

Facilitator's Guide to 7-11 Health Information

Field Test Version



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INTRODUCTION TO THE MANUAL

Background

This Facilitator's Guide was originally produced as a companion piece to the *Community Health Committee (COMM)* package of materials. COMM field testing revealed that community members, although they may belong to health committees, often do not have the foundational factual information about the health topics that they are meant to address in their work. In these field tests, facilitators would attempt to answer the many questions posed by the groups when introducing the 7-11 framework, but often without sufficient information themselves, and without a resource to refer to. The need for a document that clearly summarized the factual 7-11 health information and behaviours became apparent. The question and answer format that is used in this document grew out of these field experiences, building from the types of questions that the COMM members were asking. The document aims to use language that will be understandable at community level.

Audience

Nevertheless, it is anticipated that this resource will prove valuable to audiences other than community health committees, and may be used in a wide range of settings, both among community members (e.g. mother support groups, positive deviant hearth groups) and among staff themselves. Staff should feel free to make use of it in any way that they wish.

How to use the manual

The first section of the document focuses on foundational nutrition information, to help inform later sections on maternal and child diet. Thereafter, the document proceeds sequentially through each of the 7 pregnant women and 11 child interventions. The desired behaviors are summarized at the beginning of each section, followed by questions and answers. There is a supplemental section at the end on birth registration; not included in the 7-11 framework but equally important as the 7-11 practices.

It is up to the facilitator how to structure the review of this information. The facilitator may handle the review through a straight question-and-answer session, or may divide participants into groups and assign each group sections of the document to review and explain to others, or may design a game or a competition of some kind. The facilitator may choose to create flashcards with the questions on one side and the answers on the other side. It is up to the facilitator, and he or she should feel free to use his or her creativity.

Acknowledgments

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BACKGROUND: GENERAL NUTRITION

General: This is a general introductory section to clarify and provide examples the food groups in a country as well as foods containing important vitamins or micronutrients. This is not one of the 7-11 behaviours, but it is necessary background for:

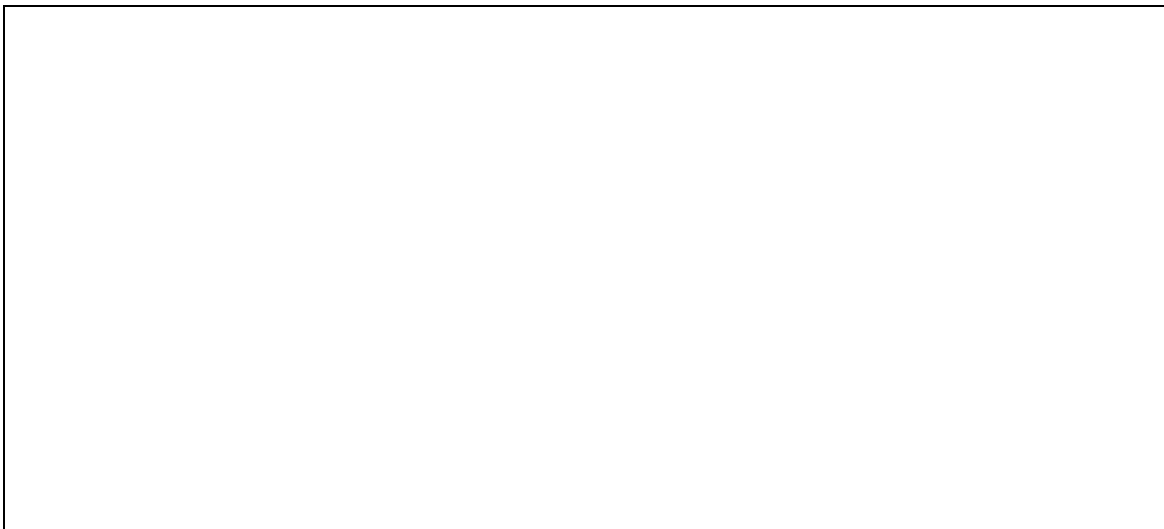
- Pregnant Woman Intervention 1: Adequate Diet
- Child Intervention 3: Adequate Diet
- Child Intervention 4: Adequate Iron

The food groups and food examples given here will vary by country.

Questions and Answers:

Q1: How many food groups are there, and what are they?

- The answer is that it depends on the country. In the past we had four groups, then five, then the food pyramid, and now there are all sorts of divisions of food groups around the world.
- Find out what the food groups are in your country and record the information in the space below.



Q2: What are examples of '**energy giving**' foods? These may also be known as 'go' foods, or carbohydrates. Add other examples from your country in the space to the right of the list!

- Maize (corn)
- Bread
- Potatoes
- Cassava (yucca)
- Sorghum
- Millet
- Rice
- Sweet potato
- Pasta (spaghetti)

Q3: What are examples of **'protective'** foods? These may also be known as 'glow' foods. Add examples from your country in the space to the right of the list!

- Fruits
- Vegetables

Q4: What are examples of **'body building'** foods? These may also be known as 'grow' foods, or proteins. Add examples from your country in the space to the right of the lists!

- Meat
- Liver
- Chicken, other poultry
- Fish
- Legumes (nuts and beans)
- Tofo
- Eggs
- Insects

Q5: What are examples of **'concentrated energy'** foods? These may also be known as 'super go' foods. Add examples from your country in the space to the right of the lists!

- Oil
- Coconuts
- Sugar
- Avocado
- Honey

Q6: What are examples of **foods containing vitamin A?** Add examples from your country in the space to the right of the list!

- Eggs
- Small fish
- Orange or yellow vegetables

Q7: What are examples of **foods containing iron?** Add examples from your country in the space to the right of the lists!

- Meats (including liver, kidney)
- Fish
- Eggs
- Dark green leafy vegetables
- Insects

Q8: What are examples of **foods containing vitamin C?** Add examples from your country in the space to the right of the lists!

- Citrus fruits (oranges, lemons, grapefruits)
- Tomatoes
- Meats
- Fermented porridge

Q9: What are examples of **dairy products**? Add examples from your country in the space to the right of the lists!

- Milk
- Cheese
- Yogurt

Q10: How often should pregnant women and children eat from these food categories? Please find out the answer per the protocols in your own country and fill in the table below!

No.	Type of food	How often?
1	'Energy giving' foods, also known as 'Go' foods or Carbohydrates	Daily
2	'Protective' foods, also known as 'Glow' foods	
3	'Body-building' foods, also known as 'Grow' foods or Proteins	
4	'Concentrated energy' foods	
5	Foods containing Vitamin A	
6	Foods containing Iron	
7	Foods containing Vitamin C	
8	Dairy products	

PREGNANT WOMAN INTERVENTION I: ADEQUATE DIET

Definition: A diet recommended to pregnant women to meet the additional nutrient requirements of pregnancy. A pregnant woman is advised to take one additional nutritious meal and nutritious snack each day during pregnancy.

Target behaviours:

- Pregnant woman eats a balanced diet
- Pregnant woman takes one additional nutritious meal and one additional nutritious snack per day while pregnant
- Pregnant woman uses iodized salt

Questions and Answers

Q1: What constitutes a balanced diet?

- Eating from all of the food groups in the recommended quantities

Q2: How many food groups are there, and what are they?

- The answer is that it depends on the country. In the past we had four groups, then five, then the food pyramid, and now there are all sorts of divisions of food groups around the world.
- Refer to the section on 'Nutrition General' where you determined this for your country
- Carbohydrates (or "Energy-giving foods", or "Go" foods) should be eaten every day
- Refer to the section on 'Nutrition General' for guidelines on frequency of consumption for the other food groups.

Q3: What constitutes an "additional meal"?

- It is necessary to have some understanding of the "baseline" eating practices of women in the area.
- Ideally, we would like to see at least three meals a day and one snack as a base. The overall composition of these meals and snack should represent a balanced diet, as described above
- In some communities or at certain times of year (during the hunger gap) food may be scarce and women may be eating only one meal a day, or living off of porridge or a similar base and eating solid foods only once or twice a week. In these cases, the recommendation should still be that the pregnant woman try to increase her food intake as much as possible.

Q4: Why do pregnant women need to take additional nutrient rich diet?

- This is due to the additional nutrient requirements of pregnancy. Pregnant women are more vulnerable to having nutritional disorders such as anemia unless their nutritional needs are met with additional nutrient rich food intake.

- Pregnant adolescents are particularly most vulnerable to anaemia because they have double nutrient requirements – they need nutrients for their own growth as well as for the growth of the fetus.

Q5: What happens if a pregnant woman doesn't eat enough during her pregnancy?

- This can result in giving birth to a low birth weight baby. Low birth weight babies are at more risk of illness and death than regular weight babies

Q6: Why is iodized salt important?

- A person without enough iodine in his or her body can develop *goitre* which is visible as a large swelling at the front of the neck. Ask community participants if they have ever seen this. Many often have. This is a result of lack of iodine
- Iodine is especially critical for the development of the child's brain. It is essential to help prevent learning disabilities and delayed development

Q7: Where do we get iodized salt?

- The answer will vary by country, but it is usually safe to say that all salt sold in shops is iodized
- It is the salt that vendors sell in small piles or small bags in markets that may not be iodized. You should try to find out the situation in your area

Q8: I've heard that too much salt isn't good for you?

- That is correct. In many areas where we work the problem is too little rather than too much, and in those cases we want to make sure that pregnant women are consuming salt that is iodized

Q9: What do we say about sugar?

- In areas where food scarcity and low consumption is the norm, sugar is a good source of concentrated energy and can be recommended
- However, too much sugar can be problematic. If you are in a context where overweight/obesity and/or diabetes are common, then you'll want to emphasize a reduction in the amount of sugar the pregnant woman consumes.

Q10: What if the pregnant woman is overweight or obese? What do we recommend for her 'adequate diet'?

- It is still important that she eats a balanced diet because of the nutritional needs of the baby.
- It is possible that even though the woman is overweight she may still be lacking some important nutrients, so a balanced diet should be ensured.
- She should take an extra nutritious snack. If her normal consumption levels are very high she may not need to eat an extra meal
- Moderate exercise even during pregnancy is important

PREGNANT WOMAN INTERVENTION 2A: IRON-FOLATE SUPPLEMENTS

Definition: Supplemental intake and increased iron and folate food intake; promotion of locally available foods such as animal foods, vitamin A and C-rich foods, access to iron and folate supplements

Target behaviors:

- Pregnant woman takes iron/folate supplements for 6 months (according to national government policy)
- Pregnant woman eats local foods rich in iron and folate

Questions and Answers

Q1: Why is iron important?

- A lack of iron causes anaemia – a deficiency in the number of red blood cells. Red blood cells are important because they carry oxygen from the lungs to all tissues. Cells depend on oxygen to survive and replicate. So, anaemia = lack of red blood cells = lack of oxygen to cells.
- Some community members may refer to this as “weak blood”. That is fine if it helps to understand the seriousness.

Q2: What are the consequences of anaemia?

- When a woman has anaemia she feels tired and has less energy than usual, and her ability to think clearly and learn is reduced.
- Women with severe anaemia in pregnancy are at greater risk of complications during pregnancy and delivery, and possible death during childbirth
- If a pregnant woman does not have sufficient iron in her body, the risk of anaemia is passed to her baby, and this can result in learning difficulties and slower growth and development
- Anaemia in a pregnant woman may also result in the baby being born early or with low birth weight. Her child may never catch up in terms of growth and, as an adult, will run an increased risk of chronic illness such as heart disease and diabetes.

Q3: Is insufficient iron the only thing that causes anaemia?

- About half of all anaemia in women worldwide is due to iron deficiency, but there are other causes of anaemia, to include:
- Hookworm infections
- Other deficiencies in nutrition, especially folate and vitamins A, B12 and C.
- Conditions inherited at birth, such as an inherited blood disease known as ‘sickle cell disease’
- Malaria is a very common cause of anaemia, and anaemia is a particularly important complication of malaria in pregnant women. In places where malaria is common, pregnant women, especially women who are pregnant for the first time, are more at risk of severe anaemia.

Q4: Can a pregnant woman get iron from the foods that she eats?

- Yes, but it's difficult for a pregnant woman to get *all* of the iron she needs through food alone. That is why pregnant women are given iron/folic acid supplements

Q5: Which foods contain iron?

- Refer to the 'Nutrition General' session and see the list that you developed there. Some examples include meats, fish, insects and dark green leafy vegetables.
- Remember that it is best to eat food containing iron *together with* a food containing vitamin C. This will help the body to absorb the iron better. Refer to the 'Nutrition General' session to see the list of vitamin C-rich foods that you developed there. Some examples include citrus fruits and tomatoes.

Q6: What if our staple foods are fortified with iron? Should the pregnant woman still take the supplements?

- Yes, pregnant women should still take iron tablets because the level of iron in fortified foods is very low and a pregnant woman needs more than what fortified foods alone will provide.
- The levels of iron in fortified foods are set at a lower levels because everyone in the population needs to consume them – if they put enough to meet needs for pregnant women, then it would be too much for other people, like men, who may eat more.

Q7: What is folate and what is folic acid?

- Folate is a naturally occurring vitamin. Folic acid is the synthetic form used as a supplement or available in fortified food. The folic acid supplement is usually combined with the iron supplement.

Q8: Why is folate important?

- It plays a big role in the production of new cells in the body, and is particularly important during periods of rapid cell formation such as pregnancy and infancy
- Folate, like iron, is also very important in preventing anaemia
- Folic acid protects against neural tube defects. These defects can lead to malformations of the spine (spina bifida – where the spinal cord does not become enclosed by a spinal column), or of the brain (anencephaly – an infant's brain does not develop).

Q9: What foods contain folate?

- Refer to the 'Nutrition General' session and see the list you developed there. Some examples include: leafy vegetables, lettuce, legumes (nuts and beans), sunflower seeds.

Q10: How often should a pregnant woman take iron/folic acid supplements?

- You should find out what the government policy is in your country. The pregnant woman will be instructed when she goes to the clinic for ante-natal care

PREGNANT WOMAN INTERVENTION 2B: DEWORMING

Definition: Soil-transmitted helminths (STHs) and Schistosomiasis are caused by parasitic worms, and are diseases of poverty. They can be effectively treated with medicines, but require combined water, sanitation and hygiene interventions to control spread and re-infection.

STH affects the health and livelihoods of over one billion people worldwide, and undermines global development efforts. Treating women of childbearing age and young children for STHs and Schistosomiasis can play a major role in strengthening maternal, newborn and child health.

The World Health Organization (WHO) recommends pregnant women receive treatment for hookworm (a type of STH) after the first trimester, and if at risk of Schistosomiasis, they should receive treatment for this also.

Target behaviors:

- Pregnant women receive de-worming medication during pregnancy per national government protocols
- Pregnant women practice good sanitation and hygiene
- Pregnant women do not walk barefoot

Questions and Answers

Q1: What are the main worms that we are concerned about?

- The scientific name for the worms that we are concerned with is 'Soil-Transmitted Helminths', or STHs.
- The main species of STH that affects humans are:
 - Roundworm
 - Whipworm
 - Hookworms
- While STHs are the most common worms we are concerned about, another type of parasite is known as Schistosomiasis. We'll talk about that in a later question.

Q2: How do we get infected with STHs?

- These worms live inside the infected person, and they produce thousands of eggs each day. These eggs pass out through the faeces. If a person defecates outside, or if faeces are used as a fertiliser, eggs are deposited on the soil. The eggs can then become infective after about 3 weeks.
- Infections in humans are caused by:
 - Ingestion (eating) of infective eggs from soil contaminated with human faeces,
 - Eating infected eggs in contaminated food, such as vegetables that are not carefully cooked, washed or peeled, or on your hands or utensils
 - Worms penetrating the skin when walking barefoot on contaminated soil.
- One person cannot pass worms to another person through their faeces because eggs in faeces need about 3 weeks in the soil before they become infective.

Q3: What are the symptoms of worms in adults?

- Stomach problems such as diarrhoea and pain or discomfort
- General tiredness and weakness

Q4: What are some of the results of being infected with worms?

- Blood loss in the intestine that can result in anaemia
- Lowered immunity, meaning you don't fight off illnesses as well as before
- Malnutrition
- Blockages in the intestine which may require surgery

Q5: Why do we need to treat worms in pregnant women and women of childbearing age?

- Hookworm infections cause anaemia in women, and when a woman becomes pregnant, this anaemia can cause:
 - Illness or death of the mother
 - The baby's growth is slowed
 - Early delivery of the baby
 - Low birth weight of the baby. Low birth weight is a risk factor for the baby which can lead to increased illness or death. The baby may never catch up in terms of growth and, as an adult, will run an increased risk of chronic illness such as heart disease and diabetes¹.
- If worm infections exist with other more severe infections such as HIV, malaria or TB, the effects will be even more serious, leading to very poor nutrition, poor ability to fight illness, and possibly damage to the internal organs of the body.
- In many cases, untreated worm infections are **undoing all the positive work** being done to improve the mother and child's health and nutrition! If the mother and child are eating well but have worm infections, it is as if they are not eating well!

Q6: How can we avoid becoming infected with worms?

- The main risks for worm infections are related to unclean water and poor sanitation. Proper disposal of human waste is especially important, since a small amount of faeces can contain up to 100 eggs!
- To control worm infections in areas where they are common, there should be treatment with medicines of all at-risk populations living in these endemic regions
- To reduce the spread of worms, these actions are important:
 - More people using latrines instead of defecating outdoors
 - Appropriate hand washing and preparation of food,
 - Using footwear, not walking barefoot
 - Clean water for personal hygiene
 - Not using uncomposted human faeces as fertilizer

¹ http://www.unicef.org/esaro/7310_gender_and_nutrition.html

- As part of a complete de-worming program, it is important that we implement ALL of these actions together!

Q7: Who is most at risk for worm infections?

- Populations at risk in endemic areas for STH are:
 - preschool-aged children;
 - school-aged children;
 - women of childbearing age
 - Also, pregnant women in the second and third trimesters should be included as part of a de-worming program

Q8: What is the main objective of a de-worming program?

- Obviously the main objective is to reduce worm infections in humans! Here is a bit more information:
- Death and illness is directly related to how heavy the worm infection is in the person's body: the greater the number of worms in the infected person, the worse the problem will be. The aim of a de-worming program is to keep the levels of infection low, so even if you are infected with worms, the quantity of worms won't be as heavy as it would have been without the de-worming.

Q9: Do I need to be diagnosed with worms to get the medicine?

- No. De-worming medicines are given without an individual diagnosis Your Ministry of Health will determine how frequent your de-worming program should occur – usually once or twice a year, depending on how much worm infection there is in your country.

Q10: What medicines are used in de-worming programs?

- The World Health Organization (WHO) has recommended medicines for STH de-worming called Albendazole and Mebendazole.. These medicines are effective, inexpensive and easy to administer, even by non-medical people. For example, teachers can give de-worming medicine. These medicines have been through many safety tests and have been used in millions of people with very few and very minor side-effects.
- *As with all medicines, there are certain cases in which these medicines are contra-indicated (instances where the medicine should not be used) - Refer to Ministry of Health screening protocols which must be adhered to and reflect contra-indications.*

Q11: Besides STH, what other worms are we concerned about?

- The other important type of worm is known as 'blood flukes', also known as 'trematode worms', and they cause a disease called 'Schistosomiasis', or Bilharzia. These worms do not live in the soil, which is why they are not called STHs. They are found in water.
- Bilharzia is most commonly found in Africa, as well as parts of Asia and South America.

Q12: How do people get infected with Bilharzia?

- When people suffering from Bilharzia contaminate freshwater with their faeces, the eggs in the faeces hatch in the water. Snails then eat the eggs and release larvae into the water, which can enter the skin of people who are in contact with the infested water. This means you should not swim in lakes or ponds that are known or suspected to be contaminated.

Q13: What are the symptoms of Bilharzia?

- There are two types of Bilharzia, with different symptoms:
 - Bilharzia of the intestine: This can result in stomach pain, diarrhoea and blood in the faeces. Liver enlargement is also common in advanced cases.
 - Urogenital Bilharzia: This can cause blood in the urine. In women you may find lesions on the genitals and bleeding from the vagina. In men, urogenital bilharzia can cause problems with seminal vesicles, prostate and other organs. Kidney failure and bladder cancer are possible complications in the later stages. This disease may also have other long-term irreversible consequences, including infertility.

Q14: What is the recommended medicine for Bilharzia?

- Praziquantel is the name of the de-worming medicine recommended to treat all forms of Bilharzia. It is effective, inexpensive and easy to administer, even by non-medical personnel such as teachers. Praziquantel has been through many safety tests and have been used in millions of people with very few and very minor side-effects when used in accordance with *Ministry of Health screening protocols*.

Q15: How can I know if a pond or lake is infected with Bilharzia?

- There's no way of knowing if a pond or lake is infected with Bilharzia just by looking at it. The parasite that is transmitted by the freshwater snail are difficult to spot in or on the shores of lakes, dams, ponds, wetlands, rivers, streams and canals. But here are some points to keep in mind
- If Bilharzia is common in the area, if the water is fresh water (not sea water), if there are snails in the water, if the water is shallow, or if there are reeds or grass growing in the water – then it's a good idea to assume that the water holds a risk for Bilharzia.

PREGNANT WOMAN INTERVENTION 3A: INFECTIOUS DISEASE PREVENTION: TETANUS

Definition: The Tetanus Toxoid (TT) vaccine is given during pregnancy to prevent tetanus to the mother as well as her baby. Tetanus is a life-threatening bacterial disease that is caused by the toxin of a bacterium called *Clostridium tetani*. Tetanus bacteria enter the body through an open wound. Tetanus affects a person's nervous system and can be fatal if left untreated. It is preventable through immunisation.

Target behaviours:

- Every pregnant woman receives the full schedule of TT following the national health standards of the Expanded Immunisation Program of the country
- Every pregnant woman should have a vaccine record card

Questions and answers

Q1: What is Tetanus?

- Tetanus is a life-threatening bacterial disease. Tetanus bacteria enter the body through an open wound. Tetanus affects a person's nervous system and can be fatal if left untreated. It is preventable through immunisation.
- Tetanus is the only vaccine-preventable disease that is not transmitted from person to person
- It is also the only vaccine-preventable disease that a person can get more than once

Q2: How does a person contract Tetanus?

- A person contracts Tetanus when bacteria from a contaminated source enter a break in the skin (a cut or puncture wound). The bacteria are commonly found in soil, dust and manure. In the case of the newborn, Tetanus usually occurs through infection of the unhealed umbilical stump, particularly when the stump is cut with a non-sterile instrument. The disease does not spread between people.

Q3: What are the symptoms of Tetanus in a pregnant woman, and in a newborn?

- The disease makes muscles rigid, causes muscle spasms and makes breathing difficult or impossible; it can completely shut down the nervous system
- A newborn or infant with tetanus can generally suck normally for 2 days, then crying will increase, and the child will show an inability to suck, begin to have muscle spasms and grow rigid and stiff

Q4: What are the consequences of Tetanus in a pregnant woman and in a newborn?

- There is great risk that a newborn with tetanus will die

Q5: Why is it important for a pregnant woman to be vaccinated with Tetanus Toxoid (TT)?

- The Tetanus Toxoid (TT) vaccine causes the formation of antibodies that protect the mother against Tetanus. (You can think of antibodies like soldiers in the body)
- During pregnancy, the antibodies (or soldiers) are also passed on to the baby and protect him or her for a few months after birth.
- The vaccine also helps prevent early birth.

Q6: Is the TT safe?

- Yes, the TT is safe.

Q7: Does TT have side effects?

- The side effects are related to sore arm, swelling at the site of injection, and itching.

Q8: Can the vaccine cause the disease?

- No

Q9: When should a pregnant woman receive TT?

- During antenatal care visits, the health care provider must check the immunization status of the pregnant woman (either by history or by card), regardless of whether the woman intends to continue the pregnancy. If the woman qualifies for it, the provider should administer TT:
 - If the pregnant woman has not previously been vaccinated, or if her immunization status is unknown, she should receive two doses of TT one month apart before delivery, and further doses as per the country schedule
 - If the woman has had 1–4 doses of tetanus toxoid in the past, she should receive one dose of TT before delivery
 - A total of 5 doses protects a woman throughout her childbearing years

Q10: Are there any reasons a pregnant woman should not receive TT?

- No, in general it is safe for a pregnant woman and her baby to receive the recommended TT schedule

Q11: Why is important to keep a vaccine record card?

- The pregnant woman must keep a vaccination record card
- The pregnant woman must take the vaccination card when visiting the antenatal care service and the moment of delivery
- The pregnant woman should make sure the health care provider completes the vaccination record card when she receives TT doses

PREGNANT WOMAN INTERVENTION 3B: INFECTIOUS DISEASE PREVENTION: HIV, AND PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV (PMTCT)

Definition: HIV (human immunodeficiency virus) is the virus that causes AIDS. This virus may be passed from one person to another when infected blood, semen, or vaginal secretions come in contact with an uninfected person's broken skin or mucous membranes. In addition, infected pregnant women can pass HIV to their baby during pregnancy or delivery, as well as through breast-feeding.

The immune system is the body's defense against disease and HIV, the human immunodeficiency virus, causes the immune system to gradually deteriorate, resulting in what is called AIDS. AIDS is an acronym for Acquired Immunodeficiency Syndrome and refers to the most and advanced severe stage of HIV infection.

When a woman is infected with HIV she can pass the virus to her infant during pregnancy, labor, delivery or breastfeeding. This is called mother to child transmission, or MTCT. The prevention of transmission of HIV from the mother to her infant is called PMTCT. The current global effort is to prevent new infections entirely in children and this is called Elimination of Mother To Child Transmission of HIV (EMTCT)

Certain factors can increase the risk of the mother transmitting the virus to the child. Some of these include: high viral load in the blood of the mother, lower CD4 count; severe HIV disease in the mother, poor nutrition, with micronutrient deficiencies. On the baby's side, some of the factors that can increase risk of infection include premature birth, baby has ulcers in the mouth or thrush, invasive monitoring of the baby during delivery, and birth order (first twin) in twin pregnancy.

Target Behaviors:

- Avoid risky sexual behavior. This includes multiple concurrent sexual partners, unprotected sex with an HIV-positive person
- Get tested for HIV. One can be infected without showing initial symptoms. Testing and getting treatment early (if found positive for HIV) can prolong quality life for the infected person
- If found to be HIV positive, start treatment early as per instructions from facility staff
- If found HIV negative, stay negative and avoid behaviors that can put you at risk
- Disclose, confide in someone about your HIV status. This person can support you in adhering to your treatment for HIV.
- It is important for a pregnant woman to **know her HIV status** so she can prevent transmission to her infant. All pregnant women should be tested for HIV
- All pregnant women who are positive for HIV should receive treatment to prevent transmitting the virus to her baby. These services are available at the clinic and all HIV-positive pregnant women should try and access them.
- For HIV positive mothers who choose to breastfeed their babies, it is important to practice exclusive breast feeding in the first six months and continue to breastfeed while taking Anti-retroviral therapy.
- HIV positive mothers should ensure that their newborn babies are tested for HIV as soon as they are born. If babies are HIV positive they should be started on treatment immediately to improve their chances of survival.
- Mothers who are HIV positive should continue to take their medicines regularly, for life.

Question and Answers

Q1: How is HIV transmitted?

HIV can be transmitted from one person to another in several ways; the most common of which is sexual transmission. This can include heterosexual or homosexual (e.g. men who have sex with men) transmission.

Other ways of HIV transmission include:

- Transmission from a mother to her infant during pregnancy, labor, delivery or breastfeeding;
- Blood from HIV-contaminated needles, syringes or other sharp instruments, and from transfusion with HIV-contaminated blood.

HIV is not transmitted through casual contact, sharing food, or mosquito bites.

Q2: What is the difference between HIV and AIDS?

HIV (human immunodeficiency virus) is the virus that causes AIDS (acquired immunodeficiency syndrome). AIDS is the late stage of HIV infection. People who have AIDS grow weaker because their bodies lose the ability to fight off illness. Without treatment, people with AIDS will eventually die, usually of opportunistic infections. With appropriate treatment, however, HIV can be managed and infected persons can live long and productive lives.

Q3: How quickly does a person infected with HIV develop AIDS?

The length of time can vary widely between individuals. Left without treatment, the majority of people infected with HIV will develop signs of HIV-related illness within 5–10 years, although this can be shorter. The time between acquiring HIV and an AIDS diagnosis is usually between 10–15 years. Antiretroviral therapy (ART) can slow the disease progression by preventing the virus replicating and therefore decreasing the amount of virus in an infected person's blood (known as the 'viral load').

Q4: What is the benefit of an HIV test?

Knowing your HIV status can have 2 important benefits:

If you learn that you are HIV positive, you can take steps before symptoms appear to access treatment, care and support, thereby potentially prolonging your life and preventing health complications for many years.

If you know that you are infected, you can take precautions to prevent the spread of HIV to others.

Q5: Is there a cure for HIV?

No, there is no cure for HIV. But with good and continued adherence to antiretroviral therapy, the progression of HIV in the body can be slowed to a near halt. Increasingly, people living with HIV can remain well and productive for extended periods of time.

Q6: What are antiretroviral drugs?

Antiretroviral drugs are used in the treatment and prevention of HIV infection. They fight HIV by stopping or interfering with the reproduction of the virus in the body, reducing the amount of virus in the body.

Q7: What is the most common life-threatening opportunistic infection affecting people living with HIV or AIDS?

Tuberculosis (TB) kills nearly 360,000 people living with HIV each year. It is the number one cause of death among HIV-infected people in Africa, and a leading cause of death in this population worldwide.

Q8: Does male circumcision prevent HIV transmission?

No, it does not prevent it altogether, but male circumcision reduces the risk of female-to-male sexual transmission of HIV by around 60%. WHO and UNAIDS have recommended voluntary medical male circumcision as an additional strategy for HIV prevention in settings with high HIV prevalence and low levels of male circumcision. A one-time intervention, medical male circumcision provides life-long partial protection against HIV as well as other sexually transmitted infections. It should always be considered as part of a comprehensive HIV prevention package and should never replace other known methods of prevention, such as female and male condoms.

Q9: How effective are condoms in preventing HIV?

When used properly during every sexual intercourse, condoms are a proven means of preventing HIV infection in women and men. However, apart from abstinence, no protective method is 100% effective.

Q10: How can HIV infection be prevented?

Prevention of HIV transmission is through avoidance of situations in which exposure to the virus occurs or by taking medications to prevent transmission, such as ARV prophylaxis through prevention or elimination of mother to child transmission of HIV (PMTCT/EMTCT) programs or post-exposure prophylaxis (PEP) after rape or an occupational exposure.

Some of the general approaches to HIV prevention include:

- Abstaining from sex
- Practicing mutual faithfulness after determining HIV status of both partners
- Consistent and correct use of condoms
- Screening blood before transfusion
- Adhering to infection control measures
- Post exposure prophylaxis (PEP)
- Prevention of mother to child transmission of HIV through ARV prophylaxis, modifying delivery practices to reduce transmission and ensuring safe infant feeding practices.

Q11: Now that I am infected with HIV what should I do?

Infection with HIV is no longer a death sentence as there is treatment available to keep people alive. Now that you know your status, in addition to the prevention measures listed above you should also take note of the following:

- Maintain safer sexual practices and behavior
- Use condoms for high-risk sexual behaviors
- Be faithful to your partner
- Maintain one sexual partner
- Visit the health facility for examination and initiation of treatment for HIV infection
- Adhering completely to the HIV medication regimen your doctor or nurse has prescribed for you
- Attend your clinic appointments regularly
- Request for any additional needs to help you stay on treatment
- Join a support group to learn from other HIV positive people
- Encourage other members of your family to get tested for HIV
- Disclose, tell another person of your HIV status so that they can support you as you are on treatment.

Q12: How is HIV transmitted from mother to child?

HIV-positive women can transmit HIV to their infants during pregnancy, birth, or while breast feeding. This occurs when there is a mixing of blood between the mother and child (during pregnancy when the virus can cross the placenta from mother to child), or the mixing of body fluids (during delivery as the baby passes through the birth canal), or through breastfeeding when the virus may be transmitted to the child.

Q13: When is HIV transmitted from the mother to the child?

During pregnancy, labor and delivery, the risk of HIV transmission from mother to child is between 20– 50% (without treatment such as ART). In other words 20 to 50 children born to 100 HIV positive women will be infected by the virus. Different periods of pregnancy have different risks which are as follows: 5–10% during pregnancy; 10–20% during labor and delivery; 5–20% during breast feeding. The virus can be transmitted at any time the newborn has contact with the blood or bodily fluids of the HIV positive mother.

Q14: How can we prevent the transmission of HIV from mother to child?

Prevention of transmission of HIV infection from HIV positive women to their infants during pregnancy, labor, and delivery and post-natal through breastfeeding. This is often through the use of antiretroviral drugs during pregnancy and after delivery for mother and child, which is why it is so important for an HIV-positive women to delivery in a health facility – to ensure that she and her baby receive the drug regimen that they need.

Q15: So what should the HIV positive pregnant woman/mother do?

Infection with HIV is no longer a death sentence as there is treatment available to keep people alive. Now that you know your status, in addition to the prevention measures listed above , you should also take note of the following:

- Attend to your antenatal clinic and other medical appointments regularly
- Plan to deliver in a health facility or with the assistance of a trained birth attendant
- When your baby is born make sure that he or she is also tested early for HIV

PREGNANT WOMAN INTERVENTION 3C: SEXUALLY-TRANSMITTED INFECTIONS/DISEASES (STI/STD)

Definition: STIs/STDs are infections/diseases that are passed from one person to another through sexual contact. These include chlamydia, gonorrhea, genital herpes, human papillomavirus (HPV), syphilis, and HIV. Many of these STDs do not show symptoms for a long time, but they can still be harmful and passed on during sexual relations. Some of the infections are caused by bacteria while others are caused by viruses or fungi. People who have STDs/STIs are more likely to have HIV than people who do not have STDs. Routine screening for syphilis is an essential part of antenatal care and can help prevent serious illness particularly for the newborn child. These screening tests should be offered to all pregnant women at the first antenatal visit

Target Behaviors:

- Avoid behaviors that can expose you to the risk of acquiring sexually transmitted infections
- Get regular screening, especially during pregnancy
- Seek care and treatment early if you have symptoms related to sexually transmitted diseases
- Take treatment as long as advised by your medical person so that the infection can be treated completely.
- Pregnant woman attends the first antenatal visit early in the pregnancy
- Pregnant woman agrees to be screened for syphilis during the first antenatal visit
- Pregnant woman receives 4 antenatal clinic visits
- Pregnant woman receives results of syphilis test and accepts treatment immediately if the result is positive
- If there is a positive result the pregnant woman's sexual partner is traced and counselled and also accepts testing and treatment
- Both parents accept counselling on preventing STIs during pregnancy
- Facility delivery is planned especially for a mother who has been treated for syphilis

Questions and Answers

Q1: How are STDs spread?

You can get an STI/STD by having sex (vaginal, anal or oral) with someone who has an STD. Anyone who is sexually active can get an STD. Some STDs, like herpes and HPV, can also be spread by skin-to-skin contact.

Q2: How will I know if I have an STI/STD?

Many STDs don't cause any noticeable symptoms. STDs can be transmitted through sexual relations with someone with no symptoms. As such, the only way to know for sure if you have an STD is to get tested.

Q3: Can STDs be treated?

Your doctor can prescribe medicines to cure some STDs, like chlamydia and gonorrhea. Other STDs, like herpes, cannot be cured, but you can take medicine to help with the symptoms.

If you receive treatment for an STD, be sure to finish all of your medicine, even if you feel better before you finish it all. Ask the doctor or nurse about testing and treatment for your partner, too. You and your partner should avoid having sex until you've both finished treatment. Otherwise, you may continue to pass the STD back and forth. It is possible to get an STD again (after you've been treated), if you have sex with someone who has an STD.

Q4: What happens if I don't treat an STD?

Some curable STDs can be dangerous if they aren't treated. For example, if left untreated, chlamydia and gonorrhea can make it difficult or even impossible for a woman to get pregnant. You also increase your chances of becoming infected with HIV if you have an untreated STD. Some STDs, in particular HIV, can be fatal if left untreated.

Q5: What can I do to protect myself?

The surest way to protect yourself against STDs is to not have sex ("abstinence"). It is okay to say "no" if you do not want to have sex.

If you do decide to have sex, you and your partner should get tested beforehand

Q6: Are some STDs associated with HIV?

Yes. People can get syphilis, gonorrhea, and herpes (shingles) in addition to HIV infection. People with these STDs are at higher risk of contracting HIV.

Q7: Why does having an STD put me more at risk for becoming infected with HIV?

If you get an STD you are more likely to get HIV than someone who is STD-free. This is because the same behaviors and circumstances that may put you at risk for getting an STD can also put you at greater risk for getting HIV. In addition, having a sore or break in the skin from an STD may allow HIV to more easily enter your body.

Q8: If I already have HIV, and then I get an STD, does that put my sexual partner(s) at an increased risk for getting HIV?

It can. If you already have HIV, and then get another STD, it can put your HIV-negative partner at greater risk of getting HIV from you.

Your sexual partner is less likely to become infected with HIV from you if you

- Use antiretroviral therapy (ART). ART reduces the amount of virus (viral load) in your blood and body fluids. ART can keep you healthy for many years, and greatly reduce your chance of transmitting HIV to sex partners, if taken consistently.
- Choose less risky sexual behaviors.
- Use condoms consistently and correctly.

The risk of getting HIV may also be reduced if your partner takes pre-exposure prophylaxis, or PrEP, after discussing this option with his or her healthcare provider and determining whether it is appropriate.

Q9: Will treating STDs prevent me from getting HIV?

No. If you get treated for an STD, this will help to prevent its complications, and prevent spreading STDs to your sexual partner(s). Treatment for an STD other than HIV does not prevent the spread of HIV.

If you are diagnosed with an STD, talk to your doctor about ways to protect yourself and your partner(s) from getting reinfected with the same STD, or getting HIV.

Q10: What is Syphilis?

Syphilis is a sexually transmitted infection which can pass from the infected mother to the unborn child. The infection can be hard to recognize. It causes significant illness and death and is especially dangerous to the

newborn baby. It is estimated that globally more than 1.5 million pregnant women are infected with syphilis² and that more than half a million adverse events occur in their babies.

The most common problems which result from syphilis infection are stillbirths, preterm labour and newborn infection leading to death. Syphilis can also cause deformities in the baby such as blindness or deafness and cause babies to be born very small, called low birth weight. When a newborn baby or young infant shows signs of syphilis infection this is called “congenital syphilis” meaning acquired from its mother.

Q11: Is syphilis curable?

Yes, adult women and men can be cured of syphilis using a very strong antibiotic which is given as an injection a number of times to ensure the infection is cured. If the patient does not receive treatment the infection will eventually lead to serious illness and death. This antibiotic can safely be given to a pregnant woman during pregnancy and will protect the unborn baby and can also be given to a newborn baby or an infant or child suspected of having congenital syphilis.

Q12: Can congenital syphilis be prevented?

Yes. As the infection may have no symptoms it is best that all pregnant women are tested. If a pregnant woman is tested early in her pregnancy and found to have a positive result she can be treated quickly and this can prevent complications and also protect the unborn baby from acquiring congenital syphilis. At this time her sexual partner should be contacted and also treated so that he will not pass the infection onto the pregnant woman and unborn child again.

Q13: What can be done to prevent congenital syphilis?

Early diagnosis and treatment during pregnancy is the best way to prevent the complications to the newborn baby. All pregnant women should be encouraged to attend their first antenatal visit as early as possible in the pregnancy in order for the syphilis screening test to be done and the mother and her partner to be treated if needed.

² <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001396>

PREGNANT WOMAN INTERVENTION 3D: TUBERCULOSIS (TB)

Definition: Tuberculosis or TB is a bacterial infection that most commonly affects the lungs. It is transmitted from person to person through droplets from the throat and lungs of people with the active lung disease. Sometimes it can spread to affect other part of the body to include the abdomen, the bones, and other internal organs. Tuberculosis is curable and preventable.

Target Behaviors:

- Pregnant women are tested for HIV and screened for Tuberculosis during antenatal care visit
- If you are HIV positive get screened for Tuberculosis
- If you have Tuberculosis get tested for HIV
- If you are infected with both HIV and Tuberculosis, go to the health facility for appropriate treatment for both conditions.
- Take TB medicines as prescribed by your doctor or nurse, and finish the treatment.

Questions and Answers

Q1: How is Tuberculosis spread?

TB is spread from person to person through the air. When people with TB of the lungs cough, sneeze or spit, they propel the TB germs into the air. A person needs to inhale only a few of these germs to become infected. People ill with TB can infect up to 10-15 other people through close contact over the course of a year. Without proper treatment up to two thirds of people ill with TB will die.

Q2: How do I know I have Tuberculosis?

In healthy people, TB infection often causes no symptoms. The symptoms of active TB of the lungs are coughing, sometimes with sputum or blood, chest pains, weakness, weight loss, fever and night sweats. When a person develops active TB (disease), the symptoms (cough, fever, night sweats, weight loss etc.) may be mild for many months. This can lead to delays in seeking care, and results in transmission of the bacteria to others.

Q3: Is TB treatable?

Tuberculosis is preventable and curable. Tuberculosis is treatable with a six-month course of antibiotics. It is important to take the treatment completely to cure the disease and prevent the spread to other people.

Q4: How common is TB and HIV infection in the same person?

Co-infection with TB and HIV is common and TB leads to the death of nearly 360,000 people living with HIV each year. It is the number-one cause of death among HIV-infected people in Africa, and a leading cause of death in this population worldwide.

Q5: What are the ways to prevent and treat TB?

There are a number of core health care strategies that are critical to prevent and manage TB infection among people living with HIV: 1) intensified case finding for active TB 2) TB isoniazid preventive treatment; 3) TB infection control and 4) early initiation of antiretroviral therapy.

PREGNANT WOMAN INTERVENTION 4: MALARIA PREVENTION, TREATMENT ACCESS AND INTERMITTENT PREVENTIVE TREATMENT

Definition

Malaria is caused by a parasite called Plasmodium, which is transmitted via the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells.

Target Behaviours:

- Pregnant woman attends antenatal care and receives Intermittent Preventative Treatment in pregnancy (IPTp) per national protocols
- Pregnant woman is tested immediately for malaria if she has a high fever in an endemic area
- Pregnant woman seeks treatment for malaria, and is treated with Artemisinin based combination therapies (ACTs)
- Pregnant women sleep under Long Lasting Insecticide Treated Net (LLIN) every night

Questions and Answers

Q1: What causes malaria?

- Malaria is caused by a parasite called Plasmodium, which is transmitted through the bites of infected **mosquitoes**. In the human body, the parasites multiply in the liver, and then infect the blood.

Q2: What are the symptoms of malaria?

- Symptoms of malaria include fever, headache, and vomiting
- These symptoms usually appear between 10 and 15 days after the mosquito bite. .
- If not treated, malaria can quickly become life-threatening by disrupting the blood supply to vital organs.
- Pregnant women are at higher risk of dying from the complications of severe malaria.

Q3: What are the possible consequences of malaria in pregnant women? Why are we especially concerned about malaria in pregnant women?

- Malaria can lead to maternal anemia, fetal loss, premature delivery, intrauterine growth retardation and low birth weight babies

Q4: How can we prevent the transmission of malaria?

- Use of insecticide-treated mosquito nets (ITNs or Long Lasting ITNs)
- Indoor spraying
- Prevention in pregnancy with LLINs (long lasting ITNs)
- Intermittent preventive treatment in pregnancy (IPTp)

Q5: What are the recommendations for *treatment* of malaria during pregnancy?

- Diagnosis with a quality microscope, or a rapid diagnostic test and treatment with effective antimalarial drugs
- The goal of malaria treatment in pregnancy is to completely eliminate the infection because any amount of parasites in the blood can affect the mother, and can also affect the unborn baby.
- Not all malaria drugs are safe for pregnant women. The names of the drugs considered safe in the first trimester of pregnancy are quinine, chloroquine, proguanil and Pyrimethamine. Clindamycin is also safe, but must be used in combination with another drug, preferably.

Q6: What is Intermittent Preventive Treatment in pregnancy? (IPTp)

- Intermittent preventive treatment in pregnancy means treating pregnant women for malaria even if they don't have malaria now. It is prevention! The abbreviation is IPTp.
- IPTp is recommended in some countries but not in others. It is important to know the Ministry of Health policy for IPTp in your country.
- In countries where IPTp is recommended, two doses of IPTp should be given after 16 weeks of pregnancy. The two doses should be given one month apart. All pregnant women in these countries should receive these doses, even if they don't have symptoms of malaria
- The IPTp doses are given during ANC visits
- In some countries, more than two doses are given. In fact, it is possible to give a dose during every ANC visit, except during the first trimester.

Q7: Are the recommendations different for a HIV+ pregnant woman?

- Yes. If the HIV+ pregnant woman is already receiving co-trimoxazole prophylaxis then she should not receive IPTp

Q8: What if a pregnant woman only goes for ANC late in her pregnancy and there is not time to give her two doses?

- For these women, even one dose of IPTp is beneficial.
- The last dose of IPT-SP can be administered up to the time of delivery, without safety concerns.

Q9: How should IPTp doses be given?

- IPTp should ideally be given as “directly observed therapy” (DOT). This means that somebody must watch the woman taking her dose, to make sure she takes it!

Q10: When should IPTp NOT be given

- IPTp should not be given during the first trimester of pregnancy.

PREGNANT WOMAN INTERVENTION 5: HEALTHY TIMING AND SPACING OF PREGNANCIES

Definition: Healthy Timing and Spacing of Pregnancy (HTSP) is an intervention to help women and families make an informed decision to delay the first pregnancy, and space or limit subsequent pregnancies to achieve the healthiest outcomes for women, newborns, infants, and children.

Target behaviors:

- Delay the first pregnancy to at least age 18
- Wait at least 24 months after a live birth, but no more than five years, before attempting another pregnancy (“wait until your baby is at least two years old before attempting another pregnancy”). Spacing reduces health risks for a mother and her baby.
- Wait at least six months after a miscarriage or abortion before trying for another pregnancy
- Limit pregnancies to a mother’s healthiest ages, 18 to 34

Questions and Answers

Q1: What is Healthy Timing and Spacing of Pregnancies? (HTSP)

- Healthy Timing and Spacing of Pregnancy (HTSP) is an intervention to help women and families make informed decisions to delay of first pregnancy and space and limit additional pregnancies for healthiest outcomes for the women, newborns, infants and children.
- The four most important HTSP messages are:
 - Delay the first pregnancy to at least age 18
 - Wait at least 24 months after a live birth before attempting another pregnancy. Waiting until the baby is at least two years old before trying to conceive again reduces health risks for the mother and her baby.
 - Wait at least six months after a miscarriage or abortion before trying for another pregnancy
 - Mothers limit pregnancies to their healthiest ages, 18 to 34

Q2: Is it safe for girls less than 18 years old to get pregnant?

- There are very high risks of complications during pregnancy for girls under age 18. (This means that it’s really important for girls under 18 to have a skilled birth attendant to oversee childbirth and care for the mother and child after birth!)
- Teenage girls are twice as likely to die in pregnancy and childbirth. If a girl is younger than 15 years old, she is five times more likely to die than someone between the ages of 18 and 34. She is also at highest risk of suffering severe damage to her body because she is not fully grown and her reproductive organs are not fully developed.
- Delaying the first pregnancy until a girl is at least 18 years old improves the chances that the mother and her baby will be healthy.
- Infants born to girls younger than 18 years old have a higher risk of dying before their first birthday. They are also more likely to be stunted and anemic.

Q3: How can a teenage girl avoid becoming pregnant?

- Complete sexual abstinence is the most effective way to avoid pregnancy and STIs/HIV. However, abstinence may be hard to practice consistently. Should young people become sexually active, they need to know about contraceptive methods, including condoms and emergency contraceptive pills.
- Young men need to share responsibility for protecting young women from unintended pregnancy and STIs/HIV. They should use condoms consistently and correctly to prevent STIs/HIV even when their partners are using another contraceptive method to prevent pregnancy.
- Contraceptive methods can be used to delay the first pregnancy. All methods, except for sterilization, are safe for girls to use. When she is ready to become pregnant, she can simply stop using the method.
- Emergency Contraceptive Pills can prevent pregnancy when taken within 5 days of unprotected sex; that is, when no method was used, a method was used incorrectly or a method failed.

Q4: What about mothers older than 34 years old – is it safe for them to get pregnant?

- No, the risk of the mother or the baby dying increases steadily after she turns 35. Older mothers should be encouraged to protect themselves from pregnancy by using a long-acting or permanent contraceptive method.

Q5: What if I am older than 34 and pregnant, and I don't want to terminate the pregnancy?

- Follow the best advice on being healthy during your pregnancy and ensure you have skilled care for child birth

Q6: How long do older women have to use contraception?

- If an older woman is not using a permanent method, she will need to protect herself until she reaches menopause and has not had monthly bleeding for 12 months in a row.

Q7: If a mother has many children, will they all be equally healthy?

- Not always. It depends on how long the family waits between each birth.
- If there is less than two years separating children, studies have found that the younger children in large families are often not as healthy as their two to three older siblings. Younger children in large families are also more likely to be stunted or malnourished.

Q8: How does HTSP save lives?

- When a mother waits at least 2 years before becoming pregnant again, she can breastfeed her baby longer. This child will grow stronger and be more able to fight disease before a younger brother or sister is born. The next baby will also be more likely to be healthy and strong.

- If a mother does not space her pregnancies by at least two years, or does not wait until her baby is two years old before trying for another pregnancy, her second baby is more likely to die. About one-third of all infant deaths are because births are too close together.
- Waiting at least 2 years allows time for the mother to recover from childbirth, regain her strength and become adequately nourished between pregnancies.
- There are other health advantages to spacing: mothers are less likely to have anaemia, and less likely to have complications in pregnancy and childbirth

Q9: What are the advantages for children if their births are spaced?

- Children will have better growth and better nutritional status. They will be less likely to be stunted. They will receive better care from their mother because younger siblings are not competing for her care and attention. The children also have more opportunities to be educated/go to school because there are more resources for each child when there are fewer children.

Q10: When is a good time for a mother and father to discuss family planning?

- In preparing for marriage, a couple needs to consider when they would like to conceive their first child, and how they will protect themselves from pregnancy until the time is right for them. During pregnancy, a mother and father can decide what family planning method to use after the baby is born in order to space or prevent the next pregnancy.

Q11: Does breastfeeding protect a mother from pregnancy?

- Yes, but just for a few months. If a mother *exclusively* breastfeeds her baby (meaning no other liquids, not even water, or food, except for vitamins, medicines and vaccines) and if her monthly bleeding / menses has not returned, she will not get pregnant for the first 6 months after her baby is born. If she stops exclusively breastfeeding, or if her menses does return, she can get pregnant again within a few weeks.
- When her baby is six months old, she does need to use another method of contraception, as she can get pregnant, and these too-soon pregnancies are the riskiest for mothers and babies.
- If a mother is not *exclusively* breast feeding, she can get pregnant again as soon as four weeks after giving birth.

Q12: What happens if a mother decides not to exclusively breastfeed?

- She is at risk of another pregnancy as early as 4 weeks after giving birth. She can get pregnant even before her monthly bleeding returns, so she needs to be very careful to protect herself from this

Q13: When we have had all the children we plan to have, and do not want another child, what should a couple do?

- Women and couples who have had all the children they want may choose a long-acting or permanent contraceptive method. These methods are the most effective and they can provide either many years of protection or life-long protection from pregnancy.

Q14: Where can I go to get the family planning method I would like to use?

- Community Health Workers often carry with them condoms, pills and emergency contraception. The nearest health facility should be able to give you your choice of injectables, and implants.
- For IUCD (intrauterine contraceptive device) and sterilization, women may have to go to a higher level health facility like a Health Center.

Q15: I want another baby, but I have just had a miscarriage. How long should I wait before trying for another pregnancy?

- A woman should wait at least six months before trying for another pregnancy so that her body will have time to recover.

Q16: How soon after a miscarriage do I need to start using contraception to protect me from pregnancy until I am healthy again?

- After a miscarriage, fertility returns very quickly, so a woman needs to start using a family planning method within one week if she has sex. However, she should avoid sex until all her bleeding has stopped and she is healthy again.

PREGNANT WOMAN INTERVENTION 6: BIRTH PREPAREDNESS

(INCLUDES PREVENTING POST-PARTUM HAEMORRHAGE USING MISOPROSTOL)

Definition: Birthing and emergency plans are in place and the family understands, recognises and acts quickly if complications arise in pregnancy, during labour and delivery or after the delivery. If approved in your country/context “safe motherhood tablets” (misoprostol) are in the pregnant woman’s possession and are taken immediately after the birth of the baby to prevent a Postpartum Haemorrhage (PPH)*.

Target behaviors:

- Pregnant woman attends at least 4 antenatal visits and the 4th is in late pregnancy
- Pregnant woman is tested for HIV, knows her HIV status so she can help protect her baby
- Pregnant woman and her family consider giving birth in a facility with a skilled birth attendant
- Household knows the location of the closest facility
- Pregnant woman selects a birth companion to accompany her to the facility and stays to support her during labour and deliver
- Household prepares by gathering clean birth supplies, pre arranges transport and saves money needed to pay for the delivery and any emergency care
- Household prepares for care of other children whilst the mother is away
- Pregnant woman receives “safe motherhood tablets” (misoprostol) at the 4th ANC visit, or from a CHW at a home visit in late pregnancy, and takes the tablets as soon as possible after the baby is born

*If this is MoH policy and the birth is at home, or in a low level facility where safe use of injectable oxytocin for AMTSL is not possible or feasible. (All women should receive Active Management of the Third Stage of Labour (AMTSL))

Questions and Answers

Q1: Why plan ahead for the birth?

- The more prepared families are for the birth and the new baby the more chance that the mother and the newborn baby will survive, especially if there is an unexpected emergency. It takes time to save up the money needed for the delivery and new baby. The family will need items like baby clothing, clean birth materials and mothers hygiene and it is best to keep them in a bag ready for the birth.
- Costs for the delivery at the facility and for transport to and from, as well as for any emergency treatment, can be a lot of money for the family so saving up over the time of the pregnancy is advised.
- Mothers and babies can die whilst families look for money to pay for transport or unexpected emergency care.

Q2: What supplies are needed for a clean birth?

- All births, whether they happen at home or in the health facility, need to be “clean” otherwise the mother and baby can become very sick from infection entering the birth canal or via the baby’s umbilical cord.

- The birth needs to happen on a clean surface so a **plastic sheet or mat** is needed
- The birth assistant must have clean hands before helping mother and baby, so **soap and water** is needed
- The birth attendant needs to be protected from infections like HIV so **plastic gloves** are needed
- The umbilical cord must be kept clean so clean string for tying the umbilical cord and a **clean blade** for cutting the cord is needed.
- All families are advised to have these supplies ready along with clothes for the mother and newborn baby and packed ready to take to the health facility when labour starts, or to use at a home birth.

Q3: What sort of complications can arise and when?

- Only 15% of all pregnancies develop complications but if they do they can be very dangerous.
- The most common complication is bleeding before or soon after the birth.
- Other problems can be convulsions, very high fever with severe pain after the birth. The newborn baby can become suddenly very sick with difficult breathing or fever.
- Most deaths of mothers and newborn babies happen on the day of birth or in the first 3 days after the birth. Being prepared for complications means families can act quickly if needed. Delay in taking a sick mother and newborn to the facility can mean the difference between living and dying.

Q4: Why deliver in a health facility rather than at home?

- The staff at the health facilities are trained to care for mothers and babies during the labour and delivery and they have the drugs and equipment ready for assisting the birth. Although most births go very smoothly occasionally there can be a complication and if this happens at home the time taken to get the mother to the health facility might be too long to help save her life. Planning to have the baby in the health facility means that if a complication does arise the health staff can give immediate emergency care or organize to transfer the mother to the referral hospital quickly.

Q5: What is a birth companion?

- A birth companion is someone whom the woman has chosen to be with her during the labour and delivery in order to provide her with physical and emotional support.
- Having a birth companion during the labour and delivery, rather than labouring alone, can actually result in improved outcomes such as a shorter labour, improved early initiation of breastfeeding and care of the newborn!
- This is especially so if it is the first birth and best if the birth companion has learnt about best practices for pregnancy, labour, delivery and newborn care. The birth companion may have accompanied her to ANC or been present during home visits by a CHW.

- The birth companion can be a friend, a traditional birth attendant (TBA), a mother or mother in law, a sister or other woman relative, or even her husband!
- The delivery room in the health facility requires enough space and privacy for the woman to have her birth companion with her.

Q6: What is a post-partum hemorrhage?

- A post-partum hemorrhage (PPH) is heavy bleeding from the birth canal after the birth of the baby. There is always some blood loss after a delivery but if the blood soaks through clothes and runs into a pool under the bed it is too much.
- PPH is the most common complication and is the leading cause of mothers' deaths in the world. A woman can die from a PPH in as little as 2 hours.
- A PPH can happen if the womb is tired after a long labour, if there is some damage to the birth canal or if the placenta has been retained (has not come out).
- A PPH cannot be predicted and every mother, whether it is her first baby or 10th baby is at risk of a PPH.
- PPH can be prevented by having medication immediately after the birth of the baby. This medication can be given as an injection by the skilled birth attendant or tablets if the birth occurs at home or the injection is not available.

Q7: How does the “safe motherhood tablets” (misoprostol) help prevent a PPH?

- The safe motherhood tablets work by quickly making the womb strong again after the labour and birth of the baby. They help to push out the placenta after the birth of the baby and to stop further bleeding.
- The tablets are specially designed for those women who cannot reach a facility and the birth happens at home or if the health facility has no injections, or refrigeration to store the drug or lack skilled staff.
- A CHW or TBA, who has been trained in administering safe motherhood tablets and is present at the birth, can give the tablets or the mother can take them herself.

Q8: When should the mother take the safe motherhood tablets (misoprostol)?

- The safe motherhood tablets should be taken immediately after the birth of the baby by mouth with some water or fluid to drink. All 3 tablets should be taken at once. They should be taken as soon as possible after the birth even if the placenta has not been delivered.
- The tablets will not work if taken before the birth of the baby!
- They should be kept in a safe and dry place at home until the birth.

PREGNANT WOMAN INTERVENTION 7: ACCESS TO QUALITY MATERNAL HEALTH SERVICES: ANTENATAL AND POSTNATAL CARE; SKILLED BIRTH ATTENDANCE

Definition: Facilitate access to **quality** maternal health services: antenatal and postnatal care; skilled birth attendance

Target behaviors:

- Every woman attends at least 4 quality antenatal care appointments during her pregnancy
- Every woman delivers her baby with the assistance of a skilled birth attendant
- Every woman receives quality postnatal care, immediately after birth and in the following weeks

Questions and answers

Q1: What is meant by “facilitate access” to quality maternal health services?

- To facilitate means to ease, to expedite, to help, to promote or to speed up.
- Maternal health services are health services provided to the mother during pregnancy, at the time of delivery and in the weeks after the birth.
- We know that there are many barriers which prevent pregnant women from reaching or accessing maternal health services provided by the Ministry of Health or other approved providers. These barriers might be financial (not having money to pay for services), geographic (difficulty travelling to the health services), or due to a lack of knowledge and awareness or fear of health services. It is therefore everybody's responsibility (COMM, chiefs, families, husbands, mothers in law, NGOs and government) to help reduce these barriers so that pregnant women can access and reach maternal health services (antenatal care, reach a skilled birth attendant for her delivery and have a postnatal checkup after the delivery).
- Pregnant women who access quality maternal health services have a much higher chance of delivering a strong health baby and not dying if there is a complication.

Q2: What is antenatal care?

- Antenatal care is care provided by midwives, nurses or doctors to check that the pregnant woman and her growing baby are healthy.
- All pregnant women should have antenatal care even if she has had many other pregnancies or it is her first pregnancy.
- During an antenatal care consultation the health staff will check the pregnant woman for any illnesses and for potential risks of complications and to make sure the baby is growing. They will give her tablets to make her and baby stronger and, where relevant, to prevent malaria, give her injections to immunize her and her baby against tetanus infection and provide education about preparing for the birth and care of the baby and herself after the birth.

Q3: Why should a woman have 4 antenatal care appointments during pregnancy?

- At least 4 antenatal consultations protect the pregnant woman and the growing baby against complications and keep her healthy and strong in preparation for the birth.
- Complications (unexpected difficulties) can arise as the pregnancy progresses and the time when most women need the most antenatal care is in the last 3 months.
- A full term healthy pregnancy lasts around 40 weeks (9 months). Pregnant women should visit for an antenatal consultation once they know they are pregnant at or before 3 - 4 months (12 – 16 weeks), again at 6 – 7 months (28 weeks), at 8 months (32 weeks) and again at 9 months (36 weeks).
- Approximately 25% of maternal deaths occur during pregnancy and of these up to half are related to poor quality or lack of antenatal care.
- Pregnant women may die or become very ill because of a condition called high blood pressure which causes convulsions or bleeding from the placenta called an antepartum haemorrhage (APH).³ More often their baby dies. Detecting high blood pressure is one of the key roles of the antenatal clinic staff in late pregnancy and is why pregnant women need to attend for 4 visits. Pregnant women may not feel unwell with this disease until suddenly becoming very sick.

Q4: What are the elements of “quality” antenatal care?

- Quality antenatal care means that the health staff are qualified and trained to provide antenatal care, have all the essential equipment and drugs they need and there is enough staff so that the appointment is not rushed and the pregnant woman can ask questions.
- It also means women are treated with respect and are given a personal pregnancy health book or card.
- The nurse or midwife must be able to refer a pregnant woman to doctor if they find she has a complication.
- The essential equipment the staff will need includes an arm cuff and stethoscope to measure blood pressure, adult weight scales, a tape measure to make sure baby is growing and a fetal heart sound device (called a fetoscope or Doppler) to make sure the baby's heart rate is strong.
- The essential drugs needed include enough iron tablets for 3 months for each pregnant woman, enough anti-malaria tablets in relevant areas and enough emergency drugs if the woman becomes very sick.
- The clinic should also have access to a laboratory and enough blood testing equipment to check for infections or illness.
- If any of these items above are not available then this is not quality antenatal care and so places the pregnant woman and her baby at risk of illness or complications.

³ http://www.who.int/pmnch/media/publications/aonsectionIII_2.pdf

Q5: What is a skilled birth attendant?

- A skilled birth attendant (SBA) is a midwife, nurse or doctor who has been trained in health and maternity care. This usually means they have attended at least 3 years of training in health science and/or another year studying the care of the pregnant women, care during delivery and postnatal care.
- They must hold a license or registration certificate to practice in their country.
- A skilled birth attendant should also have received extra training to enable them to detect and manage an emergency and this training is often called Basic Emergency Obstetric and Neonatal Care (BEmONC).
- A Traditional Birth Attendant (TBA) is not a SBA but may have had some basic training of around 6 – 8 weeks. A TBA does not have the years of training or skills needed to help save the life of a mother or baby if there is a complication and emergency. A TBA can however be a great support to pregnant women and to SBAs. They should be encouraged to help women and accompany them to the facility and stay with them during labour, birth and the early days after birth.

Q6: Why is it important that a woman delivers her baby with a skilled birth attendant?

- Most of the time labour and delivery occur as nature intended, naturally and without any complications. However about 15% of pregnancies will experience a complication during labour or the delivery or soon after. These complications are not predictable and can be catastrophic. Deaths from these conditions could be prevented if all pregnant woman have their birth attended by a SBA.
- The most common complication is postpartum hemorrhage (PPH) which causes about 25 - 30% of all maternal deaths worldwide.
- A SBA is equipped to support and manage a normal labour and delivery as well as detect any complications. A SBA should ensure also that they are delivered safely in a clean environment and with clean instruments especially for cutting the umbilical cord. If a complication arises in labour, delivery or soon after then the SBA can act swiftly to identify the problem, start treatment and refer to a doctor for further help if needed.
- If the birth occurs at home then the time it takes to reach the facility and a SBA which can mean the mother dies and or is so ill that she cannot be saved by the time she reaches the SBA. If a woman experiences a PPH at home she can die within just 2 hours from loss of blood. Fast action if a complication arises, by the SBA, is the key to saving mothers and newborns lives at the time of birth.

Q7: What is postnatal care?

- Postnatal care is the care provided to mother and baby immediately after birth and for the next 6 weeks.
- This care is provided by the SBA while the mother is in the facility before discharge and then at home by a trained CHW who should visit the mother at home at least 3 times in the first week after birth.

- All mothers should attend the health centre to see SBA again at 6 weeks after birth for a postnatal checkup.
- Postnatal care consists of checking the mother for excessive bleeding, fever, signs of infection, or any other complication and providing support and education to establish breastfeeding and care of the newborn.

Q8: Why should a woman receive postnatal care?

- Postnatal care is critical to ensure survival of mother and baby and to allow the mother to recover from the pregnancy and delivery.
- The postnatal period is a time when many complications occur, especially excessive bleeding in the first 24 hours after birth, or infections which most often occur in the first week after birth. Women and their babies are very vulnerable in the first 6 weeks after birth and need rest, good nutrition and regular checkups by trained CHWs and SBAs to make sure they can care for their new baby and can resume normal activity in their family and community.

Q9: What are the elements of “quality” postnatal care?

- Quality postnatal care means 3 key things; staying in the facility for at least 24 hours after the birth, being checked by CHW 3 times in the first week once at home, and going for a postnatal checkup at 6 weeks after birth.
- The mother should be able to stay in a postnatal room in the facility for at least 24 hours after delivery before going home.⁴ This enables the SBA to check on the mother regularly including for bleeding and to check the baby is breathing well, is warm and is feeding regularly. It also allows the SBA to give advice and education about breastfeeding and make sure the mother has rested and is strong enough to go home. Many facilities however lack a postnatal room and the essential equipment needed such as beds, water and privacy so the mothers are sent home very quickly and are not checked or educated before leaving.
- If the SBA alerts the CHW that a new mother is leaving and will need home visits then she can be followed up quickly at home during the critical time of the first week. The CHW can check the mother and baby, give advice and refer back to the SBA if they find any danger signs.
- Finally attending a postnatal check up at the clinic at 6 weeks after birth ensures all is well for the resumption of normal family life and the SBA can provide family planning options to assist with birth spacing, as well as provide child immunization and education on continued exclusive breastfeeding.

⁴ http://apps.who.int/iris/bitstream/10665/97603/1/9789241506649_eng.pdf

CHILD INTERVENTION I: APPROPRIATE BREASTFEEDING

Definition: Appropriate breastfeeding includes 3 components:

1. Initiate breastfeeding immediately within the first hour of birth, feeding infant colostrum (the thick yellowish first milk) and;
2. Exclusive breastfeeding for the first 6 months of life and;
3. Continue breastfeeding for 24 months and beyond with appropriate complementary feeding at 6 months.

Target behaviors:

- Mother begins breastfeeding within the first hour of birth, giving the baby colostrum.
- Mother feeds the baby only breast milk for the first 6 months.
- Mother breastfeeds on demand.
- Mother continues and increases breastfeeding during baby's illness.
- Mother continues to breastfeed for 24 months and beyond and gives appropriate complementary foods starting at 6 months of age.
- Caregiver does not give the baby any pacifiers or bottles.
- Caregiver takes child to growth monitoring and promotion as soon as possible after birth, then monthly to assess appropriate growth.

Questions & Answers

Q1. Why is breastfeeding important?

- Breast milk contains everything babies need for healthy growth in the first 6 months and continues to be an important source of nutrition, energy and protection from illness up to 2 years and beyond.
- Breast milk is nutritious and easily digested by babies.
- Breast milk contains antibodies that help protect babies from common childhood illnesses such as diarrhoea and pneumonia.
- Breast milk is free, always clean, and available at anytime and anywhere.
- Breastfeeding helps to establish a close bond between mother and baby.
- Exclusive breastfeeding is a natural method of birth control, 98% effective during the first 6 months as long as mother's menses has not returned.
- Breastfeeding has long-term health benefits for both babies (e.g. reduced risk of obesity and diabetes) and mothers (e.g. reduced risk of breast and ovarian cancer)

Q2. When should mothers start breastfeeding?

- Breastfeeding should begin within one hour of birth.
- Placing the newborn skin-to-skin between the mother's breasts immediately after birth helps to initiate breastfeeding as the newborn can reach breast easily and begin suckling when he/she is ready. This will improve the newborn's chance to live. The newborn benefits from receiving the colostrum, which is full of ingredients that protect the infant from illness and give him/her adequate nutrition.
- Early breastfeeding also reduces the risk of bleeding in mothers and helps expel the placenta.

Q3. How long should mothers breastfeed their babies?

- Breastfeeding should continue up to 2 years of age or more.
- Babies should be exclusively breastfed for the first 6 months of life.
- After 6 months, babies should receive nutritionally adequate and safe complementary foods while continuously being breastfed.

Q4. What does exclusive breastfeeding mean?

- Exclusive breastfeeding means giving **ONLY** breast milk including the colostrum, but **NO** water, other fluids or foods to the baby. For the first 6 months, breast milk provides all the water, energy and nutrients the baby needs for healthy growth and development. If directed by doctors or health staff, vitamins, mineral supplements or medicines can be given.
- Encourage mothers, especially new mothers, to join a mother-to-mother support group if available, as it is one of the best ways to help mothers practise exclusive breastfeeding.

Q5. Mothers are often afraid that their babies are thirsty and that breastmilk doesn't have enough water. Is that true? What about when the weather is very hot?

- Breastmilk provides all the liquid needs of an infant, including in hot and dry climates. The composition of the breastmilk will change depending on many variables in order to satisfy the needs of the infant. Giving water to infants can be dangerous

Q6. What are the dangers of non-exclusive breastfeeding for babies under 6 months of age?

- Giving the baby breast milk *plus* other foods or liquids such as thin porridge, water or sugar water is called "mixed feeding" and should be avoided as it increases the possibility that the baby will become ill and die from illnesses like pneumonia or diarrhoea. With mixed feeding, the baby is also more likely to get malnourished as other liquids or foods do not provide as much nutrition suited to babies as breast milk does.

Q7: I've heard that if the mother is HIV+ the risk of transmitting the infection to her infant through breastfeeding is higher if the infant is fed both breastmilk and other liquids and foods, than if fed breastmilk alone. Why is that?

- Yes, it is true that risk of transmitting is higher if the child is being fed both breastmilk and other foods and liquids. This is because a newborn's gut is not yet fully developed to handle other foods and liquids and so these often cause damage to the gut lining, thus providing easy access for the virus from the breastmilk to enter the newborn's body.
- Exclusively breastfed babies do not have this permeability and thus are at lower risk of getting the virus.

Q8. Can mothers or caregivers give breast milk substitutes such as commercial infant formula?

- In most communities, practising safe and proper use of commercial infant formula is difficult. Babies fed only formula have a higher risk of illness and death. This risk results from a lack of proper sanitation and proper preparation of the formula. It also happens because breast milk contains vitamins, minerals and antibodies that protect the baby from illnesses – and formula does not have all these good ingredients. Thus, use of infant formula is generally NOT recommended except for medical reasons.

Q9. When is appropriate time to introduce other foods to babies?

- Starting at 6 months, breast milk alone cannot fulfill all the young child's needs for energy and nutrients, such as iron, zinc, and vitamin A. Therefore, children 6 months and older should be given safe complementary foods rich in these nutrients to meet the requirements for good growth and health along with breast milk.

Q10. What is the appropriate amount and frequency of breastfeeding?

- Under 6 months: Breastfeeding on demand, day and night, at least 8 times daily and as much as the baby wants.
- Between 6-24 months: Continue breastfeeding on demand, with meals.

Q11. How can we check if a baby is getting enough breast milk?

- A baby who is exclusively breastfed and getting enough milk should pass urine 6-8 times or more in 24 hours. This urine test is not useful if a baby is getting other fluids in addition to breast milk.
- Another way to check is by looking at baby's weight gain. If the mother has a growth chart, see whether or not the child's growth curve follows the standard curve.

Q12. What are some reasons that a baby might not get enough breast milk?

- Poor breastfeeding practices (e.g. not feeding on demand, giving bottles or pacifiers/dummies, feeding other foods or fluids before the child reaches 6 months of age), poor attachment, and conditions related to mother (e.g. tiredness, worry or stress, lack of confidence, dislike of breastfeeding) or baby (e.g. illness, too small and weak to suck) can result in poor nutrition for the baby.
- Encourage mothers to breastfeed on demand day and night; that is whenever the baby shows signs of hunger such as restlessness, opening mouth and turning head from side to side, sticking out the tongue, and sucking on hands. Offer the breast before crying as this is often a late sign of hunger.
- Although many mothers, especially first-time mothers, worry about not having enough breast milk to feed their baby, almost all women can produce enough breast milk. To ensure adequate milk production and flow, a baby needs to feed as often and for as long as he/she wants, both day and night. Stimulation of the breasts by the infant suckling helps to increase mother's milk supply.
- Avoid giving bottles with artificial teats or pacifiers as they make it more difficult for the baby to learn to attach well and suckle at the breast.

- If the baby cannot feed from the breast (e.g. baby sick or too small and weak, mother away from her baby), then he/she needs to be fed using expressed breast milk in a clean cup. Expressed breast milk is the milk that has been removed from the breasts manually by hand or by using a pump. Feeding breast milk using a cup is recommended as cups are less likely to get contaminated than bottles and does not interfere with suckling when the baby returns to breastfeeding. It also gives the baby some of the contact he/she needs.

Q13: If a mother doesn't have a fridge to store expressed breastmilk, how long will it stay fresh?

- Breastmilk can be stored for 6-8 hours in a clean, covered container at room temperature

Q14. How can we help a mother to position and attach her baby well for optimal breastfeeding?

- Poor attachment prevents effective suckling and can cause pain for the mother during breastfeeding, which can lead to offering the breast less frequently. Improving the baby's position and attachment can help the mother breastfeed her child well.

Ensure good positioning by following these 4 points (See Figure 1):

1. Baby's head and body are in line.
2. Baby faces mother's breast with his/her nose opposite mother's nipple.
3. Baby is held close to mother's body.
4. Baby's whole body is supported, not just the neck and shoulders.

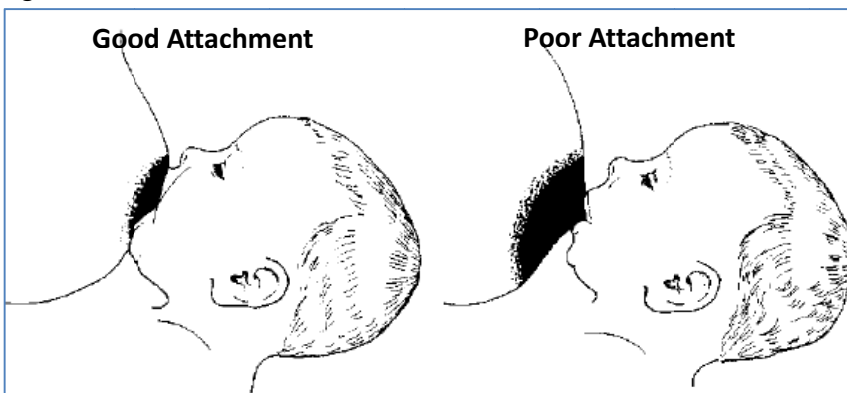
Figure 1. Good Positioning



Ensure good attachment by following these 4 points (See Figure 2):

1. Baby is close to the breast with mouth wide open taking in plenty of the areola (dark area around nipple)
2. Baby's chin is touching the mother's breast
3. More areola can be seen above the baby's mouth than below it
4. Baby's lower lip is curled outwards

Figure 2. Good and Poor Attachment



Q15. What to do when a baby or a mother is sick?

- Sick Infant - A sick infant may get tired quickly and suck for a shorter time. Clear a blocked nose before offering the breast. Breastfeed more often for shorter periods (maybe every 2 hours) if the baby sucks less than before. Give expressed breast milk using a cup if the baby cannot suck or refuses to suck. The mother should manually express her breast milk every 3 hours to keep up her supply of breast milk.
- During a baby's recovery from illness, breastfeed more often so the baby can catch up on growth.
- Sick Mother - If the mother is feeling sick, refer her to the health clinic. If she is admitted to the hospital, she should bring her baby and someone else (if possible) to care for her. If she has fever, give her plenty to drink. If possible, the mother should continue to breastfeed her baby. Breastfeeding mothers should only take medicines on the advice of health staff. When she recovers, help her increase her supply of breast milk by allowing the baby to feed more frequently, for a longer time each feed, both day and night.

Q16. What are some common breastfeeding problems and how can mothers prevent them?

- Common problems include:
 - sore or cracked nipples often due to poor attachment;
 - engorgement (hard and swollen breast, often affecting the whole of both breasts) due to inadequate emptying of breast milk;
 - mastitis (swollen with redness and severe pain that may accompany fever, often affecting a part of one breast) due to a blocked milk duct, pressure from clothes or fingers or an infection;
 - thrush (itchy and red nipples with deep stinging breast pain during or after feedings) caused by Candida (yeast) infection.
- Following good breastfeeding practices can help prevent the problems:
 - Start breastfeeding within one hour of delivery.
 - Allow the infant to suck as frequently and as long he/she wants.
 - Alternate which breast the baby starts feeding from.
 - Let the child feed fully on one breast before switching to the other.
 - Manually empty the breast if the baby doesn't empty it.
 - Use good positioning and good attachment.
 - Wash the breasts only once per day, and avoid using soap or lotions.
- NOTE: For mastitis (if due to an infection) and thrush, refer the mother to the health clinic as antibiotics may be required. For thrush, the baby should also receive treatment as well. Mothers can continue to breastfeed while on antibiotics.

Q17. What are the breastfeeding recommendations for HIV+ mothers?

- WHO recommends that where anti-retroviral drugs (ARVs) are available, HIV+ women take ARVs while breastfeeding to prevent the transmission of the virus to the infant. HIV+ mothers should follow the National Policies and take ARVs during and after breastfeeding.
- HIV+ mothers on ARVs should exclusively breastfeed for the first 6 months, introducing appropriate complementary foods thereafter, and continue breastfeeding up to 12 months. Then,

once a safe and adequate replacement feeding option becomes available, breastfeeding can be stopped **gradually** over a month and not abruptly, see below for required conditions.

- Even where ARVs are not yet available, exclusive breastfeeding for the first 6 months and continued breastfeeding thereafter is recommended unless ALL of the conditions for using replacement feeding are met, see below for required conditions. Again, breastfeeding should be stopped **gradually** over a month, not abruptly.
- When acceptable, feasible, affordable, sustainable and safe replacement feeding can be provided, avoid breastfeeding entirely, see below for required conditions.
- **The conditions for using replacement feeding are:**
 1. Safe water and sanitation are assured at the household level and in the community and;
 2. The mother or other caregiver can reliably provide sufficient infant formula milk to support normal growth and development of the infant and;
 3. The mother or other caregiver can prepare formula cleanly and frequently enough so that it is safe and carries a low risk of diarrhoea and malnutrition and;
 4. The mother or other caregiver can, in the first 6 months, give exclusively infant formula milk and;
 5. The family is supportive of this practice and;
 6. The mother or other caregiver can access healthcare that offers comprehensive health services.
- Mothers who are HIV- or of unknown HIV status should follow the recommendations for the general population, that is, exclusively breastfeeding for the first 6 months and continuing breastfeeding with adequate complementary feeding up to 2 years or more. Mothers who do not know their HIV status should be encouraged to have HIV testing done.
- Infants who are HIV+ should also be breastfed so they can receive the benefits of breast milk.

CHILD INTERVENTION 2: ESSENTIAL NEWBORN CARE

Definition: Essential Newborn Care (ENC) is care that every newborn baby needs regardless of where it is born or its size. ENC should be applied immediately after the baby is born and continued for at least the first 7 days after birth. Many ENC interventions are simple and can be provided by a Skilled Birth Attendant (SBA) or a trained Community Health Worker (CHW) or Traditional Birth Attendant (TBA) or by a family member supporting the mother in a health facility or at home.

Target behaviors:

- **Keep baby warm:** Care givers and mothers make sure the newborn baby is immediately dried after birth, placed on the abdomen (skin to skin), covered with a clean towel/cloth and a hat on the head. They make sure the baby is NOT bathed for the first 24 hours.
- **Help baby breathe:** Care givers and mothers assist the newborn baby to take its first breath by immediately rubbing its back and feet to stimulate it to cry and by clearing the mouth if it is having any difficulty in breathing
- **Keep baby clean:** Care givers and mothers wash their hands before touching the newborn baby, they cut the umbilical cord with a clean blade, they keep the cord area clean and dry, they do not put anything on the cord stump (exception in some country /district contexts – care giver or mother applies chlorhexidine antiseptic (gel or liquid) as soon possible after cutting the cord and then daily for 7 days)
- **Help baby feed:** Care givers and mothers assist the newborn baby to breastfeed within 1 hour after birth and make sure the baby receives the first milk (colostrum) and only breast milk and no other fluids for the first 6 months
- **Help the small baby survive:** Care givers and mothers give extra special care to the small baby by practicing ENC plus kangaroo mother care (KMC) which means placing it naked skin to skin on the mother's chest and continuing this day and night
- **Help protect from HIV:** Care givers and mothers ensure the newborn of a HIV positive mother is brought to the facility for early infant diagnosis (EID) testing at one month

Questions and Answers

Q1: When do most newborn babies die?

- Nearly 3 million newborn babies die every year, mostly in developing countries and where many births happen at home. Most of these newborn babies die on their first day of life or in the first week. These babies do not need to die and most of these deaths are preventable if every newborn baby received 'Essential Newborn Care' (ENC).
- Many lives would be saved if all newborns were provided with ENC and this is best done in a quality health facility by a trained SBA.

Q2: What do newborn babies die from?

- The most common cause of newborn death is because of being born too early or too small. Small babies have more difficulty to keep warm, are weak to suck at the breast and have a much higher chance of getting an infection.
- Breathing complications are the second most common problem where the baby cannot take its first breath or has trouble breathing. This is more common in small babies. Breathing problems need to be recognized very quickly and the baby can be helped to clear the mouth and to take a breath.
- Infections in the lungs, brain or the whole body are the third most common cause of deaths and can occur as a result of unclean practices at the time of birth such as cutting the umbilical cord with something dirty.
- Most of these deaths can be prevented by providing mothers with quality ANC and for all births to be in a health facility with a SBA who will perform ENC.

Q3: Why do all newborn babies need essential newborn care (ENC)?

- The baby was protected from infection in the mother's womb and kept warm and fed by the placenta. After the birth these protections are gone and it takes a newborn baby some time to adapt but especially so in the first 24 – 48 hours after birth. The air temperature is much cooler than in the womb, they must get nourishment from the breast rather than the placenta and they are not protected from outside infections by the womb. It takes most newborn babies 1 week to 4 weeks to become strong and adapt to being outside the womb and for small babies this will take even longer.

Q4: What are the main essential newborn care practices?

- **Keep baby warm:** Care givers and mothers make sure the newborn baby is immediately dried after birth, placed on the abdomen (skin to skin), covered with a clean towel/cloth and a hat on the head. They make sure the baby is NOT bathed for the first 24 hours.
- **Help baby breathe:** Care givers and mothers assist the newborn baby to take its first breath by immediately rubbing its back and feet to stimulate it to cry and by clearing the mouth if it is having any difficulty in breathing
- **Keep baby clean:** Care givers and mothers wash their hands before touching the newborn baby, they cut the umbilical cord with a clean blade, they keep the cord area clean and dry, they do not put anything on the cord stump (exception in some country /district contexts – care giver or mother applies chlorhexidine antiseptic (gel or liquid) as soon possible after cutting the cord and then daily for 7 days)
- **Help baby feed:** Care givers and mothers assist the newborn baby to breastfeed within 1 hour after birth and make sure the baby receives the first milk (colostrum) and only breast milk and no other fluids for the first 6 months
- **Help the small baby survive:** Care givers and mothers give extra special care to the small baby by practicing ENC plus kangaroo mother care (KMC) which means placing it naked skin to skin on the mother's chest and continuing this day and night
- **Help protect from HIV:** Care givers and mothers ensure the newborn of a HIV positive mother is brought to the facility for early infant diagnosis (EID) testing at one month

Q5: If the birth is at home can a family member do ENC?

- Yes; either the family member who is assisting at the birth or support a trained CHW or TBA who is present. They can apply the ENC actions and this will help the newborn survive the first minutes and the first day of life.
- It is better to go to the health facility for the birth but sometimes births happen very fast, or on the way, so all family members and CHWs/TBAs should know what to do.
- It is important to have a birth kit ready with cloths and a hat for the baby, a clean cord cutting blade, clean cord ties and soap and water. If using chlorhexidine antiseptic is advised in your context then this should also be in the birth kit and applied as soon as possible after the cord is cut.
- In some circumstances women are left to birth alone however this is not acceptable as the mother needs help during her labour and birth and she cannot apply ENC easily. She needs someone to help her do ENC and to take care of the newborn baby.

Q6: What are some harmful practices that may cause newborn babies to become sick or die?

- If the newborn baby is not immediately dried after birth then the wet fluid left on the body and head will cause the baby to get very cold very quickly. Sometimes in home births families wait until the placenta arrives before drying and caring for the baby but this could take a long time and by then the baby will be very cold.
- Other practices which are very harmful are cutting the cord with a piece of bamboo or unclean blade that has been used by others. This can lead to an infection of the lungs or brain or the whole body.
- Bathing the baby soon after birth can make the baby very cold.
- Throwing away the colostrum and not feeding it to the newborn is very bad as this is full of natural protection and sugar to help the baby adapt to being outside the womb.
- Giving the baby fluids other than breast milk (colostrum) such as juice, sugar water, honey or tea makes the baby less likely to suck at the breast and may cause it to become sick with diarrhea.

Q7: What are the newborn danger signs?

- All members of the community need to be aware that newborn babies can get sick and die very quickly. Mothers and fathers and other family members, TBAs and CHWs and leaders of the community should all know these signs and help parents to take the newborn to the facility as soon as possible if they see the newborn with:
 - Difficulty breathing or chest indrawing
 - Fever or very cold
 - Fits or convulsions
 - Difficulty breastfeeding or sucking (especially if feeding well before or if a small baby)
 - Redness/swelling or pus in the umbilical cord or skin around it
 - Red swelling or pus in the eyes
 - Pustules and rash on the skin or yellow skin

CHILD INTERVENTION 3: ADEQUATE DIET (APPROPRIATE COMPLEMENTARY FEEDING AND VITAMIN A SUPPLEMENTATION)

Definition: Increased frequency, amount and variety of food (adequate nutrients) for children 6-59 months of age

Target behaviors:

- Complementary Feeding of children 6-23 months of age
- Adequate Frequency:
 - 6-8 months of age (breastfed): 2-3 meals/snacks a day
 - 9-23 months of age (breastfed): 3-4 meals/snacks a day
 - 6-23 months of age (non-breastfed): 4-5 meals/snacks a day
- Adequate Dietary Diversity: Infants receive foods from:
 - 4 or more food groups from 7 food groups OR
 - all 3 food groups including Glow, Grow, and Go OR
 - all 3 food groups including: Body building, Protective, and Energy-giving foods
- Vitamin A for children 6-59 months of age (see Table I for more information)
 - Increase regular intakes of Vitamin A at physiologically levels through:
 - Improved diets
 - Fortification
 - Frequent (daily or weekly) supplements (these are also safe for women of reproductive-age, unlike high-dose Vitamin A supplements)
- Take child to health clinic regularly for routine growth monitoring (or attend outreach clinics for growth monitoring)

Questions and answers

Q1: What constitutes a balanced diet?

- Eating from all of the food groups in the recommended quantities

Q2: How many food groups are there, and what are they?

- Each country has their own guidance, but two commonly used food groups are 7 food groups and the 3 food groups:
- 7 Food groups include:
 - Grains, roots, and tubers
 - Legumes and nuts
 - Dairy products (milk, yogurt, cheese)
 - Flesh foods (meat, fish, poultry, and liver/organ meats)
 - Eggs (Grow Foods)
 - Vitamin A rich fruits and vegetables (Glow Foods)
 - Other fruits and vegetables

- 3 Food groups include:
 - Carbohydrates (or “Energy-giving foods”, or “Go” foods) should be eaten every day.
 - Examples of high carb foods include: bread, oil, rice, maize flour, cassava flour, peanuts/groundnut flour.
 - Vitamins (or “Protective foods”, or “Glow” foods) should be eaten every day. They also enhance the absorption of other nutrients.
 - Vitamin-rich foods are usually red/orange fruits and vegetables and green-leafy vegetables
 - Examples of vitamin-rich foods include: Orange, lemon/lime, amaranth, pumpkin leaves, sweet potato leaves, orange-fleshed sweet potato, mango, papaya, etc.
 - Protein-rich (or “Body building” or “Grow” foods) should be eaten everyday
 - Examples of protein-rich foods include: Eggs, groundnut/peanuts, small dried fish, beans and lentils, fish, soya beans, cowpeas, and other animal source foods, etc.

Q3: What makes the best complementary foods?

- Babies can only eat small amounts of food at a time, so it is important to continue feeding them often with breastmilk and thick foods that have a lot of energy and nutrients

Q4: How do you prepare complementary foods?

- Washing your hands with soap or ash after using the latrine, after cleaning young children, and before preparing, eating, or feeding food to young children, to protect your child from diarrhea.
- Cleaning everything used to cook and feed a child is important for protecting a child from illness
- Cooking foods fully will make food safe for a child to eat.
- Serve food to a child right after cooking it to prevent illness.

Q5: What amounts and type of food should be provided for infants?

- See Table 2 on the next page

Q6: What is responsive feeding?

- Young children need to learn to eat: encourage and help them – with a lot of patience – so that they can grow healthy. This includes looking at the child in the eyes, smiling and watching for when the young child is ready to eat.

Q7: What are some things to avoid feeding children?

- Avoid giving unfiltered/untreated water to children to prevent diarrhea. It is highly encouraged to give breast milk instead, or serve water that has been boiled, or is from a safe water source.
- Avoid feeding black tea (including tea made with milk and sugar) or any other liquids high in ‘tannins’, such as coffee and cola drinks, as they prevent the absorption of iron, which could lead to iron deficiency anemia
- Avoid sugary beverages such as soda/pop, and powdered juice
- Avoid highly processed foods and snacks
- Avoid thin gruels and porridges and make them thicker consistency

Table 2. Complementary Feeding Guidelines for children under 24 months

Age	Frequency of Feeding	Amount needed	Food types
0-6 months	On demand	As much as infant wants	<ul style="list-style-type: none"> Only breastmilk
6-8 months (breastfed infants)	2-3 times with meals	Start with 2-3 tablespoons and give more each feeding until baby is eating around ½ cup of food at each meal	<ul style="list-style-type: none"> Foods that can be mashed up until smooth and soft, such as fruits, vegetables, and animal-source foods (for example, mashed cooked liver) Thick porridge with the addition of a little oil, nut, or seed paste and milk, egg, or animal-source food (for example, mashed liver, dried caterpillars ground into powder, and dried fish pounded and sieved into fine powder) Germinated or sprouted flour or toasted grain ground into flour to make porridges Fermented porridges
9-11 months (breastfed infants)	3 times a day with meals	One half cup of food each meal	<ul style="list-style-type: none"> Foods that can be mashed up or cut up into very small pieces, including food the family eats Include different types of foods, especially animal-source foods, fruits, and vegetables
9-11 months (non-breastfed infants)	3 times a day with meals + additional 1-2 snacks		
12-23 months (breastfed infants)	3-4 times a day with meals + additional 1-2 snacks (as required)	¾ cup of food at each meal	<ul style="list-style-type: none"> Foods that the family eats, mashed up or cut up into small pieces and mixed with porridge (for example, relish with porridge) Include different types of foods, especially animal-source foods, fruits, and vegetables Snacks include mashed or chopped fruits and vegetables, and breads, chapattis, and mandazis, either dipped in soured or boiled milk to soften or spread with groundnut paste or honey
12-23 months (non-breastfed infants)	3-4 times a day with meals + additional 1-2 snacks (as required)		

Note: Refer to IYCF training tool, stunting tool and e-learning tools (include links) and PD/Hearth Training Manuals for more information on locally available foods or contact Loria to hear more about the Innovative Feeding Tool.

Q8: How should I feed my child when he or she is sick?

- **Less than 6 months of age:**
 - Breastfeed more frequently during illness. This will help the baby to fight sickness, recover more quickly and not lose weight.
 - Give only breastmilk and prescribed medicine to your baby. If the baby is too weak to suckle, express breastmilk and give to the baby by cup. This will help you to keep up your milk supply and prevent breast swelling. **DO NOT** use bottles, teats or spouted cups. They are difficult to clean and can cause your baby to become sick.
 - When baby is recovering from illness, the baby will breastfeed more than usual. The baby is replacing what was lost during illness.
 - Take enough time to actively encourage your child to breastfeed more frequently when the baby's appetite returns.
- **6 months of age and older:**
 - Breastfeed more frequently and offer additional food during illness. This will help the baby to fight sickness, recover more quickly and not lose weight.
 - **DO NOT** use bottles, teats or spouted cups. They are difficult to clean and can cause your baby to become sick.
 - Take time to patiently encourage your sick child to eat as the child's appetite may be decreased due to illness. Offer the baby simple foods like porridge and fruits and other foods the child likes to eat, not too thick and not too dry, in small quantities throughout the day.
 - Avoid spicy or fatty foods.
 - When a child is recovering from illness, the child will breastfeed and eat more than usual. The child is replacing what was lost during illness.
 - Give your child one additional meal of solid food each day during the first 2 weeks of recovery. This will help regain weight lost during the illness.
 - Take enough time to actively encourage your child to eat the extra food and to breastfeed more frequently when the child's appetite returns.

Q9: What is the feeding requirement for children older than 23 months of age?

- Serve children from 2 to 5 years of age on their own plate, served from the family pot to ensure they consume an adequate amount and diverse diet.

Q10: What are the guidelines for high-dose of Vitamin A in areas of high child mortality?

- For infants from 6 months of age to one year should receive one dose of Vitamin A at the health center or outreach clinic.
- Children between the ages of 1 and 5 will receive one dose every 4-6 months

Q11: Can newborns or children who are HIV+ also receive the Vitamin A?

- Yes!

CHILD INTERVENTION 4: ADEQUATE IRON

Definition: Adequate iron means that each child consumes enough iron to meet his or her body needs, which are high for young children due to their rapid growth. Consuming enough iron to meet their needs includes iron from dietary sources as well as from supplements, such as syrup or tablets, or through fortification in either a home-based fortification form e.g. Sprinkles or a commercially prepared food specially designed for infants and young children.

Target behaviors:

- Delayed cord cutting and clamping is practiced at the time of delivery by the health staff or by family if a home delivery
- Newborns are provided early initiation of breastfeeding within one hour of birth and then exclusively breastfed for 6 months. By 6 months, children will start complementary feeding while breastfeeding is continued until 2 years of age.
- Low birth weight infants are given iron supplements from 2 months of age, as well as breastfeeding.
- Children consume iron-rich foods e.g. meat, liver, kidney, fish, dark green leafy vegetables
- Children consume foods that boost iron absorption e.g. citrus fruits, tomatoes, meats, fermented porridge
- Children should not be given foods that inhibit iron absorption e.g. tea at meals

Question & Answers

Q1: Why do we have to make sure children receive adequate Iron?

- Anemia is one of the most common problems in children, and the most common cause of childhood anemia is lack of iron.
- Anemia due to lack of iron has serious consequences for the child. Children who suffer from anemia due to lack of iron will have poor learning ability, will get tired easily, and will feel weak. These problems if not addressed well and early, will worsen and make them shorter than the other children (stunting). This problem may even continue to adulthood – they will have difficulties learning and lacking energy to work.

Q2: Which children should get adequate iron?

- Among children under 6 months of age, we usually only see anaemia due to lack of iron if the baby was born with a low birth weight (less than 2,5 kilograms at birth) or if the baby is not being breastfed, or delayed cord cutting was not practiced.
- This means breastfeeding a normal-weight baby for 6 months will protect the baby from anemia!
- Anemia due to lack of iron among children from 6 to 24 months may happen to any child because they are growing fast, their iron needs are increasing, the store of iron from birth has been used up, and the supply from breastmilk is no longer enough. They need to get iron from other sources and sometimes they don't get enough.

Q3: Why are low birth weight babies usually anemic and therefore need iron?

- Babies born at normal weight received enough iron from their mothers, and the iron in breastmilk is very well absorbed.
- Low birth weight babies received less iron from their mothers and can suffer from lack of iron after 2 or 3 months of age.
- Therefore, babies who are low birth weight need to get iron supplements (syrup) beginning at 2 months of age.

Q4: Why do babies who are not exclusively breastfed may become anemic and therefore need iron?

- If the baby is given baby formula because baby formula often does not provide enough iron.
- If the baby is given tea, because tea makes it difficult for the body to absorb (take in) the iron.
- If the baby is given animal milk, because the iron in animal milk is not enough for humans and there may be bleeding in the baby's stomach which means more iron is lost. Babies fed only on animal milk may become anemic by 4 months.
- Therefore, babies who are not exclusively breastfed need to get iron supplementation (syrup) starting at 2 months of age.
- A better way is to make sure every baby is breastfed in the first hour of life, and then exclusively breastfed for 6 months

Q5: Why do children 6 to 24 months need to have adequate iron?

- By 6 months of age, a baby is growing fast. They need more iron to grow, but the iron received from the mother from birth has been used up and the supply from breast milk is no longer enough by 6 months. The child must now start to get iron from other foods.
- Many children suffer from lack of iron between 6 months and 2 years, so it is very important to try to prevent this.
- The foods that children are given at this age often do not have enough iron (for example, watery porridge) or have iron that is difficult for the body to absorb (for example, maize porridge).
- Children 6 to 24 months may also get infections. Infections common at this age will make it harder for the body to absorb the iron, and also may affect children's appetites, so they do not consume enough food and enough iron.

Q6: What foods have iron?

- The most common foods containing iron are meat, liver, kidneys, fish, insects and dark green leafy vegetables

- Children should eat foods containing vitamin C at the same time they eat foods rich in iron, to help the body to absorb the iron
- Foods rich in vitamin C include citrus fruits like lemons, oranges, grapefruits, as well as tomatoes, meats and fermented porridge

Q7: Are there other sources of iron besides the foods listed?

- Some countries have added iron to common food products like bread. You should find out if this is true in your country
- Some countries distribute little packets to sprinkle over food. These sprinkles contain iron. You should find out if this is available in your country.

Q8: In summary, what can we do to ensure children have adequate iron?

- Delay cord clamping and cutting. Don't cut the umbilical cord too soon. Wait at least three minutes or until the cord stops pulsing. This allows the blood of the newborn that is in the placenta to reach the baby, rather than be wasted and stay in the placenta. This action can improve the iron status for up to 6 months after birth and is especially important for pre-term babies.
- Delaying the cord clamping can also help to prevent post-partum hemorrhage in the mother
- Low birth weight infants are given iron supplements from 2 months of age, as well as breastfeeding.
- Children consume iron-rich foods e.g. meat, liver, kidney, fish, insects, dark green leafy vegetables
- Children consume foods that increase the body's ability to absorb iron; for example, citrus fruits, tomatoes, meats, fermented porridge
- Children should not be given foods that make it more difficult for the body to absorb iron, such as tea.
- Children consume fortified foods or receive home fortification e.g. sprinkles if this is available in the country

CHILD INTERVENTION 5: FULL IMMUNIZATION FOR AGE

Definition: Many infectious diseases that kill millions of children are easily preventable through timely immunisation. Children must be immunized early in life, starting from the first week after birth and with completion of the full schedule before the first birthday. The effects of immunisations are maximised if given at specific ages, meaning that proper scheduling and complete doses are critical. The 7-11 programming intensifies awareness-raising around immunisation and uses every opportunity to increase immunisation coverage among one-year olds. It is also important to trace drop-outs and unimmunised children.

Target behaviours:

- Every children receive the full basic schedule of vaccines before the first birthday following the national health standards of the Expanded Program on Immunisation
- Every caregiver of children under 24 months should have a vaccine record card

Questions and Answers

Q1: Why is it important for children to be vaccinated?

- Immunization, also known as vaccination, is a healthy choice that saves lives. Vaccines have saved the lives of more babies and children than any other medical activity in the last 50 years.
- When children are immunized, they are protected against illnesses and serious harm, to include meningitis, pneumonia, paralysis, deafness, seizures, brain damage or even death.
- For effective disease control, 95% immunisation coverage in the population is needed. This means that for every 100 people in a community, if 95 or more are immunized for a particular disease there is very little chance of seeing that disease in the community.

Q2: How do vaccines work?

- The vaccines are made of either weakened or "killed" versions of the bacteria or virus that causes a particular disease.
- When these altered viruses and bacteria are injected or taken by mouth, the body's immune system starts an attack that causes the body to produce antibodies against the disease. We can think of the immune system as like soldiers, and antibodies like defences or a wall that the soldiers put up against the disease.

Q3: Are vaccines safe?

- Vaccines are generally quite safe. The protection provided by vaccines far outweighs the very small risk of serious problems.
- Vaccines must pass many safety tests before they are ever given to people. After a vaccine is approved for use, its safety is always monitored.
- It's much safer to get the vaccine than to get the disease. Serious side effects from vaccines are very rare.

Q4: Do vaccines have side effects?

- Some vaccines may cause mild temporary side effects such as fever, or soreness or a lump under the skin where the shot was given.
- The health care provider should talk to parents about possible side effects with certain vaccines.

Q5: When should the child be vaccinated?

- The WHO has developed standard immunization schedule for children, and each country follows it according to their specific context and public health policy. You can find out what the immunization schedule is for your country.
- To be fully protected, the child will be immunized starting at birth, then at 2 months of age, 4 months, 6 months, and 12 months. Some immunizations require more than one dose for full protection.
- The basic immunization schedule according to the WHO should be reached when a child is 12 months old, and boosters of some vaccines are required when the age of the child is between 4 to 6 years old.
- Nevertheless, if a child has not been fully immunised by his/her first birthday, it is extremely important to follow through with the immunisations as soon as possible.

Q6: Can my child be vaccinated when he or she is sick?

- It is safe to immunise children with minor illnesses or disabilities and those suffering from moderate malnutrition. In all countries, however, national protocols must be followed

Q7: Are there any reasons a child should not be vaccinated?

- In general, every child should be vaccinated,
- There may be some special and rare situations when a child shouldn't be vaccinated. For example, some vaccines shouldn't be given to children who have certain types of cancer or certain diseases, or who are taking drugs that lower the body's ability to resist infection.

Q8: What diseases do immunizations prevent?

- Depending on the standard immunization schedule at each country, a vaccinated child is protected against diseases such as: Diphtheria, Tetanus, Pertussis, Polio, Measles, childhood tuberculosis meningitis, disseminated tuberculosis, Hepatitis B, Meningococcal disease, Pneumococcal disease, Mumps and Rubella.

Q9: Why is it important to keep a vaccine record card?

- Without a record or proof of having had a disease the child is considered unimmunized and unprotected.
- The caregivers of a child must keep a vaccination record card
- The caregivers must take the vaccination card when taking the child to the health centre
- The caregivers should make sure the health care provider completes the vaccination record card when the child is immunized
- The vaccine record card may be needed later on to register the child for school or other things depending on each country policies

CHILD INTERVENTION 6: HAND WASHING WITH SOAP

Definition

Key points:

- Hand washing should ideally be performed under running water from a regular tap, from a Tippy Tap, or under water poured from a cup, jug or some other kind of vessel.
- Soap can be any type of proprietary bar soap, powder soap or liquid soap – or home-made soap.
- Suitable soap substitutes for hand washing at home include wood ash or other home-made hand cleaning products considered suitable by local health workers e.g. lemon?
- In warm climates it is recommended to dry hands by shaking them - air drying
- In cold climates recommended methods of hand drying are with disposable paper towels, hot air driers or freshly laundered towels.

The target hand washing moments (or critical control points)

Birth attendants:

- Before touching the mother
- Before handling the newborn
- After delivery

Laboring mothers:

- Before delivery
- Before handling the newborn

Mothers and caregivers:

- Before handling the newborn
- Before preparing food, and complementary food for the child
- Before eating
- After going to the toilet
- After changing a baby's nappy and/or clothing
- After disposing of baby and/or infant poop
- After assisting the infant with toileting
- After cleaning the infant's potty
- After giving care to an infected or at-risk person
- After contact with pets of domestic animals
- After handling raw meat, poultry or fish

Others:

- After contact with faeces
- After giving care to an infected or at-risk person
- After contact with pets or domestic animals
- After handling raw meat, poultry or fish
- Before contact with food
- Before handling the newborn
- The caregiver should also help the small child to wash his/her hands before eating!

Questions & Answers

Q1. Why is hand washing important?

- Hand washing can greatly reduce the chance of getting infections; mostly infections of the stomach and intestines, but also respiration (breathing) and skin infections
- Hand washing can reduce the risk of diarrhea by 40%. This makes hand washing the best thing you can do to avoid diarrhea!
- Hand washing in a community can help to prevent outbreaks of cholera and different kinds of flu
- If childbirth takes place where there is not good hygiene, there is three times more chance that the mother could die. This is true both for births in the clinic or at home.
- A clean birth leads to less risk of the mother dying or of the newborn getting an infection
- It is very important to wash hands when handling a newborn because they can easily get infections.

Q2. Who is hand washing important for?

- Hand washing with soap is a good hygiene practice for everyone. Frequent hand washing is recommended as hands can quickly become dirty again after washing.
- Hand washing is very important for the mother, other caregivers and the child.

Q3. What are the benefits of hand washing?

- Besides reducing the risk of diarrhea and infections, washed hands smell nice. A person can feel better when hands are clean. Babies and infants dislike dirty hands.

Q4. What is the correct way to wash hands?

- Hand washing method for birth attendants: Insert text plus illustration
- Hand washing method for mothers, caregivers and others: Insert text plus illustration
- Washing newborns' and infants' hands: Insert text plus illustration

Q5. Does the water need to be clean?

- Clean water is essential for birth attendants and laboring mothers.
- For situations that are less risky than childbirth, clean water is somewhat less essential.

Q6. How much water is needed?

- Hand washing can be done with small amounts of water by following the four steps - wet, soap, rub and rinse. There is no need for taps to be running fully open and they can be closed when the hands are being soaped and rubbed.

Q7: What is a Tippy Tap?

- The Tippy Tap is a homemade device designed to dispense small amounts of water.
- Two commercially available hand washing 'stations' for household use are the Mrembo⁵ and the Happy Tap⁶.

Q8. What should be done with the waste-water?

- In places where water is hard to get, the waste-water can be collected in a bowl or bucket for watering plants or sprinkling on the ground in the homestead. If it isn't necessary to re-use the water, it should be properly drained away to avoid accumulation of stagnant water.

Q9: We can't afford soap. Are there other alternatives, like ash?

- Wood ash is the most commonly mentioned suitable substitute for soap. An alternative to bar soap is homemade soap solution using ash and sodium bicarbonate; or made by dissolving soap powder or detergent in water.
- In some places there maybe be a traditional way of making a hand-cleaning product from local plants.
- In the absence of any of these, vigorous rubbing under flowing water is next best.

Q10: When should mothers and other caregivers wash their hands?

- Before handling the newborn
- Before preparing the family's food, or complementary food for the child
- Before eating
- After going to the toilet
- After changing a baby's nappy and/or clothing
- After disposing of baby and/or infant poop
- After assisting the infant with toileting
- After cleaning the infant's potty
- After giving care to an infected or at-risk person
- After contact with pets of domestic animals
- After handling raw meat, poultry or fish
- Mothers should also help their small children wash their hands

Q11. I sometimes forget to wash my hands – how can I remember?

- Locating the hand washing facility close to where the hand washing moment takes place can be a powerful reminder. If this is not practical, an alternative is to place an eye-catching visual reminder close to where the hand washing moment takes place. Seeing other people hand washing can also serve as a powerful reminder.

⁵ Mrembo hand washing station for rural Kenyan households: <https://vimeo.com/83795806>

⁶ Happy Tap hand washing station for Vietnamese households: <http://www.watershedasia.org/usaaid-and-launches-innovative-handwashing-device-at-investor-forum-in-vietnam/>

Q12. Does it also help to keep my finger-nails short?

- Short fingernails are less likely to conceal dirt – hence nails and hands are easier to clean.

Q13. How do other hand washing methods compare with soap and water?

- Washing hands with *hot* water and soap can be more efficacious than cold water and soap, although the amount and vigour of rubbing will affect results.
- Alcohol-based hand sanitizers (ABHS) don't require water and hands can be air dried after application.
- Both water and soap and ABHS are effective in producing a significant reduction in bacteria and viruses on the hands, though some bacteria are more stubborn than others. In hospital settings, other specialized hand sanitizing gels or foams are recommended for meeting specific infection control needs.

CHILD INTERVENTION 7: ORAL REHYDRATION THERAPY/ZINC

Definition

The definition of diarrhea is three or more watery stools per day. Diarrhea can lead to dehydration which is dangerous and must be treated. Oral rehydration therapy refers to giving the patient fluids to prevent and/or correct the dehydration that is a result of diarrhea. Oral rehydration solution is a sodium and glucose solution used to treat dehydration and is usually available in health posts or other outlets. Zinc supplementation is also important in the treatment of diarrhea, as prescribed by health staff per national policy.

Target behaviors:

- Know the definition of diarrhea: three or more watery stools per day
- Give ORS to children with diarrhea, or prepare a homemade sugar/salt solution if ORS is not available
- Continue feeding/breastfeeding children with diarrhea
- Give zinc to children with diarrhea per national guidelines and health facility instructions
- If diarrhea increases, and/or vomiting persists and/or the child is dehydrated or has other danger signs, take immediately to the health facility

Questions & Answers

Q1. What is Oral Rehydration Therapy?

- ORT is giving the patient fluid by mouth to prevent and/or correct the dehydration that is a result of diarrhoea.
- As soon as diarrhoea begins, treatment using home remedies to prevent dehydration must be started.
- If adults or children have not been given extra drinks, or if in spite of this dehydration does occur, they must be treated with a special drink made with oral rehydration salts (ORS).

Q2. What is dehydration and why do children get dehydrated?

- Dehydration is the loss of body fluid through diarrhoea or vomiting. When a child has 3 or more loose or watery stools in a day, he or she is said to have diarrhoea. When there is diarrhoea, the bowel does not work normally, and more water and salt pass from the blood into the bowel. Thus, more than the normal amount of water and salts are passed in the stool. The more diarrhoea stools a child passes, the more water and salts he or she loses. This results in dehydration.
- Dehydration can also be caused by a lot of vomiting, which often accompanies diarrhoea.
- Dehydration occurs faster in infants and young children, in hot climates, and when there is fever.

Q3. How do you prevent dehydration?

- Dehydration can usually be prevented by drinking more fluids such as gruel, soup, rice-water or coconut water, and also increasing the frequency of breastfeeding, or giving milk feeds prepared with twice the usual amount of water as soon as the diarrhoea starts.
- If dehydration occurs, the child should be brought to a community health worker or health centre for treatment. The best treatment for dehydration is oral therapy with a solution made with ORS.

Q4. What are the symptoms of dehydration?

- As dehydration increases, signs and symptoms develop. These include: thirst, restless or irritable behaviour, decreased skin tightness, dry mucous membranes, sunken eyes, sunken fontanel (in infants), and absence of tears when crying vigorously.
- Dehydration progresses from mild to moderate to severe. Severe dehydration is very dangerous and will lead to death if not corrected.

Q5. Why do people get diarrhoea and how do you prevent it?

- Dirty drinking water, poor sanitation, and infection can lead to diarrhoea, which is the second leading killer of children around the world.
- The following precautions help prevent diarrhoea
 - Exclusive breastfeeding for babies under 6 months of age
 - Use of clean water for drinking and washing
 - Hand washing
 - Use of latrines
 - Quick and sanitary disposal of babies' stools
 - Measles immunization

Q6. How do you treat diarrhoea?

- The most important parts of treatment of diarrhoea are:
 - Prevent dehydration from occurring if possible,
 - Treat dehydration quickly if it does occur,
 - Give zinc supplements for 10-14 days, depending on the availability of supplies and national policy
 - Continue feeding the child

Q7. What is ORS? Is it safe to give it to a child?

- ORS is a sodium and glucose solution used to treat children with acute diarrhoea. The packets of ORS are widely available in pharmacies, shops, and health centres. A packet of ORS is to be mixed with the recommended amount of clean water. Although these 'salts' are specially made for the treatment of dehydration, they can also be used to prevent dehydration. The packet is used by doctors and health workers to treat dehydrated children. But it can also be used in the home to prevent dehydration.

- ORS is safe. It has proven effective in the treatment of dehydration and without apparent adverse effects in worldwide use. It has contributed substantially to the reduction child deaths from diarrhoeal disease.
- ORS does not stop the diarrhoea, but it replaces the lost fluids and essential salts thus preventing or treating dehydration and reducing the danger.

Q8. In case ORS is not available, what should be given to a child with Diarrhoea?

- Mothers can use household liquids, preferably those that have been boiled, such as rice water or carrot soup. Ideally these drinks should contain starches and/or sugars as a source of glucose and energy, some sodium and preferably some potassium.
- A simple salt/sugar solution, if these ingredients are available, is also suitable for early oral rehydration therapy. 1/2 teaspoon of salt should be mixed with 6 level teaspoons of sugar in a litre of drinking water. People need to be carefully instructed in how to mix and use the solutions.
- Molasses and other forms of raw sugar can be used instead of white sugar, and these contain more potassium than white sugar. Do not use too much salt. If the solution has too much salt the child may refuse to drink it. Also, too much salt can, in extreme cases, cause convulsions. Too little salt does no harm but is less effective in preventing dehydration. (A rough guide to the amount of salt is that the solution should taste no saltier than tears.)

Q9. How do you manage a child who has diarrhoea?

- Plan A. The first step is to prevent dehydration by giving more fluid and continuing to feed the child at home:
 - give extra fluid (as much as the child will take)
 - give zinc supplements
 - continue feeding
- Plan B: Treat some dehydration with ORS
 - Give in clinic recommended amount of ORS over 4-hour period. Follow the instructions given by the clinic staff, or written on the packet
 - If the child wants more ORS than shown, give more.
 - For infants under 6 months who are not breastfed, also give 100-200 ml clean water during this period.
 - Give frequent small sips from a cup
 - If the child vomits, wait 10 minutes. Then continue, but more slowly.
 - Continue breastfeeding whenever the child wants.
 - Reassess the child after 4 hrs
- Plan C: Treat severe dehydration quickly at the health facility

Q10. When and how do you give ORS to a child with diarrhoea? 11 things you should know about rehydrating a child.

1. Wash your hands with soap and water before preparing solution.
2. Prepare a solution, in a clean pot, by mixing the ORS with one litre of clean drinking or boiled water (after cooled). Stir the mixture till all the contents dissolve
3. If ORS is not available you can mix half (1/2) teaspoon salt and six (6) teaspoons sugar with one litre of clean drinking or boiled water.
4. Wash your hands and the baby's hands with soap and water before feeding solution.
5. Give the sick child as much of the solution as it needs, in small amounts frequently.
6. Give child alternately other fluids - such as breast milk and juices.
7. Continue to give solids if child is six months or older.
8. If the child still needs ORS after 24 hours, make a fresh solution.
9. ORS does not stop diarrhoea. It prevents the body from drying up. The diarrhoea will stop by itself.
10. If the child vomits, wait ten minutes and give it ORS again. Usually vomiting will stop.
11. If diarrhoea increases and /or vomiting persists, take the child to a health clinic.

Q11. If the child with diarrhea is also vomiting, what would you do?

- If child vomits, wait ten minutes and give it ORS again. Usually vomiting will stop.
- If diarrhoea increases and /or vomiting persists, take child over to a health clinic.

Q12. What is Zinc and how does it help in the treatment of Diarrhoea?

- Zinc is an important micronutrient for a child's overall health and development. Zinc is lost in greater quantities during diarrhoea. Replacing the lost zinc is important to help the child recover and to keep the child healthy in the coming months
- Giving zinc decreases the duration and severity of diarrhoea and the likelihood of future diarrhoea episodes in the 2-3 months following

Q13. How is Zinc administered?

- Zinc and ORS can be given at the same time while your child has diarrhoea. Zinc is given once a day. Give the zinc at a time of day that is easy for you to remember and repeat every day until all zinc tablets are gone. Dissolve the tablet in a little bit of clean water and give it to the child to drink it. ORS needs to be given throughout the day while your child has loose stools.

Q14. Is it safe to take Zinc and ORS while taking other medications such as antibiotics, ARVs, etc.?

- The only side effect of zinc is sometimes vomiting. You should not expect any other side effects. As always, you should see a health centre if your child has any danger signs with or without the zinc supplements
- Yes, you can give zinc with other medicines. Only give your child medicines that are prescribed at the clinic or by a community health worker

Q15. Is it advisable to continue feeding a child with diarrhoea?

- Yes, continue to feed your child and offer an extra meal each day. If your child will eat more than usual, allow him or her to do that. When food is given, sufficient nutrients are usually absorbed to support continued growth and weight gain. In contrast, children whose food is restricted or diluted lose weight and have diarrhoea of longer duration
- For children exclusively breastfeeding, give breastmilk more frequently and for longer at each feed.
- If not exclusively breastfed, increase fluid. For example, give soup, rice water, yoghurt drinks or clean water.
- Children with diarrhoea over 6 months of age need to be offered frequent small meals and must be encouraged to eat.

Q16. When should a mother/ care giver take a child with Diarrhoea to a health center?

- If the child shows signs of dehydration
- If the cannot drink or eat, or is very thirsty;
- If the child has many watery stools, or is vomiting a lot
- If there is blood in the stools.
- If the child has a fever and bloody diarrhoea,
- In case of convulsions in a child with diarrhoea

Q17. Is it good to give Antibiotics and Antidiarrheal for diarrhoea?

- Many mothers think their baby needs an antibiotic or some sort of 'drug' to treat the diarrhoea episode. Antibiotics are only recommended for children with bloody diarrhoea and episodes of cholera.
- Giving the mother zinc will likely help with this because zinc decreases the duration of the diarrhoea. Continue to discourage the mother from going to local pharmacies or markets for additional antibiotics or Antidiarrheal.

CHILD INTERVENTION 8A: PREVENTION, CARE SEEKING AND TREATMENT FOR ACUTE RESPIRATORY INFECTION

Definition

Acute respiratory infections such as colds, coughs, sore throats and runny noses are common in children. But in some children, acute respiratory infection can progress to more serious illnesses such as pneumonia which could prevent normal breathing. Pneumonia accounts for 15% of all death in children under 5 years.

Target Behaviours:

- **Recognise** ordinary coughs and colds (uncomplicated acute respiratory infection) from pneumonia and its danger signs
- **Care** of a child with cough and cold by keeping warm and encouraging to eat and drink as much as possible. The nose of a child with a cough and cold should be cleared often, especially before the child eats or goes to sleep
- **Protect** children from pneumonia including promoting exclusive breastfeeding and adequate complementary feeding
- **Prevent** pneumonia with full immunization, hand washing with soap, reducing household air pollution, HIV prevention and cotrimoxazole prophylaxis for HIV-infected and exposed children
- **Treat** pneumonia focusing on making sure that every sick child has access to timely and the right kind of care either from a community-based health worker, or in a health facility if the infection is severe where the child can get the antibiotics and oxygen they need to get well.

Questions and Answers

Q1. What is the difference between ordinary coughs/colds and pneumonia?

- Children with ordinary coughs or colds, runny noses or sore throats do not have difficulty in breathing and they do not have a fever.
- A child with a cough and fever, and having difficulty breathing should be considered as pneumonia and checked by a trained health worker immediately.

Q2: How dangerous is pneumonia?

- Very dangerous. Pneumonia remains one of the three leading infectious causes of death in children younger than 5 years, and caused 1.3 million deaths in 2011.
- The global case-fatality ratio for severe pneumonia is 9% (9 out of 100 children with pneumonia die).

Q3. What are the danger signs of pneumonia?

- The child is breathing much faster than usual
- The child is breathing with difficulty or gasping for air
- The lower part of the chest sucks in when the child breaths in, or it looks as though the stomach is moving up and down
- The child has had a cough for more than 3 weeks
- The child is unable to breastfeed or drink
- The child vomits frequently

Q4. How do I know that a child is breathing too fast?

- Count the breaths per minute of the child and depending on the age, fast breathing can be determined as follows:
 - From birth to 59 days – more than 60 breaths a minute
 - 2 months to 12 months – 50 breaths a minute or more
 - Over 12 months to 5 years – 40 breaths a minute or more

Q5: How can I know the difference between pneumonia and an asthma attack in my child?

- Both diseases are grave and a child could die from either one of them; therefore bringing the child to the health facility is important.
- There are some differences, although both conditions affect the respiratory system. Pneumonia is always accompanied by fever, asthma is not. Pneumonia is an acute disease, therefore is most likely accompanied by a general feeling of being sick (fatigue, headache, sweating or chills); Asthma usually is a chronic disease and usually is not accompanied by these symptoms. Both diseases have cough, but this symptom has different quality. In Asthma, cough is usually DRY with no production of sputum; in Pneumonia cough is usually MOIST with production of green sputum.

Q6. What are likely causes of pneumonia?

- Pneumonia can be caused by viruses, bacteria and fungi
- A child who has a prolonged cough that persists for more than 3 weeks, may have tuberculosis, an infection in the lungs.

Q7: Is pneumonia contagious – can it be passed from one person to another?

- The germs that cause pneumonia are usually found in the mouth and nose of the infected person. They can be spread easily to another person, either through the air or by touching a contaminated surface. Typically, they enter the person's body through their mouth, nose, or eyes. When this happens, a battle begins -- the person's immune system tries to kill the germs, while the germs try to multiply.
- Although a person with pneumonia is contagious, that person's germs are more likely to cause an upper respiratory infection in another person (such as the common cold) than pneumonia. This is because many of the viruses and bacteria that cause people to get pneumonia are the same ones that cause upper respiratory infections.

Q8. Who is at risk of pneumonia and other breathing illnesses?

- Children living in an environment with smoke such as tobacco or cooking fires are at risk
- Children with weak immune systems (weak 'soldiers' in the body)
- Malnourished children
- Complications from other infections, for example measles, chickenpox

Q9. What should I do if my child is suspected of having pneumonia?

- Do not treat at home
- The child should be taken immediately to a trained health worker who can also provide a referral to a health facility if required.

CHILD INTERVENTION 8B: PREVENTION, CARE SEEKING AND TREATMENT FOR MALARIA

Definition

Malaria is caused by a parasite called Plasmodium, which is transmitted via the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells.

Target Behaviours

- Child is tested immediately if she/he has a fever, refuses to eat or has vomiting, diarrhoea, drowsiness or fits in an endemic area.
- Seek treatment for malaria for the child, and should be treated with Artemisinin based combination therapies (ACTs). The child must take the full course of treatment
- Child sleeps under a long-lasting insecticide-treated net every night

Questions and Answers

Q1. What causes malaria?

- Malaria is caused by a parasite called Plasmodium, which is transmitted through the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect the blood.

Q2: What are the symptoms of malaria?

- Symptoms of malaria include fever, headache, and vomiting
- These symptoms usually appear between 10 and 15 days after the mosquito bite. .
- If not treated, malaria can quickly become life-threatening by disrupting the blood supply to vital organs.
- Pregnant women are at higher risk of dying from the complications of severe malaria.

Q3. What are the signs that the malaria is very serious?

- Very pale - anaemia
- Severe vomiting
- Convulsions
- Severe malaria is more commonly seen in children

Q4. What can be done to prevent malaria?

- Sleeping under long-lasting insecticidal nets protects against malaria
- Indoor spraying with an insecticide is the most effective way to rapidly reduce malaria transmission
- Early diagnosis and prompt treatment of malaria prevents deaths

Q5: Why is malaria so serious in children under 5?

- Children under five years of age are one of most vulnerable groups affected by malaria.
- Where malaria is very common, people become partly immune to it during childhood. In these places, the majority of the malaria illnesses - and the majority of the serious cases of malaria that lead to death - occurs in young children before they have become partly immune.
- It is more common to see severe malaria in children than in adults
- As with any patient, children with suspected malaria should have a malaria test, as long as getting the test doesn't significantly delay treatment. Children with malaria should be appropriately treated as quickly as possible

Q6: What about malaria in infants?

- Newborns and infants less than 12 months of age are one of most vulnerable groups affected by malaria.
- During pregnancy, malaria infection in the mother cause low birth weight and result in infant death.
- In areas where malaria is common, the newborn will get some malaria immunity from its mother at birth. However, this is almost gone by the time the infant reaches 3 months of age.
- Infants are at increased risk of rapid disease progression, severe malaria and death. Severe anaemia is particularly common in this age group.
- WHO recommends the following package of interventions for the prevention and control of malaria in infants:
 - use of long-lasting insecticidal nets (LLINs);
 - intermittent preventive therapy for infants (IPTi) in areas of moderate to high transmission in sub-Saharan Africa;
 - prompt diagnosis and effective treatment of malaria infections.

Q7: Should those of us living in Africa do anything special to prevent malaria?

- WHO recommends the following:
 - In areas with seasonal malaria of the **Sahel** sub-region of Africa, seasonal malaria chemoprevention (SMC) for children aged between 3 and 59 months
 - In areas of moderate-to-high transmission in sub-Saharan Africa, intermittent preventive therapy for infants (IPTi), except in areas where WHO recommends administration of SMC

CHILD INTERVENTION 9: PREVENTION, CARE SEEKING AND TREATMENT FOR ACUTE MALNUTRITION

Definitions

Acute Malnutrition: Also known as 'wasting,' occurs as a result of recent rapid weight loss or a failure to gain weight, most often caused by insufficient food intake, disease, inappropriate childcare practices or a combination of these factors. Visible signs of wasting include thinness and bilateral oedema. Children under 5 years of age with a weight for height z-score (WHZ) < -2 and/or MUAC < 12.5 cm, and/or bilateral oedema suffer from acute malnutrition.

Moderate Acute Malnutrition (MAM): Children under 5 years of age with a WHZ ≥ -3 SD and < -2 SD, or a MUAC of ≥ 11.5 cm and < 12 cm.

Severe Acute Malnutrition (SAM): Children under 5 years of age with a WHZ < -3 SD, or a MUAC or < 11.5 cm and/or bilateral oedema.

Mid-Upper Arm Circumference (MUAC): a measure of acute malnutrition in which the circumference of the upper arm is measured using a MUAC

Bilateral Oedema: fluid retention on both sides of the body. It is a visible sign of severe acute malnutrition.

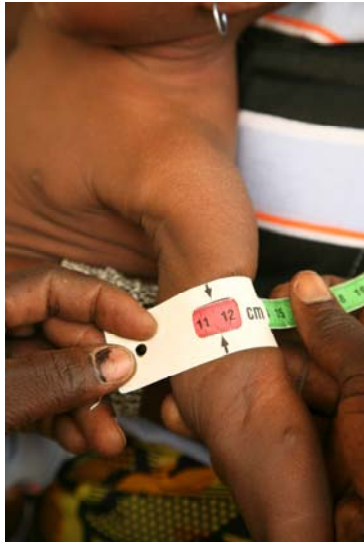
Community-based Management of Acute Malnutrition (CMAM): is an approach for the treatment of acute malnutrition. The majority of children are treated in the community using ready-to-use therapeutic food (RUTF) and weekly visits to a health post for medical checks and routine medicines.

Ready-to-Use Food (RUF): any food that is designed to be eaten straight from the packet, without the need for cooking, dilution, or other preparation.

Ready-to-Use Therapeutic Food (RUTF): contains all of the energy and nutrients necessary to allow for rapid catch-up growth and is used particularly in the treatment of children from 6 months of age with severe acute malnutrition who have appetite and no medical complications.

Ready-to-Use Supplementary Food (RUSF): are meant to provide only part of the daily energy and nutrient requirements. RUSF is used in the treatment of moderate acute malnutrition.





Questions & Answers

Q1: What is acute malnutrition?

- Acute malnutrition, which is also known as 'wasting,' occurs when there is recent rapid weight loss or a failure to gain weight. This is most often caused by insufficient food, disease, inappropriate childcare practices or a combination of these factors.
- Visible signs of wasting include thinness and bilateral oedema as in the pictures of the feet on the previous page. There are ways to measure if a child has acute malnutrition

Q2: What is the difference between Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)?

- Children will be given these diagnoses based on specific measurements. SAM is more serious and life-threatening than MAM.

Q3: What is bilateral oedema?

- Bilateral oedema is fluid retention on both sides of the body, as in the pictures of the feet on the previous page. It is a visible sign of severe acute malnutrition

Q4: What is MUAC?

- MUAC means 'Mid-Upper Arm Circumference' and it is a measure of acute malnutrition in which the upper arm of the child is measured, as in the photo above.

Q5: What is CMAM?

- CMAM means Community-based Management of Acute Malnutrition, and it is a way of treating acute malnutrition in the community instead of the clinic. The majority of children are treated in the community using ready-to-use therapeutic food (RUTF) and weekly visits to a health post for medical checks and routine medicines

Q6: What is RUF and RUTF?

- RUF is Ready-to-Use Food, and it is any food that is designed to be eaten straight from the packet, without the need for cooking or other preparation.
- RUTF is Ready-to-Use Therapeutic Food. It contains all of the energy and nutrients necessary so that children with acute malnutrition can rapidly catch up in their growth. It is used particularly in the treatment of children from 6 months of age with severe acute malnutrition who have no appetite and no medical complications

Q7. How 'big' of a global problem is acute malnutrition?

- At any given time an estimated 52 million children are acutely malnourished. Most of these children are living in places that are not in emergency situations; rather, this is 'normal life'.
- The majority of wasted children are found in Asia, followed by Africa.
- It is estimated that less than 15% of acutely malnourished children are receiving the required treatment.

Q8. Why is prompt treatment essential for a child with acute malnutrition?

- Children with moderate or severe acute malnutrition are at much higher risk of dying compared to healthy, well-nourished children.⁷ Severe acute malnutrition is considered a life-threatening emergency—prompt and effective treatment is urgently required to prevent death.
- Acute malnutrition increases the risk of disease and also affects a child's overall growth and development.⁸

Q9. How is acute malnutrition detected?

- Acute malnutrition is identified by looking for visible signs—thinness and oedema—and by measuring the child's weight, height and MUAC.
- Most government protocols for the management of acute malnutrition recommend using MUAC to screen for acute malnutrition at the community level. Volunteers can be trained in this simple procedure and can refer children with acute malnutrition to treatment facilities.

Q10. How can acute malnutrition be prevented?

- The causes of acute malnutrition are similar to those of stunting and micronutrient deficiencies, therefore, strategies to address other forms of malnutrition will help to prevent wasting.
- Preventive actions such as improved infant and young child feeding and good hygiene and sanitation are important.

⁷McDonald CM, Olofin I, Flaxman S, Fawzi WW, Spiegelman D, Caulfield LE et al.; Nutrition Impact Model Study. The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. *Am J Clin Nutr*. 2013; 97(4): 896–901. doi:10.3945/ajcn.112.047639.

⁸Khara T, Dolan C. Technical briefing paper: Associations between wasting and stunting, policy, programming and research implications. Oxford: Emergency Nutrition Network; 2014 (<http://www.enonline.net/waststuntreview2014>)

Q11. What is the treatment for acute malnutrition?

- Children with acute malnutrition require timely and effective treatment in order to prevent serious illness and death.
- The recommended treatment is called Community-based Management of Acute Malnutrition (CMAM). The CMAM approach has four components:
 - Supplementary Feeding Programme (SFP) for moderate acute malnutrition,
 - Outpatient Therapeutic Programme (OTP) for severe acute malnutrition,
 - Stabilization Care for complicated case of acute malnutrition.
 - The fourth component of CMAM is Community Mobilization. This refers to a range of activities that build a relationship with community members and build the capacity of the community for early detection of acute malnutrition, referral and prevention. Community mobilization is an essential step to ensure that children requiring care in the community are accessing it.
- Most CMAM programmes are implemented within the primary health care system, managed by the Government, with support of local partners and the UN.

Q12. What if CMAM services are not available?⁹

- If there is no Outpatient Therapeutic Programme, the first response should be treatment of Severe Acute Malnutrition (SAM) at an in-patient facility; that is to say, at a hospital.
- If a Supplementary Feeding Program ration is available, all SAM children should be given a ration rather than nothing at all. In some places, SAM children have been given a double SFP ration until the special Ready-to-use Therapeutic Food
- Children with Moderate Acute Malnutrition (MAM) can be enrolled in Positive Deviance/Hearth programmes if other treatment services are not locally available.

Q13. Can local foods be used to treat acute malnutrition?

- It is important to remember that SAM children require specialized care due to their unique physical needs as a result of acute malnutrition. They cannot handle a normal diet and often refuse food due to their weakened physical state. As a result, international protocols such as CMAM have been developed to ensure the safe and effective rehabilitation of children with severe acute malnutrition. In the absence of supplementary feeding programmes, local foods can be used to treat moderate acute malnutrition; however, such children should be assessed by medical personnel to screen for medical complications.¹⁰

Q14. Can RUTF be made locally?

- RUTF can be produced locally using simple equipment; however, it is a complex process requiring strict quality control and hygienic practices. Many attempts to make local RUTF have been unsuccessful.

⁹ Currently, there is no evidence-based guideline for the treatment of SAM (without complications) in the absence of RUTF. The above recommendations are comments provided by Valid International

¹⁰ There are no agreed upon protocols for the treatment of moderate acute malnutrition using local foods.

CHILD INTERVENTION 10: PREVENTION AND CARE SEEKING AND TREATMENT FOR PAEDIATRIC HIV

Background

The vast majority of babies who get HIV acquire it from their mothers. HIV transmission from the mother to her child can occur during pregnancy or birth, or by breast feeding. However, there are means of preventing the passing of HIV from mother to child through use of drugs (antiretrovirals). And those who do become infected can receive treatment, care and support that allow them to live normal lives.

Globally, despite significant strides in increasing the number of people put on life-saving antiretroviral therapy, the number of HIV positive children on treatment is still very low. Data from WHO shows that by the close of 2012 only one third of children who needed antiretroviral treatment were receiving it. In order to reverse this trend, there is a need for concerted effort to increase the percentage of HIV infected children receiving antiretroviral therapy.

Target Behaviors

- HIV exposed children receive antiretroviral therapy for prevention of HIV transmission
- HIV exposed children are tested for HIV at 6 weeks and 18 month or once they have stopped breast feeding
- HIV positive children seek early care and treatment
- HIV Positive children adhere to antiretroviral therapy

Q1: How is HIV transmitted in children?

- The most common way is that an HIV-positive mother transmits the infection to her baby. The infection can be passed from the mother to the baby during pregnancy or child birth, or through breast feeding.
- Children can also get infected if they receive a blood transfusion with HIV infected blood, or if punctured with contaminated needles or razors.
- A child can become infected with HIV if he or she is the victim of sexual abuse

Q2: Are there ways of preventing an HIV-positive mother from transmitting HIV to her baby?

- Yes! One of the ways is by giving both the mother and the child medication (antiretrovirals) that helps prevent HIV transmission. The mother takes the medication during pregnancy and throughout the time period that she is breast feeding. The baby is given a syrup. This is called 'Prevention of Mother to Child Transmission', or PMTCT.
- If PMTCT is administered correctly, mother to child transmission can be completely eliminated!
- The new guidelines from WHO recommend that ALL HIV-positive pregnant women should receive antiretroviral therapy, regardless of the stage of their illness. This strategy is often referred to as option B plus.

Q3: At what age can a child be tested for HIV?

- The baby can be tested using modern HIV testing methods during the first 4-6 weeks of life.
- If the modern tests are not available, then the routine tests like those used for adults, can only confirm if a child has HIV from 18 months onwards.
- This is because the method used in adults tests for the presence of **antibodies** in the blood. Antibodies are like soldiers fighting the HIV and they will show up in the body if the person has HIV. However, in the case of the young baby born to an HIV-positive women, he or she has received some of the mother's antibodies. If the baby is tested in this way the results may show that he or she is positive but this could actually be from the mothers antibodies which are circulating in the baby's blood and may not mean that the baby himself or herself has HIV.

Q4: If it is better to test the baby with the modern testing methods, why isn't that test available everywhere?

- Unfortunately due to high costs, the modern testing is only available in limited places. However, sometimes blood can be collected from children and taken to a laboratory where the service is available. You should find out what the situation is in your country or your area.

Q5: When should an HIV positive child start antiretroviral therapy?

- An HIV positive child below the age of 5 years should start antiretroviral therapy immediately
- Children above 5 years are started based on their CD4 count, and based on the stage of illness they are in as determined by the health workers. The CD4 test counts defense cells in the body, commonly referred to as "soldiers". The fewer "soldiers" there are, the weaker the body is. When the number of soldiers gets too low, health workers will start the child on treatment.

Q6: Why is it important for a child to start treatment early?

- Children have developing body defense systems that are fragile and can be more easily destroyed by HIV than in people with more developed systems. For this reason it is important that children are started early on treatment before their defense systems have been destroyed in order to have better outcomes.
- For HIV positive children who are not put on antiretroviral treatment, one third of them die before their first birthday and half before their second. Therefore it is of utmost importance that children are put on antiretroviral therapy early in order to reverse this trend.

Q7: Why is it so important for children to take all their HIV medication as instructed?

- If the patient does not adhere to the treatment all the time then there is a risk of the virus becoming resistant to the drugs, and making the drugs ineffective. When patients adhere 100% it is like the drugs are giving the virus a hard punch. But if it is less than 100% then the virus is only getting slapped, and the virus gets used to that and so the drug doesn't work as well anymore.
- Resistance of the virus to HIV drugs is a big challenge to the overall health system because alternative drugs are more expensive and many governments are not able to afford them.

Q8: At what age should an HIV-positive child be told that he or she has HIV, and why is it important to tell them?

- There is no specific age when a child should be told, but the parents or guardian of the child should disclose this information to the child at the earliest opportunity when they feel the child can understand and is psychologically ready. The process for telling younger children may be done in steps with children being given information in bits until eventually full information has been given
- It is important that the HIV status of children is known to them so they understand why they are taking the medication, and this will make it more likely that he or she will adhere to the treatment. This is especially important with HIV positive adolescents.

Q9: What support is available for parents who are finding it difficult to tell their child that he or she is HIV positive?

- The support that parents can receive varies from country to country and also from one location to another however, support that is commonly available can be obtained from family members, health workers, counselors, community volunteers, support groups etc.
- Parents or guardians can be supported on how to disclose to children from the clinic where the child is receiving treatment. It is usually best if the parent is the one that discloses the HIV status to the child rather than them finding out from someone else.

Q10: What food is recommended for a child taking antiretroviral therapy?

- The main goal for nutrition in both adults and children is to ensure that individuals receive a balanced diet. In children it is particularly important that they receive adequate amounts of food as their bodies are rapidly growing.
- Generally speaking there is no special diet that is required for an HIV positive child if they are on a balanced diet. However; it is highly desirable that their diet contains adequate vitamins to boost their immunity, since HIV tends to weaken immune systems.
- It is also important that growth monitoring is carried out routinely so that children who develop malnutrition are picked up early and provided the necessary care and support early. The monitoring of children may be done using the child health card/chart.

Q11: What about breastfeeding the HIV-positive baby?

- For babies up to 6 months breast milk alone is sufficient to provide the nutrients required.
- However, breastfeeding poses a risk of repeat transmission of HIV from the mother to the child, known as re-infection. **If an HIV-positive baby is re-infected through breastmilk.....(what?)**
- On the other hand in developing country settings, children who are not breast fed are more likely to die due to infection or malnutrition related causes.
- For this reason there are very specific recommendations about breastfeeding when the mother, or both the mother and the baby, are HIV+. See Child Intervention I, Question 16, which explains these recommendations.

CHILD INTERVENTION 11: DEWORMING

Definition: Soil-transmitted helminths (STHs) and Schistosomiasis are caused by parasitic worms, and are diseases of poverty. They can be effectively treated with medicines, but require combined water, sanitation and hygiene interventions to control spread and re-infection.

STH affects the health and livelihoods of over one billion people worldwide, and undermines global development efforts. Treating women of childbearing age and young children for STHs and Schistosomiasis can play a major role in strengthening maternal, newborn and child health.

Target behaviors:

- Starting at 6 months of age, children in endemic areas receive de-worming medication every 6 months, per national government protocols
- Caregivers and children practice good sanitation and hygiene
- Children do not walk barefoot

Questions and Answers

See **Pregnant Woman Intervention 2b** for basic information on worms and deworming

Q1: What are the symptoms of worms in children?

- Stomach problems such as diarrhoea and abdominal pain,
- General tiredness and weakness,
- Lowered immunity,
- Malnutrition,
- Stunted growth and delayed development,
- Intestinal blockages which may require surgery and
- Chronic intestinal blood loss that result in anaemia (caused by hookworms).

Q2: Why do we need to treat worms in children?

- Worm infections pose a serious threat to children's health, education, and productivity. Globally, more than 500 million children are infected with intestinal worms which impacts their growth and development.
- Soil-transmitted helminthes infections in children can cause:
 - Decreased nutritional status (causing intestinal bleeding, loss of appetite, diarrhoea or dysentery, and reduced absorption of micronutrients – including Vitamin A)
 - Decreased appetite which can contribute to malnutrition
 - Worsening of school performance and absenteeism
 - Complications that require surgical intervention
 - Decreased ability of the immune system to fight infections.
- Worm infections often exist with other more severe infections such as HIV, Malaria and TB. They may therefore have additional negative effects on nutritional status, immune response and organ damage.

- Intestinal worms are associated with a significant loss of micronutrients among preschool-age children, and these deficiencies during childhood can cause poor learning and development, stunted growth, blindness, and problems with immune function.
- STH's can weaken the effectiveness of vaccines in children.
- The constant and lifelong immune suppression (weakening the body's "soldiers") due to worm infections can reduce the body's lifelong capacity to resist other infections.

Q3: Are there any side effects to deworming medication?

- Yes, but they are usually not severe and do not last long. Side effects more common in those that have worm infestation. Side effects are abdominal discomfort/pain, headaches, nausea

OTHER: BIRTH REGISTRATION

Definitions

Birth registration is the official recording of a child's birth by the State. It is a permanent and official record of a child's existence. Birth registration is part of an effective civil registration system that acknowledges the person's existence before the law, establishes family ties and tracks the major events of an individual's life, from live birth to marriage and death.

A **birth notification** is the notice of the occurrence of a birth by midwives or others to civil registrars, who then register the birth.

A **birth certificate** is a personal document issued to an individual by the state to prove that their birth has been registered.

Target behaviours:

- The child's birth is registered during the first month of life

Questions and answers

Q1: What is a birth certificate?

- A birth certificate is a **very important** document which shows:
 - What a child's name is
 - Where the child was born
 - When the child was born
 - Who the child's parents are

Q2: Why should I get my child registered?

- First, it is the right of every child to have their birth registered as well as to have a name and nationality. These rights are enshrined in international human rights law through the Convention on the Rights of the Child (CRC) and other treaties. Recording a child's name ensures their right to an identity.
- Second, it is a legal requirement to register births in most countries. In Zimbabwe, for example, the Birth and Death Registration Act makes birth registration mandatory for every child and if the responsible person does not register the birth, he or she has committed an offence punishable under law.
- Third, birth registration often signifies the beginning of the legal contract between the individual and the State known as citizenship. Birth registration serves as important proof of the place of birth and parentage, and while birth registration does not in itself give citizenship to the child, it is often essential to acquire citizenship based on each country's laws.

Q3: What are the benefits of having children registered and obtaining birth certificates?

- A birth certificate may be required especially for vulnerable children to obtain access to basic services such as health, education and social welfare.

- It can also help to protect children from situations of exploitation and violence, such as child marriage and child labour, and achieve convictions against those who have abused a child.
- It can protect children from trafficking, as well as under-age military service and ensure that children are recognized as a child before the law.
- In adulthood, birth certificates may be needed for many purposes: to obtain social security or a job in the formal sector; to buy or prove the right to inherit property; to obtain identity cards; to vote; and to obtain a passport.
- Birth registration is part of national civil registration systems that also record deaths and marriages. Civil registration provides the data that are needed by governments to track the size and trends of their populations. This information helps governments to plan what services children and communities will need in the future.

Q4: When should I get my child registered?

- You should get your child registered as soon after they have been born as possible. Many countries will charge a fee for late registration, often after 3 months – please check what the deadline is in your country.

Q5: What is the process for getting my child registered?

- The first step is that a **notification** of birth is issued, usually by the health institution and birth attendants if the baby was born at a health facility, or in a few situations by a local government official or a village chief.
- The second step is for the informant, who is usually the mother or father to make a **declaration** of the birth to the Civil Registrar.
- Third, the **registration** is generally followed by the Civil Registrar issuing a **birth certificate** that is personalized in a secure manner on a secure base paper.

Q6: Where should I go to get my child registered?

- Birth registration is usually done at an office of the Civil Registrar. There should be Civil Registration Offices in all districts and usually the parents can go to the nearest Office.

Q7: What documents will I have to take with me?

- The informant, who is usually the parent, is required to prove her/his identity through documentation and/or a witness (or witnesses) before the registration can take place. If only one parent is present they should bring the ID of the other parent and marriage certificate. In some situations, if one parent is deceased, the surviving parent should have her/his ID and death certificate of the other parent together with marriage certificate.
- The informant's declaration may have to be supplemented by documentary evidence – for example, a medical certification of birth from a hospital or a midwife.

Q8: What information is included on the birth certificate?

- The minimum information included in a birth registration is usually: 1) the child's name at birth, 2) the child's sex, 3) the child's date and place of birth, 4) the parents' names and addresses, and 5) the parents' citizenship.

Q9: What if there is an issue with the identity of the baby's father? For example, what if I don't know who the father is, or I know, but the father will not acknowledge it, or I know but he or we don't want others to know? In other words, in situations where it is not possible to give the father's identify for some reason, but I still want to register my baby?

- The answer to this is that it depends on the policy in your country, which you will need to find out! Some of the possibilities are given here.
- In many countries it is acceptable to record the names of the parents of the mother of the baby (the grandparents), instead of the father. The child will therefore be registered with the mother's surname/maiden name. In some places this may have to be supported by a local chief or neighbourhood leader. In other places, it may be necessary to bring two or more family members as witnesses and/or to approve the use of the family name.
- In some countries it is okay to simply leave the father's name blank. In this case again the child will be registered with the mother's surname/maiden name.
- If the problem is that the father does not want to acknowledge that he is the father, in some countries and some cases this can be taken to court and the court can order a paternity test.
- In any of these scenarios if the father's identity is revealed at a later time, in most places the baby's registration can be updated, although this will usually need to go through the court.
- If the scenario is one where the father *does* want to be identified but the baby was born out of wedlock, or perhaps the woman is married to a different man, it may be necessary for the father to complete an "acceptance of paternity/responsibility" or similar document, signed by both parents.

Q10: What if the IDs of both the father and mother are required to register a child in my country, and the husband or the wife is not around at all and a copy of their ID is not available?

- Again, you will need to find out what arrangements are allowed in your country in this type of situation.
- As above, it may be possible to record the names of the grandparents of the child in lieu of the missing father or mother.
- It may also be possible to waive the requirement for the second ID if family members attest and serve as witnesses instead.
- It may also be the case that if there is a copy of the ID of the missing parent in the village records it may be permissible to use that.

Q11: What will it cost me to have my child's birth registered?

- In many countries birth registration is free of charge, especially for the poor, provided it is undertaken in the first 90 days after the baby was born. However, after that time a late fee may be charged. In some situations, there may be some transport costs and accommodation for travelling to the Civil Registry office to register the birth and to collect the birth certificate.

Q12: Which children are least likely to have their births registered?

- Registration rates are generally lower than average for vulnerable children, including: urban slum-dwelling children; children from minority groups, migrant, refugee and IDP populations; children who are stateless, disabled, or orphaned; and children born during or just after wars or natural disasters.

Q13: What are some important things to emphasize to community members when raising awareness on birth registration?

- People should think carefully about the names they want to give to children. This will be the person's names for the rest of his or her life and will appear on the important documents such as national registration cards, passport, school certificates and any other documents. (It is very expensive to get a name changed once it has been registered on a birth certificate.)
- If the person's birth has already been registered, it is against the law to register him or her again. A birth can be registered only once.
- The certificate should be checked for accuracy as soon as it is issued. If the registration office has made a mistake, such as a spelling error, the office should be alerted for immediate correction.
- Parents should never lie when registering a child's birth. It is against the law and may cause problems later.

APPENDIX: QUESTIONS FOR TEST USE

GENERAL NUTRITION

1. How many food groups are there, and what are they?
2. What are examples of 'energy giving' foods? These may also be known as 'go' foods, or carbohydrates. How often should pregnant women and children eat these?
3. What are examples of 'protective' foods? These may also be known as 'glow' foods. How often should pregnant women and children eat these?
4. What are examples of 'body building' foods? These may also be known as 'grow' foods, or proteins. How often should pregnant women and children eat these?
5. What are examples of 'concentrated energy' foods? These may also be known as 'super go' foods. How often should pregnant women and children eat these?
6. What are examples of foods containing vitamin A? How often should pregnant women and children eat these?
7. What are examples of foods containing iron? How often should pregnant women and children eat these?
8. What are examples of foods containing vitamin C? How often should pregnant women and children eat these?
9. What are examples of dairy products? How often should pregnant women and children eat these?

WOMAN 1: ADEQUATE DIET

1. What constitutes a balanced diet?
2. How many food groups are there, and what are they?
3. What constitutes an "additional meal"?
4. Why do pregnant women need to take additional nutrient rich diet?
5. What happens if a pregnant woman doesn't eat enough during her pregnancy?
6. Why is iodized salt important?
7. Where do we get iodized salt?
8. I've heard that too much salt isn't good for you?
9. What do we say about sugar?
10. What if the pregnant woman is overweight or obese? What do we recommend for her 'adequate diet'?

WOMAN 2A: IRON-FOLATE SUPPLEMENTS

1. Why is iron important?
2. What are the consequences of anaemia?
3. Is insufficient iron the only thing that causes anaemia?
4. Can a pregnant woman get iron from the foods that she eats?
5. Which foods contain iron?
6. What if our staple foods are fortified with iron? Should the pregnant woman still take the supplements?
7. What is folate and what is folic acid?
8. Why is folate important?
9. What foods contain folate?
10. How often should a pregnant woman take iron/folic acid supplements?

WOMAN 2B: DEWORMING

1. What are the main worms that we are concerned about?
2. How do we get infected with STHs?
3. What are the symptoms of worms in adults?
4. What are some of the results of being infected with worms?
5. Why do we need to treat worms in pregnant women and women of childbearing age?
6. How can we avoid becoming infected with worms?
7. Who is most at risk for worm infections?
8. What is the main objective of a de-worming program?
9. Do I need to be diagnosed with worms to get the medicine?
10. What medicines are used in de-worming programs?
11. Besides STH, what other worms are we concerned about?
12. How do people get infected with Bilharzia?
13. What are the symptoms of Bilharzia?
14. What is the recommended medicine for Bilharzia?
15. How can I know if a pond or lake is infected with Bilharzia?

WOMAN 3A: INFECTIOUS DISEASE PREVENTION: TETANUS

1. What is Tetanus?
2. How does a person contract Tetanus?
3. What are the symptoms of Tetanus in a pregnant woman, and in a newborn?
4. What are the consequences of Tetanus in a pregnant woman and in a newborn?
5. Why is it important for a pregnant woman to be vaccinated with Tetanus Toxoid (TT)?
6. Is the TT safe?
7. Does TT have side effects?
8. Can the vaccine cause the disease?
9. When should a pregnant woman receive TT?
10. Are there any reasons a pregnant woman should not receive TT?
11. Why is important to keep a vaccine record card?

WOMAN 3B: INFECTIOUS DISEASE PREVENTION: HIV, PMTCT

1. How is HIV transmitted?
2. What is the difference between HIV and AIDS?
3. How quickly does a person infected with HIV develop AIDS?
4. What is the benefit of an HIV test?
5. Is there a cure for HIV?
6. What are antiretroviral drugs?
7. What is the most common opportunistic infection affecting people living with HIV or AIDS?
8. Does male circumcision prevent HIV transmission?
9. How effective are condoms in preventing HIV?
10. How can HIV infection be prevented?
11. Now that I am infected with HIV, what should I do?
12. How is HIV transmitted from mother to child?
13. When is HIV transmitted from the mother to the child?
14. How can we prevent the transmission of HIV from mother to child?
15. So what should the HIV positive pregnant woman/mother do?

WOMAN 3C: INFECTIOUS DISEASE PREVENTION: SEXUALLY-TRANSMITTED INFECTIONS/DISEASES (STI/STD)

1. How are STDs spread?
2. How will I know if I have an STI/STD?
3. Can STDs be treated?
4. What happens if I don't treat an STD?
5. What can I do to protect myself?
6. Are some STDs associated with HIV?
7. Why does having an STD put me more at risk for becoming infected with HIV?
8. If I already have HIV, and then I get an STD, does that put my sexual partner(s) at an increased risk for getting HIV?
9. Will treating STDs prevent me from getting HIV?
10. What is Syphilis?
11. Is Syphilis curable?
12. Can congenital Syphilis be prevented?
13. What can be done to prevent congenital Syphilis?

WOMAN 3D: INFECTIOUS DISEASE PREVENTION: TUBERCULOSIS (TB)

1. How is Tuberculosis spread?
2. How do I know I have Tuberculosis?
3. Is TB treatable?
4. How common is TB and HIV infection in the same person?
5. What are the ways to prevent and treat TB?

WOMAN 4: MALARIA PREVENTION, TREATMENT ACCESS AND INTERMITTENT PREVENTIVE TREATMENT

1. What causes malaria?
2. What are the symptoms of malaria?
3. What are the possible consequences of malaria in pregnant women? Why are we especially concerned about malaria in pregnant women?
4. How can we prevent the transmission of malaria?
5. What are the recommendations for *treatment* of malaria during pregnancy?
6. What is Intermittent Preventive Treatment in pregnancy? (IPTp)
7. Are the recommendations different for a HIV+ pregnant woman?
8. What if a pregnant woman only goes for ANC late in her pregnancy and there is not time to give her two doses?
9. How should IPTp doses be given?
10. When should IPTp NOT be given?

WOMAN 5: HEALTHY TIMING AND SPACING OF PREGNANCIES

1. What is Healthy Timing and Spacing of Pregnancies? (HTSP)
2. Is it safe for girls less than 18 years old to get pregnant?
3. How can a teenage girl avoid becoming pregnant?
4. What about mothers older than 34 years old – is it safe for them to get pregnant?
5. What if I am older than 34 and pregnant, and I don't want to terminate the pregnancy?
6. How long do older women have to use contraception?
7. If a mother has many children, will they all be equally healthy?
8. How does HTSP save lives?
9. What are the advantages for children if their births are spaced?
10. When is a good time for a mother and father to discuss family planning?
11. Does breastfeeding protect a mother from pregnancy?
12. What happens if a mother decides not to exclusively breastfeed?
13. When we have had all the children we plan to have, and do not want another child, what should a couple do?
14. Where can I go to get the family planning method I would like to use?
15. I want another baby, but I have just had a miscarriage. How long should I wait before trying for another pregnancy?
16. How soon after a miscarriage do I need to start using contraception to protect me from pregnancy until I am healthy again?

WOMAN 6: BIRTH PREPAREDNESS

1. Why plan ahead for the birth?
2. What supplies are needed for a clean birth?
3. What sort of complications can arise and when?
4. Why deliver in a health facility rather than at home?
5. What is a birth companion?
6. What is a post-partum hemorrhage?
7. How does the 'safe motherhood tablets' (misoprotol) help prevent a post-partum hemorrhage?
8. When should the mother take the safe motherhood tablets (misoprostol)?

WOMAN 7: ACCESS TO QUALITY MATERNAL HEALTH SERVICES

1. What is meant by "facilitate access" to quality maternal health services?
2. What is antenatal care?
3. Why should a woman have 4 antenatal care appointments during pregnancy?
4. What are the elements of "quality" antenatal care?
5. What is a skilled birth attendant?
6. Why is it important that a woman delivers her baby with a skilled birth attendant?
7. What is postnatal care?
8. Why should a woman receive postnatal care?
9. What are the elements of "quality" postnatal care?

CHILD 1: APPROPRIATE BREASTFEEDING

1. Why is breastfeeding important?
2. When should mothers start breastfeeding?
3. How long should mothers breastfeed their babies?
4. What does exclusive breastfeeding mean?
5. Mothers are often afraid that their babies are thirsty and that breastmilk doesn't have enough water. Is that true? What about when the weather is very hot?
6. What are the dangers of non-exclusive breastfeeding for babies under 6 months of age?
7. I've heard that if the mother is HIV+ the risk of transmitting the infection to her infant through breastfeeding is higher if the infant is fed both breastmilk and other liquids and foods, than if fed breastmilk alone. Why is that?
8. Can mothers or caregivers give breast milk substitutes such as commercial infant formula?
9. When is appropriate time to introduce other foods to babies?
10. What is the appropriate amount and frequency of breastfeeding?
11. How can we check if a baby is getting enough breast milk?
12. What are some reasons that a baby might not get enough breast milk?
13. If a mother doesn't have a fridge to store expressed breastmilk, how long will it stay fresh?
14. How can we help a mother to position and attach her baby well for optimal breastfeeding?
15. What to do when a baby or a mother is sick?
16. What are some common breastfeeding problems and how can mothers prevent them?
17. What are the breastfeeding recommendations for HIV+ mothers?

CHILD 2: ESSENTIAL NEWBORN CARE

1. When do most newborn babies die?
2. What do newborn babies die from?
3. Why do all newborn babies need essential newborn care (ENC)?
4. What are the main essential newborn care practices?
5. If the birth is at home can a family member do ENC?
6. What are some harmful practices that may cause newborn babies to become sick or die?
7. What are the newborn danger signs?

CHILD 3: ADEQUATE DIET (APPROPRIATE COMPLEMENTARY FEEDING AND VITAMIN A SUPPLEMENTATION)

1. What constitutes a balanced diet?
2. How many food groups are there, and what are they?
3. What makes the best complementary foods?
4. How do you prepare complementary foods?
5. What amounts and type of food should be provided for infants?
6. What is responsive feeding?
7. What are some things to avoid feeding children?
8. How should I feed my child when he or she is sick?
9. What is the feeding requirement for children older than 23 months of age?
10. What are the guidelines for high-dose of Vitamin A in areas of high child mortality?
11. Can newborns or children who are HIV+ also receive the Vitamin A?

CHILD 4: ADEQUATE IRON

1. Why do we have to make sure children receive adequate Iron?
2. Which children should get adequate iron?
3. Why are low birth weight babies usually anemic and therefore need iron?
4. Why do babies who are not exclusively breastfed may become anemic and therefore need iron?
5. Why do children 6 to 24 months need to have adequate iron?
6. What foods have iron?
7. Are there other sources of iron besides the foods listed?
8. In summary, what can we do to ensure children have adequate iron?

CHILD 5: FULL IMMUNIZATION FOR AGE

1. Why is it important for children to be vaccinated?
2. How do vaccines work?
3. Are vaccines safe?
4. Do vaccines have side effects?
5. When should the child be vaccinated?
6. Can my child be vaccinated when he or she is sick?
7. Are there any reasons a child should not be vaccinated?
8. What diseases do immunizations prevent?
9. Why is it important to keep a vaccine record card?

CHILD 6: HAND WASHING WITH SOAP

1. Why is hand washing important?
2. Who is hand washing important for?
3. What are the benefits of hand washing?
4. What is the correct way to wash hands?
5. Does the water need to be clean?
6. How much water is needed?
7. What is a Tippy Tap?
8. What should be done with the waste-water?
9. We can't afford soap. Are there other alternatives, like ash?
10. When should mothers and other caregivers wash their hands?
11. I sometimes forget to wash my hands – how can I remember?
12. Does it also help to keep my finger-nails short?
13. How do other hand washing methods compare with soap and water?

CHILD 7: ORAL REHYDRATION THERAPY/ZINC

1. What is Oral Rehydration Therapy?
2. What is dehydration and why do children get dehydrated?
3. How do you prevent dehydration?
4. What are the symptoms of dehydration?
5. Why do people get diarrhea and how do you prevent it?
6. How do you treat diarrhea?
7. What is ORS? Is it safe to give it to a child?
8. In case ORS is not available, what should be given to a child with diarrhea?

9. How do you manage a child who has diarrhea?
10. When and how do you give ORS to a child with diarrhea? 11 things you should know about rehydrating a child.
11. If the child with diarrhea is also vomiting, what would you do?
12. What is Zinc, and how does it help in the treatment of diarrhea?
13. How is Zinc administered?
14. Is it safe to take Zinc and ORS while taking other medications such as antibiotics, ARVs, etc.?
15. Is it advisable to continue feeding a child with diarrhea?
16. When should a mother or caregiver take a child with diarrhea to a health center?
17. Is it good to give antibiotics and antidiarrheal for diarrhea?

CHILD 8A: PREVENTION, CARE SEEKING AND TREATMENT FOR ACUTE RESPIRATORY INFECTION

1. What is the difference between ordinary coughs/colds and pneumonia?
2. How dangerous is pneumonia?
3. What are the danger signs of pneumonia?
4. How do I know that a child is breathing too fast?
5. How can I know the difference between pneumonia and an asthma attack in my child?
6. What are likely causes of pneumonia?
7. Is pneumonia contagious – can it be passed from one person to another?
8. Who is at risk of pneumonia and other breathing illnesses?
9. What should I do if my child is suspected of having pneumonia?

CHILD 8B: PREVENTION, CARE SEEKING & TREATMENT FOR MALARIA

1. What causes malaria?
2. What are the symptoms of malaria?
3. What are the signs that the malaria is very serious?
4. What can be done to prevent malaria?
5. Why is malaria so serious in children under 5?
6. What about malaria in infants?
7. Should those of us living in Africa do anything special to prevent malaria?

CHILD 9: PREVENTION, CARE SEEKING AND TREATMENT FOR ACUTE MALNUTRITION

1. What is acute malnutrition?
2. What is the difference between Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM)?
3. What is bilateral oedema?
4. What is MUAC?
5. What is CMAM?
6. What is RUF and RUTF?
7. How 'big' of a global problem is acute malnutrition?
8. Why is prompt treatment essential for a child with acute malnutrition?
9. How is acute malnutrition detected?
10. How can acute malnutrition be prevented?
11. What is the treatment for acute malnutrition?

12. What if CMAM services are not available?
13. Can local foods be used to treat acute malnutrition?
14. Can RUTF be made locally?

CHILD 10: PREVENTION AND CARE SEEKING FOR PAEDIATRIC HIV

1. How is HIV transmitted in children?
2. Are there ways of preventing an HIV-positive mother from transmitting HIV to her baby?
3. At what age can a child be tested for HIV?
4. If it is better to test the baby with the modern testing methods, why isn't that test available everywhere?
5. When should an HIV positive child start antiretroviral therapy?
6. Why is it important for a child to start treatment early?
7. Why is it so important for children to take all their HIV medication as instructed?
8. At what age should an HIV-positive child be told that he or she has HIV, and why is it important to tell them?
9. What support is available for parents who are finding it difficult to tell their child that he or she is HIV positive?
10. What food is recommended for a child taking antiretroviral therapy?
11. What about breastfeeding the HIV-positive baby?

CHILD 11: DEWORMING

12. What are the symptoms of worms in children?
13. Why do we need to treat worms in children?
14. Are there any side effects to deworming medication?

BIRTH REGISTRATION

1. What is a birth certificate?
2. Why should I get my child registered?
3. What are the benefits of having children registered and obtaining birth certificates?
4. When should I get my child registered?
5. What is the process for getting my child registered?
6. Where should I go to get my child registered?
7. What documents will I have to take with me?
8. What information is included on the birth certificate?
9. What if there is an issue with the identity of the baby's father? For example, what if I don't know who the father is, or I know, but the father will not acknowledge it, or I know but he or we don't want others to know? In other words, in situations where it is not possible to give the father's identity for some reason, but I still want to register my baby?
10. What if the IDs of both the father and mother are required to register a child in my country, and the husband or the wife is not around at all and a copy of their ID is not available?
11. What will it cost me to have my child's birth registered?
12. Which children are least likely to have their births registered?
13. What are some important things to emphasize to community members when raising awareness on birth registration?

RESOURCES

Pregnant Woman 3A: Infectious Disease Prevention: Tetanus

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2. http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/immunization_tetanus.pdf
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1. Rutstein, Shea, and Rebecca Winter. 2014. *The Effects of Fertility Behavior on Child Survival and Child Nutritional Status: Evidence from the Demographic and Health Surveys, 2006 to 2012*. DHS Analytical Studies No. 37. Rockville, Maryland, USA: ICF International.

Pregnant Woman 7: Access to Quality Maternal Health Services

1. WHO Making Pregnancy Safer – provision of effective antenatal care (2006)
2. WHO recommendations for Postnatal care mother and newborn (2013)

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2. WHO. (2009). Infant and young child feeding: model chapter for textbooks for medical students and allied health professionals.
3. WHO, UNICEF, UNAIDS, & UNFPA. (2010). Guidelines on HIV and infant feeding 2010: principles and recommendations for infant feeding in the context of HIV and a summary of evidence.

Child 2: Essential Newborn Care

1. ENAP 2014, WHO CHX guidance, WHO Care of the newborn in the community, WHO PMTCT HIV, Lancet - May 2014 Every newborn series, Born Too Soon Report – STC 2012

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1. WHO, UNICEF, USAID, AED, UCDAVIS, & IFPRI. (2008). Indicators for assessing infant and young child feeding practices Part I: Definitions. Available at: <http://www.who.int/nutrition/publications/infantfeeding/9789241596664/en/> (accessed on 4/10/2014).
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Child 5: Full Immunization for Age

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2. <http://www.immunizebc.ca/getvaccinated/infant-immunizations>
3. http://www.who.int/immunization/policy/Immunization_routine_table2.pdf?ua=1
4. http://www.who.int/immunization/policy/immunization_tables/en/
5. Global Health and Nutrition. 7-11 Start Up Field Guide. World Vision International 2010.

Child 6: Hand Washing with Soap

1. Educational materials on hand washing
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 - www.globalhandwashingday.org
 - www.schoolsanitation.org
 - www.washinschools.info
 - www.schools.watsan.ne
2. UNICEF Malawi: http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Frontiers_no2_Triggering_handwashing.pdf
3. Global PPP for Handwashing with Soap: handwashing behaviour change Think Tank meeting, Washington DC, Feb 2014. <http://www.scribd.com/doc/210571415/Handwashing-Station-Developed-for-Rural-Kenya> Onyalo Biro – local plant/shrub perceived to have hand sanitizing properties
4. UNICEF Handwashing Promotion M&E Module. Jelena Vujcic and Pavani Ram, University at Buffalo. <http://globalhandwashing.org/resources/general/unicef-handwashing-monitoring-evaluation-toolkit>
5. Practical Guidance for Measuring Handwashing Behaviour. Pavani K. Ram. <https://www.wsp.org/sites/wsp.org/files/publications/WSP-Practical-Guidance-Measuring-Handwashing-Behavior-2013-Update.pdf>
6. Global PPP for Handwashing webinar 4 Dec 2014. David Neal, Florida University: Handwashing and the Science of Habit: http://sanitationupdates.wordpress.com/2014/12/05/david-neal-handwashing-and-the-science-of-habit-dec-4-2014/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+SanitationUpdates+%28Sanitation+Updates%29
7. Our Handwashing Distance Learning Course Modules are available on our [website](#) with readings and PDF-based course modules coming soon (Jan 2015) from Global PPP for Handwashing. For the latest on handwashing research, be sure to read our 2014 handwashing research summary <http://globalhandwashing.org/resources/general/2014-handwashing-research-summary>
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9. World Hygiene Programme. <https://www.linkedin.com/company/world-hygiene-programme>
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