice to women experiencing minor ailments.

- The signs that labor is starting are: water breaks, contractions start, bloody mucus (bloody show) comes from the vagina. MMRPAs must accompany women who start labor to the health facility immediately if the women are not already in shelters.

- The benefits to the mother and baby of delivering at a health facility include: a clean, warm, and sterile environment, skilled clinicians who know how to deal with problems, easy transfer to the hospital in emergencies, prevention of HIV transmission from mother to baby, medications, and Starter Packs.

- All pregnant women should go to the shelter 2 weeks before their estimated date of delivery (EDD), or directly to the health facility if labor has started, accompanied by the MMRPA.

- All new mothers should attend the 6-week postnatal visit (6 weeks after delivery) and have their babies immunized according to the national schedule.
Reproductive Processes

Even though pregnancy and birth are natural parts of life, many people do not know the processes that lead to a woman becoming pregnant and giving birth.

Part of your job is to educate pregnant women about the basic processes of pregnancy and birth. It is important for you to become familiar and comfortable with pregnancy and birth processes so that you can educate and help women to have healthy pregnancies and healthy babies.

EGG AND SPERM

A woman has many eggs in her ovaries. Every month, an egg is released from the ovary and travels down the fallopian tube. It takes around 12 hours for the egg to reach the middle of the fallopian tube.

A man’s semen has millions of sperm. Sperm look like tadpoles when viewed under a microscope. They are produced in the testes. When a male reaches orgasm during sexual intercourse, he ejaculates 150–500 million sperm as semen through the penis.
FERTILIZATION

When a man and a woman have sex and the man ejaculates, sperm from the man’s penis goes into the womb (uterus) and travels up the fallopian tube to the egg. This is where the egg and sperm meet.

If the sperm from the man’s penis connects with the egg, the egg is fertilized. The fertilized egg then travels down the fallopian tube into the womb, attaches to the wall of the womb, and begins to grow.

If the egg is not fertilized, the egg is expelled from the woman’s body through the vagina along with blood and some excess tissue from the womb (uterus). This is called menstruation, or a woman’s period.
Once a woman has a fertilized egg in her womb, she is pregnant. Sometimes the fertilized egg divides into two or more eggs, or more than one egg is fertilized. In these cases, a woman will carry twin or triplets.

The fertilized egg grows into a baby, and the baby grows bigger every month. By the last few months of her pregnancy, a woman’s womb has grown very large to hold the growing baby. The baby grows inside of the amniotic sac, which is a thin bag full of clear fluid that protects the baby from infection and cushions the baby as the woman moves.

The placenta is a package of blood vessels (tubes) that grows inside the womb next to the baby. Some of the mother’s blood runs through the placenta into the umbilical cord. The umbilical cord is attached to the growing baby, and the baby receives blood and nutrients from the mother’s body through the umbilical cord.
LENGTH OF PREGNANCY

Pregnancy usually lasts 38–40 weeks, or 9 months from the woman’s last menstruation to child birth. It is important for a woman to keep the track of the time she has been pregnant so that she knows when to go to her prenatal checkups and when to start preparing for labor and birth.

SIGNS OF PREGNANCY

When a woman is pregnant, she experiences certain signs and symptoms:

• Missed period
  A sperm from the man’s penis has connected with an egg, and the egg has attached to the wall of the womb and started to grow into a baby. The egg does not get flushed out, and the woman does not have a period.
• **Enlarged breasts**
  A woman’s breasts grow larger and are sometimes sore.

• **Darkening of the areola**
  A woman’s nipples and the skin around them become darker.

• **Unusual cravings**
  A woman may crave strange or unusual foods.
• **Nausea**
  A woman feels sick to her stomach and may vomit.

• **Enlarging abdomen**
  A woman’s abdomen (stomach) grows bigger as the baby grows.

• **Fetal movements**
  The growing baby (also called a fetus) moves in the womb.

• **Palpation of the baby**
  The nurse will touch the woman’s abdomen to feel the baby’s body and the way it lies in the uterus.
• **Colostrum coming from the breasts**
  A thick, yellow-white substance (called colostrum) may leak from the woman’s breasts.

• **Positive HCG**
  If the urine test at the health facility is positive, this means a woman is pregnant.
LABOR AND DELIVERY

When a woman is ready to give birth, she goes into labor. When labor starts, the womb muscle tightens to help push the baby out. These are called contractions or labor pains.

Before or after the contractions start, the woman’s water breaks. This is when the amniotic sac that surrounds the baby breaks, and the clear fluid comes out of the woman’s vagina.

Sometimes when labor starts, some bloody, thick mucus, called bloody show, will come out of the woman’s vagina. This mucus has served as a “plug” to keep germs from entering the womb (uterus). When labor starts, this plug comes out.

The womb has a very strong muscle, so the contractions are very strong. With every contraction, the baby is pushed down a little bit more. As contractions continue, they become more regular, more frequent, and stronger.

During labor, the baby moves from the womb into the birth canal. When the baby has moved down into the birth canal, the woman pushes during every contraction to help push the baby out. The birth canal stretches to allow the baby to come out, and the baby is born.
Prenatal Care (ANC)

Some of your main responsibilities as an MMRPA are to accompany pregnant women through all aspects of prenatal care (ANC), accompany them to the health facility for delivery, and accompany them through postnatal care.

Remember that ALL pregnant women must go to the health facility for prenatal care (ANC) to help themselves and their growing babies stay healthy, even if they do not have HIV or other illnesses. During prenatal visits, the nurse or doctor will check the pregnant woman and her growing baby to make sure they are healthy.

PRENATAL VISITS

A pregnant woman should have 5 prenatal visits total:

- Booking visit (1st visit) – as soon as she knows she is pregnant, or at least within the first 14 weeks of pregnancy
- 4 more visits

To accompany pregnant women, MMRPAs must:

- Go with pregnant women to the booking visit and other prenatal visits.
- Bring pregnant women to the health facility for more visits if there are problems.

Why is prenatal care (ANC) important?

- The clinician does physical exams to look for problems, including checking the position of the baby. If there are problems the clinician will help.
- Clinicians give counseling, support, and nutrition advice.
- Women receive vaccinations and other treatment if needed.
- Women can receive free and confidential testing for HIV (Voluntary Counseling and Testing or VCT).
- Women with HIV receive help through the PMTCT program and learn how to prevent passing HIV to their babies.
- Women learn their expected due dates (EDD) so that they know when to start planning to come to the shelter.
Maternal Mortality Reduction Program Assistant Training

UNIT 2

1. EDD
2. 
3. 
4. HIV test?
5. 
6. 
7. PMTCT
8. Symptoms of STIs?
1. The nurse determines the woman’s expected due date (EDD) so that the woman will know when to enter the shelter.

2. The nurse checks the woman’s blood pressure, heartbeat, and lungs.

3. The nurse checks for anemia.

4. The nurse checks the growing baby’s position, growth, and heartbeat.

5. The nurse gives the woman a tetanus (TT) vaccination.

6. The nurse offers HIV counseling and testing (VCT).

7. The nurse provides PMTCT to pregnant women with HIV.

8. The nurse screens for sexually-transmitted infections (STIs).

9. The nurse looks for possible complications so they can be addressed immediately. The nurse checks the pregnant woman’s pelvis to determine whether she will be able to deliver vaginally, or whether she might need a caesarian section.

10. The nurse offers psychological support and health education to prepare the pregnant woman for labor. The nurse offers guidance and support throughout the woman’s pregnancy.
## Minor Ailments of Pregnancy

### Minor Ailments of Pregnancy

<table>
<thead>
<tr>
<th>Minor Ailment</th>
<th>Action by MMRPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>Advise the woman to eat dry and non-fatty foods (if she is nauseous more than 2 to 3 times per day, she should consult a clinician).</td>
</tr>
<tr>
<td>Heartburn</td>
<td>Encourage the woman to drink milk.</td>
</tr>
<tr>
<td>Minor Ailment</td>
<td>Action by MMRPA</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Constipation</strong></td>
<td>Encourage the woman to drink plenty of fluids and eat foods rich in roughage.</td>
</tr>
<tr>
<td><strong>Muscle cramps</strong></td>
<td>Advise the woman to do mild exercise.</td>
</tr>
<tr>
<td><strong>Body pains, stomachache, backache</strong></td>
<td>Encourage mild exercise.</td>
</tr>
<tr>
<td>Minor Ailment</td>
<td>Action by MMRPA</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Cravings</td>
<td>Reassure the woman that cravings will pass.</td>
</tr>
<tr>
<td>Chloasma (darkening of facial skin)</td>
<td>Reassure the woman that this will not be permanent.</td>
</tr>
<tr>
<td>Hemorrhoids</td>
<td>Advise the woman to drink plenty of fluids.</td>
</tr>
<tr>
<td></td>
<td>If the hemorrhoids persist, she should seek medical attention.</td>
</tr>
</tbody>
</table>
## MAJOR AILMENTS OF PREGNANCY

<table>
<thead>
<tr>
<th>Major ailments</th>
<th>Action by MMRPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dizziness</td>
<td>For all these ailments, accompany the pregnant woman to the health facility for medical attention as soon as possible</td>
</tr>
<tr>
<td>Persistent headache</td>
<td></td>
</tr>
<tr>
<td>The baby is not moving</td>
<td></td>
</tr>
<tr>
<td>Major ailments</td>
<td>Action by MMRPA</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Epigastric pain (upper abdominal pain)</td>
<td></td>
</tr>
<tr>
<td>Bleeding</td>
<td></td>
</tr>
<tr>
<td>Water breaks early (before the EDD)</td>
<td></td>
</tr>
</tbody>
</table>

For all these ailments, accompany the pregnant woman to the health facility for medical attention as soon as possible.
<table>
<thead>
<tr>
<th>Major ailments</th>
<th>Action by MMRPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edema (swelling) of the feet and legs</td>
<td>For all these ailments, accompany the pregnant woman to the health facility for medical attention as soon as possible</td>
</tr>
<tr>
<td>Swelling and lower abdominal pains</td>
<td></td>
</tr>
</tbody>
</table>
Anemia

There is another ailment or illness that often affects pregnant women. It is called anemia. Anemia is the condition of having less than the normal number of red blood cells (RBC) (also called hemoglobin). This means that the blood cannot carry nutrients and oxygen around the body the way that it should.

SIGNS AND SYMPTOMS OF ANEMIA

• Pallor
  In particular pale insides of eyelids and fingernails

• Dizziness
• Extreme weakness or tiredness

• Headaches

• Lethargy
  Having no energy to do anything

• Low blood pressure
One of your responsibilities as MMRPAs is to teach pregnant women about the signs and symptoms of anemia. You must teach them so that they can recognize the signs and symptoms and report them to you. You must also teach pregnant women that anemia is a very serious condition that needs medical attention.

- **Stool changes color**
- **Skin is cold**
- **Rapid heart rate**
  The heart beats faster than normal.
If a pregnant woman under your care has signs and symptoms of anemia, you must refer her to the health facility.

At the health facility:

- She will receive iron supplements to take daily.
- She will also receive advice on eating more foods high in calories (fatty energy foods), and foods that contain lots of iron, for example, spinach, liver, and wild vegetables such as leshoabe, tenane, and papasane.
One of your major responsibilities as an MMRPA is to accompany pregnant women to the shelter 2 weeks before their estimated delivery date (EDD), or accompany them directly to the health facility immediately if labor starts while they are still at home.

You must:

- Keep track of each pregnant woman’s estimated date of delivery (EDD) so that you know when to accompany her to the shelter.
- Educate pregnant women about the signs of labor, so that if labor starts before they are in the shelter, they will know and can come and tell you.
- Educate pregnant women about the importance for both the mother and baby of delivering at a health facility.
- Educate pregnant women about how to prepare for going to the shelter and for labor.
SIGNS OF LABOR:

- **Contraction start**
  As labor progresses, contractions become more regular, more frequent, and stronger.

- **Water breaks**
  Water breaks and clear fluid comes out of the vagina.

- **Bloody show**
  A plug of thick, bloody mucus comes out of the vagina.
HEALTH FACILITY DELIVERY

One of your responsibilities as an MMRPA is to educate pregnant women about the importance of delivering at a health facility, and the benefits to the mother and baby. You must encourage pregnant women to plan to go the shelter 2 weeks before their EED and to deliver at the health facility. You must accompany them to the shelter.

You must help women plan what to bring, including cotton wool for the mother after delivery and clothes for the baby, decide who will watch their children, and make other necessary plans for while they are away at the shelter.

If you find out that a woman has delivered at home, you must accompany the mother and baby to the health facility within 48 hours (2 days) of delivery. The clinician will examine the mother for injuries caused by the delivery and give the baby BCG and Polio 0 vaccines. If the mother has HIV, the baby will be given NVP drops.

Benefits to the Mother

- Home deliveries pose many risks for the mother, baby, and traditional birth attendant. If the woman has HIV, the baby and attendant may become infected. If the woman has complications, both she and the baby might die.
- The health facility is clean and warm, which is especially important in the winter months.
- The equipment is always sterile, and this helps to prevent infection.
- If complications arise, clinicians can handle them immediately. If the birth is complicated, it is easy to transfer the woman to the hospital.
- Deliveries are done by qualified, skilled clinicians.
- If the woman has HIV, skilled clinicians will prevent HIV transmission and infection, so that HIV is not passed to the baby, and the attending clinicians and assistants are not infected.
- Clinicians can give the woman medications to help fight infection, lessen pain, or stop the bleeding.
- The mother receives Starter Packs for her newborn baby and food packages for herself. The Starter pack contains: baby blanket, baby wrapper, 2 vests, one woolen hat, one baby jumper, 4 towel napkins, a 50-gram bar of soap, safety pins, Vaseline, and a washing basin for the baby. The food package for the mother contains: 50 kilograms of maize meal, 6 kilograms of pulses, 6 kilograms of corn soya blend (CSB), and 2.5 liters of cooking oil.
- Women receive counseling about breastfeeding and caring for their newborn babies, both during ANC visit and immediately after delivery.
Benefits to the Baby

- If the mother has HIV, skilled clinicians will prevent HIV from passing to the baby.
- The baby receives the necessary medications (eye drops, vaccines, Vitamin K).
- The baby is born in a clean, sterile, and warm environment.
- If the mother has HIV, the baby will receive NVP drops.
- If the baby is not breathing well, clinicians will use equipment to help the baby breathe more easily.

Benefits of the shelter

- Women are well-cared for at the shelter, and they do not have to walk long distances once they go into labor.
- The shelters are clean and warm.
- If labor starts at night, women are already under care and do not have to walk long distances at night.
Postnatal Care (PNC)

One of your main responsibilities as an MMRPA is to accompany mothers and their new babies to the 7-day and 6-week (6/52) postnatal visits (7 days and 6 weeks after delivery.) These 2 visits are very important.

6-WEEK (6/52) POSTNATAL VISIT

Benefits to the Mother

- Thorough physical examination – to check for infection and make sure the mother is recovering well after delivery
- Pap smear
- CD4 check if the mother is HIV positive
- TT vaccine booster if needed
- Family planning services
**Benefits to the Baby**

- Thorough physical examination
- Vaccines (Polio1 and Penta)
- DNA PCR if HIV-exposed (a blood test where the baby’s blood is taken from the heel to check whether the baby is HIV positive or not)
- Prescription of CTX after the DNA PCR test (if the baby has HIV)
- Ensure continuation on infant formula program if HIV-exposed
Role Play

Tholoana, a woman in the village, approaches the MMRPA, and tells her that she thinks she is pregnant. She has 3 children already, and she delivered all of them at home with the help of a traditional birth attendant.

Tholoana heard about the Maternal Mortality Reduction Program at a public gathering in the village. She does not understand why she should deliver at the health facility, and she is suspicious. But a friend urged her to go to the MMRPA, so she has come reluctantly.
NOTES
HIV/AIDS and STIs

**BACKGROUND**

HIV/AIDS is a serious disease. If it is not treated, it leads to death. HIV/AIDS can spread easily. In Lesotho, an estimated 23.7 percent of the adult population is infected with HIV. This means that many women under the care of MMRPAs may have HIV. It is very important for MMRPAs to learn what HIV/AIDS is, how it is spread, and how it is treated, so that they can treat and educate women under their care.

In this unit, you will learn about HIV transmission, its stages and symptoms, testing, prevention, treatment, and side effects of treatment. One of MMRPAs’ main responsibilities is to provide Directly Observed Therapy (DOT) to women under their care who have HIV and need to take antiretroviral medications (ARVs), so you will also learn ARV drug names, dosages, time of day of taken, and special indications.

You will also learn about sexually-transmitted infections (STIs) in general, including symptoms and prevention.
OBJECTIVES

By the end of this unit, you will be able to:

a. Define HIV and AIDS.
b. Describe the 4 stages of HIV/AIDS and the major symptoms associated with HIV/AIDS.
c. Describe how HIV is transmitted (spread) from person to person, and how HIV is not transmitted.
d. Explain what an HIV test is and why it is important to be tested.
e. Name the main ways to avoid getting HIV, and to prevent passing HIV to someone else if you already have it.
f. Demonstrate how to use male and female condoms, and teach others how to use them.
g. Educate pregnant women and nursing mothers about the importance of being tested for HIV, how to avoid getting HIV, and how to prevent passing HIV to their babies and others.
h. Explain that antiretrovirals (ARVs) stop HIV from multiplying in the body.
i. Explain when ARVs should be taken, for how long, the correct dosage, and how they should be stored.
j. Provide Directly Observed Therapy (DOT) for women taking tuberculosis (TB) medication or ARVs to ensure adherence.
k. Ask about and identify mild and severe side effects of ARVs in women taking ARVs, and refer women suffering from severe side effects to the health facility immediately.
l. Define what an STI is and describe how STIs are transmitted.
m. Identify symptoms of STIs.
n. Name the main ways to avoid getting STIs, and to prevent passing an STI to someone else if you already have it.
o. Educate pregnant women and nursing mothers about the importance of being tested for STIs and how to avoid getting STIs.
Key Points

- HIV/AIDS is a serious disease that attacks a person’s immune system. If it is not treated, it leads to death.
- HIV cannot be cured, but it can be treated effectively. If people with HIV receive treatment, they can lead long and healthy lives.
- HIV is transmitted from person to person by contact with blood, contact with body fluids during sex, or from mother to child during pregnancy or delivery.
- An HIV test is a fast and simple blood test. The results are confidential.
- To avoid getting HIV and to prevent passing HIV to others, people should avoid having sex (abstinence), only have sex with one partner who is not infected, use condoms during sex, get tested for HIV regularly and have partners get tested, and not use razors, needles, or any instruments that might have another person’s blood on them.
- Male and female condoms, when used correctly, can help prevent the transmission of HIV and other STIs.
- Antiretroviral drugs (ARVs) are used to treat HIV/AIDS. ARVs stop HIV from multiplying in the body.
- ARVs must be taken every day at the same time, for life. This is called adherence.
- If a woman under an MMRPA’s care is taking ARVs, the MMRPA must go to her house every morning and evening and watch her swallow her pills. This is called Directly Observed Therapy (DOT).
- People taking ARVs may experience mild or severe side effects. Severe side effects include: difficulty breathing, trouble swallowing, swollen eyes, blisters or sores, vomiting, rash, abdominal pain, yellow eyes (jaundice), or fever.
- Women who experience severe side effects from ARVs must go to the health facility immediately, accompanied by the MMRPA.
- A sexually-transmitted infection (STI) is an illness transmitted from person to person during sex. HIV/AIDS is an STI.
- Symptoms of STIs include: vaginal itching, discharge from the penis, pain during sex, pain during urination, sores or lesions on the penis or vagina, and abdominal pain.
- Unlike HIV, some STIs can be cured with treatment.
- To avoid getting STIs and to prevent passing STIs to others, people should use condoms during sex, get tested regularly for STIs, and have their partners get tested.
What are HIV and AIDS?

An estimated 23.7 percent of the population in our country has HIV or AIDS. This means that people in your villages, and some of the women you will accompany in your work, have HIV/AIDS.

HIV/AIDS is a serious disease. If it is not treated, it leads to death. HIV/AIDS can spread easily, so it is very important for you to learn what HIV/AIDS is, how it is spread, and how it is treated, so that you can educate and treat women under your care.

In order to understand what HIV/AIDS is and how it spreads, you must understand in general what causes many illnesses and how many illnesses spread.

Many illnesses are caused by germs, which are very tiny organisms. Germs are so small that you cannot see them with the naked eye. When germs enter our bodies, they often make us sick. Germs enter through openings in our bodies, for example through the mouth or nose, or through a cut or other open wound.

For example, imagine that someone has the flu. That person sneezes. The sneeze blows their germs into the air. If a person nearby breathes in those germs, that person may get the flu. Some germs are passed through the air in this way. Others are passed through bodily fluids like blood or semen. Still others are passed by touch.

If your body’s defenses are strong, your body can fight off the germs and you will not get sick, or you will only get a little sick. But if your body’s defenses are weak, the germs may make you very sick.
WHAT IS HIV?

HIV is a type of germ called a virus. When HIV enters the body, it can cause the disease called AIDS. We will learn more about AIDS, but first we will learn about HIV.

HIV cannot be cured. Once HIV gets in the body, it will always be there, and that person will always have HIV. HIV stands for “human immunodeficiency virus.” “Human” means the disease attacks humans, “immunodeficiency” means it attacks the immune system, and “virus” is what causes the disease.

Even though HIV cannot be cured, it can be controlled with treatment.
THE IMMUNE SYSTEM

Everyone has an immune system that fights off germs. Think of the immune system as a blanket that protects your body and helps it fight germs. HIV attacks the immune system. That is like moths eating through a blanket. When this happens, the immune system cannot fight off germs as well as before. When a blanket gets holes in it, it cannot keep you warm.

Doctors and nurses can see how strong the immune system is by doing a blood test. The test measures the number of something called CD4. CD4s are the part of the immune system that keeps you strong and helps you fight off germs and disease. HIV attacks and destroys CD4s. When the doctor does the blood test, she can tell how strong or weak your immune system is by counting the number of CD4s in a sample of blood.

If a person’s CD4 count is below 350, it means that her/his immune system is weak and she/he will have to start taking medicine to increase the number of CD4s in his or her body. If the number of CD4s is higher than 350, it means that the person’s immune system is still strong enough to fight infection. The person will not need to start taking medicine right away, but if his or her CD4 count falls below 350, she or he will have to begin taking medicine. Taking medicine will make the CD4s in the body go up. Once a person is diagnosed with HIV, the doctor or nurse will test his or her CD4 every 6 months.
THE IMMUNE SYSTEM AND HIV

When someone first gets HIV, he usually feels fine. HIV has not yet done much damage to his CD4s, so his immune system still works fairly well. Often, people with HIV do not know that they have it. They can feel fine for many years and go about their regular activities.
WHAT IS AIDS?

Eventually HIV starts to multiply and weaken the immune system by killing CD4s. The person becomes tired, weak, and sick, and eventually has the disease called AIDS. AIDS stands for “acquired immune deficiency syndrome.”
Look at these two pictures of the same woman. She has HIV in both pictures.

Why do you think the pictures are so different?

In the 1st picture, she is not getting medicine, so her body has no defense against illnesses. As a result, she is very sick. In the 2nd picture, she is taking antiretroviral medicine (ARVs). This medicine reduces the HIV in her body and allows her immune system to get strong again by increasing the number of CD4s in her body. Her stronger immune system keeps her from getting sick. Good nutrition, exercise, plenty of rest, a healthy lifestyle (not smoking or drinking), and ARVs work together to keep her healthy.

If a woman under your care has HIV/AIDS, it is your job to help her stay healthy by encouraging a healthy lifestyle and helping her take medicine that reduces the strength of HIV. When people with HIV follow a healthy lifestyle and take medicine, their immune systems stay strong and they can live for many years.
Stages and Symptoms of HIV/AIDS

Not everyone who has HIV appears sick. This is because there are 4 stages of HIV/AIDS infection. Over time, 1 stage leads to the next, and if the person is not treated, she/he will become very sick and eventually die.

STAGE 1 – ASYMPTOMATIC HIV INFECTION

Stage 1

Stage 1 starts when a person is infected with HIV.

At this stage, people often do not know that they have HIV.

Some people get flu-like symptoms 1 to 4 weeks after they are infected with HIV, but these flu-like symptoms are rare – they occur in less than 5 percent of those who are infected. People in Stage 1 are HIV-positive and asymptomatic. Asymptomatic means that a person is HIV-positive but looks and feels healthy. The person will not have any symptoms and might feel fine for many years.
HIV TEST

A person must get tested to know for sure if he or she has HIV. When someone goes to get tested, she/he will receive counseling before and after the test. Everyone should be tested for HIV and know his or her status.

**HIV tests do not work well for the first few weeks after infection.**

This is because the HIV has not yet multiplied in the body. It takes about 4 to 12 weeks after infection for enough HIV to have multiplied to show up on the test. This 4 to 12 week period is called the “window period.” During this time, a person can have HIV but the test might not show it.

After the window period, there is enough HIV to show up on the test. If someone has HIV, the test is “positive” and the person is said to be HIV-positive. A person without HIV is called HIV-negative.
HIV CAN BE SPREAD THROUGH SEX

Once a person has HIV, he or she will always have HIV and can pass it on to other people.

Many people do not know they have HIV, and as a result, they can spread it to other people through sex or other ways. This is why it is important to be tested.
Stage 2

In Stage 2, people might look healthy and feel fine, but they may have some mild symptoms. Symptoms during Stage 2 include some weight loss, respiratory infections, minor fungal infections of the fingernails, and, occasionally, herpes zoster, which is a type of rash on the body.
Stage 2 Symptoms

- Weight loss
- Cough
- Rash

Many people generally feel fine during Stage 2 because the symptoms are mild.
HIV TESTING IS IMPORTANT

It is important for people to get tested to know for sure if they have HIV or not. If the HIV test is positive, the person will be referred to the health facility. The doctor or nurse will evaluate the person and also do a test to check her/his CD4 count. After this, the doctor will check the person’s CD4 count every 6 months. When the person gets sick, or if her/his CD4 count falls below 350, she/he will start taking medicine.

It is important to get tested to prevent the spread of HIV/AIDS. When a person is tested and knows that she/he has HIV, she/he can keep from spreading it. If she/he does get tested, she/he may be spreading HIV without even knowing it. When someone is tested, there is counseling available for that person before and after the test.
Stage 3

During Stage 3, the body’s immune system becomes weak because there is more HIV in the body and the number of CD4s is low. Many infections develop. These are called “opportunistic infections” because the HIV weakens the immune system, giving the opportunity for infections to develop.

Stage 3 Symptoms

People often get TB, pneumonia, diarrhea, fevers that come and go, and a cough.
People often lose weight. Their hair might start to thin or fall out. Some people might get a white covering in the mouth called thrush, and they often get blisters and sores on their skin, frequently on their genitals. People in Stage 3 will be started on medications to fight HIV.
Stage 4

As HIV destroys the body’s immune system, more and more opportunistic infections occur. People get sicker and sicker, weaker and weaker.
Stage 4 Symptoms
Many of the symptoms are the same as in Stage 3, but they might be worse and occur more often. Some people will have seizures.

- Weight loss
- Rash
- Sores
- Hair loss
- Thrush

People often lose weight. People might get a white covering in the mouth called thrush. They might lose their hair. People often get skin rash. People often get blisters or sores on their skin.
PROGRESSION OF HIV TO AIDS

When someone first gets HIV, there is not a lot of HIV in his body so his immune system still works fairly well, and he usually feels fine. In Stage 1 a person can get flu-like symptoms for a few days, but this goes away quickly. Most people have no symptoms during Stage 1. They do not know that they have HIV and generally feel healthy and are able to go about their regular activities.

In Stage 2 people usually look healthy but have mild symptoms. Because the symptoms are mild, most people during Stage 2 are able to go about their regular activities.

Stage 3, is known as symptomatic HIV infection, or AIDS. Many infections and symptoms develop because the body’s immune system has become weak.

In Stage 4, this is defined as AIDS stage. HIV has multiplied and the person becomes very weak and sick, with many symptoms. It is as if the person does not have an immune system. The HIV has become stronger than the immune system.

As MMRPAs, you must actively look for symptoms of HIV/AIDS among the women under your care. You must also educate the women under your care about the importance of getting tested for HIV, and having their partners tested for HIV also.
Transmission of HIV/AIDS

HIV can be transmitted in 3 main ways:

- Contact with another person’s blood (transfusions, wounds)
- Contact with another person’s bodily fluids through sex
- From mother to child during child bearing

Because HIV is in the blood, semen, vaginal fluids, and breast milk, the virus can pass from one person’s body to another through any of these fluids.

HIV CAN BE TRANSMITTED THROUGH BLOOD

- Transfusion
- Cut
- Needle
HIV CAN BE TRANSMITTED THROUGH SEX

- Sex between a man and woman
- Anal sex between a man and woman
- Oral sex between a man and a woman
- Sex between two men
HIV CAN BE TRANSMITTED THROUGH CHILDBEARING

Pregnancy

Breastfeeding

Delivery

WAYS HIV CANNOT BE TRANSMITTED

HIV cannot be transmitted by shaking hands, hugging, coughing, mosquito bites, contact with animals, sitting next to someone with HIV, living with someone who has HIV, or eating with someone who has HIV.
ANYONE CAN GET HIV

There are many kinds of people in this picture, young and old people, married and single people, children, and babies. All of these kinds of people can get HIV. Anyone can get HIV.

As MMRPAs, you must educate the women under your care about how HIV is transmitted and not transmitted. The more women know about HIV, the better they will be able to avoid getting it if they do not have it yet, or avoid passing it to others if they do have it.
HIV Testing and Prevention

**VOLUNTARY COUNSELING AND TESTING (VCT)**

An HIV test is a fast and simple blood test. The results are available within a few minutes. A counselor will provide counseling before the test to explain the process and after the test to give the results and provide support.

People cannot be forced to take an HIV test. They must take it voluntarily. This is called Voluntary Counseling and Testing (VCT).

One of your main responsibilities as an MMRPA is to advise women under your care to get tested for HIV. Remember that at a pregnant woman’s first prenatal visit, the booking visit, she will be offered an HIV test and counseling (VCT). Before you accompany a pregnant woman to this visit, you must educate her about the importance of being tested.
Why is it very important to be tested for HIV?

- HIV can be treated, but in order to receive treatment, you need to know that you have it.

- If a woman has HIV, she must receive treatment and learn how to take care of herself. If a pregnant woman has HIV, she must also learn how to prevent passing HIV to her growing baby – PMTCT.

- If a woman knows that she has HIV, she can learn how to avoid infecting others.

- If a woman does not have HIV, she can learn how to avoid getting it in the future.

- Pregnant women with HIV will get help from the health facility through the PMTCT program.

After your first test, you should be tested again 3 months later. Why?

- If the HIV infection is new, it will not show up on the first test. HIV will not show up on the test until after the window period.

- If a woman’s partner has HIV and she does not know, she may become infected from her partner after the first test.

Even if you explain the importance of testing, some women under your care may not want to get tested for HIV. Why?

- They are afraid of HIV. They think that having HIV means certain death. They do not know that people with HIV can get treatment and live long, healthy lives.

- They are afraid that if they have HIV, people will discriminate against them.

- They don’t want their partners to know about the test.

- They are afraid their partners will hurt them or leave them if they have HIV, etc.

What you can you say to encourage pregnant women to get tested for HIV?

- Tell women that their fears are understandable, but that you will help and support them.

- Pregnant women with HIV can learn to avoid passing HIV to their growing babies, give birth to healthy babies, and lead healthy and productive lives. But to do this, they must be tested so they can receive medication and help from the health facility.
**HIV testing is confidential.** The health facility will not tell anyone about the results.

If a woman is afraid of abandonment or violence from her partner if her partner suspects that she has been tested or that she has HIV, she can ask her MMRPA and the social worker for help and support.

**How can you confirm that a pregnant woman has gotten tested and counseled for HIV?**

- Ask to see her Bukana (health booklet). The clinician will write in the Bukana after HIV testing. You will not be able to interpret the coding, but you must make sure that the pregnant woman has been tested by checking the Bukana.

**PREVENTION**

**How can a person avoid getting HIV, or avoid passing it to others if she/he already has HIV?**

- Abstinence (do not have sex)
- Only have sex with one person whom you know does not have HIV.
- Use condoms correctly during sex.
- Do not use a needle, razor blade, or any other sharp instrument that anyone else has used.
- Do not touch someone else’s blood.

**How can pregnant women with HIV avoid passing HIV to their babies during pregnancy and delivery, and while caring for their newborns?**

- Attend all prenatal visits.
- Take medicine (ARVs) faithfully if prescribed.
- Deliver at the health facility.
- Attend postnatal visits.
- Get HIV tests, vaccinations, and medicine for the new baby.
- Feed the baby only infant formula, no breast milk.
- If breastfeeding, do not mix breastfeeding and infant formula feeding.
Male and Female Condoms

Both male and female condoms provide a barrier between two people so that sperm, vaginal secretions, and the HIV virus or other STIs cannot pass between them.

This means that women and men can use condoms to prevent pregnancy, avoid getting HIV, and avoid passing it to their partners if they already have HIV themselves.

To prevent pregnancy and transmission of HIV or other STIs, people should use condoms every time they have sex.

Anyone can get condoms at the health facility. Condoms are free. MMRPAs should carry condoms with them to demonstrate condom use during household visits, and they should remind everyone that condoms are available at the health facility.

HOW TO USE A MALE CONDOM

- Wash your hands.
- Check the expiration date on the package before using the condom. Do not use a condom that is past the expiration date.
- Open the package. (Do not use teeth or fingernails, because they could put a hole in the condom.)
- Find the tip of the condom and hold it so the ring hangs down like a little hat.
- Hold the top with your forefinger and thumb as you place the condom on the penis, with the ring on the outside. Roll the condom down to the base of the penis. Check to make sure it is on correctly.
- After sex, hold the condom at the base and pull the penis away from your partner. Do not spill any liquid on your partner.
- Slide the condom off without spilling the liquid inside.
- Tie the condom in a knot and dispose of it.
How to Use a Male Condom

1. Open the condom package.
2. Take out the condom.
3. Pinch the condom at the top to create a small opening.
4. Place the condom over the erect penis.
5. Roll down the condom to the base of the penis.
6. Use lubricant if needed.
7. Dispose of the condom after use.
HOW TO USE A FEMALE CONDOM

• Wash your hands.

• Check the expiration date on the package. Do not use a condom that is past the expiration date.

• At the arrow on the package, tear downward.

• Remove the condom from the package.

• Hold the inner ring between your thumb and forefinger.

• Squeeze the sides of the inner ring together, so that it becomes long and narrow, and grasp it firmly.

• Find a comfortable position for inserting the condom. Try sitting, squatting, or lying down.

• Push the inner ring up into the vagina as far as possible. Insert your index or middle finger into the condom.

• One inch of sheath, including the outer ring, will remain outside the body. When the penis enters the vagina, the slack will decrease.

• The outer ring should remain outside the vagina, protecting the external genitalia.

• Upon entering the vagina, the penis may push the outer ring into the vagina or the penis may enter to the side between the condom and the vaginal wall. If either of these things happens, STOP! Remove the penis. Adjust the outer ring until it is again outside the vagina and try once more.

• To take out the condom, grasp the outer ring, twist the condom to seal in the fluid, and gently remove it.

• Place the condom in a tissue or in the empty package and throw it into the garbage.
How to Use a Female Condom

1. 

2. 

3. 

4. 

5. 

6.
HIV/AIDS EDUCATION

As an MMRPA, you must educate the women under your care about HIV testing and prevention. This can be challenging. Women may be embarrassed or afraid. You may also be embarrassed. But if you are respectful and kind, and speak with women in the right way, it will make the communication easier.
**HIV Education Checklist**

- Anyone can get HIV.
- HIV is transmitted through blood, semen, vaginal secretions, and breast milk.
- HIV cannot be transmitted by shaking hands, hugging, coughing, mosquito bites, contact with animals, sitting next to someone with HIV, living with someone who has HIV, or eating with someone who has HIV.
- HIV cannot be cured. Once it is in the body, it stays there forever.
- HIV can be treated and controlled. HIV does not mean certain death.
- It is very important to get tested for HIV. The HIV test is a fast and simple blood test, and results are confidential.
- It is important to get tested because if the person has HIV, s/he can receive treatment if needed. If a pregnant woman knows she has HIV, she can avoid passing it to her baby. If the person does not have HIV, s/he can learn to avoid getting HIV in the future.
- People should avoid getting HIV, or avoid passing HIV to others if they already have it, by not having sex at all (abstinence); only having sex with one person who does not have HIV; always using condoms during sex; not using needles, razor blades, etc. that someone else has used; and not touching someone else’s blood.
- If a pregnant woman does not have HIV, she must use condoms to prevent getting HIV in the future.
- Help and counseling are available for people who are diagnosed with HIV.
There is no cure for HIV. Once HIV is in the body, it stays there forever.

But people with HIV/AIDS can receive treatment, so that they can lead healthy lives. The treatment is to take antiretroviral drugs, or ARVs.

ARVs stop HIV from multiplying in the body and killing CD4s, which are an important part of the body’s defense system. When HIV multiplies, it weakens the immune system. As long as a person is taking ARVs properly every day and not missing any doses, her/his immune system will stay fairly strong.

When people are diagnosed with HIV, they do not always take ARVs right away. Based on the person’s physical condition, the doctor or nurse and the person will decide together when the person should start taking ARVs.

To treat HIV, most people take 3 different ARV medicines each day. Sometimes 2 or 3 ARVs are combined in one pill, so that people do not have to take so many pills.

ARVs must be taken with care. Some medicines have to be taken without food, and some medicines have to be taken with food. ARVs are usually taken in the morning and again at night, at the same time each day.

All people diagnosed with HIV visit the doctor once every 6 months if the CD4 is above 450 and every 3 months if the CD4 is below 450 but not yet 350. If they are not yet
taking ARVs, the doctor or nurse checks them to see if they need to start. If they are taking ARVs, the doctor checks to see if the ARVs are working. Once the person’s test result for CD4 falls to or below 350, the doctor or nurse will start the person on ARVs and the person will be seen at the health facility monthly.

After people with HIV have started taking ARVs, they must take them at the same time every day for the rest of their lives. This is called **adherence**.

If a person stops taking ARVs or misses some doses, the HIV begins multiplying again, killing the CD4s. If s/he repeatedly starts and stops taking ARVs, the HIV in her/his body will become stronger and better able to fight the ARVs. This is called **drug resistance**, and it is very dangerous. This means that the ARVs will not work as well as they should.

A pregnant woman may be put on ARVs to prevent her unborn baby from becoming infected with HIV. Pregnant women with HIV may need to come to the health facility more than once a month.

When one of the women under your care starts taking ARVs, the doctor or nurse will meet with you and the woman to explain what medications she will take, at what time of day, and in what amounts. This information will also be written on a form.
Zidovudine (AZT)

Take 2 times per day:

- **Morning – 6 A.M.**
- **Night – 6 P.M.**

1 pill (300 mg)

Lamivudine (3TC)

Take 2 times per day:

- **Morning – 6 A.M.**
- **Night – 6 P.M.**

1 pill (150 mg)
Combivir or Duovir
A combination of AZT and 3TC

Take 2 times per day:

Morning – 6 A.M.
Night – 6 P.M.

1 pill
(450 mg)

Stavudine (D4T)

Take 2 times per day:

Morning – 6 A.M.
Night – 6 P.M.

1 pill
(40 mg)
**Didanosine (ddI)**

- **Take 2 times per day:**
  - Morning – 6 A.M.
  - Night – 6 P.M.

  - **1 pill** (200 mg)
  - Take on an empty stomach (at least 2 hours after a meal)

---

**Nevirapine (NVP)**

- **Take 1 time per day for 14 days**
  - Morning – 6 A.M.

- **After 14 days take 2 times per day**
  - Morning – 6 A.M.
  - Night – 6 P.M.

- **1 pill** (200 mg)
Abacavir (ABC)

Take 2 times per day:

- Morning – 6 A.M.
- Night – 6 P.M.

1 pill (300 mg)

Tenofovir (TDF)

Take 1 time per day

- Night – 6 P.M.

1 pill (300 mg)

Take with food
Efavirenz (EFV)

1 pill (600 mg)

Take on an empty stomach (at least 2 hours after a meal)

Take 1 time per day

Night – 6 P.M.

Indinavir (IDV)

1 pill (400 mg)

Take on an empty stomach with water

Take 3 times per day

Morning – 6 A.M.

Noon – 12 P.M.

Night – 6 P.M.
Coviro (L30)
Combination of Stavudine (d4T), Lamivudine (3TC)

Take 2 times per day

1 pill
(T30-d4T 30mg, 3TC-150 mg)

Morning — 6 a.m.
Evening — 6 p.m.
Many people with HIV also have to take another medication called co-trimoxazole (CTX), also known as Bactrim. It is not an ARV. It is an antibiotic that people with HIV take to prevent opportunistic infections.
One of your main responsibilities as an MMRPA is to make sure that the women with HIV who are under your care take their ARVs correctly every day.

In order to do this, you must make sure that you know which combinations of ARVs the woman must take. Then you must go to the woman’s house every morning at the correct time, and again every evening at the correct time, to watch her swallow her ARVs. This is called Directly Observed Therapy (DOT). DOT means that you are present and watching when the person takes the medication. By doing DOT, you are ensuring adherence. In other words, you are making absolutely sure that the woman takes her ARVs correctly.
STORING MEDICATIONS

Away from children

Out of sunlight

ARVs should be stored all together in one place: a dry place that is away from sunlight and heat and also away from children. You must make sure that women under your care store ARVs properly.

LIVING HEALTHFULLY

No alcohol

No smoking

Eat healthy foods

People living with HIV/AIDS can stay healthy when they are on ARVs by not smoking, not drinking alcohol, maintaining a healthy diet, walking, getting lots of rest, and participating in everyday life.
Protected Sex Only

Living healthfully also means protecting others from getting HIV. People on ARVs should always have protected sex, and should always use condoms.

Impact of ARVs and Living Healthfully

These are two pictures of the same Rwandan woman, Solange. As you can see, in the first picture she is thin, weak, and sick. In the other picture, she looks much healthier. Solange has HIV in both pictures.

In the first photo, Solange had not started to take ARVs. People with HIV/AIDS who take their ARVs correctly every day (adherence) and live positively can lead long, healthy lives. As MMRPAs, you must make sure that women under your care who are taking ARVs take them correctly every day.
Side Effects of ARVs

Sometimes when people take medications such as ARVs, they have reactions to the medications. For example, they may get a headache, feel nauseous, or get diarrhea. These reactions are called side effects.

When women under your care are taking ARVs, they may sometimes experience side effects from the ARVs. Some side effects are mild and not serious. Other side effects are severe and very serious. If a woman under your care experiences a severe side effect, you must be able to recognize it and accompany the woman to the health facility immediately.

MILD SIDE EFFECTS

Women under your care who are taking ARVs may experience one or more of these mild side effects. While these side effects can be unpleasant, they are not serious.

If a woman is experiencing any of these mild side effects, tell her to go to the health facility within 2 days to get help.

- Muscle pains
- Diarrhea
- Nervousness or anxiety
- Strange dreams
Difficult sleeping

Headache

Loss of appetite

Burning or tingling feet

Weakness or fatigue

Night sweats
SEVERE SIDE EFFECTS

If a woman is experiencing any of these severe side effects, you must accompany her to the health facility immediately.

Every time you visit a woman under your care who is taking ARVs, you must ask her if she is experiencing side effects and refer her to the health facility if she is. Do not assume that she will tell you if she is experiencing side effects. You must always ask.

It is not enough to ask, “How are you feeling?” You must take the time to ask, “Are you experiencing any severe side effects, for example, a rash, vomiting, difficulty breathing, etc?”

You must also teach women to recognize the serious side effects, so that when they experience a serious side effect they know to come and find you so that you can accompany them to the health facility immediately.

- Difficulty breathing
- Swollen eyes
- Blisters or sores
- Vomiting
Rash

Abdominal pain

Yellow eyes (jaundice)

Fever
**Picture 1:** The MMRPA arrives at the woman’s home.

**Picture 2:** The woman takes her ARVs as the MMRPA watches.

**Picture 2:** The woman has difficulty breathing.

**Picture 3:** The MMRPA tells the woman that they must go to the health facility immediately.
**Picture 1:** The MMRPA arrives at the woman’s home.

**Picture 2:** The MMRPA asks the woman if she is experiencing any serious side effects.

**Picture 3:** The woman shows the MMRPA that she has a rash on her stomach.

**Picture 4:** The MMRPA tells the woman that they must go together to the health facility immediately.
Sexually Transmitted Infections (STIs)

What is a sexually transmitted infection (STI)?
- An STI is an illness that is passed from person to person during sex.

What causes STIs?
- STIs are caused by germs that grow in warm, moist places in the body, such as the mouth, throat, vagina, and penis.

How are STIs transmitted (passed from one person to the next)?
- When two people have sex and one person already has an STI, the STI is passed to the other person during sex.
- Some STIs are passed from the mother to the baby during delivery.

HIV AND OTHER STIs

If a person has an STI, that person is more vulnerable to becoming infected with HIV. In fact, that person is 5 times more likely to get HIV than a person who does not have an STI.

Also, if a person has HIV, that person is more vulnerable to becoming infected with another STI.

It is very important for people with HIV to avoid becoming infected with other STIs. It is also very important for people with other STIs to get treatment for STIs and to avoid becoming infected with HIV.

It is very important for pregnant women to be tested and treated for STIs because some STIs can be passed from the mother to the baby during delivery. For example, if a baby is born with an eye infection called conjunctivitis (the baby’s eyes will be red, swollen, or leaking thick yellow-white fluid), this is often a sign that the mother has an STI. If STIs are not treated, they can also lead to infertility.
The main symptoms of STIs are:

- Vaginal itching
- Discharge from the penis
- Pain during sex
- Pain during urination
- Sores or lesions on the penis or vagina
- Abdominal pain
If a woman has an STI, it is very important for her to get treatment. But women under your care might be very embarrassed to talk about STI symptoms, and they might not tell you about them.

When you talk with women under your care, how can you find out if they or their partners have symptoms of STIs?

- If a woman complains of not feeling well, listen carefully. She may mention these symptoms indirectly; for example, she may say she has pain or problems with her uterus.
- Find a way to speak with the woman privately.
- Remind the woman that you will keep everything she tells you confidential.
- Remind that woman that asking her about sexual matters is part of your job.
- Ask the woman directly, but politely, if she is suffering from vaginal itching, abdominal pain, vaginal discharge, etc., or if she has noticed any symptoms in her partner.
STI PREVENTION

- Do not have sex (abstinence).
- Always use condoms during sex.
- Get tested every few months for STIs if sexually active.
- Both partners must get tested.
- Anyone who is sexually active, married or unmarried, should get tested.

STI EDUCATION

- Educate women about STI transmission and symptoms.
- Explain the dangers of STIs and HIV to the woman, her baby, and her partner.
- Explain that many STIs are treatable.
- Ask women if they are experiencing symptoms of STIs, and refer them to the health facility if they have symptoms.
- Encourage women to get tested for STIs regularly, and to ask their partners to get tested.
- Encourage women to use condoms, and teach them how to use them.
- Remind women that they must also be tested for HIV regularly during pregnancy.
- Ask women if they have sexual relations with more than one person, or if their partners do. If so, all partners must be tested and treated.
HIV/AIDS Treatment and STIs Checklist

- Explain when ARVs should be taken, for how long, the correct dosage, and how they should be stored.
- Visit the health facility every month with women under your care who have HIV.
- Remind women taking ARVs to store medicine in a safe, dry place, away from sunlight and children.
- Make sure that women have the correct ARVs.
- Make sure that women take their ARVs correctly every day by going to their houses in the morning and again in the evening to watch them swallow the medications (Directly Observed Therapy/DOT).
- Record ARVs taken on the appropriate form.
- Remind women to report to you any side effects they experience while taking ARVs.
- Ask about and identify mild and severe side effects of ARVs in women taking ARVs, and accompany women suffering from severe side effects to the health facility immediately.
- It is good for at least one family member to know about the woman’s HIV status, or the whole family if possible, so that they can support her.
- Observe women for signs that they are not practicing healthy behaviors. Counsel them if they are; note and refer them to the health facility.
- Educate women about STI transmission and symptoms.
- Ask women if they are experiencing symptoms of STIs, and refer them to the health facility if they have symptoms.
- Encourage women to get tested for STIs regularly, and to ask their partners to get tested.
- Encourage women to use condoms, and teach them how to use them.
- Remind women that they must also be tested for HIV regularly during pregnancy.
HIV Education Role Play, Part 1

Narrator: Lerato’s husband has been working in South Africa for the last year. He comes home to visit every once in awhile. Lerato got pregnant during his last visit, about one month ago. The MMRPA has heard this news, and comes to visit Lerato.

MMRPA: Greetings, Lerato, how are you today?

Lerato: I am well. I have some news. I think I am pregnant.

MMRPA: Congratulations, now you will have another little one in your family.

Lerato: Thank you. I am happy and I am not worried. My husband has been working in South Africa, so now we have more money for food and other necessities.

MMRPA: I’m very glad that your husband has found work in South Africa. But while he is away, you must take care of yourself. First of all, it’s very important for you to go to the health facility for a pregnancy test and prenatal visit.

Lerato: But the health facility is very far away! I don’t think I need to go. I never did that for my other pregnancies.

MMRPA: Don’t worry. I know that the health facility is very far away, but I will accompany you the whole way.

Lerato: Oh, thank you so much. I appreciate it. What will happen during the visit?

MMRPA: The nurse will check to make sure you are pregnant and that you are healthy. She will also offer you an HIV test. It’s very important to do this test. It’s very important to know if you have HIV, especially since you are pregnant.

Lerato: HIV test?? What do you mean?? I don’t have HIV! I don’t need a test.

STOP the role play.
**HIV Education Role Play, Part 2**

**Narrator:** The MMRPA accompanied Lerato to the health facility for her booking visit and Lerato had an HIV test. The test was negative, and Lerato was very relieved. She told the MMRPA that she did not have HIV. During the MMRPA’s next visit, Lerato is very happy because she has heard that her husband is coming home for another visit.

**MMRPA:** Greetings, Lerato, how are you today?

**Lerato:** I am very well, thank you. I am happy because I have heard that my husband is coming home again for a visit.

**MMRPA:** That’s very good news, I’m glad that you will see your husband. But before he comes, I would like to show you how to use condoms. Then when he visits, you should ask him to use condoms every time you have sex.

**Lerato:** Condoms?? What do you mean?? Are you saying that my husband has HIV?? I’m sure that he does not. Anyway, I could never ask him to use condoms. He would be very angry. He would probably accuse me of being unfaithful to him.

*STOP the role play.*
Women with HIV can stay healthy during pregnancy and give birth to healthy babies. They can prevent passing HIV to their babies. But to do so, they must take certain precautions. This is called “preventing mother-to-child transmission” – PMTCT.

To prevent passing HIV to their babies during pregnancy and delivery, pregnant women must attend all prenatal visits, take ARVs faithfully if prescribed, and deliver at the health facility. After delivery, they must feed their babies infant formula exclusively, or breastfeed exclusively if they cannot formula feed. They must also take the baby to the health facility regularly for immunizations, HIV tests, and the infant formula program.

During this unit, you will learn how to help pregnant women and nursing mothers with HIV so that they and their babies stay healthy and they do not pass HIV to their babies.
OBJECTIVES

By the end of this unit, you will be able to:

a. Describe how women with HIV can transmit HIV to their babies and how they can prevent transmission (PMTCT).

b. Accompany pregnant women with HIV to all prenatal visits and follow-up visits, to the shelters and health facilities for delivery, and to the 6-week (6/52) postnatal visit.

c. Observe pregnant women with HIV take their ARVs every morning and evening (Directly Observed Therapy - DOT) to ensure adherence as well as give the baby the prescribed medication.

d. Educate all pregnant women with HIV about what they must do to prevent passing HIV to their babies, including attending all prenatal and follow-up visits, going to the shelter 2 weeks before EDD, delivering at the hospital, attending all postnatal visits, taking ARVs, and giving NVP drops and cotrimoxazole to the baby.

e. Demonstrate how to prepare infant formula.

f. Teach mothers with HIV how to prepare infant formula and feed their babies correctly.
**Key Points**

- Women with HIV can pass HIV to their babies during pregnancy, delivery, and breastfeeding.
- Women with HIV can stay healthy during pregnancy, give birth to healthy babies, and prevent passing HIV to their babies. To do this, they must follow certain practices carefully. This is called “preventing mother-to-child transmission of HIV,” or PMTCT.
- To prevent passing HIV to her baby, a woman must attend all prenatal visits, take ARVs faithfully if prescribed, deliver at the health facility, attend postnatal visits, get her baby immunized and tested for HIV, give the baby medications if prescribed, and feed her baby only infant formula if appropriate, or only breast milk if appropriate.
- Infant formula must be made correctly with clean water and clean utensils.
IMPACT OF BABIES WITH HIV

Having a baby with HIV can be difficult for a family. When the baby is sick, the parents or caretakers must tend to the baby, and this may take away time from work or taking care of other children. This can drive a family further into poverty.
HOW BABIES CAN GET HIV

A woman can pass HIV to her baby:

- **During pregnancy by sharing blood**
  HIV can pass from the mother to the growing baby inside the womb, through the placenta and umbilical cord.

- **During delivery**
  During delivery, the baby is exposed to large amounts of the mother’s blood and other bodily fluids that contain HIV.

- **During breastfeeding**
  Breast milk can contain high levels of HIV that can pass to the baby.
If a woman with HIV follows certain practices carefully during pregnancy, labor, and delivery, and while taking care of her new baby, she can prevent passing HIV to her baby and keep herself and her baby healthy. This is called PMTCT – “preventing mother-to-child transmission.”
PMTCT DURING PREGNANCY

To prevent passing HIV to her baby during pregnancy, a woman should:

- Get tested for HIV if she has not been tested already, and get her partner tested, as soon as she suspects that she is pregnant. The clinician will offer an HIV test and counseling (VTC) during the booking visit. If her partner has HIV, they should practice safe sex with condoms, and he should be tested again in 3 months.

- Get screened for sexually-transmitted infections (STIs).

- Practice safe sex by using condoms every time.

- Go to the health facility for all prenatal (ANC) visits.

- Take ARVs every day if her CD4 count is below 350.

- Every baby whose mother has HIV is born with antibodies to the virus in his blood. These antibodies disappear over time (18 months). ARVs stop the multiplication of the virus and prevent the spread of HIV to the baby.
MMRPA Responsibilities for PMTCT during Pregnancy

As MMRPAs, how should you support pregnant women with HIV so that they can prevent mother-to-child transmission during pregnancy?

- Accompany pregnant women during ALL visits to the health facility, including prenatal (ANC) visits, visits for VCT, and monthly follow-up visits.

- For pregnant women with HIV who must take ARVs, do Daily Observed Therapy (DOT) – observe the woman take her ARVs in the morning and evening.

- Educate pregnant women with HIV about how they can prevent passing HIV to their babies (PMTCT), the importance of adherence, and how to prevent STIs.
PMTCT DURING DELIVERY

- To prevent passing HIV to their babies during labor and delivery, pregnant women with HIV should go to the shelter 2 weeks before their estimated due date (EDD) and deliver at the health facility. Remember that ALL pregnant women, not just those who have HIV, should go to shelters and deliver at the health facility.

- When a woman delivers at the hospital, clinicians will prevent HIV from passing to the baby and to those assisting in the delivery.
As MMRPAs, how should you support pregnant women with HIV so that they can prevent mother-to-child transmission during delivery?

- Accompany pregnant women to the shelters 2 weeks before their estimated due date (EDD).

- If a pregnant woman with HIV goes into labor before she is in the shelter, accompany her directly to the health facility for delivery.

- For pregnant women with HIV who must take ARVs, do Directly Observed Therapy (DOT).

- Educate ALL pregnant women, including those with HIV, about the importance of delivering at the health facility.

- Help ALL pregnant women, including those with HIV, to plan and prepare for going to the shelters and delivering at the health facility.
To prevent passing HIV to her newborn baby, a mother should:

- Continue to take ARVs daily if her CD4 count is below 350.
- Give NVP drops to her baby daily.
- Go to the 6-week (6/52) postnatal visit, where she will be checked and her baby will be tested for HIV.
- Give the baby Bactrim (antibiotics) starting 6 weeks after birth.
- Get the baby vaccinated according to the national schedule.
• Continue to take the baby to the health facility once a month for checkups, until the baby is 18 months old.

• Get the baby tested for HIV a 2nd time at 18 months

• If she chooses to feed her baby infant formula, pick up infant formula monthly at the health facility, and feed her baby only infant formula.
As an MMRPA, how should you support mothers with HIV so that they can prevent mother-to-child transmission after delivery?

- Continue providing DOT for mothers taking ARVs.
- Accompany mothers to the 6-week (6/52) postnatal visit.
- Ensure that the baby takes NVP drops daily.
- Educate mothers about infant formula, the importance of adherence, and the importance of postnatal visits, immunizations, and HIV tests for the baby.
- Accompany the mother and baby through the infant formula program.
Infant Formula Program

This program is available at all PIHL-supported health facilities for HIV-exposed babies. The mother and her family members must decide how the baby will be fed after birth. If the mother chooses to breast feed her baby, she must be supported at all levels and educated about exclusive breast feeding.

If the mother chooses to feed her baby infant formula, the MMRPA must accompany the mother to enroll in the program, and accompany the mother for all monthly checkups to make sure that she picks up the infant formula each time, until the baby is weaned from the program at 1 year of age.

INFANT FORMULA

Remember that one of the ways a woman with HIV can pass HIV to her baby is by breastfeeding. The breast milk of an HIV-positive woman contains HIV. A woman with HIV must make an informed choice about how she will feed her baby. During her pregnancy, the MMRPA and nurses at the health facility will educate the woman about infant formula. She will discuss it with her family, and then confirm at the health facility whether or not she will use infant formula when the baby is born. The nurse will record the decision in the woman’s record. If the woman chooses to use infant formula, the mother and baby will be enrolled in the formula program after delivery.
If a woman with HIV chooses to feed her baby infant formula, you will teach her how to do it before she delivers, and make sure that she has enough infant formula supplies. This way, she will be prepared once her baby is born. The infant formula program at the health center will provide supplies.

If a woman with HIV feeds her baby infant formula, she must feed the baby only infant formula, not infant formula sometimes and breast milk other times. Mixing infant formula feeding with breastfeeding is called “mixed feeding,” and it is very dangerous for the baby. The baby is more likely to get HIV from mixed feeding than from breastfeeding alone.

If a woman chooses to breast feed, she must be supported by both the MMRPA and health center, and she must feed her baby only breast milk (no “mixed feeding”).

What are the benefits of infant formula feeding?

• The baby cannot get HIV from the mother if she feeds the baby infant formula.

• Infant formula has many nutrients and vitamins that babies need.
How to prepare infant formula

**Step 1** – Wash your hands with soap and clean water.

**Step 2** – Heat water for cleaning utensils, and boil it for 5 to 10 minutes.

**Step 3** – Place the utensils in the boiling water, boil for 3 minutes, and remove with a fork.

Place the feeding bottle, nipple, and nipple ring into the boiling water. Remove them with a fork after 3 minutes.
**Step 4** – Heat water for making the infant formula, and boil for 5 to 10 minutes.

Heat water used for infant formula to a rolling boil for 5 to 10 minutes. Water must be boiled to remove any germs. If you do not use clean water and clean materials, the baby can become very sick with diarrhea and die. The health facility will give mothers all the materials they need to make infant formula correctly.

**Step 5** – Put 200 milliliters of hot water into the bottle.

**Step 6** – Add 7 teaspoons of infant formula powder.
Step 7 – Stir well.

Step 8 – Feed the baby the infant formula. Directions for how much and when to feed the baby are on the infant formula tin in Sesotho. Mothers will also receive instructions from staff in the formula program.

Step 9 – Discard the extra milk, and do not drink it.
### PMTCT Checklist (for women with HIV)

- Accompany pregnant women with HIV to all prenatal visits and follow-up visits, to the shelters and health facilities for delivery, and to the 6-week (6/52) postnatal visit.
- Observe pregnant women with HIV take their ARVs every morning and evening (Directly Observed Therapy – DOT) to ensure adherence, and make sure that the baby receives NVP drops.
- Educate all pregnant women with HIV about what they must do to prevent passing HIV their babies, including attending all prenatal, follow up, and postnatal visits, taking ARVs, and giving NVP drops to the baby.
- Teach mothers with HIV how to prepare infant formula and feed their babies correctly if they choose not to breastfeed.
- Accompany mothers and babies through the infant formula program until babies finish the program at 1 year of age, by going with the mothers and babies for all monthly check ups and ensuring that the mother picks up and uses infant formula correctly.
- Accompany babies through the vaccination schedule until they are fully immunized.
- Accompany infants for growth monitoring.
PMTCT Role Play 1

Narrator: An MMRPA arrives to visit Lipolelo, a young mother with HIV who has just found out that she is pregnant. Lipolelo looks sad and worried.

MMRP A: Greetings, Lipolelo, how are you today?

Lipolelo: I am well. But I have some news. I just found out that I am pregnant; in fact, I have been pregnant for 2 months.

MMRP A: Congratulations, I am very happy for you.

Lipolelo: Thank you. But I am afraid. When I had my first baby, I did not have HIV. But now I do. I'm afraid that my baby will be born with HIV. What will I do with a sick baby? I'm afraid that he will be doomed to die.

MMRP A: Don’t worry, Lipolelo. You don’t need to be afraid. You can keep from passing HIV to your baby.

Lipolelo: Is that true? What do you mean?

• What should the MMRPA say and do next?
• How will Lipolelo respond?

Finish the role play.
PMTCT Role Play 2

**Narrator:** The MMRPA comes to visit Khauhelo, who is due to give birth in about 1 month. Khauhelo has just had a visit from her mother-in-law, and she is worried and sad.

**MMRPA:** Greetings, Khauhelo, how are you today?

**Khauhelo:** I am worried and sad. My mother-in-law has been scolding me. She saw the infant formula supplies in my house, and now she knows that I plan to feed my baby infant formula. She is telling me not to do it. She says it is lazy and that all good mothers should breastfeed.

**MMRPA:** I’m sorry, Khauhelo. But don’t worry. I will help you figure out what you can say to your mother-in-law.

**Khauhelo:** To be honest, I don’t want to feed my baby infant formula either. If I do, everyone will gossip. They will know that I have HIV.

- What should the MMRPA say and do next?
- How will Khauhelo respond?

*Finish the role play.*
PMTCT Role Play 3

Narrator: The MMRPA goes to check on Tselane because she is due to give birth in 3 weeks. Tselane has HIV. The MMRPA arrives at the house and discovers that Tselane went into labor late last night and gave birth at home, 3 weeks earlier than the doctor had predicted. She is sitting in bed breastfeeding her baby.

MMRPA: Greetings, Tselane! What a surprise!! Your baby came early.

Tselane: Yes, I am very happy. I was not able to get to the hospital to deliver, but the birth was easy.

MMRPA: How are you feeling? How is the baby?

Tselane: The baby seems fine. But I am very tired. I don’t think I can go to the health facility with the baby until I feel better.

• What should the MMRPA say and do next?
• How will Tselane respond?

Finish the role play.
Tuberculosis (TB) is a serious disease. If it is not treated, it leads to death. People with HIV/AIDS are more likely to become infected with TB because their immune systems are weak. Some women under the care of MMRPAs may have HIV, TB, or both. It is very important for MMRPAs to learn what TB is, how it is spread, and how it is treated, so that they can treat and educate women under their care.

In this unit, you will learn about TB transmission, symptoms, testing, prevention, treatment, and side effects of treatment. One of MMRPAs’ main responsibilities is to provide Directly Observed Therapy (DOT) to women under their care who have TB, so you will also learn TB drug names, dosages, time of day of taken, and special indications.
OBJECTIVES

By the end of this unit, you will be able to:

a. Describe what tuberculosis (TB) is, how TB is transmitted (spread) from person to person, and the types of people who are most at risk of getting TB.

b. Describe the difference between active TB and inactive TB.

c. Explain the tests used to diagnose TB and why it is important to be tested.

d. Explain the interaction between HIV/AIDS and TB.

e. Identify symptoms of TB.

f. Name the main ways to avoid getting TB and prevent the spread of TB.

g. Explain when TB medications should be taken, for how long, the correct dosage, and how they should be stored.

h. Describe the importance of adherence to TB medications and the danger of multidrug-resistant tuberculosis (MDR TB) as a consequence of non-adherence.

i. Explain the complicating factors that arise when a person has both HIV and TB.

j. Provide Directly Observed Therapy for women taking TB medications to ensure adherence, and provide support and counseling for HIV-positive people with TB.

k. Ask about and identify mild and severe side effects of TB in women taking them, and accompany women suffering from severe side effects to the health facility immediately.

l. Educate pregnant women and nursing mothers about the importance of being tested for TB, how to avoid getting TB, the importance of adherence when taking TB medications, and the side effects of TB medications.
Key Points

- Tuberculosis (TB) is a serious disease that often starts in the lungs and then spreads. If it is not treated, it leads to death.
- TB can be cured with medication.
- TB is transmitted from person to person when a person with TB coughs, and another person breathes in the droplets from the cough.
- There are 2 common TB tests: a sputum test and an X-ray test.
- To avoid getting TB and to prevent passing TB to others, people should cover their mouths and noses when they cough, open doors and windows to let in fresh air and sunlight, get tested for TB and have family members tested, and take TB medications faithfully if prescribed.
- TB medications must be taken every day at the same time for 6 to 9 months. This is called adherence.
- If a woman under an MMRPA's care is taking TB medications, the MMRPA must go to her house every morning and evening and watch her swallow her pills. This is called Directly Observed Therapy (DOT).
- People taking TB medications may experience mild or severe side effects. Severe side effects include: difficulty breathing, difficulty hearing, trouble swallowing, swollen eyes, swollen tongue, blisters or sores, vomiting, rash, abdominal pain, or yellow eyes (jaundice).
- Women who experience severe side effects from TB medications must go to the health facility immediately, accompanied by the MMRPA.
Tuberculosis Transmission, Diagnosis, and Groups at Risk

TB STARTS IN THE LUNGS AND SPREADS

TB is a dangerous disease that usually infects the lungs. TB can infect other parts of the body, too, such as the bones and joints, stomach, throat, heart, and brain. TB is very serious and can kill people if left untreated.

TRANSMISSION OF TB

TB is transmitted by droplets of water in the air. When a person sick with TB coughs, she can transmit these droplets of water into the air. If someone else breathes in the droplets, this person can also get TB. TB is more likely to be transmitted to other people in closed, dark areas where the air is still and does not change with the breezes or wind. TB cannot be transmitted by touching someone, by having sex, or by eating food. TB cannot be transmitted through blood, urine, feces, water, or insect bites.
INACTIVE TB

There are two types of TB: inactive and active. Inactive TB is in the lungs, but it is not growing. A person with inactive TB feels healthy, and she cannot give anyone else TB, even through coughing. However, a person with inactive TB can get sick later if the TB “wakes up” in the lungs and starts to grow.

ACTIVE TB

When the TB in a person’s lungs starts to grow or “wakes up,” it becomes active. Then the person starts looking and feeling sick.

Why do you think inactive TB would start to grow?

Under what conditions do you think inactive TB becomes active?
WHO GETS TB?

People with weak immune systems can get TB very easily. This includes very young children, people with HIV/AIDS, and people who do not eat enough nutritious food. Most of the time, active TB does not develop in people who are well nourished and who do not have other illnesses. This is why TB often affects poor people – because poor people are often sick or hungry. Inactive TB also becomes active more quickly in children, who cannot fight off illnesses as well as adults can. Other people at risk for TB are students who live in dormitories, and prisoners – people who live in close quarters that allow the TB germs to spread easily from person to person.

TB AND HIV WORK TOGETHER AGAINST THE BODY

HIV is one example of an illness that makes a person weak by attacking the immune system, so inactive TB turns into active TB faster in people living with HIV/AIDS. HIV makes patients about 100 times more likely to develop active TB. TB makes HIV worse, and HIV makes TB worse. Worldwide, TB is the leading cause of death for people with HIV/AIDS.
ACTIVE TB IS CURED WITH MEDICINE

HIV is a chronic, incurable disease – people can never get rid of HIV once they have it. However, TB is not an incurable disease – it can be treated. With medicine, the body can get rid of TB. If a person has active TB, he should take medicine that kills TB.

SICK PEOPLE AND THEIR FAMILIES SHOULD BE TESTED FOR TB

Because TB can spread very easily among people who are living close together, if one person in a home or family has TB, everyone in the home or family should go to the health facility to get tested for TB. Even if someone thinks she might have TB, everyone in her home or family should go to the health facility to get tested. As MMRPAs, you should bring or send these people to the health facility to get tested for TB. When you visit women under your care who have TB, you should meet outside the house, if weather permits. If it is not possible to meet outside, you must wear a mask to prevent breathing in TB germs. This will keep you safe. You must also encourage the family to open the windows and doors immediately every morning when they wake up, if weather permits.
TB Tests

There are a few ways to get tested for TB. The most common way to test for TB is a sputum test. Sputum is a thick substance coughed up from the lungs and usually spit out. The germs that cause TB can be found in the sputum of people who have TB. A 2nd type of TB test is a chest X-ray, where a doctor takes a picture of the person’s chest to look for TB in the lungs.

Who should always get tested for TB?

There are 3 types of people who should always get tested for TB:

- Someone who has TB symptoms.
- Someone who lives with or spends a lot of time with someone who has TB or TB symptoms.
- Someone who has HIV/AIDS.

If a woman under your care has HIV/AIDS and continues to feel sick even after taking antiretroviral medicines (ARVs), she should visit the health facility to get tested for TB.
Symptoms of TB

- Cough
- Fever
- Weight Loss
- Chest Pain
- Loss of Appetite
- Fatigue
You must ask about and look for these symptoms in the women under your care, especially women with HIV.

People with HIV/AIDS might have different types of TB symptoms. For example, they might have no cough or no difficulty breathing at all. Some common TB symptoms for people living with HIV/AIDS are weight loss, diarrhea, or a swollen stomach. If a woman under your care has experienced severe weight loss, she should be tested for both HIV and TB.
Preventing TB Transmission

TB is killed by sunlight. If a house has a lot of open windows that let in fresh air and sunlight, the TB droplets in the air will not be able to survive. If a woman under your care has TB, ask to meet her outside in the fresh air and sunlight. If you cannot meet her outside, and she has MDR TB wear an N95 mask. This will prevent you from getting TB. Another way to prevent TB that is not in the picture story is immunization. All babies should be immunized so that they do not get TB.

Because TB is spread by droplets of water in the air, people who are sick should cover their mouths and noses when they cough to prevent the droplets from entering the air and infecting other people. Eating lots of nutritious food can also prevent TB by making people healthy and strong – strong enough to help make sure they will be able to fight off active TB.

People who have inactive TB can take medicine to prevent the TB from becoming active. If a person is tested and finds out that she has inactive TB, she cannot give TB to anybody else. However, if the inactive TB becomes active, she can then give TB to someone else, so she should take medicine to make sure her inactive TB stays inactive. This is especially true for children who live with people who have TB, since their immune systems are weaker, and they cannot fight off TB as well as adults.
**Picture 1:** There is a sick pregnant woman lying in bed, coughing and sweating. Her child and the MMRPA are also in the room. Little droplets of moisture fly out of the pregnant woman’s mouth.

**Picture 2:** These droplets float in the air around the MMRPA and child as the pregnant woman lies in bed.

**Picture 3:** The MMRPA opens a window across from the pregnant woman’s bed and sunlight pours in. The sunlight kills the droplets.

**Picture 4:** The pregnant woman covers her mouth when she coughs. No droplets can be seen floating in the air.

**Picture 5:** The MMRPA goes to the health facility and picks up a food package.

**Picture 6:** The MMRPA visits the family and hands the child a pill from a pill bottle. The MMRPA stays outside of the house.

**As MMRPAs, what should you do to prevent the spread of TB?**

Educate the women under your care and their families:

- Cover mouths and noses when coughing.
- Open windows to let in fresh air and sunlight.
- Have family members tested.
- Have children or others take preventative medicine.
TB Treatment

TB medications, like antiretroviral drugs (ARVs), must be taken with care. Some people have to take several medicines a day.

**Rifampicin (R)**

**Take 1 time per day**

**Morning – 6 A.M.**
Isoniazid (H)

Take 1 time per day

Morning – 6 A.M.

Take on an empty stomach (1 hour before or 2 hours after meals)

Combination Pill: Rifampicin (R) + Isoniazid (H)

Take 1 time per day

Morning – 6 A.M.

Take on an empty stomach (1 hour before or 2 hours after meals)
Ethambutol (E)

Take 1 time per day

Take on an empty stomach (1 hour before or 2 hours after meals)

Morning – 6 A.M.

Pyrazinamide (Z)

Take 1 time per day

Take on an empty stomach (1 hour before or 2 hours after meals)

Morning – 6 A.M.
Streptomycin (S)

One injection per day for the first 2 months of treatment

Morning – 6 A.M.
DIRECTLY OBSERVED THERAPY

One of your main responsibilities as MMRPAs is to make sure that the women with TB who are under your care take their TB medications correctly every day.

In order to do this, you must make sure that you know which combinations of TB medications the woman must take. Then you must go to the woman’s house every morning at the correct time to watch her swallow her TB medications. As you know, this is called Directly Observed Therapy (DOT). DOT means that you are present and watching when the person takes the medication. By doing DOT, you are ensuring adherence. In other words, you are making absolutely sure that the woman takes her TB medications correctly every day.
TREATING ACTIVE TB

Active TB

People with active TB take medicines for 6 months. The regimens for children and adults are different:

- For the first 2 months, adults take RHZE, which contains 4 different medicines.
- For the last 4 months, adults take RH, which contains 2 different medicines.
- Children take 1 type of pill, RHZ, for the first 2 months.
- For the last 4 months, children take 1 type of pill, RH. TB pills should be taken in the morning after meals at 6 a.m. on an empty stomach.
- The number of pills each person swallows each day depends on the dosages prescribed by the doctor. The doctor will prescribe the correct amount of medication depending on the person’s weight.
- The doctor or nurse will write down the drugs that the patient has to take in order to help patients and MMRPAs remember them.
**TREATING INACTIVE TB**

**Inactive TB**

People with inactive TB, particularly children younger than 5 years of age, should take isoniazid once a day for 9 months.

It is your job as an MMRPA to make sure that the people under your care take all their medicines every day. TB medications are taken in the morning after taking food not at a specific time. at the same time for all 9 months.

**HIV AND TB**

A person’s treatment regimen may be different if he or she has to take ARVs and TB medications at the same time. Frequently these medicines interfere with each other. In some cases, this results in more side effects. In other cases, one medication will make the other less effective. A doctor will decide the best treatment regimen for people who have both HIV/AIDS and TB. Be sure to speak with the doctor or nurse in these situations so that you fully understand what types of medications the person should be taking and how often.
MULTIDRUG RESISTANCE

If someone with TB does not take all of their TB medications every day until the treatment is finished (6 or 9 months), the TB can grow stronger and become able to fight the medication. Then the TB can start growing again. The medications will not work anymore, and the person will become sicker. Also, anyone who catches TB from this person will have this “resistant” type of TB, and TB medications will not work for this person either.

When TB grows stronger and the medicines do not work against it anymore, the result is called multidrug resistance, and it is very dangerous. When a person has multidrug-resistant TB (MDR TB), doctors must use different types of medicine. MDR TB can be spread the same way as regular TB. That is why you must watch people under your care take their medicine every time. By making sure that they take their medicine every day for as long as they have to, you are also making sure that TB medicine keeps working for everyone.

People living with HIV/AIDS are more likely to have MDR TB than regular TB, which means that regular medicine will not work for them. If someone under your care continues to cough or lose weight after 1 month of TB medicine, he or she should visit the health facility again to be re-tested.
Side Effects of TB Medications

Sometimes people who take TB medications have reactions to the medications. For example, they may get a headache, feel nauseous, or get diarrhea. These reactions are called side effects.

When women under your care are taking TB medications, they may sometimes experience side effects from the medications. Some side effects are mild and not serious. Other side effects are severe and very serious. If a woman under your care experiences a severe side effect, you must be able to recognize it and accompany the woman to the health facility immediately.

MILD SIDE EFFECTS OF TB MEDICATIONS

- Loss of Appetite
- Burning or tingling feet
- Dizziness
- Weakness or Fatigue
SEVERE SIDE EFFECTS OF TB MEDICATIONS

- Difficulty breathing
- Difficulty hearing
- Swollen eyes
- Swollen tongue
Blisters or sores

Vomiting

Rash

Abdominal pain

Jaundice
Women under your care who are taking TB medications may experience one or more of these mild side effects. While these side effects can be unpleasant, they are not serious.

If a woman is experiencing any of these mild side effects, tell her to go to the health facility within 2 or 3 days to get help.

Women under your care who are taking TB medications may experience one or more of these severe side effects. These side effects are very serious.

If a woman is experiencing any of these severe side effects, you must accompany her to the health facility immediately.

Every time you visit a woman under your care who is taking TB medications, you must ask her if she is experiencing side effects and refer her to the health facility if she is. Do not assume that she will tell you if she is having side effects. You must always ask.

It is not enough to ask, “How are you feeling?” You must take the time to ask, “Are you experiencing any severe side effects, for example, a rash, vomiting, difficulty breathing, etc.”?

You must also teach women to recognize the serious side effects, so that when they experience a serious side effect, they know to come and find you so that you can accompany them to the health facility immediately.
### TB Treatment Checklist

- Explain when TB medications should be taken, for how long, and the correct dosage.
- Make sure that women have the correct TB medications.
- Remind women taking TB medications to store medicine in a safe, dry place, away from sunlight and away from children.
- Make sure that women take their TB medications correctly every day by going to their houses in the morning and again in the evening to watch them swallow the medications (Directly Observed Therapy, or DOT).
- Before the woman takes TB medication, always ask if she has eaten or not.
- Record TB medications taken on the treatment card.
- Ask about and identify mild and severe side effects of TB in women taking them, and accompany women suffering from severe side effects to the health facility immediately.
TB Case Study 1

During a visit with a woman under your care, you notice that the woman has a bad cough. When you ask about the cough, she tells you that she has had the cough for a few weeks and has been feeling very poorly in general. Last night, she was scared because when she coughed, some blood came up. She also tells you that sometimes she sweats a lot at night, but other times she feels very cold and shivers.

What should you do and say to help the woman and educate her?

TB Case Study 2

A woman under your care has just been diagnosed with TB. You visit her in the morning to watch her take her TB medications. As you arrive at the house, you see that the door and windows are shut. You hear the woman coughing.

What should you do and say to help the woman and educate her?

TB Case Study 3

A woman under your care has HIV and has been taking her ARVs faithfully every day for a month. She was very sick before she started taking ARVs, but the doctor reassured her that the ARVs would help her to feel better. But even after 1 month of taking ARVs, the woman still feels poorly and seems to be getting thinner and thinner. One morning during your daily visit, you notice that the woman seems even worse.

What should you do and say to help the woman and educate her?
TB Case Study 4

A woman under your care was diagnosed with TB about 2 months ago. You have been watching her take her TB medications every day. One morning when you arrive to watch her take her medications, the woman tells you that she is feeling much better, and she does not want to take the TB medications anymore because sometimes the medications make her feel dizzy and very tired.

What should you do and say to help the woman and educate her?

TB Case Study 5

A woman under your care was diagnosed with TB 1 month ago. But after 1 month of taking TB medications every day under your supervision, the woman is still coughing all the time, sometimes coughing up blood. She has also lost weight and is getting very thin. During your morning visit with her, she asks you why she is not getting better after taking her medicines faithfully for 1 month.

What should you do and say to help the woman and educate her?

TB Case Study 6

A woman under your care has been diagnosed with TB recently. You go to her house every morning to watch her take her TB medications. A few days after she starts taking the TB medications, she tells you that she feels dizzy, very tired, and nauseous. She is very worried about these symptoms and is afraid that the TB medications are making her sick.

What should you do and say to help the woman and educate her?
TB Case Study 7

A woman under your care has just been diagnosed with TB. You arrive in the morning to watch her take her TB medications for the first time. You complete your duties, say goodbye, and promise to see her again tomorrow morning. A little while later, you pass her house again. She runs out to see you and is very distressed. She says that after she took the TB medications, she started to vomit and is having a lot of pain in her belly.

What should you do and say to help the woman and educate her?
In addition to attending prenatal visits, delivering at the health facility, attending postnatal visits, and taking medications when prescribed, pregnant women and mothers should follow other practices to improve and maintain their families’ health. These practices include family planning when appropriate, making sure that their children are immunized properly according to the national immunization schedule, recognizing signs of malnutrition and diarrhea in their children and bringing them to the health facility for treatment when needed, and following good personal and household hygiene practices.

In this unit, you will review information about family planning, immunizations, malnutrition, diarrhea, and good hygiene practices so that you can educate the families under your care and make sure that they receive treatment or are referred to the health facility when needed.
OBJECTIVES

By the end of this unit, you will be able to:

a. Define family planning and birth control, and give examples of birth control methods.

b. Name some of the benefits of, and social and cultural obstacles to, families practicing family planning and using birth control.

c. Educate community members about the benefits of family planning and birth control.

d. Describe how the different methods of birth control work; name their advantages, correct use, and the side effects of each; and teach women and their partners about birth control methods.

e. Describe the immunizations that all babies should receive according to the national schedule.

f. Accompany babies to the Under-5s Clinic until they are declared fully immunized.

g. Describe the 3 food groups needed for proper nutrition.

h. Name reasons why children become malnourished.

i. Identify the main symptoms of malnutrition in children, including the symptoms of marasmus and kwashiorkor, and refer children with these symptoms to the health facility immediately.

j. Define diarrhea and describe its symptoms, main causes, and treatment, and teach families how to treat diarrhea.

k. Describe personal and household hygiene practices that can help prevent diarrhea and the spread of disease, and teach families about these practices.
Key Points

- Family planning is when families plan the number of children they want, when they want to have them.
- Birth control is a medicine, device, or practice that prevents pregnancy. All birth control methods except sterilization prevent pregnancy only while a woman uses them. If she stops using birth control, she can get pregnant again.
- Birth control methods include birth control pills, injections, and male and female condoms.
- Male and female condoms are the only birth control methods that prevent the transmission of HIV and other STIs.
- Benefits of birth control include: having smaller numbers of children means that parents are better able to feed, clothe, and educate all of them; limiting pregnancies lowers a woman’s risk of anemia or other complications brought on by too many pregnancies; teenage girls who avoid getting pregnant can finish school and become better prepared to become mothers in the future.
- All parents should have their babies immunized according to the national immunization schedule at the Under-5s Clinic.
- The 3 food groups are proteins, carbohydrates, and protective foods. A balanced diet includes adequate amounts of these 3 kinds of food.
- Marasmus and Kwashiorkor are common forms of severe malnutrition among small children. Symptoms include: severe weight loss, stunting, and wasting of muscles, below normal progress on the road to health chart (marasmus); pale, brittle hair; swelling of hands, face, and feet (edema); loss of appetite, diarrhea, dehydration; and below normal progress on the road to health chart (kwashiorkor).
- Children with symptoms of severe malnutrition must be brought to the health facility immediately.
- Diarrhea and vomiting are often caused by germs found in feces. People are exposed to these germs through dirty hands, dirty water, or dirty food.
- Diarrhea can be treated with homemade or packaged Oral Rehydration Solution (ORS). People with severe diarrhea must be brought to the health facility immediately.
- Following good personal and household hygiene practices such as washing hands with soap and clean water, using latrines, and ventilating the house, can improve family health by preventing germs from spreading.
Family Planning

WHAT IS FAMILY PLANNING?

Family planning is when a family plans the number of children they want, and when they want to have them.

Birth control is a medicine, device, or practice that prevents pregnancy. There are different kinds of birth control. All birth control methods except sterilization prevent pregnancy only while a woman uses them. If she stops using birth control, she can get pregnant again.
Family Planning Benefits and Obstacles

What are some of the benefits of practicing family planning?

- **Spacing of pregnancies** – Having too many pregnancies too close together puts a woman at risk for anemia and other complications. Birth control helps women space their pregnancies to avoid this.

- **Women’s health** – Having too many children, children very close together in age, or getting pregnant at too young or too advanced an age can be dangerous for a woman’s health. Family planning helps to protect women from these risks.

- **Family health** – Families with fewer children are better able to feed, educate, and support all their children.

- **Community health** – Having fewer children through family planning can help families achieve better health and economic well-being and contribute to the health and economic well-being of their communities.

- **Women with HIV** – Women with HIV risk passing HIV to their babies during pregnancy and birth. These women can use birth control to limit pregnancies if they want to. They can also learn how to prevent passing HIV to their babies during pregnancy, during birth, and after birth – PMTCT (preventing mother-to-child transmission).

- **Protection against STIs** – Male and female condoms protect against getting pregnant as well as protecting against sexually-transmitted infections (STIs) including HIV.

- **Prevention of teenage pregnancies** – If teenage girls use birth control to avoid getting pregnant, they can stay in school longer and become better prepared to support a family when they are older.

- **Lowering the risk of death during childbirth** – Sometimes women die during childbirth and leave orphaned children. Using birth control lowers this risk. (Women taking ARVs or TB medication may not be able to use certain forms of birth control because they may react with the ARVs or TB medications.)

- Write other benefits here:
  - _______________________________________________________________________
  - _______________________________________________________________________
  - _______________________________________________________________________
  - _______________________________________________________________________
What are some reasons why people do not want to use birth control methods and practice family planning?

- Traditional culture teaches that it is important to have many children as a sign of wealth or to ensure the family’s survival.

- In some communities, babies die frequently, especially in poor families, so families want to have a lot of children because they know they will lose some.

- People want to have many children so that the children can help support the family by working and farming.

- Women think that birth control methods will give them cancer or other serious illnesses.

- Women who try birth control methods experience bad side effects.

- People think that birth control methods are too expensive.

- Male partners, mother-in-laws, or elders pressure women not to use birth control methods.

- People’s religions prohibit the use of modern birth control methods.

- Some people live very far from the health facility, so it is difficult for them to pick up pills or get injections.

- Some people prefer to use traditional birth control methods.

- Write other reasons here:
  - ____________________________________________________________
  - ____________________________________________________________
  - ____________________________________________________________
  - ____________________________________________________________
What can you say to women in order to encourage them to do family planning if it might be appropriate for them?

• A family with many children may not be able to provide enough food, clothing, or schooling for the children and therefore may end up poorer, not wealthier.

• There are other signs of wealth and well-being that do not harm a family’s health as a large number of children can, including: a well-built house, well-kept animals, well-fed children who complete school, and well-tended land that does not have to be divided among too many adult children.

• Families with fewer children have a better chance of keeping their children healthy so that they will not lose children to death.

• Families can learn how to protect their children against common childhood illnesses that often kill children in poor families, for example, malnutrition or diarrhea, so that they do not lose children to early death.

• More children may provide more help with farming, but they also need more food and resources.

• Family planning is not the responsibility of women alone. Men must share this responsibility.

• MMRPAs and health facility staff members can help women learn how to speak with their male partners about birth control and family planning, so that men understand its importance to family health.

• MMRPAs and health facility staff can counsel couples, men, mothers-in-law, and extended family members about how family planning will improve their family’s health and well-being.

• Family planning contributes to the health and economic well-being of families and communities. If families have too many children, the family may not have food security or adequate access to education and economic opportunities. Smaller families mean greater economic well-being for everyone.

• Birth control methods do not give women cancer or other serious illnesses.

• Even though some birth control methods do have side effects, these effects are usually not serious, and they can be managed. Most side effects go away after a few months.

Even when you speak with families using these ideas, it can be difficult to help families understand the importance and benefits of family planning and birth control.

It is important to speak with both women and men about family planning and birth control. Family planning is not only women’s responsibility. Men must share this responsibility.
Educating families and communities about family planning can be a long and slow process. Sometimes it is difficult to change people’s attitudes and behaviors because they have been taught these attitudes and behaviors since they were young. But every time you talk with someone about family planning, you make a difference. Education is one important way to change people’s attitudes and improve community health.
Birth Control Methods

How does a woman get pregnant?
A woman has many eggs in her ovaries. Every month, an egg is released from the ovary and travels down the fallopian tube into the womb (uterus). When a man and a woman have sex and the man ejaculates, sperm from the man’s penis goes into the womb and travels up the fallopian tube.

If the sperm from the man’s penis connects with the egg, this egg is fertilized. Sperm are tiny cells. A man’s semen contains millions of sperm, but only one sperm is needed to fertilize the egg. The fertilized egg travels down the fallopian tube into the womb, attaches to the wall of the womb, and begins to grow.

If the egg is not fertilized, the egg is expelled from the woman’s body through the vagina along with blood and some excess tissue from the womb (uterus). This is called menstruation or a woman’s period.

Birth control methods work in one of 3 ways:

- By preventing the egg from being released (preventing ovulation).
- By preventing the sperm from reaching the egg.
- By preventing the egg from attaching to the wall of the womb.
Birth Control Pills

How does the method work?
A woman takes a pill. The pill releases hormones (substances similar to those in a woman’s body). These hormones prevent ovulation; that is, they prevent a woman’s ovaries from producing an egg that travels to the womb. If a woman doesn’t ovulate, there is no egg in her womb, and she cannot get pregnant. Examples of pills are Nordett, Microgynon, Lo-femenal, Microval, and Microlut.

How do you use it correctly?
A woman takes 1 pill every day at about the same time of day. If she misses taking the pill 1 day, she must take it the following morning.

How long does it last?
Each pill lasts for 1 day.

How well does it work?
The pill is a very effective method as long as the woman takes a pill every day. She can get more pills at the health facility every few months. If a woman is breastfeeding, the pill is a bit less effective. There may be one kind, called a mini-pill, which does work for breastfeeding mothers. Women can get pregnant after they stop taking the pill.

Does it have side effects?
Yes.

What are they?
- Possible changes in monthly menstruation (irregular bleeding for a few months that becomes regular.
  - Women should go to the health facility if they experience heavy bleeding or breakthrough bleeding (bleeding other than menstruation).
- Possible nausea, weight gain or loss, depression, acne, headaches, or sore breasts.
- These side effects often go away after a few months.
• Possible health problems for women over 35 years old, women who smoke, or women with certain medical problems; Women must talk to a nurse or doctor at the health facility before they start taking the pill to be sure that it is safe for them.

• Women must be sure they are not pregnant before they use this method. The hormones can hurt the baby if a woman is pregnant already.

Does it also protect against HIV and STIs?
No
Injections

How does the method work?
A woman gets an injection at the health facility. The injection contains hormones (substances similar to those in a woman’s body). These hormones prevent a woman from ovulating.

How do you use it correctly?
A woman must receive her 1st injection at the health facility. Then she must get an injection every 3 months at the health facility to prevent pregnancy.

How long does it last?
1 injection lasts for 3 months.

How well does it work?
Injections are very effective as long as a woman gets an injection every 3 months.

Does it have side effects?
Yes.

What are they?
- Possible changes in monthly menstruation (irregular bleeding for a few months that becomes regular, or monthly menstruation stops).
- Possible nausea, weight gain or loss, depression, acne, headaches, or sore breasts. (These side effects often go away after a few months.)
- Possible health problems for women over 35 years old, women who smoke, or women with certain medical problems; women must talk to a nurse or doctor at the health facility before they start taking injections to be sure that it is safe for them.
- Women must be sure they are not pregnant before they use this method. The hormones can hurt the baby if a woman is pregnant already.

Does it also protect against HIV and STIs?
No.
Implants

How does the method work?
Implants give a woman hormones through an implant (a small capsule) that is put under the skin of a woman’s arm. It releases the hormones a little bit at a time so that it lasts for a long time. These hormones prevent a woman from ovulating.

How do you use it correctly?
A woman must get an implant done at the health facility. She must get another implant every 3 to 5 years to prevent pregnancy.

How long does it last?
One implant lasts for 3 to 5 years (depending on the type of implant).

How well does it work?
Implants are very effective as long as a woman gets a new implant every 3 to 5 years.

Does it have side effects?
Yes.

What are they?
- Possible changes in monthly menstruation (irregular bleeding for a few months that becomes regular, or monthly menstruation stops).
- Possible nausea, weight gain or loss, depression, acne, headaches, or sore breasts.
- These side effects often go away after a few months.
- Possible health problems for women over 35 years old, women who smoke, or women with certain medical problems; women must talk to a nurse or doctor at the clinic before they start using Norplant to be sure that it is safe for them.
- Women must be sure they are not pregnant before they use this method. The hormones can hurt the baby if a woman is pregnant already.

Does it also protect against HIV and STIs?
No
Intra Uterine Device (IUD)

How does the method work?
An IUD is put inside a woman’s womb at the health facility. It prevents an egg from attaching to the wall of the womb, so that a woman cannot get pregnant.

How do you use it correctly?
A woman must have the IUD put in at the health facility.

How long does it last?
One type of IUD lasts 10 years; the other type lasts 5 years.

How well does it work?
An IUD is very effective if it is replaced every 5 or 10 years.

Does it have side effects?
Yes.

What are they?
- Heavier and slightly more painful monthly menstruation.
- IUDs can be dangerous for women with certain medical problems. Women must talk to a nurse or doctor at the health facility before they have an IUD inserted.

Does it also protect against HIV and STIs?
No
Male Condoms

How does the method work?
A man puts a condom on his erect penis before intercourse. The condom prevents pregnancy by preventing the sperm from going into the woman’s body.

How do you use it correctly?
A man must put a condom on his erect penis correctly before intercourse. The condom must stay on. It must not have holes. A man should use a new condom every time he has intercourse.

How long does it last?
A condom lasts for one erection.

How well does it work?
Condoms are very effective if they are used correctly.

Does it have side effects?
No

Does it also protect against HIV and STIs?
YES. The condom is the ONLY birth control method that protects against HIV and STIs. If used correctly, condoms prevent all fluids from passing from one person to another during sex. This is why condoms protect against HIV and other STIs.
Female Condoms

How does the method work?
A woman puts a female condom into her vagina before intercourse. The condom prevents pregnancy by preventing the sperm from going into the woman’s body.

How do you use it correctly?
A woman must put a condom into her vagina correctly before intercourse. The condom must stay in. It must not have holes. A woman should use a new condom every time she has intercourse.

How long does it last?
A condom lasts for one intercourse session.

How well does it work?
Female condoms are very effective if they are used correctly.

Does it have side effects?
No

Does it also protect against HIV and STIs?
YES. The condom is the ONLY birth control method that protects against HIV and STIs. If used correctly, condoms prevent all fluids from passing from one person to another during sex. This is why condoms protect against HIV and other STIs.
**Sterilization**

What is sterilization?

Sterilization *permanently* prevents a woman from getting pregnant or a man from being able to get a woman pregnant. This is done through a simple operation.

For a man, the operation is called a **vasectomy**. The tubes that carry a man's sperm into his penis are cut, so that sperm cannot come out of the penis.

For a woman, the operation is called **tubal ligation**. The tubes that connect a woman's ovaries to her womb are closed, so that eggs cannot travel from the ovaries to the womb.

How long does it last?

Sterilization is **permanent**. Sterilization is best for women and men who are very, very sure that they do not want to have more children.

How well does it work?

Sterilization is very effective.

Does it have side effects?

Men and women may have some pain and swelling after the operation, which will go away after a few weeks.

Tubal ligation does not affect a woman’s menstrual cycle or her ability to have sex.

Vasectomy does not affect a man’s ability to have sex or ejaculate semen. But the semen will not have any sperm.

Does it also protect against HIV and STIs?

**No**
Side Effects of Birth Control

What can you say to women and families about side effects to help ease their fears and encourage them to use modern birth control methods?

- Most side effects from using the pill or injections go away after a few months, so the side effects may be unpleasant for a little while, but they are often not permanent.

- Women can talk with a doctor or nurse at the health facility about side effects, and the doctor or nurse can help women manage the side effects or help them switch to another method.

- Some women may have side effects from one method but not another, and some women may experience very few side effects at all. Everyone’s experience is different.

- Male and female condoms produce no side effects and are fairly effective ways of preventing pregnancy. They also protect against STIs, including HIV.

- Modern birth control methods do not cause cancer or other serious illnesses. You must reassure people about this. You can also encourage women to ask a doctor or nurse at the health facility about this if they need further reassurance.
Birth Control and Women’s Health

Some women may experience side effects when they use birth control, but most of these effects are minor and they go away after a few months. Not using birth control to practice family planning can have much more serious effects on a woman’s health than the side effects of modern birth control methods.

How can having too many children, having children spaced too close together, or having children at a young age or as an older woman, be dangerous for a woman’s or girl’s health?

- Women who get pregnant before their last child is 2 years old are more likely to get anemia, which makes them weak and prone to illness. Women’s bodies need time to heal after pregnancy, birth, and breast feeding.
- Women who have given birth to more than 5 children are more likely to have problems such as dangerous bleeding during the next birth.
- The bodies of girls and young women (under age 18) are not ready for pregnancy and birth, and it can be dangerous for them.
- Women over the age of 35 run the risk of having difficult or dangerous pregnancies and births.
NATURAL OR TRADITIONAL BIRTH CONTROL METHODS

Some couples use the “natural” or “calendar” method to avoid pregnancy. To use the calendar method, a woman predicts when she will ovulate each month and avoids having sex during those days.

When a woman is breastfeeding, if she breastfeeds her baby as much as the baby wants, if breast milk is the only thing the baby is eating and if the woman’s monthly menstruation has not returned, the woman will usually not get pregnant for the first 6 months after she gives birth. But to be safe, even women who are breastfeeding should use modern birth control methods if they do not want to get pregnant.

These methods and other traditional methods are NOT very effective. If a couple wants to prevent pregnancy, they should use a modern birth control method.

In my area, birth control methods are available at:

- _____________________________________________________________
- _____________________________________________________________
- _____________________________________________________________
- _____________________________________________________________

Remember:

At the 6 weeks postnatal visit, women will receive counseling and advice about family planning. Remember that you must accompany women to this postnatal visit, and make sure that they start to use a birth control method if they have been advised to do so.

Women who are taking ARVs should not use birth control pills, as the pills may react with the ARVs and cause problems. If women are taking both ARVs and birth control pills, they should return to the health facility every 10 weeks instead of every 12 weeks.
Immunizations

IMMUNIZATIONS

Immunizations protect babies and adults from deadly diseases. Immunizations contain a weak form of the live germs that cause the disease. When a person receives an immunization, this weak form of the disease is injected into the person’s body. The body makes antibodies (weapons) to protect itself from the disease. This means that if the person is exposed to the disease again, she/he already has the weapons to fight it off.

Often after receiving an immunization, a baby will have a slight fever. This fever is proof that the baby’s body is making weapons against the illness. This is normal and will pass.

Immunizations protect children against very serious illnesses that can spread throughout communities and kill many people. Children must be immunized so that they will not get very sick or die from these illnesses, and so that the whole community is protected from these illnesses.
NATIONAL SCHEDULE FOR IMMUNIZATIONS

<table>
<thead>
<tr>
<th>Antigen</th>
<th>Time of giving</th>
<th>Site of giving</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>After birth</td>
<td>Left forearm</td>
<td>Once</td>
</tr>
<tr>
<td>Pentavalent</td>
<td>6 weeks, 10 weeks and 14 weeks</td>
<td>Left Thigh</td>
<td>3 times</td>
</tr>
<tr>
<td>OPV</td>
<td>6 weeks</td>
<td>Oral</td>
<td>4 times</td>
</tr>
<tr>
<td></td>
<td>After delivery, at 6 weeks, 10 weeks and 14 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>9 months and 18 months</td>
<td>Right Deltoid</td>
<td>2 times</td>
</tr>
<tr>
<td>DT</td>
<td>18 months</td>
<td>Thigh</td>
<td>Once</td>
</tr>
<tr>
<td>TT to pregnant women</td>
<td>First contact, after 4 weeks, after 6 months, after one year or at the next pregnancy, the last one a year after the 4th or at the next pregnancy</td>
<td>Left deltoid</td>
<td>5 times</td>
</tr>
</tbody>
</table>

All women of childbearing age should receive:

- Tetanus Toxoid (TT) according to the schedule below. For lifetime protection, women should receive 5 doses total.

**TT immunization schedule**

<table>
<thead>
<tr>
<th>Doses</th>
<th>Timing</th>
<th>Site of the injection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st dose</td>
<td>At first contact</td>
<td>Left deltoid muscle</td>
</tr>
<tr>
<td>2nd dose</td>
<td>4 weeks after the 1st dose</td>
<td>same</td>
</tr>
<tr>
<td>3rd dose</td>
<td>6 months after the 2nd dose</td>
<td>same</td>
</tr>
<tr>
<td>4th dose</td>
<td>1 year after the 3rd dose or during subsequent pregnancy visit</td>
<td>same</td>
</tr>
<tr>
<td>5th dose</td>
<td>1 year after the 4th dose or at the next pregnancy</td>
<td>same</td>
</tr>
</tbody>
</table>

As an MMRPA, you are responsible for accompanying mothers and babies to the health facility for vaccinations until they are declared fully immunized. You must also check in babies’ health booklets regularly to make sure they are receiving the proper vaccinations at the proper times.
Nutrition and Malnutrition

WHAT IS GOOD NUTRITION?

Good nutrition is eating enough of the right foods so that the body gets the nutrients it needs to function well and stay healthy. Good nutrition does not just mean eating enough food not to feel hungry. It means eating enough of the right foods, in the right combinations, to help the body grow and protect itself. Eating enough of the right foods is called having a “balanced diet.”

If children do not have a balanced diet, they will not grow and develop properly. For example, they may become stunted (too small) or suffer delays in mental development.

THE 3 FOOD GROUPS

For good nutrition, you should eat protective foods such as fruits and vegetables, proteins such as meat and dairy, and carbohydrates (starches) such as potatoes and rice. You should eat enough from each of these 3 food groups so that your body can build and repair its bones and skin, protect itself from infection, and have the energy it needs every day.

![Image of food groups]

Carbohydrates

Carbohydrates give the body energy to work, walk, run, laugh, eat, and breathe.

Examples of carbohydrates are potatoes, porridge, rice, papa, and grains such as koro and mabele.
Proteins
Proteins help the body to grow and repair itself. Proteins help our muscles form, our skin heal when we are cut, our bones grow taller and stronger, and our hair and nails grow.

Examples of proteins are eggs, milk, meat such as beef, chicken, fish, and dried beans and peas.

Protective Foods
Protective foods help the body protect itself from sickness. Foods that have vitamins in them, such as fruits and vegetables, help strengthen the body’s immune system so that we stay healthy.

Examples of protective foods are tomatoes, peppers, peaches, apples, papasane, leshoabe, qhela, and seruoe.
MALNUTRITION

When people do not eat a balanced diet, they become malnourished. Malnutrition is very dangerous. It can lead to illness and even death. Malnutrition in children can lead to lifelong developmental problems.

In Lesotho, many adults and children are malnourished. Community health workers and MMRPAs must be able to identify cases of serious malnutrition in children, accompany these children to the health facility immediately, and provide support and follow-up.

Malnourished children have one or more of these conditions:

- Low weight compared to age
- Low MUAC measurement (12.5 centimeters or lower)
- Slow physical and mental development compared to other children
- Symptoms of Marasmus or Kwashiorkor

**Marasmus**

Marasmus is a serious condition caused by malnutrition. A child with marasmus may be eating from the 3 food groups (proteins, carbohydrates, and protective foods), but the child is not eating enough and is starving.

Signs and symptoms of Marasmus

- Serious weight loss
- Stunted growth
- Wasting of muscles; the child is so thin that his/her ribs can be seen and counted
- Severe hunger
- Child is below normal on road to health chart curve
What should the MMRPA do?
Accompany the child to the nearest health facility immediately, where the appropriate emergency treatment will be given.

While the child is hospitalized, the mother will learn about food preparation, the 3 food groups and their importance, how to recognize the early signs and symptoms of marasmus, and how to prevent it in the future. The mother will also receive instructions on how to feed the child after he is discharged, and help starting her own kitchen garden.

Prevention
MMRPAs must educate all women under their care about good nutrition and the signs of malnutrition. They must follow up with all children under their care who are enrolled in the food program to make sure they continue to improve after they are discharged from the program.

Questions
- When have you seen children with signs and symptoms of marasmus or other signs of malnutrition?
- Why do you think these children become malnourished?
- What could you do to help the families you visit whose children are malnourished?

Kwashiorkor
Kwashiorkor is a serious condition caused by malnutrition. A child with kwashiorkor is not eating enough proteins, even though the child is eating carbohydrates and protective foods. Kwashiorkor usually affects children between 18 months to 2 and a half years of age. It is common during weaning if weaning is not done properly.

Many children suffering from malnutrition have a combination of signs and symptoms of kwashiorkor and marasmus. This is known as marasmic-kwash.
Signs and symptoms of kwashiorkor

- Persistent diarrhea.
- Irritability, refusal to play with other children, or refusal to eat even with family members.
- Pale, reddish, or white hair that loses its strength, shine, curl, and springiness, and becomes brittle and falls off.
- Swelling of feet, face, eyelids, and hands that looks shiny and is not painful; if a finger is pressed in the swelling, it leaves a deep pit.
- Skin becomes lighter, with blackish spots and patches.
- Loss of appetite.
- Dehydration due to continuing diarrhea.
- Anemia and parasitic infections in severe cases.
- Child remains below normal on the road to health chart curve.

What should the MMRPA do?
Accompany the child to the nearest health facility immediately, where the appropriate emergency treatment will be given.

While the child is hospitalized, the mother will learn about food preparation, the 3 food groups and their importance, how to recognize the early signs and symptoms of marasmus, and how to prevent it in the future. The mother will also receive instructions on how to feed the child after he is discharged, and help starting her own kitchen garden.

Prevention
MMRPAs must educate all women under their care about good nutrition and the signs of malnutrition. They must follow up with all children under their care who are enrolled in the food program, to make sure they continue to improve after they are discharged from the program.

Questions
- When have you seen children with signs and symptoms of kwashiorkor or other signs of malnutrition?
- Why do you think these children become malnourished?
- What could you do to help the families you visit whose children are malnourished?

As an MMRPA, you must be able to recognize the signs and symptoms of serious malnutrition in children, for example, the signs and symptoms of marasmus and kwashiorkor. When you see a child with these symptoms, you must accompany the child and mother to the health facility immediately. You must also educate women under your care about good nutrition, and the signs and symptoms of malnutrition.
Diarrhea and Vomiting

What is diarrhea?
Watery, loose stool 3 or more times a day (within 24 hours)

What is vomiting?
When a person throws up food he/she has eaten

What causes diarrhea and vomiting?
Germs (bacteria) that enter the body from dirty hands, dirty or spoiled food, or dirty water; sometimes illnesses that cause other symptoms like fever also cause diarrhea and vomiting.

Diarrhea and vomiting are dangerous, especially for small children. Why are they dangerous?
Diarrhea and vomiting can make the body lose water and lead to dehydration. If someone is dehydrated, this means that her/his body does not have enough water. Babies and small children can become dehydrated very quickly. Severe dehydration can lead to death if it is not treated.

How should diarrhea be treated?
• Prepare Oral Rehydration Solution (ORS), and give it to the person.
• Teach families to make ORS.
• For cases of severe diarrhea (blood in the stool) or severe dehydration (person is in shock), accompany the person to the health facility immediately. At the health facility, clinicians will give the person an IV to replace lost fluids, bring down the person’s fever if needed, and give the person medication.
How should babies with diarrhea be treated?

- Exclusive breastfeeding is the best way to prevent diarrhea in babies or to treat a baby with diarrhea.
- If mothers must feed their babies infant formula, they must use clean (boiled) water and utensils.
- Babies with severe diarrhea must be brought to the health facility immediately.

If many households in the same area have cases of diarrhea and vomiting, what should you do and why?

Report the cases to the health facility. Many cases in one area may mean that there is an outbreak. Public health officials may have to check the water and food sources in the area.
MAKING ORS WITH PACKETS

water
empty fizzy drink can
ORS packet
MAKING HOMEMADE ORS

water

empty fizzy drink can

sugar

salt
Personal and Household Hygiene

Diarrhea, vomiting, and other illnesses are caused by germs. Germs are tiny things we cannot see that can enter our bodies and make us sick. They can enter through all our bodies’ openings (mouths, noses, etc.) and through cuts on our skin. They can be passed from one person to another through sneezing, coughing, or touching.

Many germs are found in stool. If stool gets on a person’s hands or on flies that have landed on the stool and then landed on food, these germs can be passed to people when they touch their mouths, handle food, or touch someone else.

Stale air can also contain germs.

Families can help to prevent diarrhea and other illnesses by practicing good personal and household hygiene, in other words, by keeping themselves and their households clean.

GERMS

- Many germs are in a person’s body fluids.
- Many germs are in stool (from people and animals).
- Flies like to land and sit on stool, and then they can carry the germs to people.
- Many germs are found in dirty water.
- Germs can be passed from one person to another through sneezing, coughing, or touching.
- Stale air can contain germs.
# Good Hygiene Practices Checklist

## Personal Hygiene

- Wash hands with soap and clean water after visiting the toilet; changing a nappy or cleaning a baby; caring for a person with diarrhea; and before handling, preparing, or eating food.
- Cover the mouth and nose with a hand or cloth when coughing or sneezing.
- Take daily baths to keep the body clean and prevent germs from spreading.
- Sick people should seek medical help as soon as possible so they can receive proper treatment and avoid spreading germs to others.

## Household Hygiene

- Use water from protected, clean sources.
- Boil all water before drinking and cooking if it is not from a clean source.
- Cover food and water so that flies cannot land on it.
- Wash dishes immediately after a meal to keep flies and cockroaches from breeding.
- Clean and sweep the house and surrounding area every day to remove breeding places for flies.
- Sweep with windows open, and remove dust from surfaces after sweeping.
- Ventilate the house by opening windows and doors to let in clean air and sunlight.

## Environmental

- Keep animal shelters away from the house, since they attract flies that can land on food and contaminate it.
- Keep stagnant water from collecting around the house.
- Build and use latrines to prevent contamination of water sources.
- Protect springs to prevent animals from contaminating the water.
An important responsibility of MMRPAs is to accurately record their work on the required forms and cards, and to report to and interact with their supervisors effectively. MMRPAs must also attend required meetings and trainings, conduct community outreach, and complete other administrative responsibilities. In this unit, you will review how to complete the forms required of you.

You will also evaluate the training and complete the post-test.

OBJECTIVES

By the end of this unit, you will be able to:

a. Describe the MMRPA’s administrative and outreach responsibilities.
b. Complete all forms required of MMRPAs accurately.
c. Take an oath stating what the MMRPA must do to uphold her responsibilities.
d. Evaluate the training and give suggestions for improvement.

Key Points

- In addition to accompanying and educating all of the women under their care, MMRPAs also have administrative and outreach responsibilities including attending trainings and monthly meetings, leading health education sessions in the community, and reporting to their supervisors regularly.
MMRPA Oath

As an MMRPA I do swear:

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

___________________________________________________________________________________________________________

Signature: _____________________________________________

Date: ________________________________________________
EVALUATION FORM

What training activity did you like the most? Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What training activity did you like the least? Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

What did you learn that was valuable and that you will use in your work?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Was there anything you did not understand? Give specific examples.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
What are your recommendations to improve this training? What would you change? (For example, what activities, illustrations, etc., would you change?)

What additional comments do you have?

Thank you for completing this evaluation.