Infant and Young Child Feeding Counselling

An Integrated Course

Participants Manual

Ministry of Community
Development Mother
and Child Health

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The training materials used in the course *Infant and Young Child Feeding Counselling: an Integrated Course* were developed by the World Health Organisation. These materials have been adapted and produced by the Ministry of Health and National Food and Nutrition Commission of the Republic of Zambia with technical and financial assistance from UNICEF and Infant and Young Child Nutrition Project-PATH

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FOREWORD

Malnutrition contributes more than half of all under-five childhood deaths throughout the developing world. In Zambia malnutrition levels are extremely high, with stunting levels being at 45%, the proportion being as high as 58.9% for children aged 18 to 23 months (ZDHS, 2007). The long-term impact of early childhood malnutrition includes poor growth, poor school performance, reduced productivity and impaired intellectual and social development.

In Zambia, breastfeeding followed by appropriate complementary feeding with continued breastfeeding is the traditional way to feed young infants. Non-optimal breastfeeding and complementary feeding practices are further, confounded by poverty and inadequate access to food often leading to a number of factors - illness, growth faltering, nutrient deficiencies, delayed development and death during the first critical two years of life.

Abundant evidence exists on nutrition which demonstrates the important role nutrition plays in a child's early years of growth and development. Appropriate feeding practices during the early years significantly contribute to the attainment of optimal health outcomes. Lack of optimal feeding practices such as exclusive breastfeeding in the first six months, is an important risk factor for morbidity and mortality.

In recent years, the problem of infant and young child malnutrition has been compounded by the presence of HIV/AIDS. Children who suffer from HIV/AIDS are more prone to or susceptible to malnutrition as compared to their uninfected peers. This is because they suffer from recurrent opportunistic infections which not only reduce their ability to take in food through loss of appetite, but also cause them to lose weight due to poor absorption and utilization of the nutrients.

Recognising the seriousness of the situation, Zambia developed the Infant and Young Child Feeding (IYCF) Operational Strategy based on the WHO/UNICEF Global Strategy on Infant and Young Child Feeding. Strategic Area 1 of the Zambian Operational Strategy aims at building capacity for implementation of IYCF. In the strength of this operational strategy, the NFNC, MOH and other stakeholders adapted the WHO generic *Infant and Young Child Feeding Counselling: An Integrated Course Training Package.*

This training package is action-oriented and based on accumulated evidence on the significance of appropriate and adequate IYCF, in the early months of life for optimal child growth and development. It comprises the Director's Guide, Trainer's Guide with its accompanying slides, Participant's Manual, and the counselling Tools. It is hoped that this IYCF training package will equip health workers and others with the knowledge and skills that they require in order to counsel caretakers of infants and young children on optimal feeding practices.

The IYCF training package presents the key issues of IYCF in a simple but provocative and creative format making it easy to read, understand and implement. It will, undoubtedly, inform and inspire the kind of practices that are necessary to make the desired behavioural changes in our communities. The Ministry of Health provided the necessary background for this outcome by launching a countrywide campaign for Infant and Young Child Feeding with a renewed energy on protecting, promoting and supporting exclusive breastfeeding on 18th February 2009.

Zambia's health sector is renowned for its excellent results in the various child survival programs. The collaborative effort that has gone into adapting the IYCF health worker-training package is commendable. Continued collaboration of this magnitude (between government, international organizations, and other stakeholders), together with a greater commitment for the implementation of programmes related to Infant and Young Child Feeding will be mandatory. It is my hope that this training package will be useful and provide the basis for desired transformation in IYCF practices.

Honourable Kapembwa Simbao M.P.
MINISTER OF HEALTH

ACKNOWLEDGEMENTS

The National Food and Nutrition Commission (NFNC) in collaboration with the Ministry of Health (MOH) would like to thank all the individuals and organisations who contributed to the successful completion of this Infant and Young Child Feeding (IYCF) Integrated Training Package for Health Workers. We are confident that partners and many others will continue supporting the implementation phase of the Training of Health workers in order to create the necessary critical mass of counselors in IYCF that is required to ensure that caretakers of young children receive the appropriate messages on IYCF.

Special thanks go to the Infant and Young Child Nutrition (IYCN) Project for collaborating with the NFNC in spearheading the adaptation and finalization process for the training package. The National Food and Nutrition Commission is grateful to Dr. Catherine Mukuka, Joseph Nyambe (Infant and Young Child Nutrition PATH Project), Chipo Mwela (UNICEF), Dr. Mary Katepa-Bwalya (WHO), Ruth M.Siyandi (Health Systems and Services Program), Maureen Mzumara (Center for Disease Research in Zambia), Dorothy Nthani (Natural Resources Development College) for their strategic support and contribution in developing the training package.

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Cassim Masi, Ph.D.
EXECUTIVE DIRECTOR
NATIONAL FOOD AND NUTRITION COMMISSION

Introduction to the Course

Why this course is needed

The WHO and UNICEF developed The Global Strategy for Infant and Young Child Feeding in 2002 to revitalize world attention to the impact that feeding practices have on the nutritional status, growth, development, health and survival of infants and young children. This course is based on conclusions and recommendations of expert consultations, which resulted in the global public health recommendation to protect, promote and support exclusive breastfeeding for six months, and to provide safe and appropriate complementary foods with continued breastfeeding for up to two years of age or beyond.

Many children however are not fed in the recommended way. Many mothers, who initiate breastfeeding satisfactorily, often start complementary feeds or stop breastfeeding within a few weeks of delivery. In addition, many children, even those who have grown well for the first six months of life, do not receive adequate complementary feeds. This may result in malnutrition, which is an increasing problem in many countries. More than one-third of under-five children are malnourished manifesting as stunting underweight, wasting or deficient in vitamin A, iron or other micronutrients. Malnutrition contributes to more than half of the 10.5 million deaths each year among young children in developing countries. Among the under five in Zambia, 47% are chronically malnourished, 5% have acute malnutrition while 28% are underweight. It is also estimated that 42% of all deaths that occur before five years of age are related to malnutrition (CSO, 2002).

Messages about infant feeding have become confusing over recent years with the HIV pandemic. In some countries, HIV infection amongst children is now one of the main causes of childhood death. According to WHO, 90% of children who acquire the infection do so from their mothers, before or during delivery, or through breastfeeding. In 1997, WHO, UNICEF and UNAIDS issued a joint policy statement, indicating that HIV-positive women should be enabled to make a fully informed decision about feeding their infants, and supported to carry out the method of their choice. Guidelines set out several feeding options to suggest to HIV-positive women. These guidelines also emphasized the need to protect, promote and support breastfeeding for those who are HIV-negative or of those of unknown status, and to prevent spillover of artificial feeding to infants of uninfected mothers.

This course contains some sessions, which address the issue of HIV and infant feeding. These are clearly marked in your Manual. Health workers and counsellors, such as yourself, can help mothers and caregivers to make appropriate choices about infant feeding and to feed their children successfully. It is important that you give this help during the whole of the first and second year of a child's life. You can give mothers good advice about feeding their babies at all times, when they are well and when they are sick.

You may feel that you have not been adequately trained to give this kind of help. In the past, counselling and support skills have seldom been included in the curricula of health workers. This course aims to give you training in basic counselling skills, which should enable you to give mothers the support and encouragement that they need to feed their children optimally.

During the course you will be asked to work hard. You will be given a lot of information, and you will be asked to do a number of exercises and practical sessions to develop your counselling skills. Hopefully you will find the course interesting and enjoyable, and the skills that you learn will make your work with mothers and babies in future more helpful for them and more rewarding for you. The competencies that you are expected to acquire are found in your manual on page 221-225. It is important that you go through the list and keep referring to them during the training. Identify which competencies you need to improve on and work on these.

Course Aims

The Integrated IYCF counselling course in Zambia is aimed at:

- Promoting breastfeeding and enhancing the implementation of Baby Friendly Hospital Initiative (BFHI)
- Complementing the PMTCT training
- Sensitising Health workers on the Code of marketing of breast milk substitutes and the Zambian legislation
- Addressing the complementary feeding challenge

Course Objectives

After completing this course, participants will be able to counsel and support mothers to carry out recommended feeding practices for their infants and young children from birth up to 24 months of age, and to counsel and support HIV-infected mothers to choose and carry out an appropriate feeding method for the first two years of life.

The Course and the Manual

Infant and Young Child Feeding Counselling: An Integrated Course consists of 40 sessions, which can be arranged in different ways to suit the local situation. Your Course Director will plan the course that is most suitable for your needs, and will give you a timetable.

This Manual, the *Participant's Manual,* is your main guide to the course, and you should keep it with you at all times, except during practical sessions. In the following pages, you will find a summary of the main information from each session, including descriptions of how to do each of the skills that you will learn. You do not need to take detailed notes during the sessions, though you may find it helpful to make notes of points of particular interest, for example from discussions. Keep your Manual after the course, and use it as a source of reference as you put what you have learnt into practice.

Your manual also contains:

- Copies of the key slides that you might want to memorize
- Forms, worksheet, job aids and checklists for exercises and practical sessions
- Written exercises that you will be asked to do individually.

You will receive separate copies of the forms, lists and checklists to use for the practical sessions, so that you do not have to carry your Manual at these times.

You will receive Answer Sheets for each written exercise after you have done the exercise. These enable you to check your answers later, and to study any questions that you may not have had time to complete.

Structure of the course

This is a reading course. It is divided into 40 sessions, which take approximately 40 hours (excluding meal times and opening or closing ceremonies). The course can be conducted consecutively in a working week, or can be spread in other ways. The sessions use a variety of teaching methods, including lectures, demonstrations, and working in small groups. Practical and exercises are a core component of the course.

In view of the intensity of the course, you and trainers are accommodated in the same place for the purpose of working together on assignment.

Session 1

Introduction to Maternal, Adolescent, Infant and Young Child Nutrition

Objectives

After completing this session participants will be able to:

- Describe the Global and Zambian Strategies for Infant and Young Child Feeding.
- List the operational targets of the Global and Zambian Strategies
- State the current recommendations for feeding children from 0-24 months of age.
- Define malnutrition, types, causes, consequences, and preventive measures.

Introduction

The Global Strategy was launched in 2002 and later revised in 2011. It was jointly developed by WHO and UNICEF, to revitalize world attention to the impact that maternal, infant and young child Nutrition practices have on the nutritional status, growth, development and health, and thus the very survival of infants and young children.

- Malnutrition has been responsible, directly or indirectly, for 60% of the 10.9 million deaths annually among children under five.
- Well over two-thirds of these deaths, which are often associated with inappropriate feeding practices, occur during the first year of life.

The Strategy is designed for use by governments and other concerned parties, such as health professional bodies, non-governmental organizations, commercial enterprises and international organizations.

It lists the WHO/UNICEF recommendations for appropriate feeding of infants and young children, explains the obligations and responsibilities of governments and concerned parties, and describes the actions they could take to protect, promote and support mothers to follow recommended feeding practices.

WHO predicts that there will be 2.3billion overweight adults by 2015 and more than 700million of them will be obese.

GLOBAL STRATEGY FOR INFANT AND YOUNG CHILD FEEDING
SUMMARY OF OPERATIONAL TARGETS

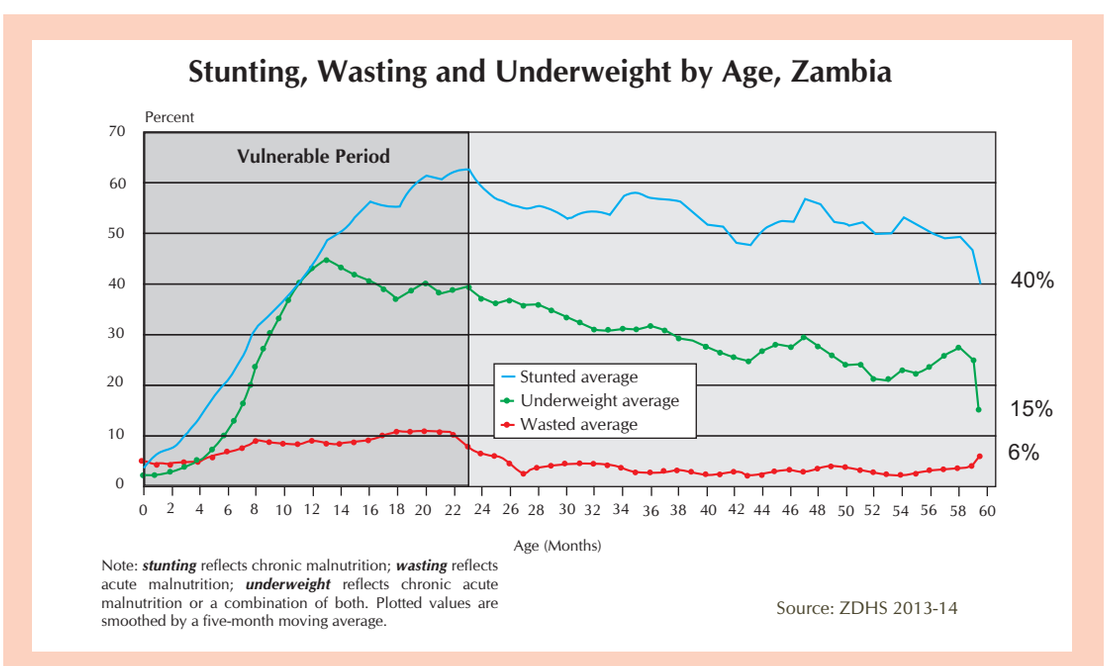
All governments are urged to:

A. Follow up previous targets from Innocenti Declaration:

1. Appoint a national breastfeeding coordinator with appropriate authority, and establish a multi-sectoral national breastfeeding committee
2. Ensure that every facility providing maternity services fully practises all the 'Ten steps to successful breastfeeding' set out in the WHO/UNICEF statement on breastfeeding and maternity services
3. Implement the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions
4. Enact imaginative legislation protecting the breastfeeding rights of working women and establish means for its enforcement

B. Introduce these five NEW targets:

5. Develop, implement, monitor and evaluate a comprehensive policy on infant and young child feeding.
6. Ensure that health and other relevant sectors protect, promote and support exclusive breastfeeding for six months and continued breastfeeding up to two years of age or beyond, while providing women access to the support they require.
7. Promote timely, adequate, safe and appropriate complementary feeding with continued breastfeeding.
8. Provide guidance on feeding infants and young children in exceptionally difficult circumstances (including babies born to mothers who are HIV positive).
9. Consider what new legislation or other suitable measures may be required to implement the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions.



This graph is showing stunting, wasting and underweight malnutrition by age in Zambia.

- 40% of the children under five years are chronically malnourished (stunting)
- 6% of the children under five years have acute malnutrition (wasting) and
- 15% of the children under five years are underweight

Note that the most vulnerable age for malnutrition is less than 2 years. Overall 42% of all deaths that occur before five years of age are related to malnutrition

National Strategies:

Based on the global initiatives Zambia developed a National Infant and Young Child Feeding Operational Strategy 2006-2010 in 2006. It was then reviewed in 2014 and the name changed to Maternal, Infant and Young Child Nutrition Operational Framework 2014 -2018. This is aimed at providing guidance to government and other stakeholder on key areas of focus in infant and young child feeding. The framework is supported by the National Food and Nutrition Policy, Nutrition Care Guidelines for People Living with HIV/AIDS (PLHIV) and (eMTCT) training materials.

In addition, Zambia has a mandatory legislation statutory instrument no. 48 of 2006 of the Food and Drugs Act (Laws, Volume 17, Cap. 303), on the Code of Marketing Breast milk Substitutes. The code aims to protect breastfeeding in order to ensure optimal growth in infants and young children and to protect them from diarrhoeal diseases and respiratory infections.

Guidelines on maternal, adolescent, infant and young child nutrition (2014) to guide the implementation of the programme have been developed and the minimum package for the 1st 1,000 most critical days is in place.

ZAMBIAN OPERATIONAL FRAMEWORK **FOR MATERNAL,** I**NFANT AND** Y**OUNG** C**HILD** NUTRITION

A. Key Strategic Areas :

1. Improving nutrition in pregnant, lactating and reproductive age women
2. Protect, Promote and Support breastfeeding in the first six months of life
3. Improving nutrition in children 6-24 months of age
4. Protect and promote the nutrition of pregnant and lactating women, infants and young children in exceptionally difficult circumstances
5. Protect the nutrition of HIV-exposed and positive infants and HIV-positive pregnant and lactating women

SUPPORTIVE STRATEGIES

1. Policy and coordination of maternal, infant and young child nutrition
2. Capacity building
3. Advocate for increased support to MIYCN among policy- and decision-makers
4. Advocate and promote behaviour change communication activities to improve and support maternal, infant and young child nutrition
5. Strengthen monitoring and evaluation of maternal, infant and young child nutrition

o **B. Zambia National Targets:**

During the period 2014 to 2018, Zambia intends to work towards achieving the following targets:

1. Decrease the national rate of stunting in children under five from 45% to 30% by 2018;
2. Reduce iron deficiency anaemia among women of reproductive age from 29% to 15% by 2018.
3. Increase the proportion of women taking iron supplements for at least 90 days during pregnancy from 44% to 55%;
4. Increase the rate of exclusive breastfeeding for the first six months of life from 61% to 80%;
5. Increase the proportion of breastfed children receiving both a minimum frequency of meals and three or more food groups between the ages of 6 and 23 months from 44% to 70%;
6. Breastmilk feeding will be initiated within the first 24 hours of birth for 80% of low-birth-weight infants.

Breastfeeding for the first six months of life

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants. As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Zambia has adopted this recommendation.

DEFINITION OF EXCLUSIVE BREASTFEEDING
Exclusive breastfeeding means giving a baby only breast milk for 6 months, and no other liquids or solids, not even water or vitamin and mineral syrups unless medically indicated.

Mothers need skilled practical help from people like yourself, who can help to build a mother's confidence, improve feeding technique and prevent or resolve breastfeeding problems, if they are to succeed in breastfeeding exclusively.

Complementary feeding

After six months of age, all babies require other foods to complement breast milk – we call these **complementary foods**. When complementary foods are introduced breastfeeding should still continue for up to two years of age or beyond. The traditional understanding of weaning has focused on the process of stopping to breastfeed. In complementary feeding however, the focus is to emphasize the importance both continuing to breastfeed and giving other foods.

Complementary feeds should be:

Timely – meaning that they are introduced when the need for energy and nutrients exceeds what can be provided through exclusive and frequent breastfeeding

Adequate – meaning that they provide sufficient energy, protein and micronutrients to meet a growing child's nutritional needs

Safe – meaning that they are hygienically stored and prepared and fed with clean hands using clean utensils and not bottles and teats

Properly fed – meaning that they are given in response to a child's signals of hunger and that meal frequency and feeding methods are suitable for the child's age.

Variety – meaning having different types of food from all food groups providing different nutrients to

meet the child's nutritional needs

Texture: meaning the food consistency should be thick enough to meet the child's nutritional needs.

Feeding in exceptionally difficult circumstances

The Global Strategy also talks about feeding in exceptionally difficult circumstances. It includes emergency situations, severely malnourished children, low-birth-weight babies, infants of HIV-infected mothers, orphans and babies born with defects such as cleft palate. However, in Zambia, infants born from HIV infected mothers are not classified as being in an exceptionally difficulty circumstance.

Malnutrition

Malnutrition means “bad feeding”. It can be little or too much food intake, the wrong types of food, or the inability of the body to utilise nutrients properly to maintain health.

Malnutrition is a problem of public health concern in Zambia. It presents in form of undernutrition and overnutrition, with undernutrition being more prevalent. The forms of undernutrition include protein energy malnutrition and vitamin and mineral deficiencies.

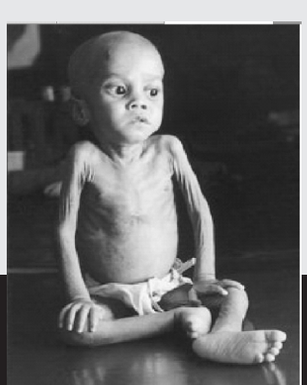
The protein energy malnutrition presents in form of kwashiorkor and/or marasmus. Kwashiorkor affects children mostly aged 6 to 12 months while marasmus affects children mostly aged 6 to 24 months

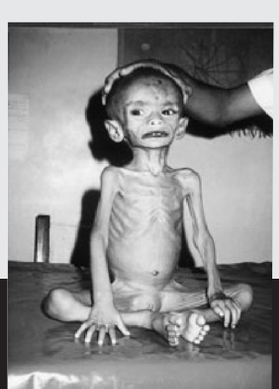
The common examples of vitamin and mineral deficiencies are vitamin A, iron, iodine and Zinc

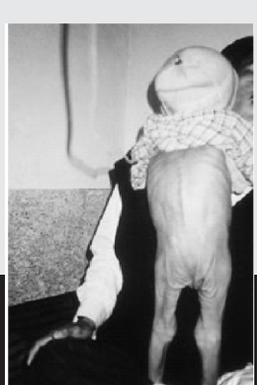
The causes of undernutrition are several and include the following: inadequate dietary intake both in quality and quantity and childhood diseases like diarrhoea, pneumonia, measles and malaria. The afore-mentioned are immediate causes of which the underlying causes are; inadequate access to food, inadequate care to children and women, lack of exclusive breastfeeding for 6 months, delayed initiation of breastfeeding within the first hour of birth, inadequate family and community caring practices, insufficient healthcare services, unhealthy environment, inadequate hygiene, water and sanitation.

The forms of overnutrition include overweight and excessive weight gain.

Severe wasting prominent in marasmus



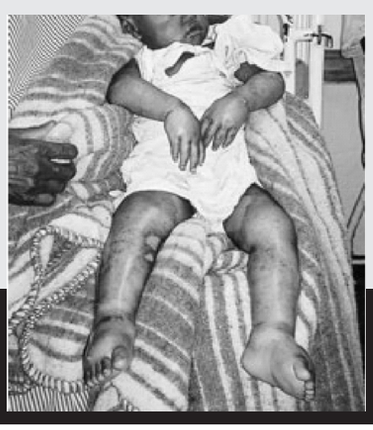


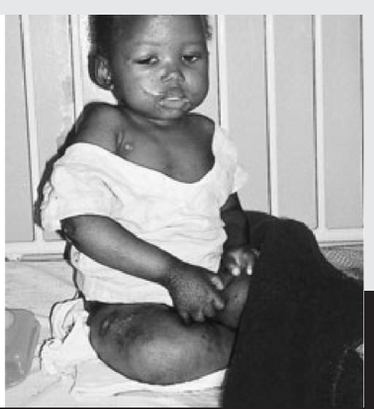


The picture above shows children with signs and symptoms of marasmus as listed below:

- Wasted muscles (flabby muscles) and baggy buttocks
- Wrinkled monkey ('old man') face
- Increased appetite (eats hungrily)
- Sunken eyes
- Mood change (always irritable) and mild skin and thin hair
- There is failure to grow
- The child has difficulty starting to walking

Generalised oedema, scaly patched visible peeling of skin prominent in kwashiorkor





The picture above shows children with signs and symptoms of Kwashorkor as follows:

- There is failure to grow
- There is pitting bilateral oedema on lower limbs but can be located on the child's feet, hands, eyelids, or belly, or it can spread to the whole body
- The child has difficulty starting to walking
- There is loss of appetite
- The child appears to have a moon face
- The child is always not interested in the surrounding environment (apathy)
- The skin changes and peels off
- The hair changes (depigmentation)

It is imperative to note that children with signs and symptoms of protein Energy malnutrition need to be commenced on treatment immediately if there is such a provision at health facility. Otherwise they need to be referred urgently to the next level of service.

However, it is important to identify children with growth faltering early and treat them immediately. This

is because even mild malnutrition puts the affected children in danger of death. Additionally, the severe forms of malnutrition in particular marasmus and kwashiorkor are costly and very difficult to manage.

Consequences of under-nutrition

Addressing under-nutrition is important in order to prevent its consequences, which once they occur are permanent and prevent the affected individuals from realizing their full potential.

These consequences include: poor brain development, stunting, increased susceptibility to infection thereby reducing the life expectancy, lowered economic performance later in adulthood due to lowered energy, increased proneness to having non-communicable diseases such as obesity, diabetes and heart diseases.

Preventive measures of malnutrition

Preventive measures of malnutrition

- Adequate adolescent and maternal nutrition
- Early initiation of new born babies to the breast within the first hour of birth
- Exclusive breastfeeding for the first six completed months of life
- Timely introduction of complementary feeding at six completed months and continued breastfeeding up to 2 years of age or beyond
- Provide micronutrients supplementation and deworming for pregnant women and children
- promote good health practices such as ITN use, Intermittent presumptive treatment (IPT) in pregnancy, safe water, hygiene and sanitation
- Eat a variety of foods selected from all food groups of the food pyramid

The bottom of a pyramid is wider than the top to show that people should eat more foods from the bottom group, a little less from the next group, and at least the least amount from the top group.

- Every person needs to eat a healthy diet every day in order to be in good health. Thus the choice of foods consumed is important, and the food pyramid is a guide to making good food choices.
- The food pyramid helps in terms of which food varieties to consume more and which ones to eat less. The use of a food pyramid to select foods for individuals and the family would help reduce problems of malnutrition and its negative consequences
- Have a healthy diet by planning diets from mixed or different food groups with adequate proportions according to each group from the food pyramid.
- For each meal the bigger portion should come from the group at the bottom of the pyramid that is;
  - Staples mostly grains such as maize, rice, millet, sorghum, roots and tubers such as cassava, and potatoes.

Coloured fruits and vegetables rich in vitamins and minerals should form the second biggest portion of a meal. such as mango, pawpaw, passion fruit, oranges, dark-green leaves, carrots, yellow sweet potatoes, and pumpkins; other fruits and vegetables such as bananas, pineapples, avocados, watermelons, tomatoes, eggplant, and cabbage should form the second biggest portion on the plate. Vegetables and fruits of varying colours should also be considered, for example instead of rape and spinach, consider rape and tomatoes to take advantage of consumption of anti-oxidants and phytochemicals that help prevent certain diseases such as cancer.

- Animal source foods such as meat, chicken, fish, liver, eggs, and other small animals, Milk and Milk products such as yoghurt, cheese, should be included in small quantities.
  - Legumes such as beans, peas, bambara nuts, groundnuts, lentils and seeds such as pumpkin seeds should be eaten slightly bigger than animal foods.
- Oils and fats which include oil seeds, margarine, palm oil, and butter improve the absorption of some vitamin and provide extra energy should be used sparingly.
- Eat fewer empty-calorie foods and drinks for example, sweets, pastries, cake, fruit drinks, punch, sodas etc. Foods with added sugars, refined starches, high in sodium or solid fat should be avoided.

If pregnant

- Remind the teenager that they need extra calories for pregnancy as well as to sustain their normal growth during adolescent years.
- Pregnant woman should eat plenty of foods containing calcium such as milk, kapenta, vegetables(. A pregnant adolescent under the age of 19 needs even more calcium because she is still increasing her bone density.
- Reinforce importance of appropriate weight gain for a healthy baby. If adolescent seems reluctant about gaining weight, remind her that weight gain is due to not only the baby, but also increased blood volume, breast tissue, fat stores, and amniotic fluid.

Introduction to the 1st 1000 Most Critical Days (MCDs)

Objectives:
Participants should be able to
- Give an overview of the 1st 1000 MCDs.
- Explain the 1st 1000 MCDs priority interventions for Zambia
- Explain the Key practices to support mother and child survival in the 1st 1,000 MCDs

- Zambia and other developing countries has suffered high malnutrition rates for decades despite so much effort in addressing it.

1st 1000 MCDs= from conception to the first two years of life.
- 270 = pregnancy
- 365 = 1st year
- 365 = 2nd year

- The 1st 1000 MCDs is the period from conception through two years of life and it is broken as follows: pregnancy- 270 days, 1st year -365 days, 2nd -year 365 days =1000days.

- Zambia has adopted the global initiative on the 1st 1000 MCDs as a strategy to tackle high rates of malnutrition.

- Several high impact priority interventions have been adopted. These interventions also referred to as minimum package for Zambia aim at reducing under-nutrition right from conception to two years of age.

Table 1 - Key 1st 1000 MCDs interventions for Zambia

Priority Intervention	Pregnancy	0-6 months	6-23 months
1. Ferrous Sulphate & folic acid supplementation (FEFOL)	x		
2. Micronutrient powders (building on current pilots)			x
3. Multiple micronutrients (pilot first)	x		
4. Promotion of Breastfeeding (Early initiation, Exclusive Breastfeeding and continued breastfeeding)		x	x
5. Promotion of Complementary Feeding			x
6. Promotion of Diverse Diets for pregnant and lactating mothers	x	x	x
7. Zinc provision during diarrhoea			x

8. Promotion of safe water and hygiene and sanitation	x	x	x
9. Growth monitoring and promotion (facility and community)		x	x
10. Vitamin A supplementation			x
11. Deworming	X		x
12. Expanding Integrated management of acute malnutrition		x	x
13. Promotion of increased availability of diverse locally available and processed foods (with focus on women's empowerment	X	x	x
14. Nutritional sensitive messages in GRZ programmes (Farmer Input Support Programme,(FISP), Food Security Pack (FSP), NRWSSP, Social Cash Transfer (SCT), School Health Nutrition (SHN), Women Empowerment Programme (WEP)	X	x	x

- The Interventions should start by improving the health status of adolescents and pre-pregnant women, and also addressing their economic and social problems.
- During the critical period beginning at the onset of pregnancy through the first 24 months of a child's life a period of 1000 days; adequate nutrition is particularly important. Nutrition during this period provides the foundation for each child's future as a healthy, productive individual and citizen.
- If nutrition is not adequate for the 1st 1000 MCDs that is, during pregnancy and child's first two years of life, the child may fail to grow normally and become stunted or short for its age.
- A child who is stunted before 2 years of age faces life long threats to his/her growth, health, and development. Unless this condition is addressed within this critical period, the situation may be irreversible.
- Children who are stunted at two years of age have their potential for learning, productivity and good health compromised permanently.
- In Zambia, significant efforts have been made to combat malnutrition in children during the past decades. However, it is still facing high levels of malnutrition with stunting at 40%, underweight 15% and wasting 6% according to the Zambia Demographic health survey (ZDHS) preliminary report of 2013/2014.

Key practices to be promoted according to age

Table 2 - Matrix of key practices according to age.

	Age of child, or mother's status	Key practices to support across the first 1,000 days
1	Pregnancy	• Eating variety of locally available nutritious foods • Eating one extra small meal or snack in a day • Eating more food when ill • Taking folic acid and Ferrous tablets • Supplementation with Multivitamins • De-worming and Malaria Prophylaxis • Use Insecticide Treated bed Nets (ITN). • Elimination of mother to child transmission(eMTCT) • Safe water, sanitation and hygiene practices
2	Birth to 6 months	• Early initiation of breastfeeding • Exclusive breastfeeding • Breastfeeding on demand at least 8-12 times in a day. • Immunization • Growth monitoring and promotion (GMP). • ITN • eMTCT • safe water, sanitation and hygiene practices
3	Breastfeeding mother	• Eating variety of locally available nutritious foods • Eating one extra small meal or snack in a day • Eating more food when ill • Supplementation with Vitamin A. • Use Of ITNs • eMTCT • safe water, sanitation and hygiene practices
5	Baby 6 to 9 months old	• Continued breastfeeding • Introduce safe and appropriate Complementary feeds at 6 completed months. • GMP • Use of ITN • Safe water, sanitation and hygiene practices • eMTCT • Vitamin A supplementation

6	Child 9 to 12 months old	• Continued breastfeeding up to 24 months • Safe and appropriate Complementary feeding practices • GMP • Use of ITN • Water, sanitation and hygiene practices • eMTCT • Immunization • Vitamin A supplementation • Deworming
7	Child 12 to 24 months old	• Continued breastfeeding up to 24months • Safe and appropriate Complementary feeding practices • GMP • Use of ITN • Safe water, sanitation and hygiene practices • eMTCT • Immunization • Vitamin A supplementation • Deworming

- The 1st 1000MCDs interventions appear at all levels of growth in the table above. Note that MIYCN practices are part and parcel of the 1st 1000bMCDP. However at each level of growth there are key practices that should be adhered to by individuals and families that are key for promoting growth. These have to be promoted in communities.

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Session 2

Why Breastfeeding is Important

Objectives

After completing this session you will be able to:

- state the advantages of exclusive breastfeeding
- list the disadvantages of artificial feeding
- describe the main differences between breast milk and artificial milks

Introduction

The Global Strategy for Infant and Young Child Feeding recommends that infants are exclusively breastfed for the first six months of life. You need to understand why breastfeeding is important so you can help to support mothers who may have doubts about the value of breast milk. You also need to know the differences between breast milk and artificial milks.

The advantages of breastfeeding

This diagram summarizes the main advantages of breastfeeding. It is useful to think of the advantages of both breast milk (listed on the left) and breastfeeding (listed on the right).

Advantages of breastfeeding

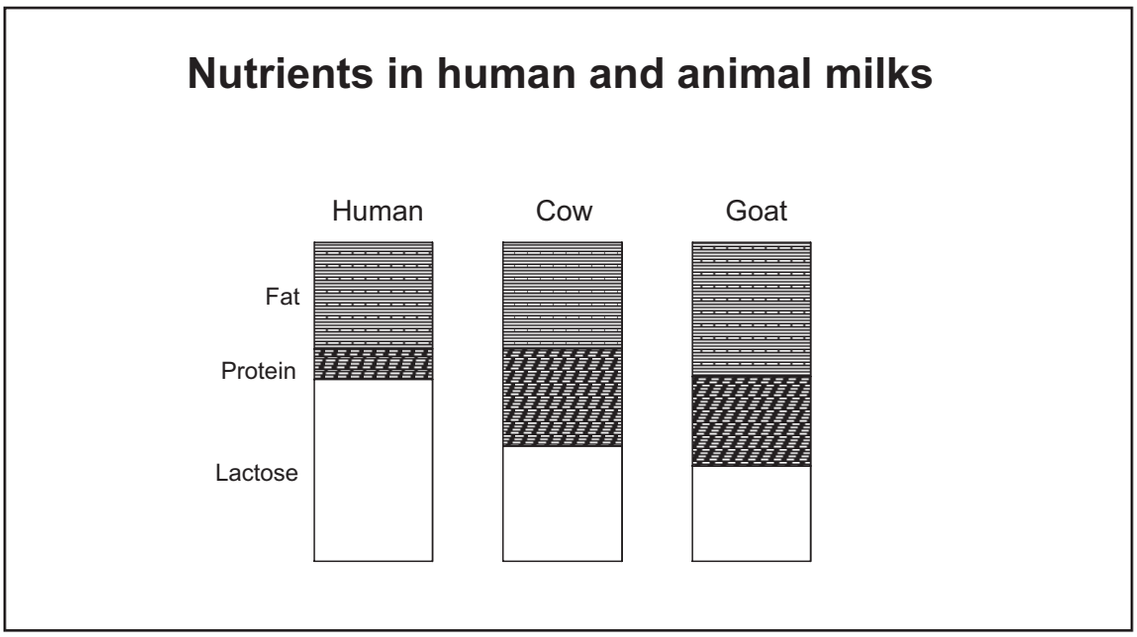
Breast milk

- Perfect nutrients
- Easily digested; efficiently used
- Protects against infection

Breastfeeding

- Helps bonding and development
- Helps delay a new pregnancy
- Protects mothers' health
- Costs less than artificial feeding

Nutrients in human and animal milks



Formula milks are made from a variety of products, including animal milks, soybean, and vegetable oils. Although they have been adjusted so that they are more like human milk, they are still far from perfect for babies.

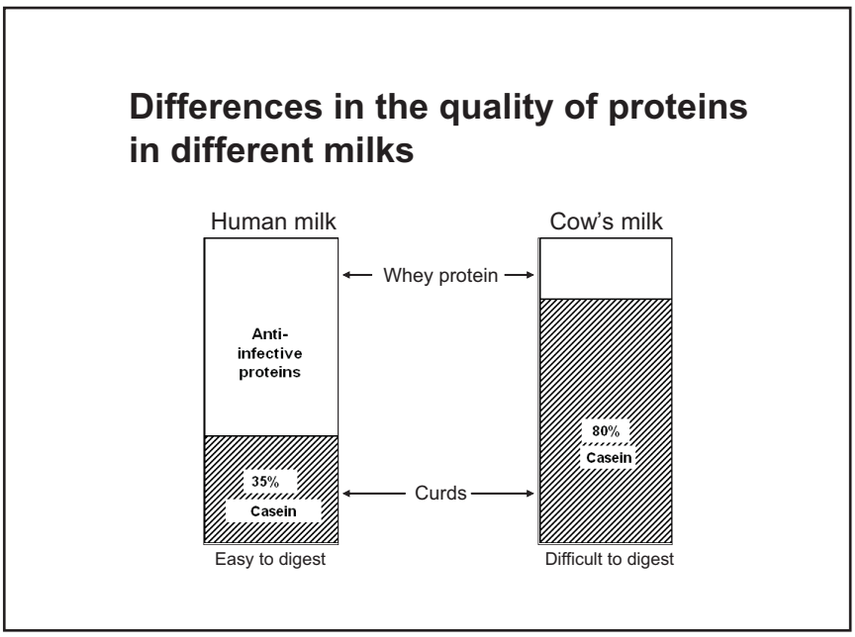
In order to understand the composition of formula milk we need to understand the differences between animal and human milk and how animal milks need to be modified to produce formula milk.

This chart compares the nutrients in breast milk with the nutrients in fresh cow's and goat's milk. All the milks contain fat which provides energy, protein for growth and a milk sugar called lactose which also provides energy.

The animal milk contains more protein than human milk. It is difficult for a baby's immature kidneys to excrete the extra waste from the protein in animal milks.

Human milk also contains essential fatty acids that are needed for a baby's growing brain and eyes, and for healthy blood vessels. These fatty acids are not present in animal milks, but may have been added to formula milk.

Quality of protein in different milks

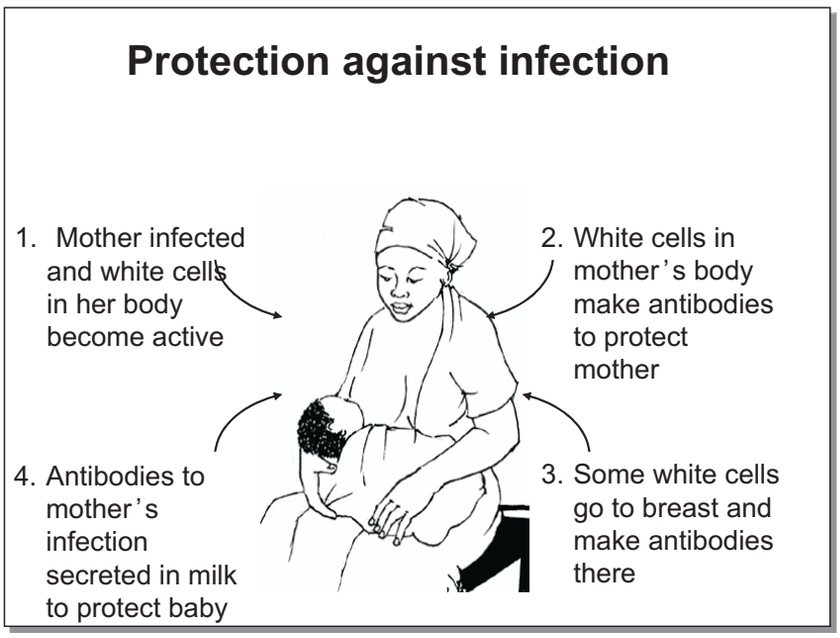


The protein in different milks varies in quality, as well as in quantity. Whilst the quantity of protein in cow's milk can be modified to make formula, the quality of proteins cannot be changed.

This chart shows that much of the protein in cow's milk is **casein**. Casein forms thick, indigestible curds in a baby's stomach.

Human milk contains more whey proteins. The whey proteins contain anti-infective proteins which help to protect a baby against infection.

Artificially fed babies may develop intolerance to protein from animal milk. They may develop diarrhoea, abdominal pain, rashes and other symptoms when they have feeds that contain the different kinds of protein.



Breast milk contains white blood cells, and a number of anti-infective factors, which help to protect a baby against many infections. Breastfeeding protects babies against diarrhoeal and respiratory illness and also ear infections, meningitis and urinary tract infections.

This diagram shows that when a mother develops an infection (1), white cells in her body become active, and make antibodies against the infection to protect her (2). Some of these white cells go to her breasts and make antibodies (3) which are secreted in her breast milk to protect her baby (4).

So a baby should not be separated from his mother when she has an infection, because her breast milk protects him against the infection.

Variations in the composition of breast milk

Colostrum is the breast milk that women produce in the first few days after delivery. It is thick and yellowish or clear in colour and in little quantities. It contains more protein than mature milk.

Colostrum

Property	Importance
• Antibody rich	- protects against allergy & infection
• Many white cells	- protects against infection
• Purgative	- clears meconium - helps to prevent jaundice
• Growth factors	- helps intestine to mature - prevents allergy, intolerance
• Rich in Vitamin A	- reduces severity of infection

Colostrum contains more antibodies and other anti-infective proteins than mature milk. It contains more white blood cells than mature milk. Colostrum helps to prevent the bacterial infections that are a danger to newborn babies and provides the first immunization against many of the diseases that a baby meets after delivery.

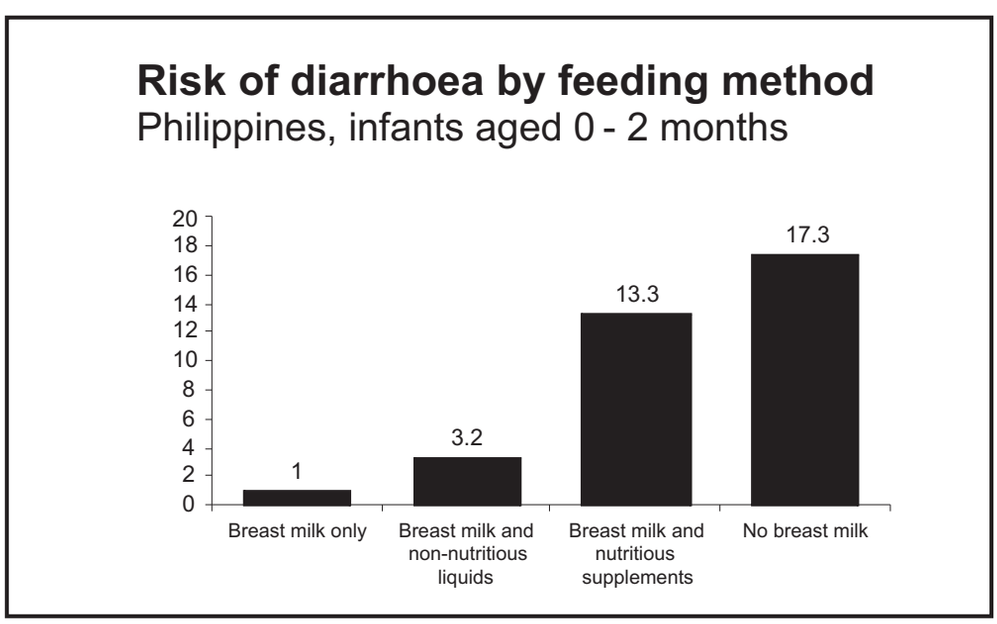
Colostrum has a mild purgative effect, which helps to clear the baby's gut of **meconium** (the first dark stools). This clears bilirubin from the gut, and helps to prevent jaundice from becoming severe.
Colostrum contains many growth factors which help a baby's immature intestine to develop after birth. This helps to prevent the baby from developing allergies and intolerance to other foods.
Colostrum is rich in vitamin A which helps to reduce the severity of any infections the baby might have.
So it is very important for babies to have colostrum.

Colostrum is ready in the breasts when a baby is born. Babies should not be given any drinks or foods before they start breastfeeding. Artificial feeds given before a baby has colostrum are likely to cause allergy and infection.

Mature milk is the breast milk that is produced after a few days. The quantity becomes larger, and the breasts feel full, hard and heavy. Some people call this the breast milk 'coming in'. Mature milk comprises foremilk and hind milk.

Foremilk is the milk that is produced early in a feed. It looks thinner than hindmilk. It is produced in larger amounts, and provides plenty of protein, lactose, and other nutrients. Because a baby gets large amounts of foremilk, he gets all the water that he needs from it. Babies do not need other drinks of water before they are six months old, even in a hot climate. If they satisfy their thirst on water, they may take less breast milk.

Hindmilk is the milk that is produced later in a feed. It looks whiter than foremilk, because it contains more fat. This fat provides much of the energy of a breastfeed. This is an important reason not to take a baby off a breast too quickly. The baby should be allowed to continue until he has had all that he wants.



This chart shows how breastfeeding protects a baby against diarrhoea. It shows the main findings of a study from the Philippines, comparing how often babies fed in different ways get diarrhoea. The bar on the left is for babies who were exclusively breastfeeding. It is small, because very few exclusively breastfed babies get diarrhoea.

The bar on the right is for artificially fed babies, who received no breast milk. This column is 17 times taller, because these babies were 17 times more likely to get diarrhoea than babies fed only on breast milk. Some of the babies were given breast milk and other feeds or fluids. These babies were more likely to have diarrhoea than exclusively breastfed babies, but less likely than babies who received no breast milk at all. Artificially fed babies get diarrhoea more often partly because artificial feeds lack anti-infective factors, and partly because artificial feeds are often contaminated with harmful bacteria.
Breastfeeding also protects against respiratory illness and other infections, e.g. ear infections, meningitis and urinary tract infections. Mortality from pneumonia is increased in babies who are not exclusively breastfed.

Psychological benefits of breastfeeding

Breastfeeding helps a mother and baby to form a close, loving relationship, which makes mothers feel deeply satisfied emotionally. Close contact from immediately after delivery helps this relationship to develop. This process is called bonding.

Babies tend to cry less if they are breastfed and may be more emotionally secure. Some studies suggest that breastfeeding may help a child to develop intellectually. Low-birth-weight babies fed breast milk in the first weeks of life perform better on intelligence tests in later childhood than children who are artificially fed.

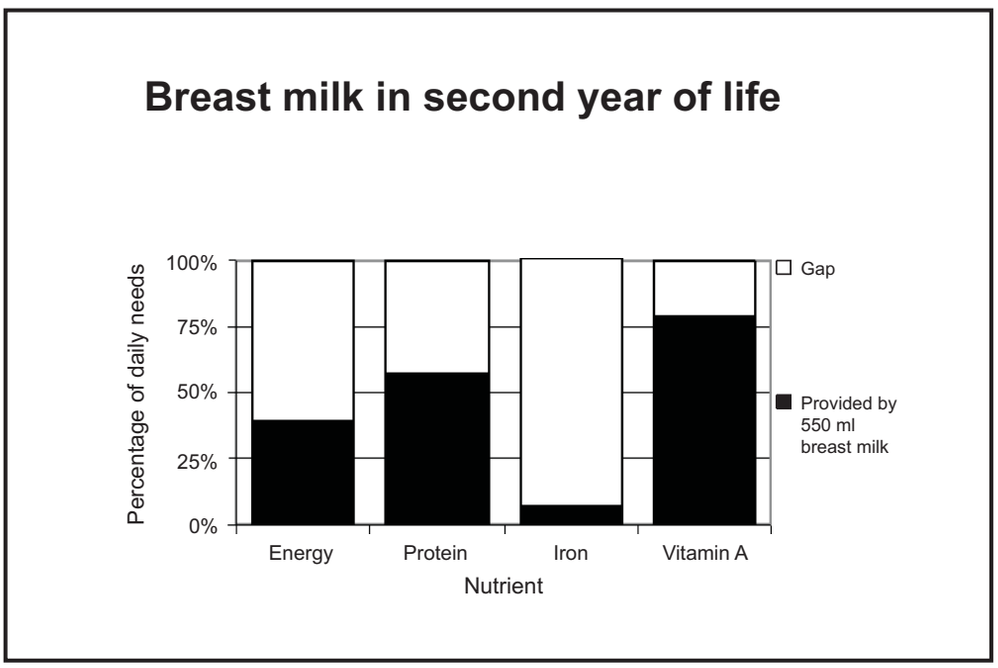
Disadvantages of artificial feeding

This chart summarizes the main disadvantages of artificial feeding.

Disadvantages of artificial feeding

- Interferes with bonding
- More diarrhoea and persistent diarrhoea
- More frequent respiratory infections
- Malnutrition; Vitamin A deficiency
- More allergy and milk intolerance
- Increased risk of some chronic diseases
- Obesity
- Lower scores on intelligence tests
- Mother may become pregnant sooner
- Increased risk of anaemia, ovarian cancer, and breast cancer in mother

Breast milk in the second year of life



For the first six months of life, exclusive breastfeeding can provide all the nutrients and water that a baby needs. From the age of six months, breast milk is no longer sufficient by itself. In Session 1 we learnt that all babies need complementary foods from six months, in addition to breast milk. However, breast milk continues to be an important source of energy and high quality nutrients beyond six months of age.

Notes

Session 3

How Breastfeeding Works

Objectives

After completing this session you will be able to:

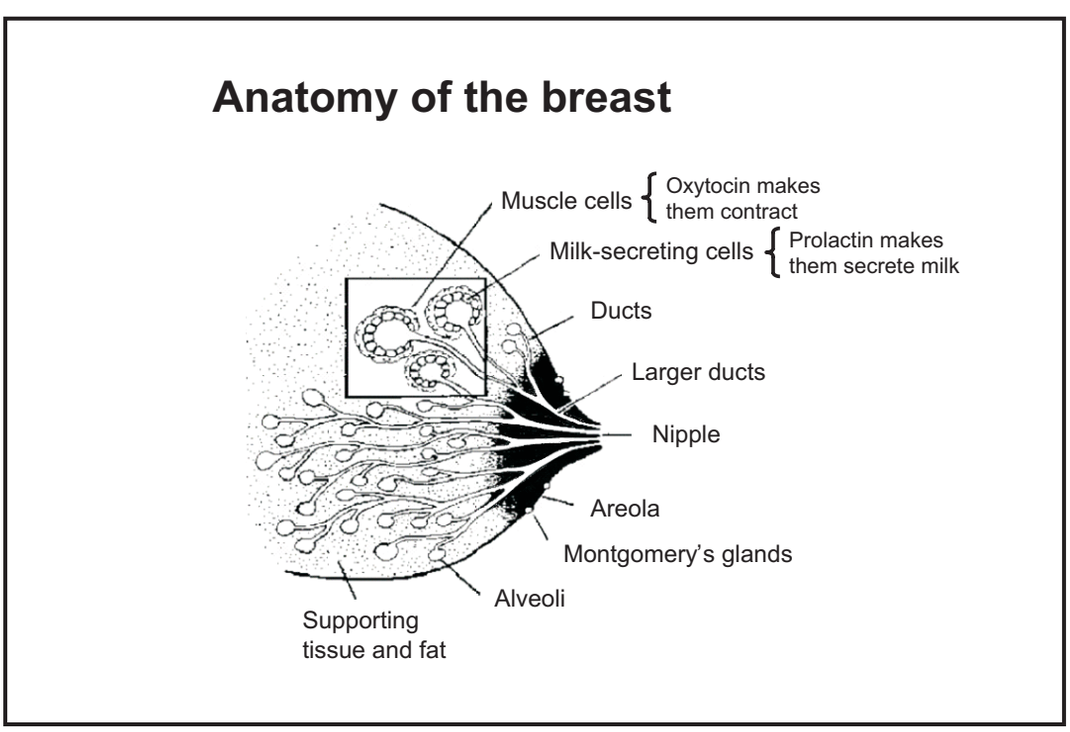
- name the main parts of the breast and describe their function
- describe the hormonal control of breast milk production and ejection
- describe the difference between good and poor attachment of a baby at the breast
- describe the difference between effective and ineffective suckling

Introduction

In this session, you will learn about the anatomy and physiology of breastfeeding. In order to help mothers, you need to understand how breastfeeding works.

You cannot learn a specific way of counselling for every situation, or every difficulty. But if you understand how breastfeeding works, you can work out what is happening, and help each mother to decide what is best for her.

Anatomy of the breast



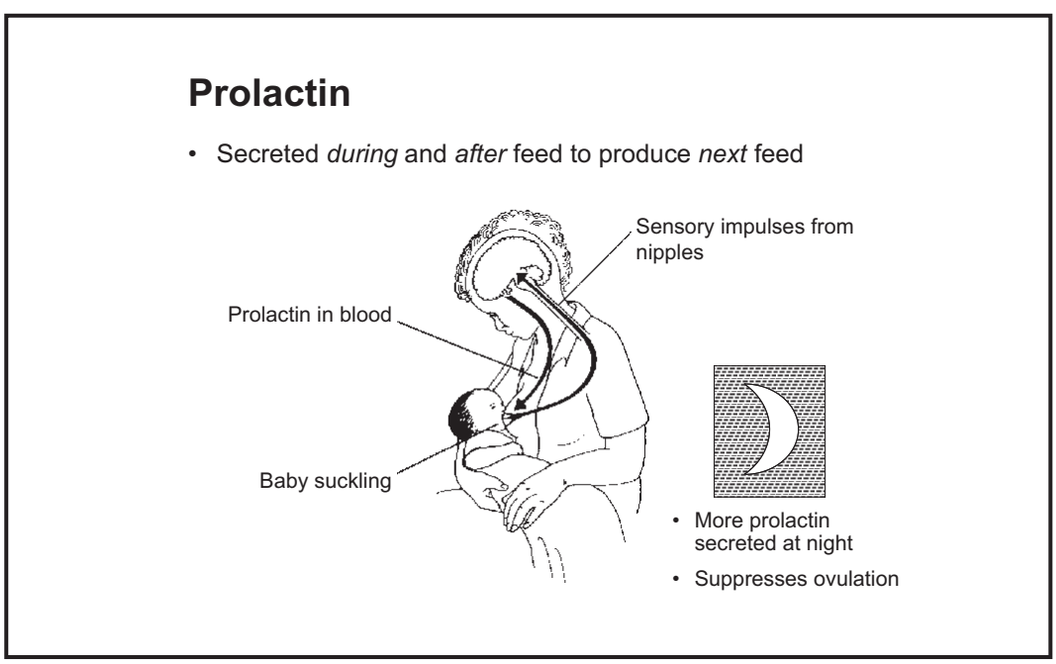
This diagram shows the anatomy of the breast.

The dark skin around the nipples is called the areola. In the areola are small glands called Montgomery's glands which secrete an oily fluid to keep the skin healthy. Inside the breast are the alveoli, which are very small sacs made of milk-secreting cells. There are millions of alveoli the diagram shows only a few. The box shows three of the alveoli enlarged. A hormone called prolactin makes these cells produce milk.

Around the alveoli are muscle cells, which contract and squeeze out the milk. A hormone called oxytocin makes the muscle cells contract. Small tubes, or ducts, carry milk from the alveoli to the outside. Milk is stored in the alveoli and small ducts between feeds.
The larger ducts beneath the areola dilate during feeding and hold the breast milk temporarily during the feed.

The secretory alveoli and ducts are surrounded by supporting tissue, and fat. It is the fat and other tissue which give the breast its shape, and which makes most of the difference between large and small breasts. Small breasts and large breasts both contain about the same amount of gland tissue, so they can both make plenty of milk.

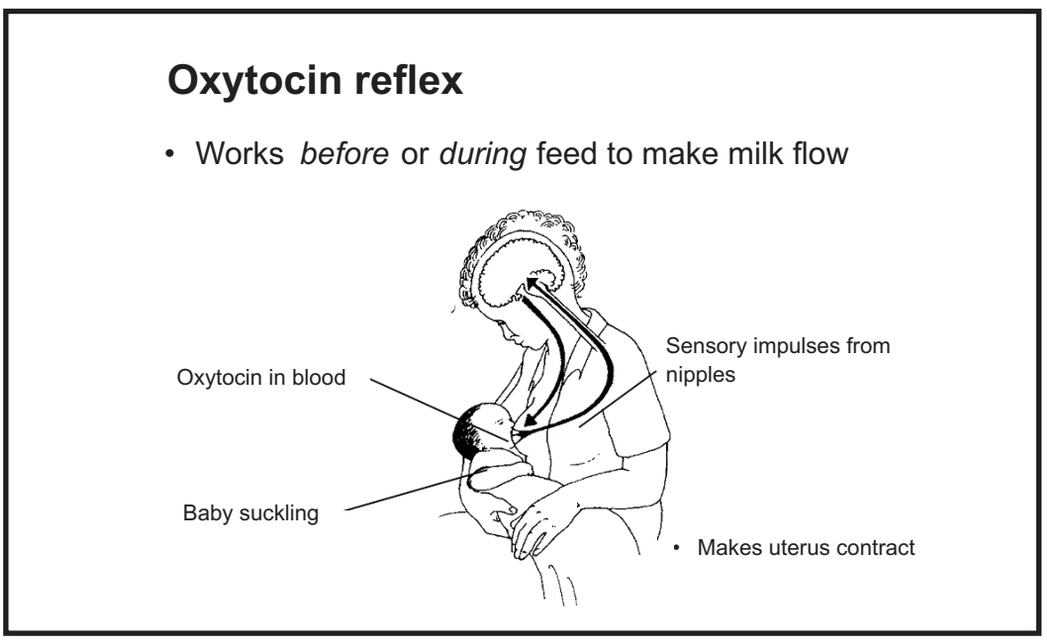
Prolactin



When a baby suckles at the breast, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes prolactin. Prolactin goes in the blood to the breast, and makes the milk-secreting cells produce milk. The more a baby suckles the more milk the breasts produce.

Most of the prolactin is in the blood about 30 minutes after the feed so it makes the breast produce milk for the next feed. For this feed, the baby takes the milk which is already in the breast.

Oxytocin



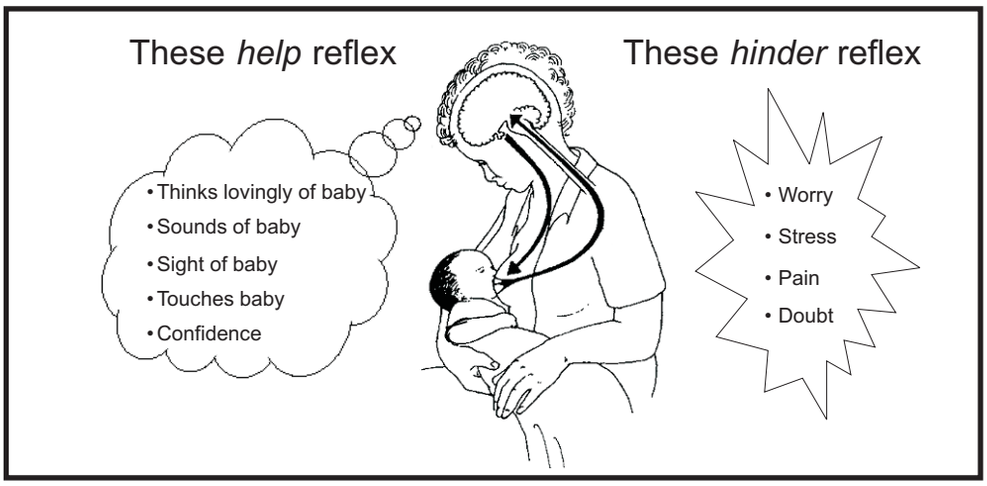
When a baby suckles, sensory impulses go from the nipple to the brain. In response, the pituitary gland at the base of the brain secretes the hormone oxytocin. Oxytocin goes in the blood to the breast, and makes the muscle cells around the alveoli contract.

This makes the milk which has collected in the alveoli flow along the ducts to the larger ducts beneath the areola. Here the milk is stored temporarily during the feed. This is the oxytocin reflex, the milk ejection reflex or the 'let-down' reflex.

Oxytocin is produced more quickly than prolactin. It makes the milk in the breast flow for *this* feed. Oxytocin can start working before a baby suckles, when a mother learns to expect a feed. If the oxytocin reflex does not work well, the baby may have difficulty in getting the milk. It may seem as if the breasts have stopped producing milk. However, the breasts are producing milk, but it is not flowing out. Oxytocin makes a mother's uterus contract after delivery. This helps to reduce bleeding, but it sometimes causes uterine pain and a rush of blood during a feed for the first few days. The pains can be quite strong.

The oxytocin reflex is easily affected by a mother's thoughts and feelings. Good feelings, for example feeling pleased with her baby, or thinking lovingly of him, and feeling confident that her milk is the best for him, can help the oxytocin reflex to work and her milk to flow. Sensations such as touching or seeing her baby, or hearing him cry, can also help the reflex. But bad feelings, such as pain, or worry, or doubt that she has enough milk, can hinder the reflex and stop her milk from flowing. Fortunately, this effect is usually temporary.

Helping and hindering of oxytocin reflex



SIGNS AND SENSATIONS OF AN ACTIVE OXYTOCIN REFLEX

A mother may notice:

- A squeezing or tingling sensation in her breasts just before she feeds her baby, or during a feed.
- Milk flowing from her breasts when she thinks of her baby, or hears him crying.
- Milk dripping from her other breast, when her baby is suckling.
- Milk flowing from her breasts in fine streams, if her baby comes off the breast during a feed.
- Pain from uterine contractions, sometimes with a rush of blood, during feeds in the first week.
- Slow deep sucks and swallowing by the baby, which show that breast milk is flowing into his mouth.

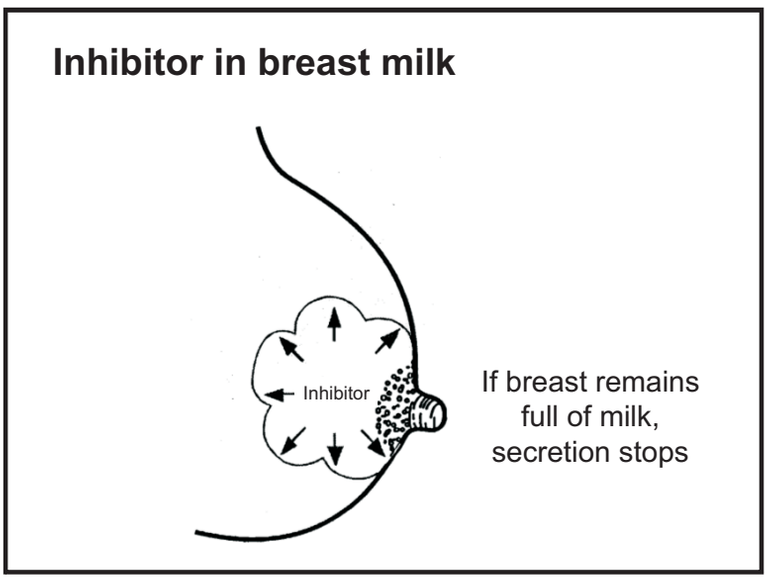
Control of breast milk production within the breast.

You may wonder why sometimes one breast stops making milk, while the other breast continues to make milk although oxytocin and prolactin go equally to both breasts. The following diagram shows why.

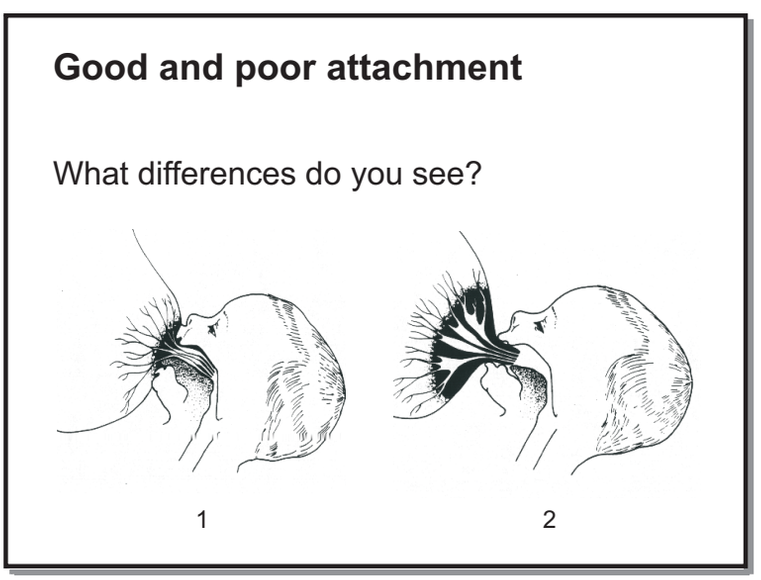
There is a substance in breast milk which can reduce or inhibit milk production.
If a lot of milk is left in a breast, the inhibitor stops the cells from secreting any more. This helps to protect the breast from the harmful effects of being too full. It is obviously necessary if a baby dies or stops breastfeeding for some other reason. If breast milk is removed, by suckling or expression, the inhibitor is also removed. Then the breast makes more milk.

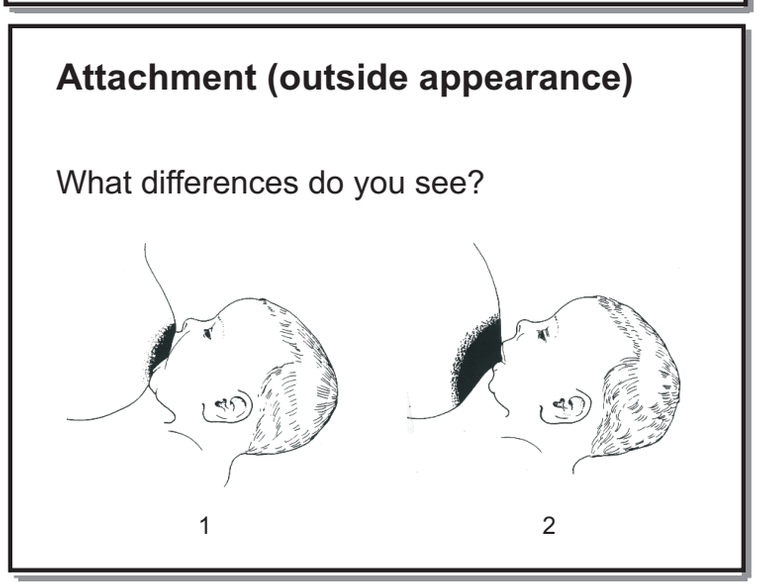
This helps you to understand why if a baby stops suckling from one breast, that breast stops making milk. If a baby suckles more from one breast, that breast makes more milk and becomes larger than the other.

It also helps you to understand why for a breast to continue to make milk, the milk must be removed. If a baby cannot suckle from one or both breasts, the breast milk must be removed by expression to enable production to continue.



Attachment to the breast





The 4 key points of attachment are:

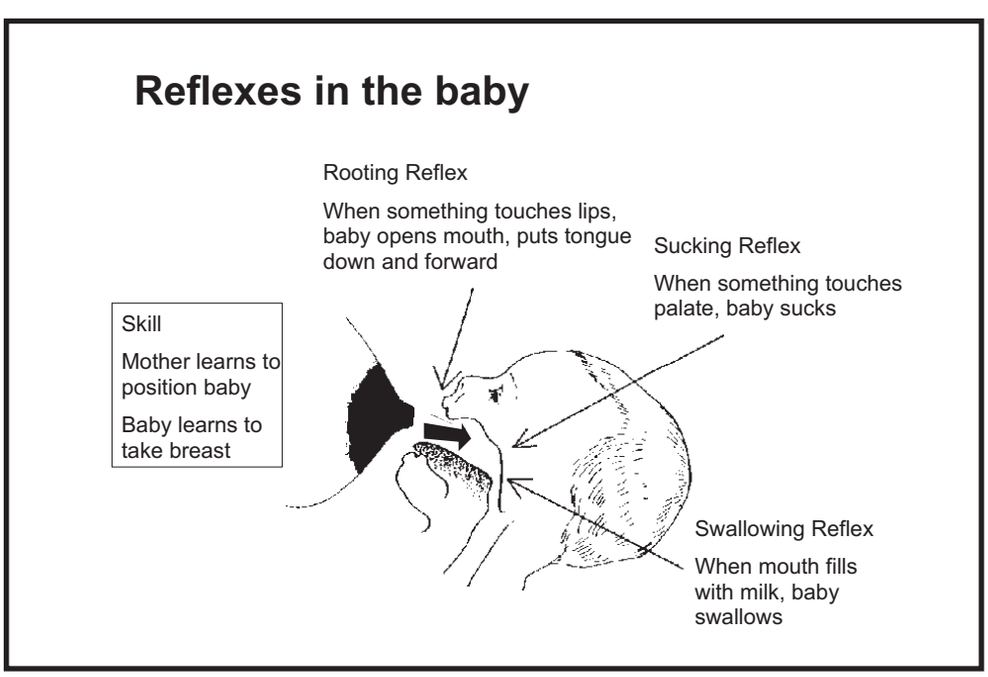
1. More areola above baby's top lip than below bottom lip
2. Baby's mouth wide open
3. Lower lip turned outwards
4. Baby's chin touches breast

Results of poor attachment

If a baby is poorly attached and he 'nipple sucks', it is painful for his mother. Poor attachment is the most important cause of sore nipples. As the baby sucks hard to try to get the milk, he pulls the nipple in and out. This makes the nipple skin rub against his mouth. If a baby continues to suck in this way, he can damage the nipple skin and cause cracks (also known as fissures). As the baby does not remove breast milk effectively the breasts may become engorged, the baby may be unsatisfied and cry a lot. Eventually, if breast milk is not removed the breasts may make less milk. A baby may fail to gain weight and the mother may feel she is a breastfeeding failure.

To prevent this all mothers need skilled help to position and attach their babies. Babies should not be given feeding bottles, especially before breastfeeding is established.

Reflexes in the baby



There are three main reflexes - the **rooting reflex**, the **sucking reflex**, and the **swallowing reflex**.

When something touches a baby's lips or cheek, he opens his mouth and may turn his head to find it. He puts his tongue down and forward. This is the 'rooting' reflex. It should normally be the breast that he is 'rooting' for. When something touches a baby's palate, he starts to suck it. This is the sucking reflex. When his mouth fills with milk, he swallows. This is the swallowing reflex. All these reflexes happen automatically without the baby having to learn to do them.

Notes

Session 4

Assessing a Breastfeed

Objectives

After completing this session you will be able to:

- explain the 4 key points of attachment
- assess a breastfeed by observing a mother and baby
- identify a mother who may need help
- recognize signs of good and poor attachment and positioning
- explain the contents and arrangement of the BREASTFEED OBSERVATION JOB AID

Introduction

Assessing a breastfeed helps you to decide if a mother needs help or not, and how to help her. You can learn a lot about how well or badly breastfeeding is going by observing, before you ask questions. There are some things you can observe when a baby is not breastfeeding. Other things you can only observe if a baby is breastfeeding.

BREASTFEED OBSERVATION JOB AID

Mother's name _____ Date _____

Baby's name _____ Baby's age _____

Signs that breastfeeding is going well:	Signs of possible difficulty:
GENERAL	
Mother:	*Mother:*
☐ Mother looks healthy	☐ Mother looks ill or depressed
☐ Mother relaxed and comfortable	☐ Mother looks tense and uncomfortable
☐ Signs of bonding between mother and baby	☐ No mother/baby eye contact
Baby:	*Baby:*
☐ Baby looks healthy	☐ Baby looks sleepy or ill
☐ Baby calm and relaxed	☐ Baby is restless or crying
☐ Baby reaches or roots for breast if hungry	☐ Baby does not reach or root
BREASTS	
☐ Breasts look healthy	☐ Breasts look red, swollen, or sore
☐ No pain or discomfort	☐ Breast or nipple painful
☐ Breast well supported with fingers away from nipple	☐ Breast held with fingers on areola
BABY'S POSITION	
☐ Baby's head and body in line	☐ Baby's neck and head twisted to feed
☐ Baby held close to mother's body	☐ Baby not held close
☐ Baby's whole body supported	☐ Baby supported by head and neck only
☐ Baby approaches breast, nose to nipple	☐ Baby approaches breast, lower lip/chin to nipple
BABY'S ATTACHMENT	
☐ More areola seen above baby's top lip	☐ More areola seen below bottom lip
☐ Baby's mouth open wide	☐ Baby's mouth not open wide
☐ Lower lip turned outwards	☐ Lips pointing forward or turned in
☐ Baby's chin touches breast	☐ Baby's chin not touching breast
SUCKLING	
☐ Slow, deep sucks with pauses	☐ Rapid shallow sucks
☐ Cheeks round when suckling	☐ Cheeks pulled in when suckling
☐ Baby releases breast when finished	☐ Mother takes baby off the breast
☐ Mother notices signs of oxytocin reflex	☐ No signs of oxytocin reflex noticed

Fig. 4.1 How does the mother hold her baby?

a. Baby's body close, facing breast Face to face attention from mother	b. Baby's body away from mother, neck twisted No mother baby eye contact

Fig. 4.2 How does the mother hold her breast?

a. Resting her fingers on her chest wall so that her first finger forms a support at the base of the breast	b. Holding her breast too near the nipple

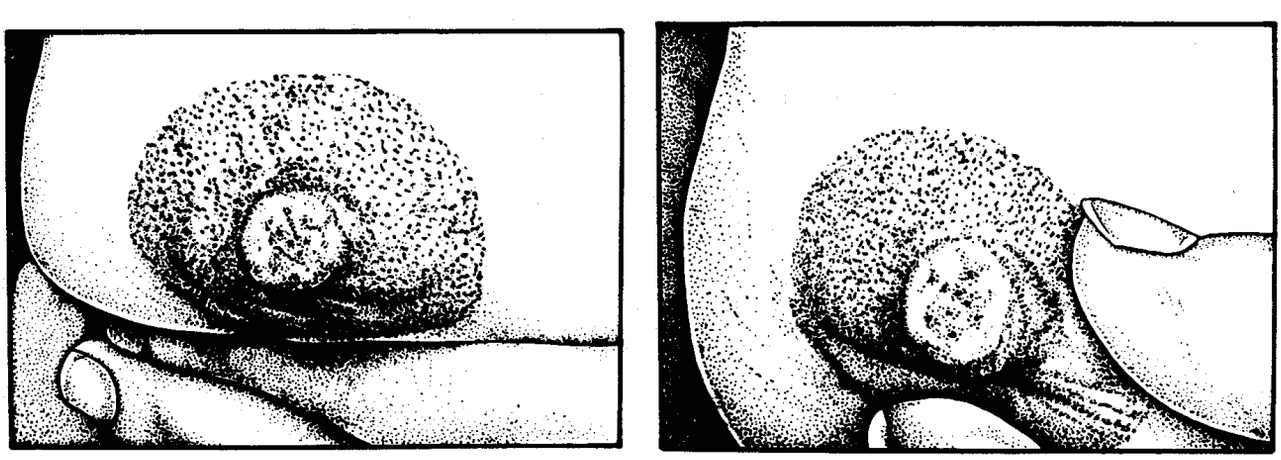
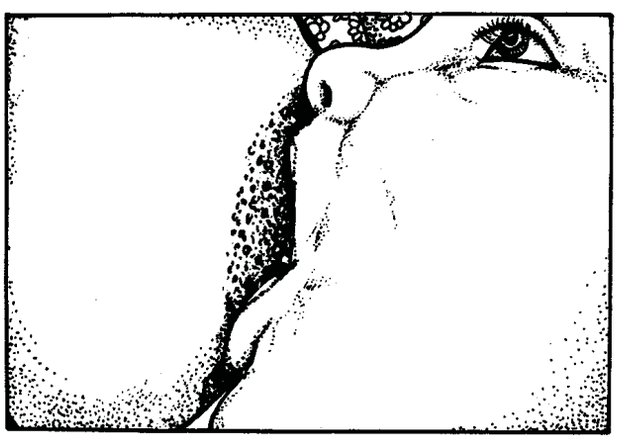
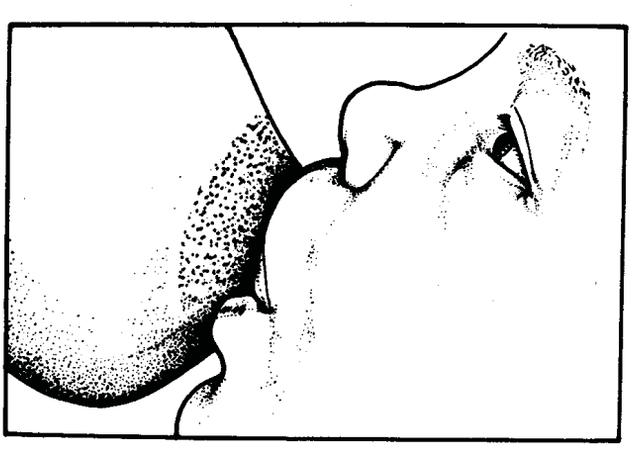


Fig. 4.3 How is the baby attached to the breast?

a. A baby well attached to his mother's breast	a. A baby well attached to his mother's breast





Exercise 4.a. Using the BREASTFEED OBSERVATION JOB AID

In this exercise, you practise recognizing the signs of good and poor attachment in some slides of babies breastfeeding. In some of the photographs you will also see signs of good and poor positioning.

With Slides 4/8-4/9, use your observations to practise filling in one of the BREASTFEED OBSERVATION JOB AIDS on the following pages. There are two forms. Fill in one form for each slide.

- If you see a sign, make a in the box next to the sign.
- If you do not see a sign, leave the box empty.

BREASTFEED OBSERVATION JOB AID – SLIDE 4/8

Mother's name _____ Date _____

Baby's name _____ Baby's age _____

Signs that breastfeeding is going well:	Signs of possible difficulty:
GENERAL	
Mother:	*Mother:*
☐ Mother looks healthy	☐ Mother looks ill or depressed
☐ Mother relaxed and comfortable	☐ Mother looks tense and uncomfortable
☐ Signs of bonding between mother and baby	☐ No mother/baby eye contact
Baby:	*Baby:*
☐ Baby looks healthy	☐ Baby looks sleepy or ill
☐ Baby calm and relaxed	☐ Baby is restless or crying
☐ Baby reaches or roots for breast if hungry	☐ Baby does not reach or root
BREASTS	
☐ Breasts look healthy	☐ Breasts look red, swollen, or sore
☐ No pain or discomfort	☐ Breast or nipple painful
☐ Breast well supported with fingers away from nipple	☐ Breast held with fingers on areola
BABY'S POSITION	
☐ Baby's head and body in line	☐ Baby's neck and head twisted to feed
☐ Baby held close to mother's body	☐ Baby not held close
☐ Baby's whole body supported	☐ Baby supported by head and neck only
☐ Baby approaches breast, nose to nipple	☐ Baby approaches breast, lower lip/chin to nipple
BABY'S ATTACHMENT	
☐ More areola seen above baby's top lip	☐ More areola seen below bottom lip
☐ Baby's mouth open wide	☐ Baby's mouth not open wide
☐ Lower lip turned outwards	☐ Lips pointing forward or turned in
☐ Baby's chin touches breast	☐ Baby's chin not touching breast
SUCKLING	
☐ Slow, deep sucks with pauses	☐ Rapid shallow sucks
☐ Cheeks round when suckling	☐ Cheeks pulled in when suckling
☐ Baby releases breast when finished	☐ Mother takes baby off the breast
☐ Mother notices signs of oxytocin reflex	☐ No signs of oxytocin reflex noticed

BREASTFEED OBSERVATION JOB AID – SLIDE 4/9

Mother's name _____ Date _____

Baby's name _____ Baby's age _____

Signs that breastfeeding is going well:	Signs of possible difficulty:
GENERAL	
Mother:	*Mother:*
☐ Mother looks healthy	☐ Mother looks ill or depressed
☐ Mother relaxed and comfortable	☐ Mother looks tense and uncomfortable
☐ Signs of bonding between mother and baby	☐ No mother/baby eye contact
Baby:	*Baby:*
☐ Baby looks healthy	☐ Baby looks sleepy or ill
☐ Baby calm and relaxed	☐ Baby is restless or crying
☐ Baby reaches or roots for breast if hungry	☐ Baby does not reach or root
BREASTS	
☐ Breasts look healthy	☐ Breasts look red, swollen, or sore
☐ No pain or discomfort	☐ Breast or nipple painful
☐ Breast well supported with fingers away from nipple	☐ Breast held with fingers on areola
BABY'S POSITION	
☐ Baby's head and body in line	☐ Baby's neck and head twisted to feed
☐ Baby held close to mother's body	☐ Baby not held close
☐ Baby's whole body supported	☐ Baby supported by head and neck only
☐ Baby approaches breast, nose to nipple	☐ Baby approaches breast, lower lip/chin to nipple
BABY'S ATTACHMENT	
☐ More areola seen above baby's top lip	☐ More areola seen below bottom lip
☐ Baby's mouth open wide	☐ Baby's mouth not open wide
☐ Lower lip turned outwards	☐ Lips pointing forward or turned in
☐ Baby's chin touches breast	☐ Baby's chin not touching breast
SUCKLING	
☐ Slow, deep sucks with pauses	☐ Rapid shallow sucks
☐ Cheeks round when suckling	☐ Cheeks pulled in when suckling
☐ Baby releases breast when finished	☐ Mother takes baby off the breast
☐ Mother notices signs of oxytocin reflex	☐ No signs of oxytocin reflex noticed

Notes

Session 5

Listening and Learning

Objectives

After completing this session you will be able to:

- list the six listening and learning skills
- give an example of each skill
- demonstrate appropriate use of each skill when counselling on infant and young child feeding

Introduction

Counselling is a way of working with people by which you understand how they feel, and help them to decide what they think is best to do in their situation. In this session we will discuss mothers who are feeding young children and how they feel.

Counselling mothers about feeding their infants are not the only situations in which counselling is useful. Counselling skills are useful when you talk to patients or clients in other situations. You may also find them helpful with your family and friends, or your colleagues at work. Practise some of the techniques with them you may find the result surprising and helpful.

The first two counselling skills sessions are about 'listening and learning'. A mother may not talk about her feelings easily, especially if she is shy, and with someone whom she does not know well. You need the skill to listen, and to make her feel that you are interested in her. This will encourage her to tell you more. She will be less likely to 'turn off', and say nothing.

Skill 1. Use helpful non-verbal communication

'Non-verbal communication' means showing your attitude through your posture, your expression, everything except through speaking. Helpful non-verbal communication makes a mother feel that you are interested in her, so it helps her to talk to you.

Skill 2. Ask open questions

Open questions are very helpful. To answer them a mother must give you some information. Open questions usually start with 'How? What? When? Where? Why?'
For example: “How are you feeding your baby?”

Closed questions are usually less helpful. They tell a mother the answer that you expect, and she can answer them with a 'Yes' or 'No'. They usually start with words like 'Are you?', 'Did he?', 'Has he?', 'Does she?' For example: “Did you breastfeed your last baby?” If a mother says “Yes” to this question, you still do not know if she breastfed exclusively, or if she also gave some artificial feeds.

To start a conversation, general open questions are helpful.
For example: “Tell me about your baby?”
To continue a conversation, a more specific open question may be helpful.
For example: “How old is your baby now?”

Sometimes it is helpful to ask a closed question, to make sure about a fact.
For example: “Are you giving him any other food or drink?”
If she says “Yes”, you can follow up with an open question, to learn more.
For example: “What made you decide to do that?”

Skill 3. Use responses and gestures which show interest

Another way to encourage a mother to talk is to use gestures such as nodding and smiling, and simple responses such as “Mmm”, or “Aha”. They show a mother that you are interested in her.

Skill 4. Reflect back what the mother says

'Reflecting back' means repeating back what a mother has said to you, to show that you have heard, and to encourage her to say more. Try to say it in a slightly different way. For example, if a mother says: “I don't know what to give my child, she refuses everything.”
You could say: “Your child is refusing all the food you offer her?”

Skill 5. Empathize - show that you understand how she feels

Empathy or empathizing means showing that you understand how a person feels.
For example, if a mother says: “My baby wants to feed very often and it makes me feel so tired,” you could say: “You are feeling very tired all the time then?”

This shows that you understand that she feels tired, so you are empathizing.
If you respond with a factual question, for example, “How often is he feeding? What else do you give him?” you are not empathizing.

Skill 6. Avoid words which sound judging

'Judging words' are words like: right, wrong, well, badly, good, enough, properly. If you use these words when you ask questions, you may make a mother feel that she is wrong, or that there is something wrong with her baby. However, sometimes you need to use the 'good' judging words to build a mother's confidence (see Session 10 'Building confidence and giving support').

HELPFUL NON-VERBAL COMMUNICATION

- Keep your head level
- Pay attention
- Remove barriers
- Take time
- Touch appropriately

LISTENING AND LEARNING SKILLS
▪ Use helpful non-verbal communication ▪ Ask open questions ▪ Use responses and gestures which show interest ▪ Reflect back what the mother says ▪ Empathize - show that you understand how she feels ▪ Avoid words which sound judging.

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Session 6

Listening and Learning Exercises

Objectives

After completing this session you will be able to:

- demonstrate appropriate use of the 6 listening and learning skills
- provide examples of each skill

Exercise 6.a Asking open questions

How to do the exercise:
Questions 1-4 are 'closed' and it is easy to answer 'yes' or 'no'.
Write a new 'open' question, which requires the mother to tell you more.

Example:

'Closed' Questions	'Open' Questions
Do you breastfeed your baby?	*How are you feeding your baby?*

To answer:

'Closed' Questions	'Open' Questions
1. Does your baby sleep with you?	
2. Are you often away from your baby?	
3. Does Sara eat porridge?	
4. Do you give fruit to your child often?	

Exercise 6.b Reflecting back what a mother says

How to do the exercise:
Statements 1-3 are some things that mothers might tell you.
Underneath 1-3 are three responses. Mark the response that 'reflects back' what the statement says. For statement 4 make up your own response which 'reflects back' what the mother says.

Example:

My mother says that I don't have enough milk.

	a) Do you think you have enoughmilk?
	b) Why does she think that?
▪	c) She says that you have a low milk supply?

To answer:

1. Mwape does not like to take thick porridge.

	a) Mwape does not seem to enjoy thick foods?
	b) What foods have you tried?
	c) It is good to give Mwape thick foods as he is over six months old.

2. He doesn't seem to want to suckle from me.

	a) Has he had any bottle feeds?
	b) How long has he been refusing?
	c) He seems to be refusing to suckle?

3. I tried feeding him from a bottle, but he spat it out.

	a) Why did you try using a bottle?
	b) He refused to suck from a bottle?
	c) Have you tried to use a cup?

4. "My husband says our baby is old enough to stop breastfeeding now."

Your husband wants you to stop breastfeeding your baby?

Exercise 6.c Empathizing - to show that you understand how she feels

How to do the exercise:
Statements 1-4 are things that mothers might say.
Underneath statements 1-4 are three responses that you might make.
Underline the words in the mother's statement which show something about how she feels.
Mark the response that is most empathetic.
For stories 5 and 6 underline the feeling words; then make up your own empathizing response.

Example:

My baby wants to feed so often at night that I feel exhausted.

	a. How many times does hefeed altogether?
	b. Does he wake you every night?
▪	c. You are really tired with the night feeding.

To answer:

1. Likando has not been eating well for the past week. I am very worried about him.

	a. You are anxious because Likando is not eating?
	b. What did Likando eat yesterday?
	c. Children often have times when they do not eat well.

2. My breast milk looks so thin - I am afraid it is not good.

	a. That's the foremilk - it always looks rather watery.
	b. You are worried about how your breast milk looks?
	c. Well, how much does the baby weigh?

3. I feel there is no milk in my breasts, and my baby is a day old already.

	a. You are upset because your breast milk has not come in yet?
	b. Has he started suckling yet?
	c. It always takes a few days for breast milk to come in.

4. I am anxious that if I breastfeed I will pass HIV on to my baby.

	a. I can see you are worried about breastfeeding your baby?
	b. Would you like me to explain to you about how the HIV virus is passed from mothers to babies?
	c. What have you heard about other options for feeding your baby?

5. Musonda brings Chiosomo to see you. He is nine months old. Musonda is worried. She says: “Chisomo is still breastfeeding and I feed him three other meals a day, but I am so upset, he still looks so thin.” What would you say to Musonda to empathize with how she feels?

6. Chaku comes to the clinic. She is pregnant with her first baby and has found out she has HIV. She says: “I am so frightened that my mother-in-law might find out”. What would you say to Chaku to empathize with how she feels?

Exercise 6.d Translating judging words

JUDGING WORDS			
Well	**Normal**	**Enough**	**Problem**
good bad badly	correct proper right wrong	adequate inadequate satisfied plenty of sufficient	fail failure succeed success

USING AND AVOIDING JUDGING WORDS			
English	*Local language*	*Judging question*	*Non-judging question*
Well		Does he suckle well?	
Normal		Are his stools normal?	
Enough		Is he gaining enough weight?	
Problem		Do you have any problems with breastfeeding?	

Notes

Session 7

Practical Session 1

Listening and Learning Assessing a Breastfeed

Objectives

After completing this session you will be able to:

- demonstrate appropriate listening and learning skills when counselling a mother on feeding her infant
- assess a breastfeed using the BREASTFEED OBSERVATION JOB AID

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session. During the practical session, you work in small groups, and take turns to talk to a mother, while the other members of the group observe.

What to take with you:

- two copies of the BREASTFEED OBSERVATION JOB AID
- one copy of LISTENING AND LEARNING SKILLS CHECKLIST
- pencil and paper to make notes
- you do not need to take books or manuals

If you are the one who talks to the mother:

Introduce yourself to the mother, and ask permission to talk to her. Introduce the group, and explain that you are interested in infant feeding. Try to find a chair or stool to sit on. If necessary, and if allowed in the facility, sit on the bed.

If the baby is feeding, ask the mother to continue as she is doing. If the baby is not feeding, ask the mother to give a feed in the normal way at any time that the baby seems ready. Ask the mother's permission for the group to watch the feed.

Before or after the breastfeed, ask the mother some open questions about how she is, how the baby is, and how feeding is going, to start the conversation. Encourage the mother to talk about herself and the baby. Practice as many of the listening and learning skills as possible.

If you are observing:

Stand quietly in the background. Try to be as still and quiet as possible. Do not comment, or talk among yourselves.

Make general observations of the mother and baby. Notice for example: Does she look happy? Does she have formula or a feeding bottle with her? Make general observations of the conversation between the mother and the participant. Notice for example: Who does most of the talking? Does the mother talk freely, and seem to enjoy it?

Make specific observations of the participant's listening and learning skills, including her non-verbal communication. Mark a on your list of LISTENING AND LEARNING SKILLS CHECKLIST when she uses a skill, to help you to remember for the discussion. Notice if she makes a mistake, for example if she uses a judging word, or if she asks a lot of questions to which the mother says 'yes' and 'no'.

Stay quietly watching the mother and baby as the feed continues. While you observe, fill in a BREASTFEED OBSERVATION JOB AID. Write the name of the mother and baby; mark a beside each sign that you observe; add the time that the feed takes.

Thank the mother for her time and say something to praise and support her.

MISTAKES TO AVOID

Do not say that you are interested in breastfeeding.
The mother's behaviour may change. She may not feel free to talk about bottle feeding. You should say that you are interested in "infant feeding" or in "how babies feed".

Do not give a mother help or advice.
In Practical Session 1, if a mother seems to need help, you should inform your trainer, and a member of staff from the ward or clinic.

Be careful that the forms do not become a barrier.
The participant who talks to the mother should not make notes while she is talking. She needs to refer to the forms to remind her of what to do, but if she wants to write, she should do so afterwards. The participants who are observing can make notes.

Notes

Session 8

Positioning a Baby at the Breast

Objectives:

After completing this session you will be able to:

- explain the 4 key points of positioning
- describe how a mother should support her breast for feeding
- demonstrate the main positions – sitting, lying, underarm and across
- help a mother to position her baby at the breast for feeding, using the 4 key points in different positions

Introduction

Always observe a mother breastfeeding before you help her. Take time to see what she does, so that you can understand her situation clearly. Do not rush to make her do something different.

Give a mother help only if she has difficulty. Some mothers and babies breastfeed satisfactorily in positions that would be difficult for others. This is especially true with babies more than about two months old. There is no point trying to change such a baby's position if he is getting breast milk effectively, and his mother is comfortable.

Let the mother do as much as possible herself. Be careful not to 'take over' from her. Explain what you want her to do. If possible, demonstrate on your own body to show her what you mean.

Make sure that she understands what you do so that she can do it herself. Your aim is to help her to position her own baby. It does not help if you can get a baby to suckle, if his mother cannot.

BREASTFEED OBSERVATION JOB AID

Mother's name _____ Date _____

Baby's name _____ Baby's age _____

Signs that breastfeeding is going well:	Signs of possible difficulty:
GENERAL	
Mother:	*Mother:*
☐ Mother looks healthy	☐ Mother looks ill or depressed
☐ Mother relaxed and comfortable	☐ Mother looks tense and uncomfortable
☐ Signs of bonding between mother and baby	☐ No mother/baby eye contact
Baby:	*Baby:*
☐ Baby looks healthy	☐ Baby looks sleepy or ill
☐ Baby calm and relaxed	☐ Baby is restless or crying
☐ Baby reaches or roots for breast if hungry	☐ Baby does not reach or root
BREASTS	
☐ Breasts look healthy	☐ Breasts look red, swollen, or sore
☐ No pain or discomfort	☐ Breast or nipple painful
☐ Breast well supported with fingers away from nipple	☐ Breast held with fingers on areola
BABY'S POSITION	
☐ Baby's head and body in line	☐ Baby's neck and head twisted to feed
☐ Baby held close to mother's body	☐ Baby not held close
☐ Baby's whole body supported	☐ Baby supported by head and neck only
☐ Baby approaches breast, nose to nipple	☐ Baby approaches breast, lower lip/chin to nipple
BABY'S ATTACHMENT	
☐ More areola seen above baby's top lip	☐ More areola seen below bottom lip
☐ Baby's mouth open wide	☐ Baby's mouth not open wide
☐ Lower lip turned outwards	☐ Lips pointing forward or turned in
☐ Baby's chin touches breast	☐ Baby's chin not touching breast
SUCKLING	
☐ Slow, deep sucks with pauses	☐ Rapid shallow sucks
☐ Cheeks round when suckling	☐ Cheeks pulled in when suckling
☐ Baby releases breast when finished	☐ Mother takes baby off the breast
☐ Mother notices signs of oxytocin reflex	☐ No signs of oxytocin reflex noticed

How to help a mother to position her baby

HOW TO HELP A MOTHER TO POSITION HER BABY

- Greet the mother and ask how breastfeeding is going.
- Assess a breastfeed.
- Explain what might help, and ask if she would like you to show her.
- Make sure that she is comfortable and relaxed.
- Sit down yourself in a comfortable, convenient position.
- Explain how to hold her baby, and show her if necessary.
  The **four key points** are:
  Baby's head and body in line
  Baby held close to mother's body
  Baby's whole body supported
  Baby approaches breast, nose to nipple (see figure 8.1)
- Show her how to support her breast:
  With her fingers against her chest wall below her breast
  With her first finger supporting the breast
  With her thumb above
  Her fingers should not be too near the nipple.
- Explain or show her how to help the baby to attach:
  Touch her baby's lips with her nipple
  Wait until her baby's mouth is opening wide
  Move her baby quickly onto her breast, aiming his lower lip below the nipple.
- Notice how she responds and ask her how her baby's suckling feels.
- Look for signs of good attachment. If the attachment is not good, try again.

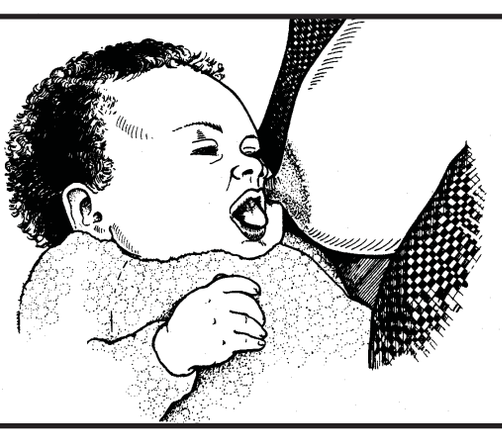


Fig. 8.1
The mother's nipple is touching her baby's lips. He is opening his mouth and putting his tongue forward ready to take the breast.

HOW TO HELP A MOTHER WHO IS SITTING

Greet the mother, introduce yourself, and ask her name and her baby's name. Ask her how she is and ask one or two open questions about how breastfeeding is going.

Assess a breastfeed. Ask if you may see how her baby breastfeeds, and ask her to put him to her breast in the usual way. (If the baby has had a feed recently, you may have to arrange to come back later). Observe the breastfeed.

If you decide that the mother needs help to improve her baby's attachment: First say something encouraging, like: "He really wants your breast milk, doesn't he?"

Then explain what might help and ask if she would like you to show her. For example, say something like: "Breastfeeding might be more comfortable for you if (baby's name) took a larger mouthful of breast when he suckles. Would you like me to show you how?" If she agrees, you can start to help her.

Make sure that she is sitting in a comfortable, relaxed position. Sit down yourself, so that you also are comfortable and relaxed, and in a convenient position to help.

Explain to the mother how to hold her baby. Show her what to do if necessary.

Make these four key points about positioning a baby clear:
- Baby's head and body in line
- Baby held close to mother's body
- Baby's whole body supported
- Baby approaches breast, nose to nipple

Show her how to support her breast with her hand to offer it to her baby:

She should rest her fingers on her chest wall under her breast, so that her first finger forms a support at the base of the breast (see Fig. 4.2, page 25).

She can use her thumb to press the top of her breast slightly. This can improve the shape of the breast so that it is easier for her baby to attach well.

- She should not hold her breast too near to the nipple.
- Explain how she should touch her baby's lips with her nipple, so that he opens his mouth.
- Explain that she should wait until her baby's mouth is opening wide, before she moves him onto her breast. His mouth needs to be wide open to take a large mouthful of breast.

Explain or show her how to quickly move her baby to her breast, when he is opening his mouth wide. She should bring her baby to her breast. She should not move herself or her breast to her baby. She should aim her baby's lower lip below her nipple, so that his chin will touch her breast.

Notice how the mother responds. Does she seem to have pain? Does she say “Oh that feels better!” If she says nothing, ask her how her baby's suckling feels. Look for all the signs of good attachment. If the attachment is not good, try again.

HOW TO HELP A MOTHER WHO IS LYING DOWN

Help the mother to lie down in a comfortable, relaxed position. It is better if she is not 'propped up' on her elbow, as this can make it difficult for the baby to attach to the breast.

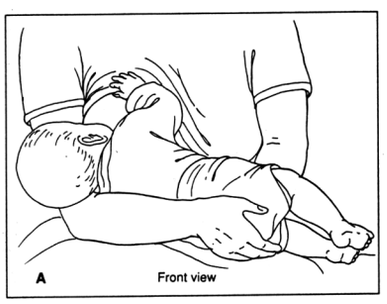
Show her how to hold her baby. Exactly the same **four key points** are important, as for a mother who is sitting. She can support her baby with her lower arm. She can support her breast if necessary with her upper arm. If she does not support her breast, she can hold her baby with her upper arm.

OTHER POSITIONS IN WHICH A MOTHER CAN BREASTFEED

Mothers can breastfeed in many different positions.

Some useful positions that you may want to show mothers are:

- the underarm position
- holding the baby with the arm opposite the breast



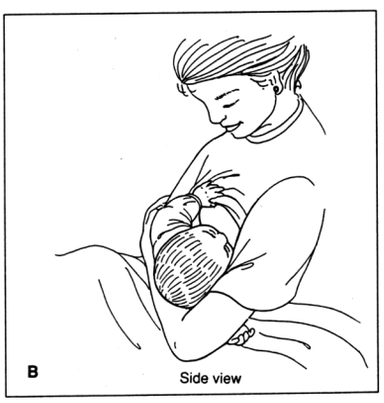


FIGURE 9–9. Madonna (cradle) position. *A. Front view. B. Side view.*

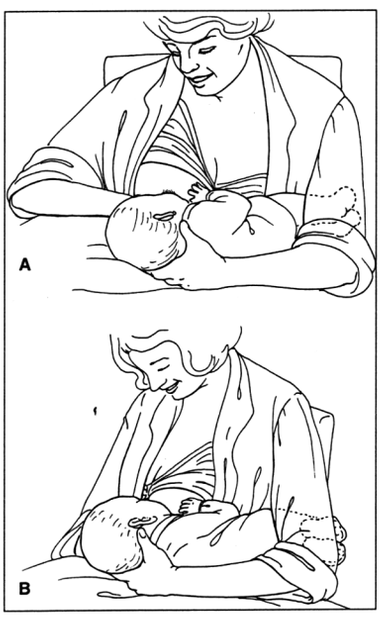


FIGURE 9–10. Football position. *A. Modified clutch position. B. Clutch hold.*

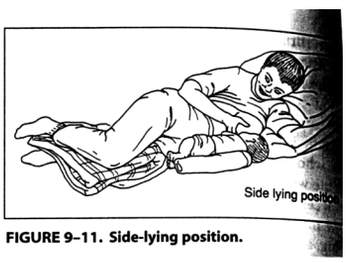


FIGURE 9–11. Side-lying position.

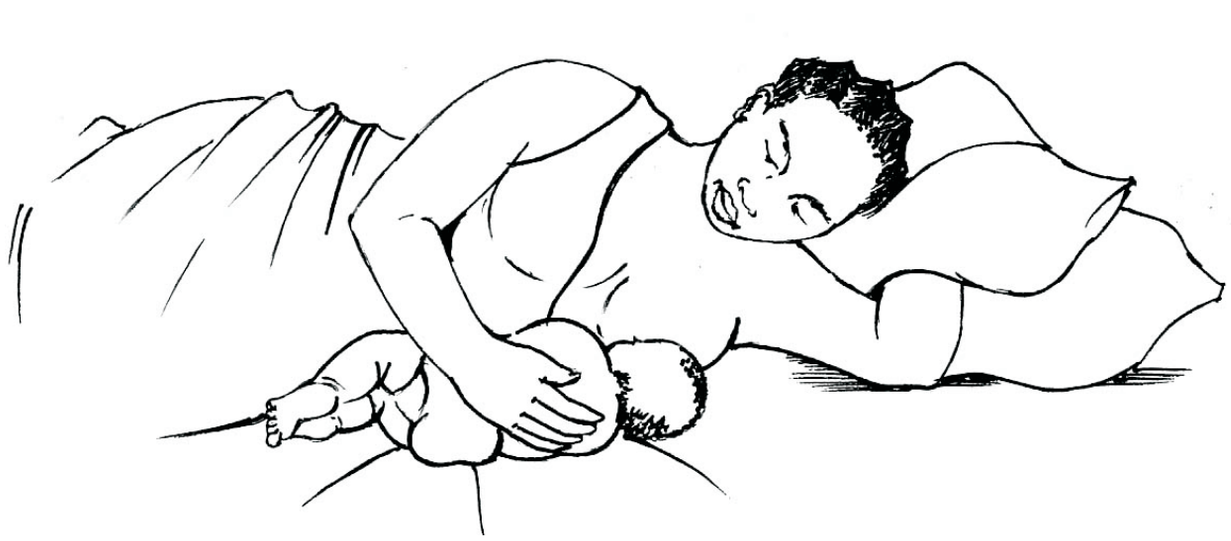
Fig. 8.2 A mother holding her baby In the underarm position

Useful for:
twins
blocked duct
difficulty attaching t

Fig 8.3
A mother holding her baby with the arm opposite the breast

Useful for:
very small babies

Fig. 8.4 A mother breastfeeding her baby lying down



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Session 9

Child Growth Assessment

Objectives

After completing this session participants will be able to:

- Explain the features of the Children's Clinic Card
- Explain on how to take weight and how to measure MUAC
- Plot a child's weight on a growth chart
- Explain the meaning of the reference lines (Z-scores)
- Interpret individual growth curves and MUAC measurements
- Explain the importance of length / height measurements

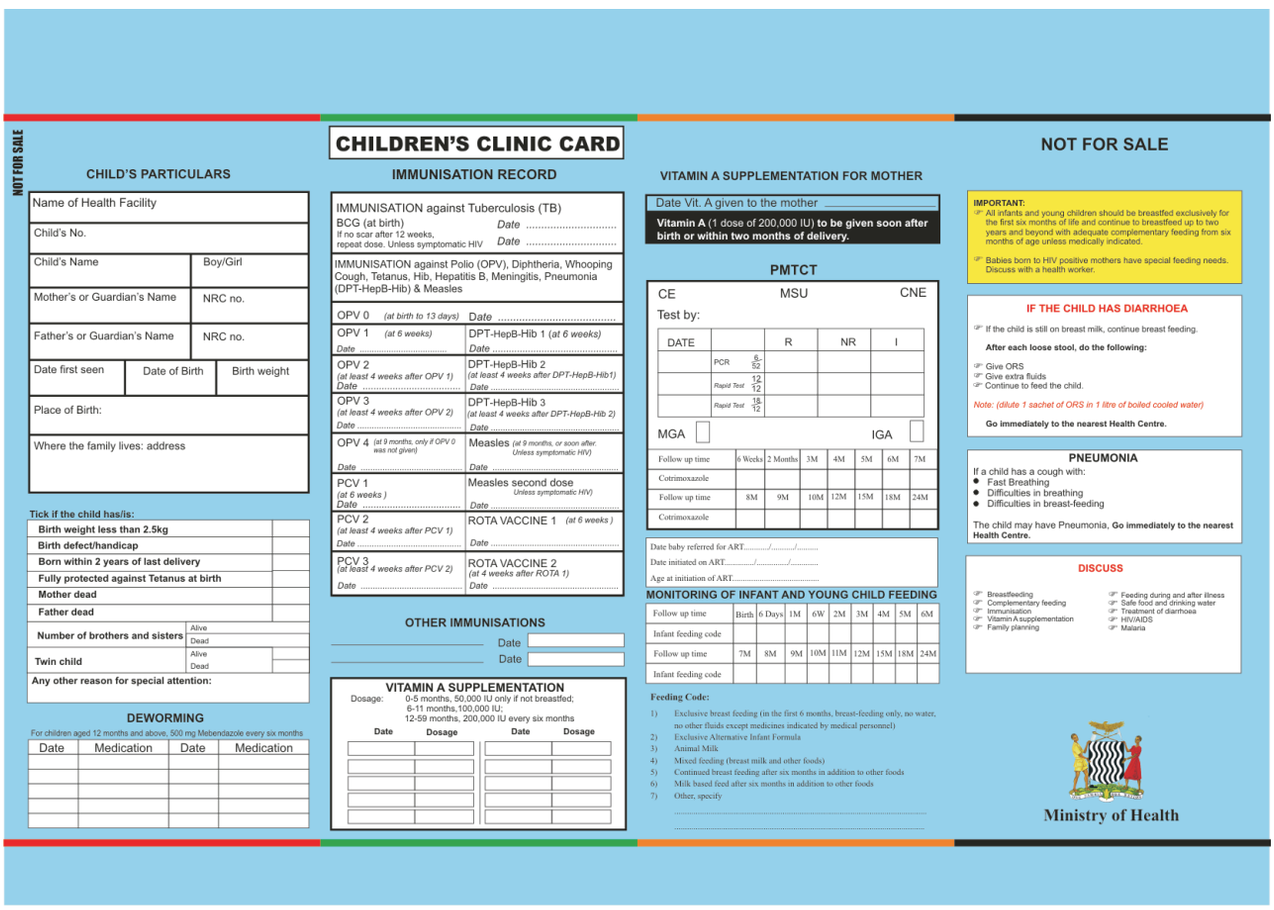
Introduction

When counselling on infant feeding it is important to understand the growth charts. If growth charts are not interpreted accurately; incorrect information can be given to a mother, leading to worry and loss of confidence.

Growth curves reflect past and present condition of the child including food intake and health status. Measurements you need to use are weight, MUAC and length or height.

Good feeding practices – both before, and after six months help prevent growth faltering of both weight and length/height and keep the curves for both indices continuing upwards.

II. Features of the Children's Clinic Card



The following are the features of the children's clinic card

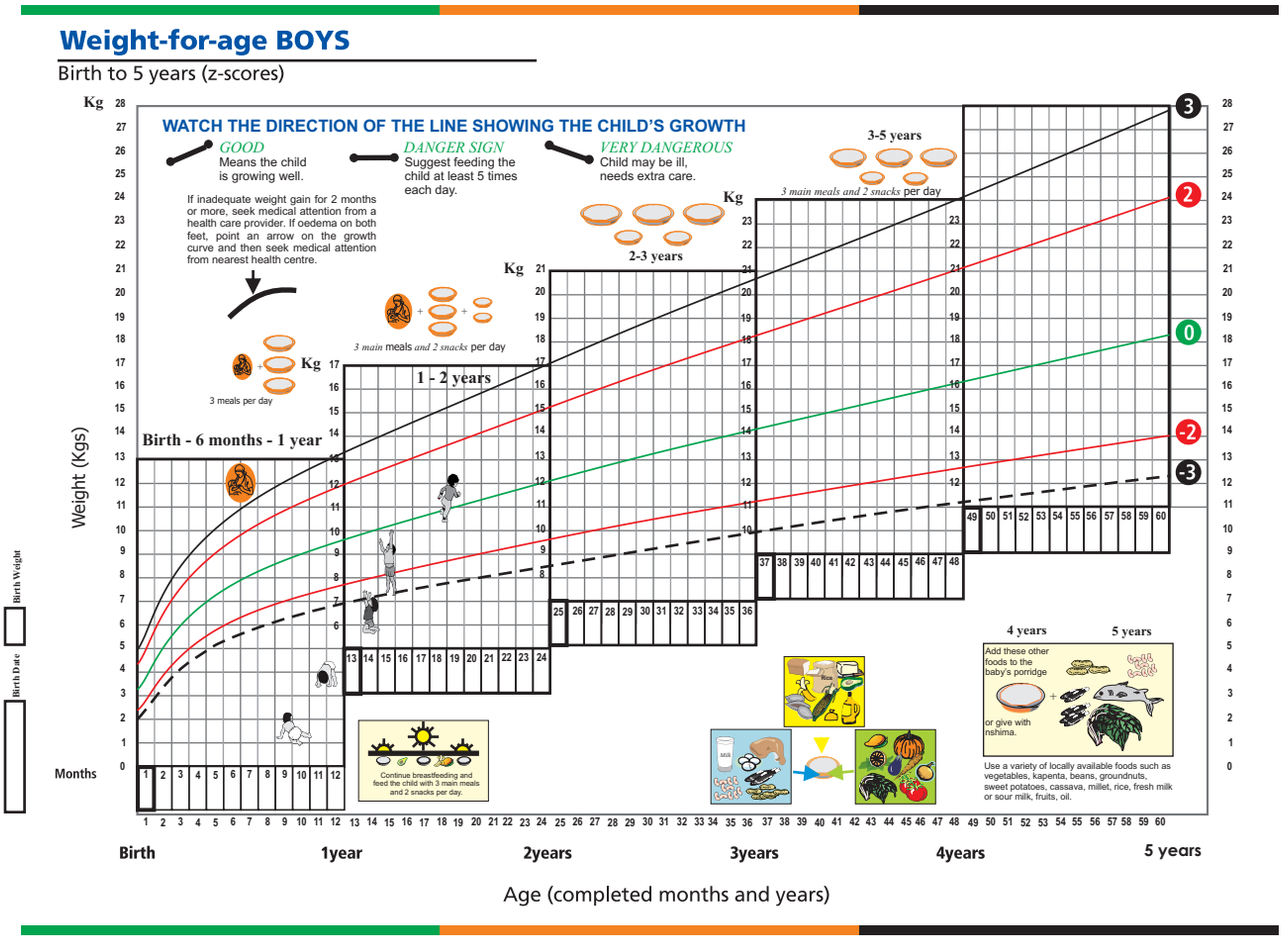
- Child's particulars
- Deworming
- Immunisation record
- Vitamin A supplementation
- PMTCT
- Monitoring of Infant and Young Child Feeding
- Child with diarrhoea
- Child with pneumonia
- Nutrition record
- Growth curves, Birth date and Birth weight
- Gross motor milestones
- Topics for discussion

The children's clinic card is a key tool to assist health workers in providing integrated care to an individual child and it contains a chart needed to record and assess the growth of a child from birth up to 5 years of age. It also contains recommendations on child feeding and care, a useful reference for parents, other caregivers and health care providers.

Boys and girls have different Children's Clinic Cards because they have different growth patterns.

A Child's Clinic Card should be opened for each child and kept by the mother/caregiver. Immediately after birth of the baby, the health worker should explain the importance of the Children's Clinic Card. It is important for Health workers to record and provide appropriate support for the infant feeding method that is being practiced in all infants and children at all visits, and specifically the different ages stated on the card.

Growth charts in assessment of feeding practices



This is a common weight chart. The child's age in months is along the bottom (X-axis) and the weight is up the side (Y-axis). There are five curves on this chart.

- The curve labeled “0” is called the median or reference line. It is the average weight for healthy children at that age. It is also called the 50th percentile because the weights of 50 percent of healthy children are below it and 50 percent are above it. The other lines called Z-score lines or standard deviations (SD) indicate the distance from the average/median.

- Generally, a plotted point which is far from the median in either direction such as along the +3SD or

-3SD indicates a problem in the growth pattern of the child. In such circumstances the child's growth trend and the health condition should be considered

- -2 SD defines the children who have lost at least 20% of their body weight for that age. This represents moderate malnutrition (moderate underweight) and these children need attention.
- -3 SD defines the children who have lost 30% of their body weight for that age. This indicates very low weight for age and represents severe malnutrition. A child near this line is not healthy and needs urgent attention
- +2 SD defines children who have gained 20% or more of their body weight for that age compared to the median and these children need attention.
- +3 SD defines the children who have gained 30% or more of their body weight for age compared to the median and needs urgent attention.
- Children whose weight falls between the +2 Z-score and +3 Z-score categories are considered overweight.
- Children whose weight falls above the +3 Z-scores are considered obese.

How to take weights

There are many types of scales that can be used to take weight. Whatever type of scale you are to use: Verify the scale's accuracy with a known weight before weighing e.g. 2 kg sugar. If the measure does not match the weight, the scale should be sent back for correction (calibration) so that it can begin to measure the right weight again.

- Place scale in an appropriate place for stability.
- The scale should be at eye level when reading the measurement.
- Take weight with minimum light clothing and shoes removed. Extra clothes on the baby can lead you to take incorrect weight

Measuring weight in children (0 – 59 months)

Steps for taking accurate WEIGHT measurements of a child using:

1. Salter Scale - child

The Salter hanging scale is commonly used for taking weight of children less than 2 years. This scale can weigh up to 25 kg and is graduated by 0.1kg (100g) increments.

i. Hook the scale to a tree with a rope, a tripod or a stick held horizontally by two people at eye level as shown in figure 1 below

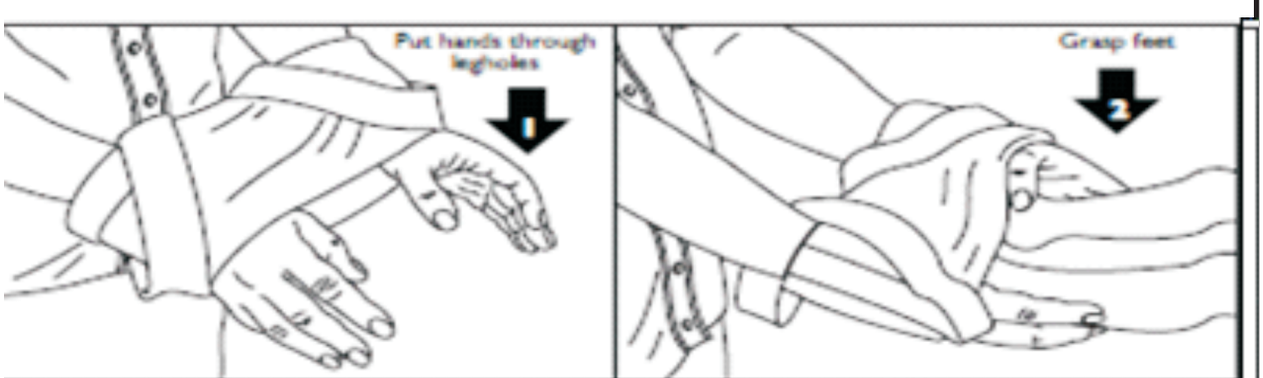
Figure 1: Scale pitched up to hang at eye level

ii. Put the weighing bags to the lower hook of the scale and the Zero reading (i.e. make sure the arrow is pointing at 0 with the weighing bags hanging on the scale) as shown in figure 2 below:

Figure 2: Empty weighing bags hanging on the scale

iv. Undress the child and place him/her in the weighing bags following steps 1 and 2 outlined in figure 3 below:

Figure 3: Placing the child in the weighing bags



I. Hook the weighing bags containing the child on the scale and allow the child to hang freely as shown in figure 4.

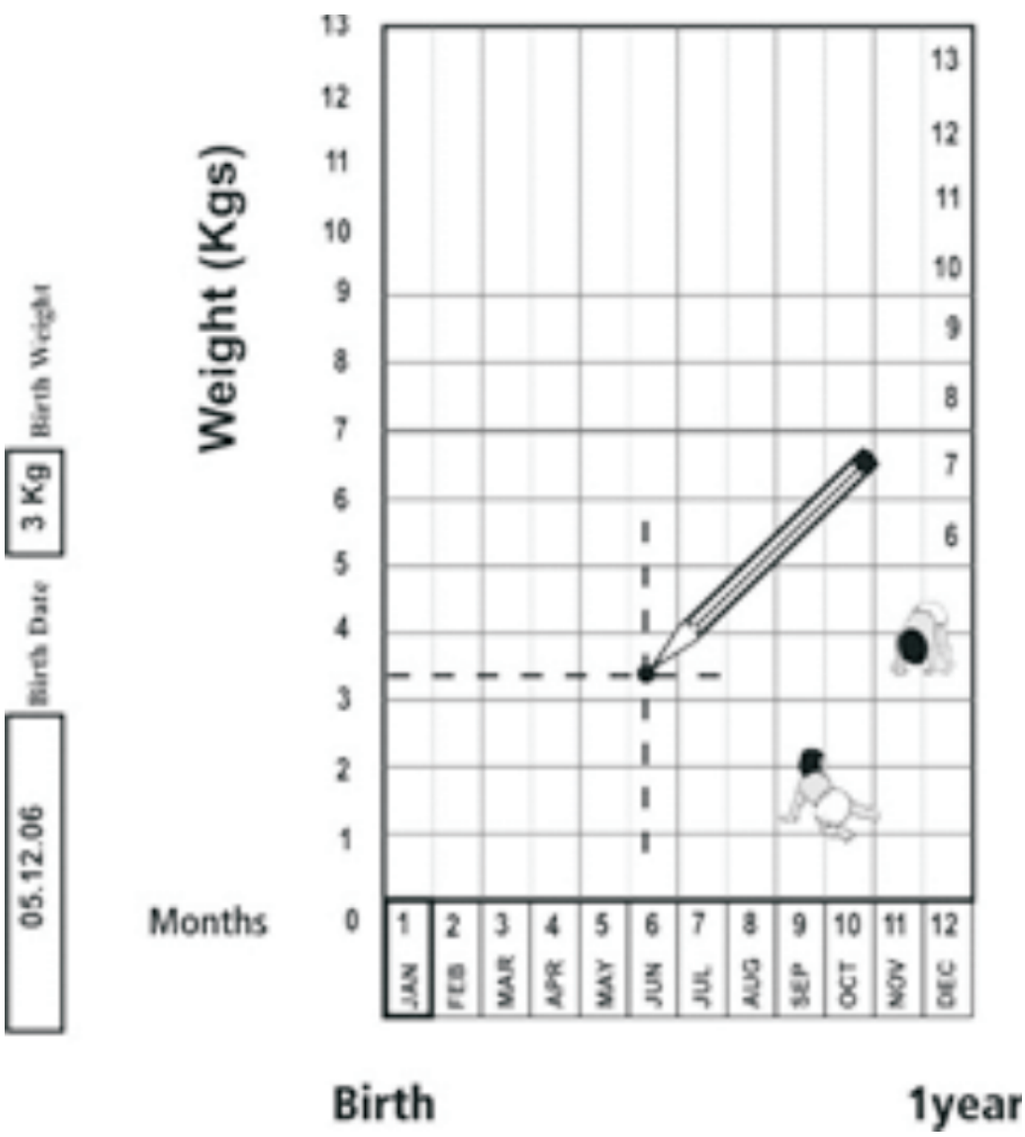
Figure 4: Child hanging freely

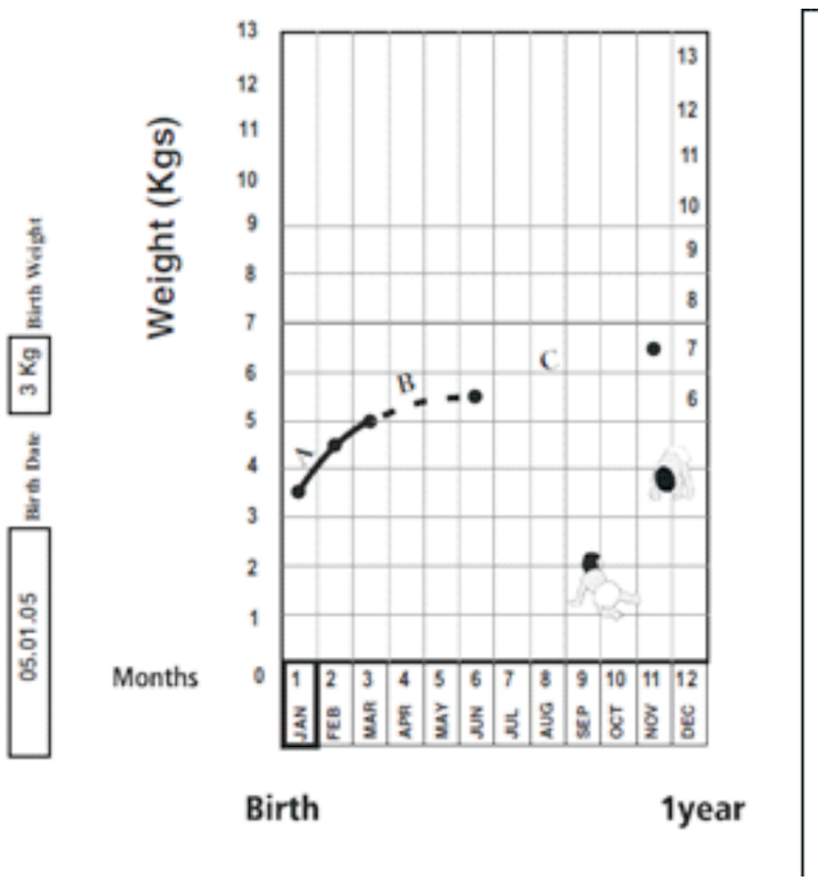
i. Wait until the child is stable and the pointer is not moving before taking the weight measurement.
ii. The pointer arrow must be steady
    a. Ensure that no one touches either the child or scale during the weighing.
    b. Also, ensure that the child hangs freely without holding onto anything as shown in figure 3 above.
iii. Take the weight reading and record it immediately in kg to the nearest 100g (e.g. 6.6 kg, 7.9 kg)

HOW TO PLOT WEIGHT ON THE GRAPH

The boxes at the bottom of the chart show months beginning with the child's first month from birth month.

- Once you have weighed the child, look for the month in which you are weighing the child on the chart.
- Find the child's age on the growth chart.
- The line up the left side of the growth chart shows a child's weight in kilos and grams.
    - Plot the weight of the child.
- Each time the child is weighed, the column for the age is followed up and the line for the weight is followed across to find the place to mark the dot
    - At the spot where they meet, mark a clear and heavy point in the middle of that month's box as shown below.





- Draw a line from the previous dot, if any, to the new dot you have just made in order to link up the dots with a continuing line to form a continuous curve. This forms the child's growth curve (A). This curve indicates how the child has been growing in the past month and also reveals the health and nutritional status of the child.

- Note: If you do not have the previous weight for the child from one or two months ago, connect the dots with a dotted line (B). If a child has not been weighed for three months or more, do not connect the dots with any lines (C). This is because one does not know how the child's growth has been progressing.

How to interpret weights

- One weight plotted on its own does not give much information. A pattern of marks is needed before one can judge the growth pattern of the child.
- Connecting the dots for each weight plotted forms the growth line for that individual child.
    - The overall shape or trend of the growth line should be similar to the shape or trend of the reference line.
    - The children's growth curve should always be heading upward, not flat or downward.
    - This is the most important feature of the growth curve.

- A child may grow more at one time than the other, so there may be small ups and downs in the line.

  So it is important to look for the general shape or trend.

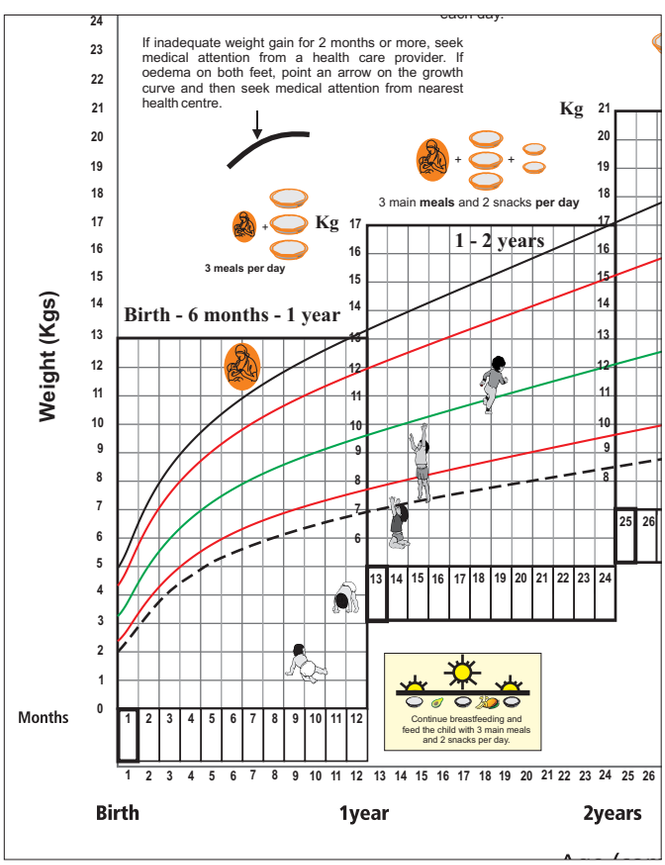
- Use the growth chart to help parents see whether their child is growing well.
- Without counseling the caregiver, measuring and plotting the child's weight is not a useful exercise.
- Taking weights alone will not help the child grow well.
- Always discuss with the care giver how to keep the child growing well or how to feed and take care of the child if s/he is not growing well.

- discuss with the caregiver on the feeding pictures corresponding to the child's age
- Explain the different pictures of feeding practices found on the chart according to age as follows:
  - **0 – 6 months – Exclusively breastfeed day and night**
  - **6 months up to 24 months** – Complementary feeding and continued breastfeeding

HOW TO PLOT THE WEIGHT

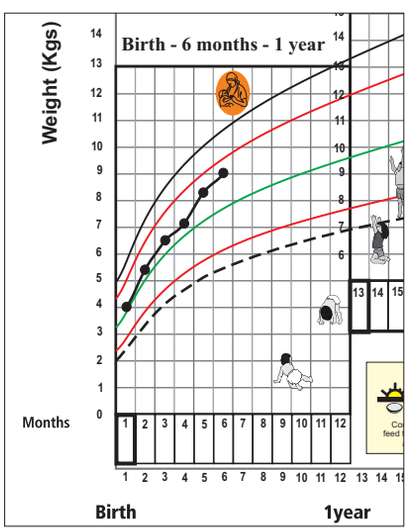
Plot the weight of Madaliso who is 13 months old. When he came today to the health facility, his weight chart was not available and you do not know Madaliso. His weight today is 7.5kg.

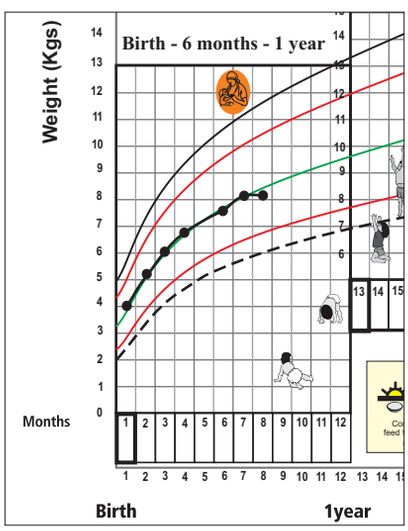
Madaliso blank weight chart

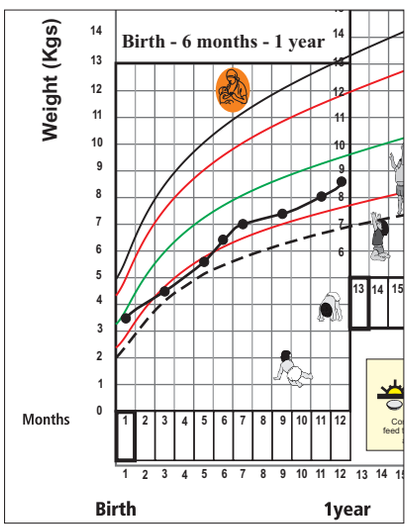


- Consider the plotted weight and think about what the weight tells you. One weight on its own does not tell you much information. You need a pattern of marks before you can judge the tendency of growth.
- Connecting the dots for each visit forms the growth line for that individual child. The overall shape or trend of the growth line should be similar to the shape or trend of the reference line printed on the chart, that is, children should always be heading upward on the curve, not flat or downward. This is the most important feature of the growth curve.
- Document Madaliso's weight in the children's clinic chart. Notice that Madaliso's weight-for-age is below the -2 Z-score curve. He is considered underweight. You need to talk to Madaliso's mother to find out more about his eating and health. Also observe Madaliso to see if he looks wasted or ill
- Had Madaliso's weight been at/or near the “0” curve which is the median, we would not be concerned about his weight but would encourage Madaliso's mother to bring him back in a month for another weight check.

Here you have the growth charts for three children who were weighed regularly.



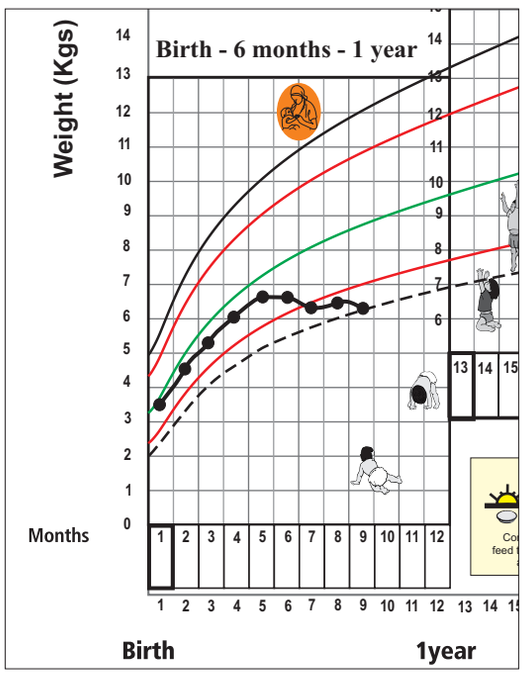




The growth charts of these three children all show a similar shape to the reference curve. However, each is growing along their individual path. (They all had different birth weights).

A child may grow more at one time than other, so there may be small ups and downs in the line. So it is important to look for the general shape or trend.

What do you see?



Here we have a growth chart for Mwape who is nine months old.

Mwape grew well for the first five months but has not grown at all in the last four months.

His weight is now static. You would need to ask the mother some questions.

Some questions you might ask are:

How was Mwape fed for the first six months of life?
What milk does Mwape have now?
What feeds does Mwape receive now?
How often does he eat?
How much does he eat?
What types of food does he eat?
How has Mwape's health been over the past few months?

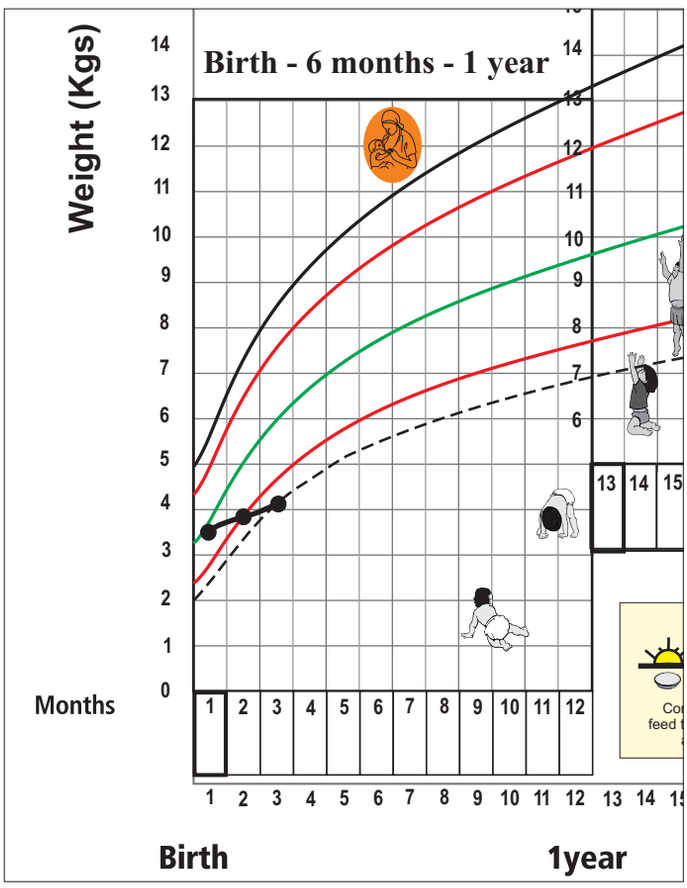
You find out that Mwape was exclusively breastfed for the first six months of life and that his mother is still breastfeeding him frequently by day. He sleeps with his mother at night and breastfeeds during the night. At six months his mother started to give him thin cereal porridge twice a day.

Some ways you might praise Mwape's mother are:

- You did well to exclusively breastfeed Mwape for the first six months of life. See how well he grew just on your breast milk.
- It is good that you are still breastfeeding Mwape now that he is over six months of age.
- It is good that you are continuing to breastfeed Mwape at night and that he is sleeping with you.

Mwape is only receiving two meals of thin porridge twice daily. He needs more frequent, nutrient-rich complementary foods each day now that he is over six months of age.

What do you see? 9/6



Here we have a growth chart for Chipasha who is 3 months old.

Chipasha is gaining weight too slowly.

Some questions you might ask are:

- How is Chipasha?
- How is Chipasha feeding?
- How often does Chipasha feed?
- Where does Chipasha sleep?
- If the mother says she is breastfeeding, you ask how is breastfeeding going for you and Chipasha?

You assess a breastfeed looking at positioning, attachment and the length of the feed.
His mother tells you that Chipasha is well and a good baby who cries little. He only wants to feed 4-5 times each day, which his mother finds helpful as she is busy during the day. Chipasha sleeps with his mother at night. Chipasha does not breastfeed often enough.

Giving complementary feeds should not be necessary at this stage. If Chipasha is breastfed more often during the day and night (at least 8 times in each 24 hours) then he should gain weight.

It is important to remember that growth lines that cross Z-score curves indicate possible at-risk status. Any sharp incline or decline in a child's growth line calls for urgent attention while a flat growth line usually indicates a possible problem situation.

Child Developmental Milestones

Basic milestones include:

- Sitting without support (SWOS)
- Standing with support (SWS)
- Hands-&-knees Crawling (HKC)
- Walking with assistance (WA)
- Standing alone (S)
- Walking alone (W)

0 TO 3 MONTHS

Inter-personal Development:

- Looks at face
- Smiles responsively
- Responds appropriately to friendly and angry tones

Motor Development:

- Brings thumb and/or fist to mouth

Language Development:

- Produces these sounds: ooo/aaaah
- Responds to bell

4 TO 6 MONTHS

Motor Development:

- Reaches for objects
- Grasps
- Puts objects in mouth

Language Development:

- Squeals
- Laughs
- Turns to rattling sound

Self-Help Development:
Can hold feeding cup or breast with hands drinking from it

7 TO 9 MONTHS

Motor Development:

- Sits without supp ort
- Can bear weight when put in a standing
- position
- Crawls
- Transfers objects from one hand to the other

Language Development:
- Babbles

Self Help Development:
- Feeds self with snacks

10 TO 12 MONTHS

Interpersonal Development:
- Pays attention to own name
- Responds differently to strangers than to familiar people

Motor Development:
- Drops and picks up toys
- Stands holding on to a supporting object
- Picks up objects with thumb and finger tip

Language Development:
- Uses dada/mama specifically

Self Help Development:
- Holds cup with both hands; drinks with assistance

13 TO 18 MONTHS

Motor Development:
- Walks when held by one hand
- Picks up objects from floor without falling
- Language Development
- Understands simple commands (e.g. no, stop)
- Imitates gestures

Self Help Development:
- Removes clothes

19 TO 24 MONTHS

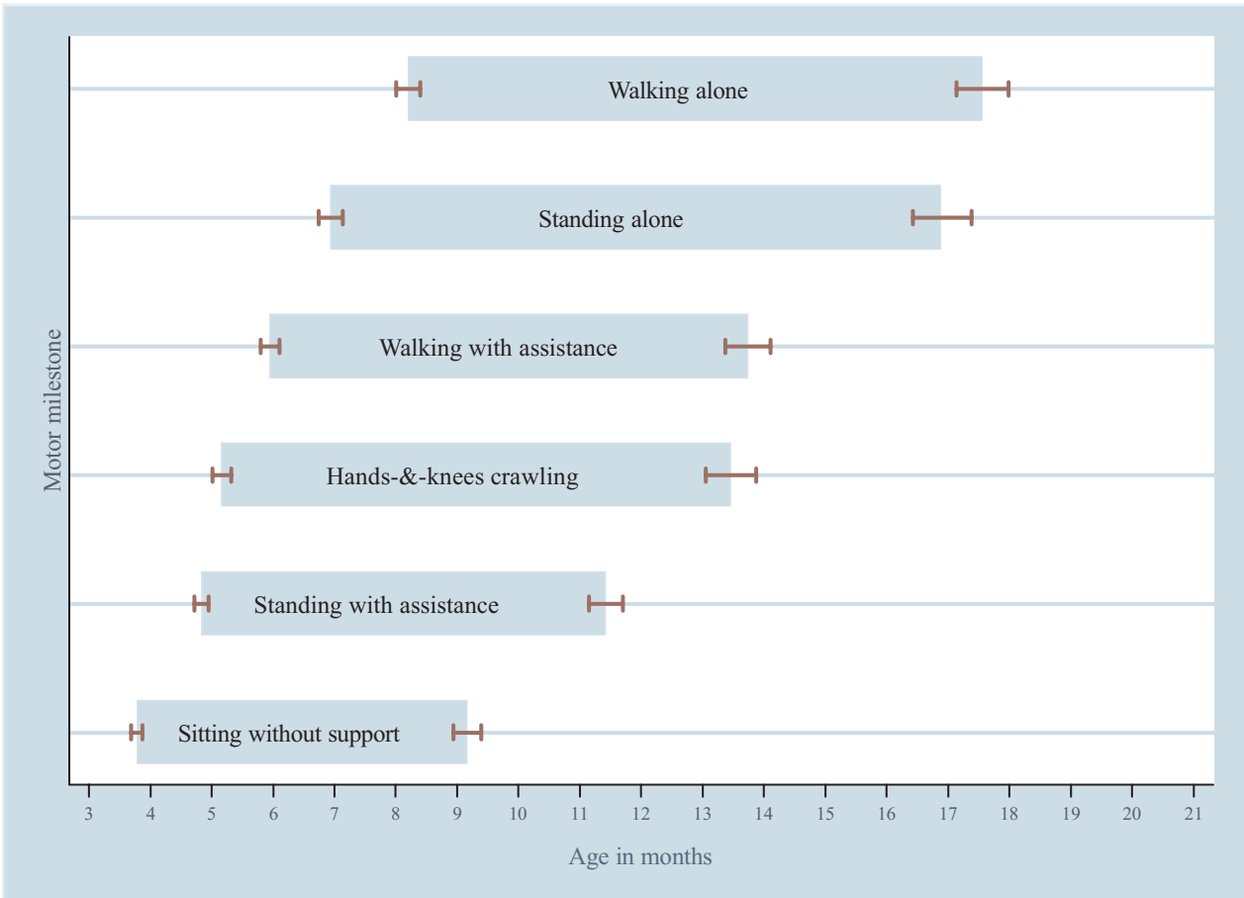
Inter-Personal Development:
- Finds hidden objects easily

Motor Development
- Walks alone
- Scribbles
- Brings objects from another place when asked

Language Development:
- Uses the word 'more' to make wants known
- Has a vocabulary of 5 to 20 words (mostly names of common objects)

Self Help Development:
- Uses spoon, just spilling a little
- Drinks from cup with one hand, unassisted
- Indicates toilet needs

Windows of achievement for six gross motor milestones



How to measure Mid-Upper Arm Circumference (MUAC)

- MUAC is a very good and easy tool to assess acute malnutrition.
- It is most useful especially when weight and height cannot be measured such as in bed-ridden children.
- The upper arm is very sensitive to rapid weight loss.
- MUAC measurement is also a good tool for predicting death risk; the lower the reading the higher the risk of death in children.
- The special arm tape (shown below) is easy, small and light to carry.
- MUAC should not be taken on babies less than 6 months because they have not yet developed their muscles but have lot of fat tissues.
- You should be able to take simple measurements such as MUAC and interpret results for appropriate actions to be taken, especially if it requires nutrition interventions

Here are the steps for taking accurate MUAC measurements
Use the measuring tape for children shown below

- The colour coding of MUAC Tape allows for easy classification of severe acute malnutrition (SAM)
- First remove any clothing covering the left arm
- Bend the arm at right angle (90°) and measure the length of the upper arm, between the bone at the top of the shoulder and the tip of the elbow (see steps 1 – 5 in Figure 6)
- Find the midpoint of the upper arm and mark it with a pen (step 6)
- Then relax the arm, letting it fall alongside the body
- Wrap the MUAC tape around the arm, such that all of it is in contact with the skin (step 7)
- It should *not be too tight or too loose*(steps 8 & 9)
- Pass the end of the tape down through the first opening and up through the second opening.
- The measurement is read from the middle window where the arrows point inward. Read and call out the measurement to the nearest 0.1cm (see step 10)
- For the three-colour tape (red, yellow, green), slide the end through the first opening and then through the second opening. Read the colour that shows through the window at the point the two arrows indicate (see step 10).

Figure 6: Measuring MUAC

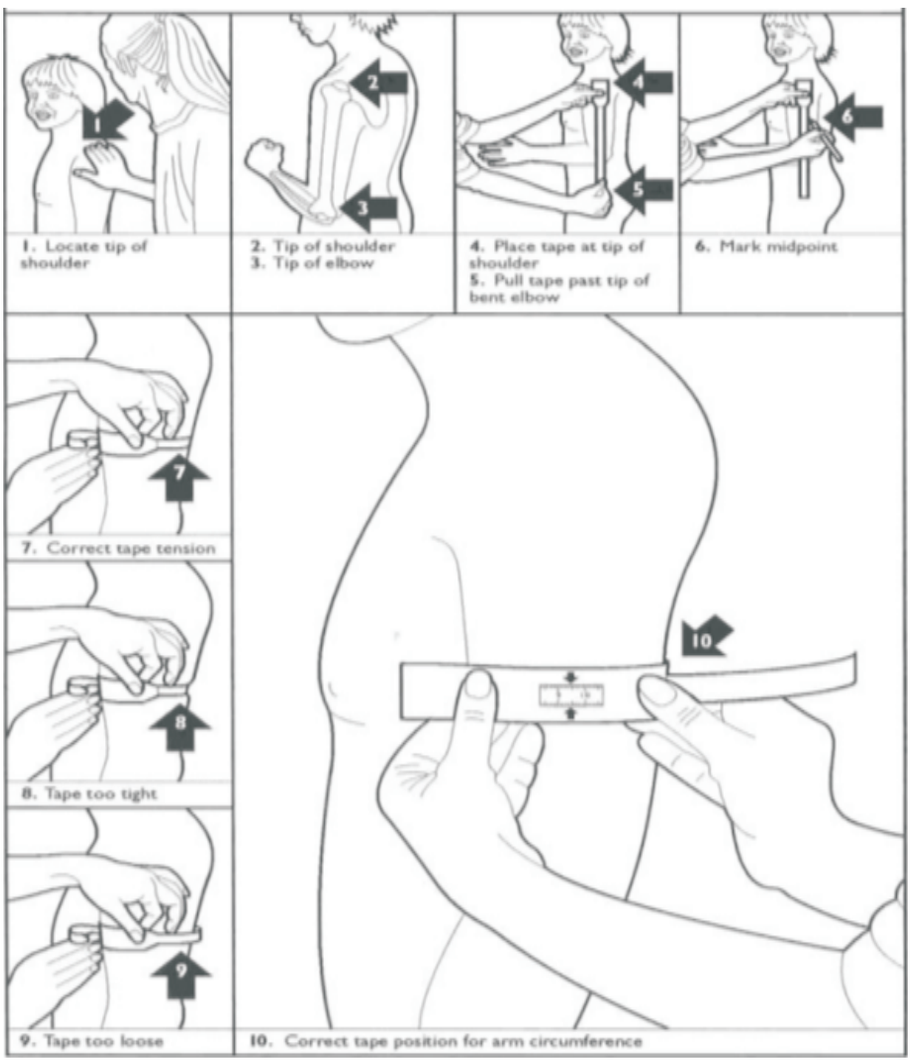


Table 6: MUAC criteria with corresponding colour code

MUAC screening	Adequately Nourished	Moderately Malnourished	Severely Malnourished
Children 6 - 59 months	≥12.5cm	11.5 cm to 12.5cm	<11.5cm
	Action		
Action	Congratulate and encourage correct practice	Identify possible causes of malnutrition and refer for supplementary feeding	Refer to health facility for admission

Height and Length Measurements

Height or length is important for growth assessments to determine the nutrition status of a child. Height/length in relation to age, determines stunting (chronic malnutrition) and height/length in relation to weight, determines wasting.

Measuring height and length in children (0 – 59 months)

The height or length should be measured with a height board only.

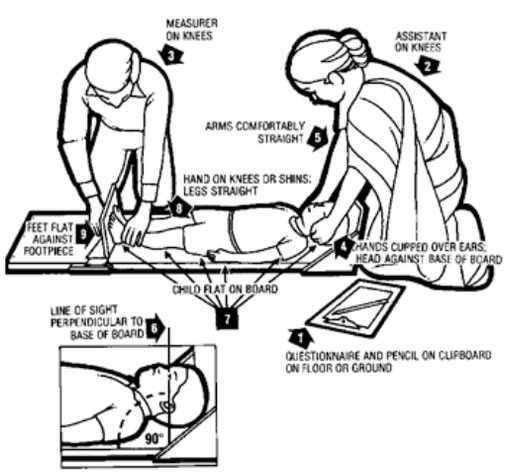
- It is important to measure children for height when they are barefoot and there should be two people to hold the child in the correct position on the height board.
- Children under 2 years old (or ≤87 cm) should be measured while lying down (length) and those over 2 years old (or > 87 cm) should be measured while standing up (height). If a child is above 2 years and is not able to stand, length can be taken. Subtract 0.7cm to get its height.

Steps for taking accurate LENGTH measurements of a child

This measurement is taken for children under 2 years old and/or ≤87 cm.

- Two people are needed to take a good measurement. If there is no assistant, the mother may help by holding the head straight.
- Place the measuring board horizontally on a flat level surface.
- Remove the child's shoes and any head covering.
- Place the child, lying down and face up on the middle of the board.
- Let the assistant hold the sides of the child's head and position the head until it is touching firmly against the headboard (with the hair compressed).
- Let the measurer place his/her hands on the child and firmly hold the child's knees together while pressing down.
    - The soles of the feet should be flat on the foot piece, toes pointing up at right angles.
- The measurer should keep the child's feet in contact with the footboard with one hand while holding the footboard securely in place with the other hand.
- Read and record the measure as shown below.
- The length is read to the nearest 0.1cm

Figure 4: Measuring length - lying down

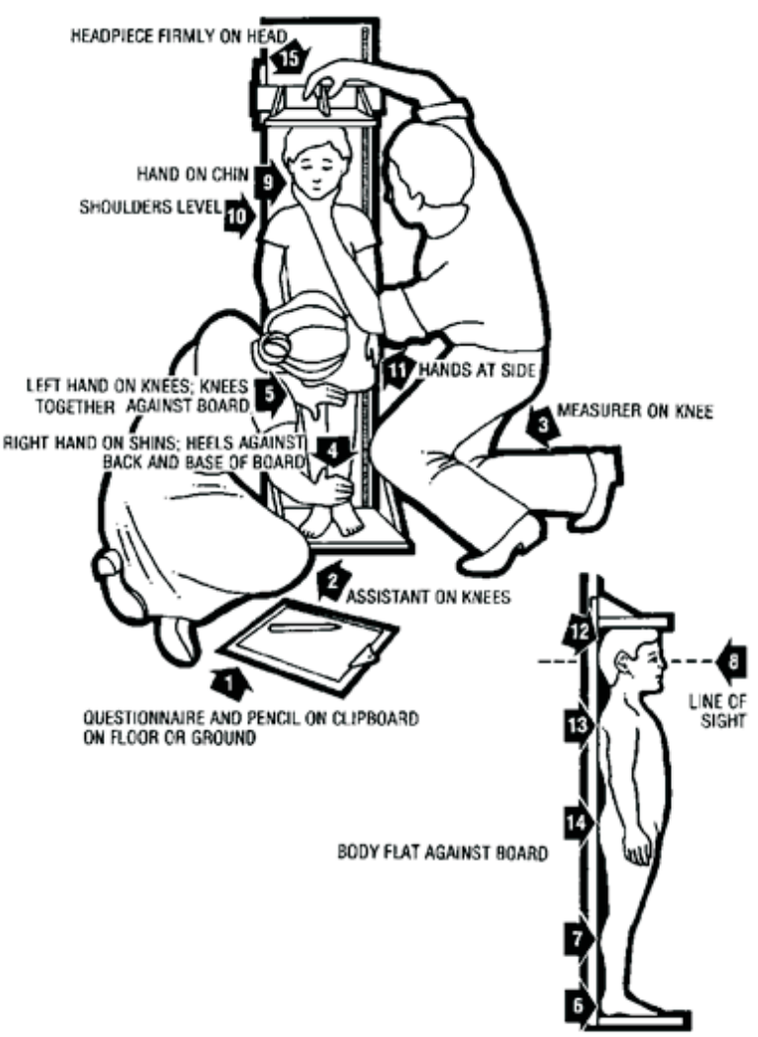


NOTE

- If the child is more than 87 cm but is too sick or too weak to stand up, length will need to be measured while lying down and then subtract 0.7 cm from the measurement.
- If the child has skeletal deformity, don't take height/length measurement. Persons with physical disabilities require specialized measures which are not covered in these course materials.

- Remove the child's shoes and any head-covering.
- Place the child on the measuring board, standing upright in the middle of the board. The child's heels and knees should be firmly pressed against the board by the assistant while the measurer positions the head and the cursor. The child's head, shoulders, buttocks, knees and heels should be touching the board.
- Read the measure to the nearest 0.1 cm.
- Record and repeat the measurement to the measurer to make sure it has been correctly heard.
- Also record the gender of the child.

Figure 5: Measuring standing height



2. Seca electronic scale (mother and baby scale)

The seca electronic scale is a floor scale for weighing children as well as adults (capacity 150 kilograms). See figure 5 for picture of seca scale

Figure 5a: Seca scale

Figure 5b: Closer image of seca indicating detail

It has a precision of 100 grams and a digital display. The child should be weighed directly, if possible. Alternatively, if the child is very small, is frightened or upset, the mother can first be weighed alone and then weighed while holding the child in her arms, and the scale will automatically compute the child's weight by subtraction. The scale itself weighs 3.6 kg. No calibration is required, although a daily check is strongly recommended to ensure the accuracy of the scale. The check can be done by weighing the same object (with a known and constant weight) every morning before work begins.

Preparing the seca Scale for use:

1. Place the scale on a hard, level surface (wood, concrete or firm earth). Soft or uneven surfaces may cause small errors in weighing.

2. Carefully turn over the scale so that the base is accessible. Press the closure of the battery compartment in the direction of the cover itself and open the battery compartment. Insert the supplied batteries into the battery compartment. Check that the polarity is correct. Close the cover and then turn the scale back up the right way. To activate the power supply, push the switch in position “ON”.

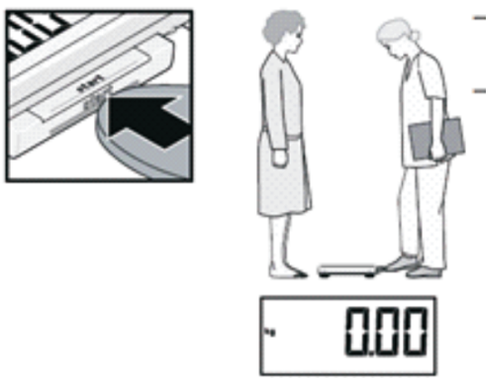
3. Handle the scale carefully:
   - Do not drop or bump the scale.
   - Do not weigh loads totalling more than 150 kilograms.
   - Protect the scale from excess moisture or humidity.

The 2 in 1 function enables the body weight of infants and young children to be determined. The child is held in the arms of an adult (mother or another adult helper)

PROCEDURE OF HOW TO TAKE WEIGHTS

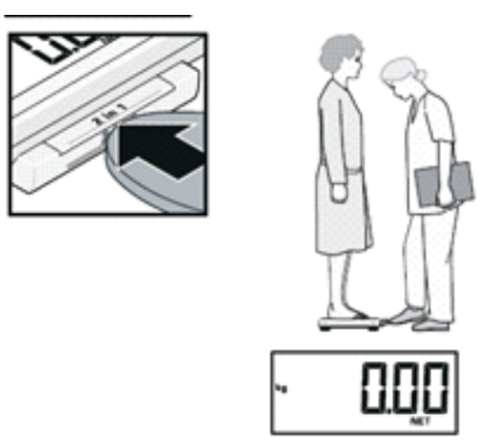
The person being weighed must stand still on the scale

- Switch on the scale with no weight applied.
- Wait until 0.00 appears on the display.



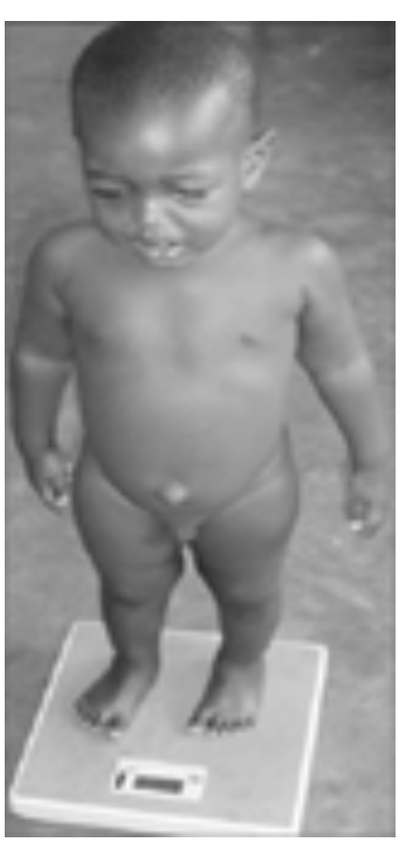
– Ask an adult to step onto the scale.
The adult's weight is displayed.

– Press the **2 in 1** key.
The adult's weight is stored.
0.00 and the word **NET** appear on the display.



- Ask the adult to hold the first baby while standing on the scale and to try not to move.
- Wait until the weight display and the message **HOLD** are no longer flashing.
- Record the baby's weight.
- Ask the adult to step off the scale with the baby.
  The baby's weight remains displayed. The adult's weight remains stored. A new measurement is automatically taken as soon as any weight is placed on the scale again.
- Take measurements for other babies in the same way with the same adult. You do not need to reactivate the 2 in 1 function or switch the scale off and on again between measurements.

NB: Older children who are able to stand on their own can be weighed alone as shown below



IV. Summarise the session 5 minutes

- ❒ Ask participants if they have any questions, and try to answer them.
- ❒ Explain that a summary of this session can be found on pages …….. of the *Participant's Manual.*

Notes

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Session 10

Building Confidence and Giving Support

Objectives:

After completing this session you will be able to:

- list the 6 confidence and support skills
- give an example of each skill
- demonstrate the appropriate use of the skills when counselling on infant and young child feeding

Introduction

This counselling skills session is about 'building confidence and giving support'. A mother easily loses confidence in herself. This may lead her to feel that she is a failure and give in to pressure from family and friends. You may need these skills to help her to feel confident and good about herself.

It is important not to make a mother feel that she has done something wrong. A mother easily believes that there is something wrong with herself, how she is feeding her child, or with her breast milk if she is breastfeeding. This reduces her confidence.

It is important to avoid telling a mother what to do. Help each mother to decide for herself what is best for her and her baby. This increases her confidence.

Skill 1. Accept what a mother thinks and feels

Sometimes a mother has a *mistaken idea* that you do not agree with. If you disagree with her, or criticize, you make her feel that she is wrong. This reduces her confidence. If you agree with her, it is difficult later to suggest something different.

It is more helpful to *accept* what she thinks. Accepting means responding in a neutral way, and not agreeing or disagreeing. 'Reflecting back' and 'responses and gestures which show interest' are both useful ways to show acceptance, as well as being useful listening and learning skills.

Sometimes a mother feels very upset about something that you know is not a serious problem. If you say something like “Don't worry, there is nothing to worry about!” you make her feel that she is wrong to feel the way that she does. This makes her feel that you do not understand, and it reduces her confidence. If you accept that she is upset, it makes her feel that it is alright to feel the way she does, so it does not reduce her confidence. Empathizing is one useful way to show acceptance of how a mother feels.

Skill 2. Recognize and praise what a mother and baby are doing right

As health workers, we are trained to look for problems. We see only what we think people are doing wrong, and we try to correct them. As counsellors, we must learn to look for and recognize what mothers and babies do right. Then we should praise or show approval of the good practices.

Praising good practices has these benefits:

- It builds a mother's confidence.

- It encourages her to continue those good practices.
- It makes it easier for her to accept suggestions later.

Skill 3. Give practical help

Sometimes practical help is better than saying anything. For example:
- when a mother feels tired or dirty or uncomfortable
- when she is hungry or thirsty
- when she has had a lot of information already
- when she has a clear practical problem.

Some ways to give practical help are these:
- Help to make her clean and comfortable
- Give her a drink, or something to eat
- Hold the baby yourself while she gets comfortable, or washes, or goes to the toilet.

Practical help also includes showing caregivers how to prepare feeds rather than just giving them a list of instructions. It also includes practical help with breastfeeding such as helping a mother with positioning and attaching, expressing breast milk, relieving engorgement or preparing complementary feeds.

Which response is more appropriate?

"You should let the baby suckle now, to help your breast milk to come in."

"Let me try to make you more comfortable, and then I'll bring you a drink."

Skill 4. Give a little, relevant information

Relevant information is information that is useful for a mother **now**.

When you give a mother information, remember these points:

- Tell her things that she can do today, not in a few weeks time
- Explaining the reason for a difficulty is often the most relevant information when it helps a mother to understand what is happening.
- Try to give only one or two pieces of information at a time, especially if she is tired, and has already received a lot of advice.
- Wait until you have built her confidence, by accepting what she says, and praising what she and her baby do right. You do not need to give new information or to correct a mistaken idea immediately.
- Give information in a positive way, so that it does not sound critical. This is especially important if you want to correct a mistaken idea.

Skill 5. Use simple language

Use simple familiar terms to explain things to mothers. Remember that most people do not understand the technical terms that health workers use.

Skill 6. Make one or two suggestions, not commands

Be careful not to tell or command a mother to do something. This does not help her to feel confident.

Instead, when you counsel a mother, suggest what she could do differently. Then she can decide if she will try it or not. This leaves her feeling in control, and helps her to feel confident.

CONFIDENCE AND SUPPORT SKILLS

- Accept what a mother thinks and feels
- Recognize and praise what a mother and baby are doing right
- Give practical help
- Give a little, relevant information
- Use simple language
- Make one or two suggestions, not commands

Notes

Session 11

Building Confidence and Support Exercises – Part 1

Objectives:

After completing this session you will be able to:

- demonstrate appropriate use of 6 confidence and support skills
- provide examples of each skill in relation to breastfeeding

Exercise 11.a Accepting what a mother THINKS

How to do the exercise:
Scenarios 1-2 are mistaken ideas which mothers might hold.
Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.
Beside each response write whether the response agrees, disagrees or accepts.

Example:

Mother of a six-month-old baby:		
"My baby has diarrhoeaso it is not good to breastfeed now".	"You do not like to give him breast milk just now?"	*Accepts*
	"It is quite safe to breastfeed a baby when he has diarrhoea."	*Disagrees*
	"It is often better to stop breastfeeding a baby when he has diarrhoea."	*Agrees*

Scenario 1 and 2:

To answer:

1. Mother of a onemonth-old baby:		
"I give him drinks of water, because the weather is so hot now."	"Oh, that is not necessary! Breast milk contains plenty of water."	
	"Yes, babies may need extra drinks of water in this weather."	
	"You feel that he needs drinks of water sometimes?"	
2. Mother of a ninemonth-old baby:		
"I have not been able to breastfeed for two days, so my milk is sour."	"Breast milk is not very nice after a few days."	
	"You are worried that your breast milk may be sour?"	
	"But milk never goes sour in the breast!"	

How to do the exercise:
Examples 3-5 are some more mistaken ideas which mothers might hold.
Make up one response that accepts what the mother says, without disagreeing or agreeing.

Example:	**Possible responses to accept what the mother thinks are:**
Mother of a oneweek-old baby:	
"I don't have enough milk because my breasts are so small".	*"Mm. Mothers often worry about the size of their breasts?"*
	"I see you are worried about the size of your breasts."
	"Ah ha"

To answer:

1. "The first milk is not good for a baby - I cannot breastfeed until it has gone."	
2. "I don't let him suckle for more than ten minutes, because it would make my nipples sore."	
3. "I need to give him formula now he is two months old. My breast milk is not enough for him now".	

Exercise 11.b Accepting what a mother FEELS

How to do the exercise:
After the Stories A and B below, there are three responses.
Mark with a ***tick*** (▪) the response that shows acceptance of how the mother feels.

Example:
Chawa's baby boy has a cold and a blocked nose, and is finding it difficult to breastfeed. As Chawa tells you about it, she bursts into tears.
Mark with a ***tick*** (▪) the response which shows that you accept how Chawa feels.

	a. Don't worry - he is doing very well.
	b. You don't need to cry - he will soon be better.
▪	c. It's upsetting when a baby is ill, isn't it?

To answer:

Story A.

Chisanzo is in tears. She says that her breasts have become soft again, so her milk must be less, but the baby is only three weeks old.

	a. Don't cry - I'm sure you still have plenty of milk.
	b. You are really upset about this, I know.
	c. Breasts often become soft atthis time - it doesn't mean that you have less milk!

Story B.

Dora is very bothered. Her baby sometimes does not pass a stool for one or two days. When he does pass a stool, he pulls up his knees and goes red in the face. The stools are soft and yellowish brown.

	a. You needn't be so bothered - this is quite normal for babies.
	b. Some babies don't pass a stool for four or five days.
	c. It really bothers you when he does not pass a stool, doesn't it?

Exercise 11.c Praising what a mother and baby are doing right

How to do the exercise:
For Story C below, there are three responses. They are all things that you might want to say to the mother.

Mark with a ***tick*** (▪) the response which praises what the mother and baby are doing right, to build the mother's confidence.
For Story D make up your own response to praise the mother.

Example:
A mother is breastfeeding her three-month-old baby and giving drinks of fruit juice. The baby has slight diarrhoea.

Mark the response which praises what she is doing right.

	a. You should stop the fruit juice- that's probably what is causing the diarrhoea.
▪	b. It is good that you are breastfeeding- breast milk should help him to recover
	c. It is better not to give babies anything but breast milk until they are about six months old.

To answer:

Story C.

The mother of a three-month-old baby says that he is crying a lot in the evenings, and she thinks that her milk supply is decreasing. The baby gained weight well last month.

	a.	Many babies cry at that time of day- it is nothing to worry about.
	b.	He is growing very well- and that is on your breast milk alone.
	c.	Just let him suckle more often- that will soon build up your milk supply.

Story D.

A four-month-old baby is completely fed on replacement feeds from a bottle. He has diarrhoea. The growth chart shows that he weighed 3.5 kilos at birth, and that he has only gained 200 grams in the last two months. The bottle smells very sour.

Exercise 11.d Giving a little, relevant information

How to do the exercise:
Below is a list of six mothers with babies of different ages.
Beside them are six pieces of information (a, b, c, d, e and f) that those mothers may need; but the information is not opposite the mother who needs it most.
Match the piece of information with the mother and baby in the same set for whom it is MOST RELEVANT AT THAT TIME.

After the description of each mother there are six letters.
Put a circle round the letter which corresponds to the information which is most relevant for her. As an example, the correct answer for Mother 1 is already marked in brackets.

To answer:

Mothers 1-6		**Information**
1. Mother returning to work	a b c d (e) f	a. Foremilk normally looks watery, and hindmilk is thicker
2. Mother with a 12-month-old baby	a b c d e f	b. Exclusive breastfeeding is best until a baby is six months old
3. Mother who thinks that her milk is too thin	a b c d e f	c. More suckling makes more milk

4. Mother who thinks that she does not have enough breast milk	a b c d e f	d. Colostrum is all that a baby needs at this time
5. Mother with a two-month-old baby who is exclusively breastfed	a b c d e f	e. Night breastfeeds are good for a baby and help to keep up the milk supply
6. A newly delivered mother who wants to give her baby prelacteal feeds	a b c d e f	f. Breastfeeding is valuable for two years or more

Exercise 11.e Using simple language

How to do the exercise:
Below are two pieces of information that you might want to give to mothers.
The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

Example:

Information:	Using simple language:
Colostrum is all that a baby needs in the first few days.	*The first yellowish milk that comes is exactly what a baby needs for the first few days.*

To answer:

Information:	Using simple language:
1. Exclusive breastfeeding is best up to six months of age.	
2. To suckle effectively, a baby needs to be well attached to the breast.	

Exercise 11.f Making one or two suggestions, not commands

How to do the exercise:
Below are some commands which you might want to give to a breastfeeding mother.
Rewrite the commands as suggestions.

The box below gives some examples of ways to make suggestions, not commands. You may find this helpful when doing the exercises below.

MAKING SUGGESTIONS, NOT COMMANDS

Commands use the imperative form of verbs (give, do, bring) and words like *always, never, must, should.*

Suggestions include:
Have you considered….?
Would it be possible….?
What about trying…to see if it works for you?
Would you be able to?
Have you thought about….? Instead of….?
You could choose between….and….and….
It may not suit you, but some mothers…… a few women….
Perhaps….might work.
Usually….Sometimes….Often….

Example:

Command: "Keep the baby in bed with you so that he can feed at night!"

Suggestions: *"It might be easier to feed him at night if he slept in bed with you."*
"Would it be easier to feed him at night if he slept with you?"

To answer:

1. Command: "Do not give your baby any drinks of water or glucose water, before he is at least six months old!"

Suggestions:

2. Command: "Feed him more often, whenever he is hungry, then your milk supply will increase!"

Suggestions:

Notes

Session 12

Practical Session 2

Building Confidence and Giving Support Positioning a Baby at the Breast

Objectives

After completing this session you will be able to:

- demonstrate the appropriate confidence and support skills when counselling a mother on feeding her infant
- demonstrate how to help a mother to position and attach her baby at the breast

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session. During the practical session, you will work in small groups, taking turns to talk to a mother, while the other members of the group observe.

What to take with you:

- one copy of the list of COUNSELLING SKILLS CHECKLIST
- two copies each of the BREASTFEED OBSERVATION JOB AID
- pencil and paper to make notes.

How to do the clinical practice:

- Talk to and observe mothers and babies as for Practical Session 1.
- Continue to practice 'assessing a breastfeed' and 'listening and learning'.

In addition, practise as many of the six confidence and support skills as possible. Try to do these things:

- Praise two things that the mother and baby are doing right
- I'vee the mother two pieces of relevant information that are useful to her now.

The participant who observes marks a on the COUNSELLING SKILLS CHECKLIST for every skill that her partner uses.

It is important that you practice helping a mother to position her baby at the breast, or to overcome any other difficulty. Often you will find that babies are sleepy. In this case you could say to the mother something like: “I see your baby seems to be sleepy now, but can we just go through the way to hold him when he is ready”. Then go through the 4 key points of positioning with the mother, holding her baby. If you do this quite a few babies will wake up and want another feed when their nose is opposite the nipple.

Notes

Session 13

Taking a Feeding History

Objectives

After completing this session you will be able to:

- take a feeding history of an infant or young child 0-24 months
- demonstrate appropriate use of the FEEDING HISTORY JOB AID

Introduction

In this session we will learn how to take a feeding history of a child aged 0-24 months. The baby may be breastfeeding or receiving another form of milk and may or may not, be receiving complementary feeds.

The FEEDING HISTORY JOB AID will help you to remember the main questions to ask for any young child.

How to Take a Feeding History

Greet the women in a kind and friendly way.

Use the mother's name and the baby's name (if appropriate).

Ask her to tell you about herself and her baby in her own way, starting with the things that she feels are important.

Look at the child's growth chart.

It may tell you some important facts and save you asking some questions.

Ask the questions that will tell you the most important facts.

The Feeding History Job Aid is a guide to the facts that you may need to learn about. Decide what you need to know from each of the six sections.

Be careful not to sound critical.

Use confidence and support skills.

Try not to repeat questions.

If you do need to repeat a question, first say: “Can I make sure that I have understood clearly?” and then, for example “You said that (name) had both diarrhoea and pneumonia last month?"

Take time to learn about more difficult, sensitive things.

For example:

- What does the baby's father say? Her mother? Her mother-in-law?
- Is she happy about having the baby now? About the baby's sex?

Some mothers tell you these things spontaneously. Others tell you when you empathize, and show that you understand how they feel. Others take longer. If a mother does not talk easily, wait, and ask again later, or on another day, perhaps somewhere more private.

FEEDING HISTORY JOB AID

Age of child
Particular concerns about feeding of child

Feeding

Milk (breast milk, formula, cow's milk, other)
Frequency of milk feeds
Length of breastfeeds/quantity of other milks
Night feeds
Other foods in addition to milk (when started, what, frequency)
Other fluids in addition to milk (when started, what, frequency)
Use of bottles and how cleaned
Feeding difficulties (breastfeeding/other feeding)

If child over 6 months old:
Does child receive his/her own serving or feed from family dish
Who, if anyone, helps the child to feed?

Health and behaviour

Growth chart (birth weight, weight now)
Urine frequency per day (6 times or more), if less than 6 months
Stools (frequency, consistency)
Illnesses

Pregnancy, birth, early feeds (where applicable)

Antenatal care
Feeding discussed at ante-natal care
Delivery experience
Rooming-in
Prelacteal feeds
Postnatal help with feeding

Mother's condition and family planning

Age
Health – including nutrition and medications
Breast health
Family planning

Previous infant feeding experience

Number of previous babies
How many breastfed and how long for
If breastfed – exclusive or mixed fed
Other feeding experiences

Family and social situation

Work situation
Economic situation
Family's attitude to infant feeding practices

The FEEDING HISTORY JOB AID

The FEEDING HISTORY JOB AID is a guide to organize your thoughts, so that you do not get lost when you talk with a mother who has an infant or young child.

It is a good idea to ask a mother something from each section to make sure you are clear about any difficulties she may be having. If at any time a mother wants to tell you something that is important to her, let her tell you that first. Ask about the other things afterwards.

Remember to use your counselling skills when you are taking a history from a mother. Try to ask questions in an open way, although you may also have to ask some closed questions if you need specific information. Remember to use other counselling skills, such as reflecting back, empathy, and praise, in between questions so that the mother is encouraged to talk more and to feel confident

DEMONSTRATION 13 . A TAKING A FEEDING HISTORY	
Health Worker:	"Good morning, I am Nurse Jane. May I ask your name, and your baby's name?"
Mother:	"Good morning, nurse; I am Mrs Mwanza and this is my daughter Lucy."
Health Worker:	"She is lovely – how old is she?"
Mother:	"She is 5 months now."
Health Worker:	"Yes – and she is taking an interest in what is going on, isn't she? Tell me, what milk have you been giving her?"
Mother:	"Well, I started off breastfeeding her, but she is so hungry and I never seemed to have enough milk so I had to give her bottle feeds as well."
Health Worker:	"Oh dear, it can be very worrying when a child is always hungry. You decided to start bottle feeds? What are you giving her?"
Mother:	"Well, I put some milk in the bottle and then mix in a spoonful or two of cereal."
Health Worker:	"When did she start these feeds?"
Mother:	"Oh, when she was about 2 months old."
Health Worker:	"About 2 months. How many bottles do you give her each day?"
Mother:	"Oh, usually two – I mix up one in the morning and one in the evening, and then she just sucks it when she wants to – each bottle lasts quite a long time."
Health Worker:	"So she just takes the bottle little by little? What kind of milk do you use?"
Mother:	"Yes – well, if I have formula, I use some of that; or else I just use cow's milk and mix in some water, or sweetened milk, because they are cheaper. She likes the sweet milk!"
Health Worker:	"Formula is very expensive isn't it? Tell me more about the breastfeeding. How often is she doing that now?"
Mother:	"Oh she breastfeeds when she wants to – quite often in the night, and about 4 or 5 times in the day – I don't count. She likes it for comfort."
Health Worker:	"She breastfeeds at night?"
Mother:	"Yes she sleeps with me."
Health Worker:	"Oh that makes it easier, doesn't it? Did you have any other difficulties with breastfeeding, apart from worrying about not having enough?"
Mother:	"No, it wasn't difficult at all."

Health Worker:	"Do you give her anything else yet? Any other foods or drinks?"
Mother:	"No – I won't give her food for a long time yet. She is quite happy with the cup feeds."
Health Worker:	"Can you tell me how you clean the cups?"
Mother:	"I just rinse them out with hot water. If I have soap I use that, but otherwise just water."
Health Worker:	"OK. Now can you tell me about how Lucy is. Has she got a growth chart? Can I see it? [mother hands over growth chart] Thank you, now let me see…. She was 3.5 kilograms when she was born, she was 5.5 kilograms when she was 2 months old, and now she is 6.0 kilograms. You can see that she gained weight fast for the first two months, but it is a bit slower since then. Can you tell me what illnesses she has had?"
Mother:	"Well, she had diarrhoea twice last month, but she seemed to get better. Her stools are normal now."
Health Worker:	"Can I ask about the earlier days – how was your pregnancy and delivery?"
Mother:	"They were normal."
Health Worker:	"What did they tell you about feeding her when you were pregnant, and soon after she was born? Did anyone show you what to do?"
Mother:	"Nothing – they told me to breastfeed her, but that was all. The nurses were so busy, and I came home after one day."
Health Worker:	"They just told you to breastfeed?"
Mother:	"Yes – but I didn't have any milk in my breasts even then, so I gave her some glucose water until the milk started."
Health Worker:	"It is confusing isn't it when your breasts feel soft after delivery? You need help then, don't you?"
Mother:	"Yes."
Health Worker:	"Can I ask about you? How old are you?"
Mother:	"Sure – I am 22."
Health Worker:	"And how is your health?"
Mother:	"I am fine."
Health Worker:	"Are you having any problems with your breasts?"
Mother:	"I have had no trouble with my breasts."
Health Worker:	"May I ask if you are thinking about another pregnancy at any time? Have you thought about family planning?"
Mother:	"No – I haven't thought about it – I thought that you can't get pregnant when you are breastfeeding."
Health Worker:	"Well, it is possible if you are also giving other feeds. We will talk about it more later if you like. Is Lucy your first baby?"
Mother:	"Yes. And I do not want another one just yet."
Health Worker:	"Tell me about how things are at home – are you going out to work?"
Mother:	"No – I am a housewife now. I may try to find a job later when Lucy is older."
Health Worker:	"Who else do you have at home to help you?"
Mother:	"Lucy's father is with me. He has a job as a driver and he is very fond of Lucy, but he thinks she should not breastfeed at night – he thinks she breastfeeds too much and he wants her to sleep in another bed. But I am not sure……. He says that too much breastfeeding is what gives her diarrhoea."

Notes

Session 14

Common Breastfeeding Difficulties

Objectives

After completing this session you will be able to identify the causes of common breastfeeding difficulties and help mothers with the following difficulties:

- 'not enough milk'
- a crying baby
- breast refusal

In previous sessions we have looked at ways to find out how mothers are managing with breastfeeding.

These include:

- good counselling skills to encourage a mother to tell you what is worrying her
- assessing a breastfeed, using your skills of observation to see if a baby is well positioned and well attached
- taking a detailed feeding history.

There are many reasons why mothers stop breastfeeding or start to mix feed, even if they decided, antenatally, to breastfeed exclusively.

When helping mothers with difficulties you will need to use all the skills you have learnt so far. Lay counsellors and community health workers have important roles to support mothers through these difficulties, as mothers may not visit a health facility to seek help.

'NOT ENOUGH MILK'

One of the commonest reasons for a mother to stop breastfeeding is that she thinks she does not have enough milk. Almost all mothers can produce enough breast milk for one or even two babies. Usually, even when a mother thinks that she does not have enough breast milk, her baby is in fact getting all that he needs.

Sometimes a baby does not get enough breast milk. But it is usually because he is not suckling enough, or not suckling effectively (see Session 3 'How breastfeeding works'). It is rarely because his mother cannot produce enough.

So it is important to think not about *how much milk a mother can produce*, but about *how much milk a baby is getting*.

Reliable signs that a baby is not getting enough milk

Poor weight gain

- less than 500 grams per month

Small amount of concentrated urine

- less than 6 times per day

For the first six months of life, a baby should gain at least 500g in weight each month. One kilogram is not necessary, and not usual. If a baby does not gain 500g in a month he is not gaining enough weight.

An exclusively breastfed baby who is getting enough milk usually passes dilute urine at least 6-8 times in 24 hours. If a baby is having other drinks, for example water, as well as breast milk, you cannot be sure he is getting enough milk if he is passing lots of urine.

Possible signs that a baby is not getting enough breast milk

- Baby not satisfied after breastfeeds
- Baby cries often
- Very frequent breastfeeds
- Very long breastfeeds
- Baby refuses to breastfeed
- Baby has hard, dry, or green stools
- Baby has infrequent small stools
- No milk comes out when mother expresses
- Breasts did not enlarge (during pregnancy)
- Milk did not 'come in' (after delivery)

There are several **possible** signs that a baby is not getting enough milk. Although these signs may worry a mother, there may be other reasons for them, so they are not reliable. For example, a baby may cry often because he has colic, although he might be getting plenty of milk.

REASONS WHY A BABY MAY NOT GET ENOUGH BREAST MILK			
BREASTFEEDING FACTORS	**MOTHER: PSYCHOLOGICAL FACTORS**	**MOTHER: PHYSICAL CONDITION**	**BABY'S CONDITION**
Delayed start	Lack of confidence	Contraceptive pill, diuretics	Illness
Feeding at fixed times	Worry, stress	Pregnancy	Abnormality
Infrequent feeds	Dislike of breastfeeding	Severe malnutrition	
No night feeds	Rejection of baby	Alcohol	
Short feeds	Tiredness	Smoking	
Poor attachment		Retained piece of placenta (rare)	
Bottles, pacifiers		Poor breast development (very rare)	
Other foods			
Other fluids (water, teas)			
These are COMMON		**These are NOT COMMON**	

The reasons in the first two columns ('Breastfeeding factors' and 'Mother: psychological factors') are common. The reasons in the second two columns ('Mother: physical condition' and 'Baby's condition') are not common. So it is not common for a mother to have a physical difficulty in producing enough breast milk.

How to help mothers with 'not enough milk'

Firstly find out whether the baby is really getting enough breast milk or not (using the reliable signs). If the baby is not getting enough breast milk you need to find out WHY so that you can help the mother. If the baby is getting enough breast milk, but the mother thinks that he isn't, you need to find out WHY she doubts her milk supply so that you can build her confidence.

Babies who are not getting enough breast milk: Low milk intake

Use your counselling skills to take a good feeding history. Assess a breast feed to check positioning and attachment and to look for bonding or rejection. Use your observation skills to look for illness or

physical abnormality in the mother or baby. Make suggestions depending on the cause of the insufficient milk. Always arrange to see the mother again soon. If possible see the mother and baby daily until the baby is gaining weight and the mother feels more confident. It may take 3-7 days for the baby to gain weight.

Babies who are getting enough milk but the mother thinks they are not: Apparent milk insufficiency

Use your counselling skills to take a good feeding history. Try to learn what may be causing the mother to doubt her milk supply. Explore the mother's ideas and feelings about her milk and pressures she may be experiencing from other people regarding breastfeeding. Assess a breastfeed to check positioning and attachment and to look for bonding or rejection. Praise the mother about good points about breastfeeding technique and good points about her baby's development. Correct mistaken ideas without sounding critical. Always arrange to see the mother again soon. These mothers are at risk of introducing other foods and fluids and need a lot of support until their confidence is built up again.

Fig. 14.1 If a baby passes plenty of urine it usually means that he is getting enough breast milk

Mrs Phiri says she does not have enough milk. Her baby is three months old and crying “all the time”. Her baby gained 200g last month. Mrs Phiri manages the family farm by herself, so she is very busy. She b reastfeeds her baby about 2-3 times at night, and about twice during the day when she has the time. She does not give her baby any other food or drink.

What could you say to empathize with Mrs Phiri?

Mrs Phiri says she does not have enough breast milk – do you think her baby is getting enough milk?

What do you think is the cause of Mrs Phiri's baby not getting enough milk?

Can you suggest how Mrs Phiri could give her baby more breast milk?

CRYING BABY

We will now look at another common reason for a mother to stop breastfeeding – the crying baby. Many mothers start unnecessary foods or fluids because they think that their baby 'cries too much'. They think that their babies are hungry, and that they do not have enough milk. These additional foods and drinks do not make a baby cry less. Sometimes a baby cries more.

A baby who cries a lot can upset the relationship between him and his mother, and can cause tension among other members of the family. An important way to help a breastfeeding mother is to counsel her about her baby's crying.

REASONS WHY BABIES CRY	
▪ Discomfort	(dirty, hot, cold)
▪ Tiredness	(too many visitors)
▪ Illness or pain	(changed pattern of crying)
▪ Hunger	(not getting enough milk, growth spurt)
▪ Mother's food	(any food, sometimes cow's milk)
▪ Drugs mother takes	(caffeine, cigarettes, other drugs
▪ Colic	
▪ 'High needs' babies	

Causes of crying

Hunger due to growth spurt:

A baby seems very hungry for a few days, possibly because he is growing faster than before. He demands to be fed very often. This is commonest at the ages of about two weeks, six weeks and three months, but can occur at other times. If he suckles often for a few days, the breast milk supply increases, and he breastfeeds less often again.

Mother's food:

Sometimes a mother notices that her baby is upset when she eats a particular food. This is because substances from the food pass into her milk. It can happen with any food, and there are no special foods to advise mothers to avoid, unless she notices a problem.

Colic:

Some babies cry a lot without one of the above causes. Sometimes the crying has a clear pattern. The baby cries continuously at certain times of day, often in the evening. He may pull up his legs as if he has abdominal pain. He may appear to want to suckle, but it is very difficult to comfort him. Babies who cry in this way may have a very active gut, or wind, but the cause is not clear. This is called 'colic'. Colicky babies usually grow well, and the crying usually becomes less after the baby is three months old.

'High needs' babies:

Some babies cry more than others, and they need to be held and carried more. In communities where mothers carry their babies with them, crying is less common than in communities where mothers like to put their babies down to leave them, or where they put them to sleep in separate cots.

How to help mothers whose babies cry a lot

As with 'not enough' milk, you have to try to find the cause of the crying so that you can help the mother. Use your counselling skills to take a good feeding history. Help the mother to talk about how she feels and empathize with her. She may be tired, frustrated and angry.

Accept her ideas about the cause of the problem and how she feels about the baby. Try to learn about pressures from other people and what they think the cause of the crying is.

Assess a breastfeed to check baby's suckling position and the length of a feed. Make sure the baby is not ill or in pain. Check the growth and refer if necessary. Where relevant, praise the mother that her baby is growing well and it not ill or bad or naughty.

Demonstrate way to carry and comfort a crying baby. Give relevant information where appropriate.

Give relevant information where appropriate.

a. Holding the baby along your forearm	b. Holding the baby round his abdomen, on your lap	c. Father holding the baby against his chest

Fig. 14.2 Some different ways to hold a colicky baby

Mrs Bwalya's baby is three month's old. She says that for the last few days he has suddenly started crying to be fed very often. She thinks that her milk supply has suddenly decreased. Her baby has breastfed exclusively until now and has gained weight well.

What can you say to empathize with Mrs Bwalya?

What can you praise to build Mrs Bwalya's confidence?

What relevant information can you give to Mrs Bwalya?

REFUSAL TO BREASTFEED

Refusal by the baby is a common reason for stopping breastfeeding. However, it can often be overcome. Refusal can cause great distress to the baby's mother. She may feel rejected and frustrated by the experience.

There are different kinds of refusal:

- Sometimes a baby attaches to the breast, but then does not suckle or swallow, or suckles very weakly.
- Sometimes a baby cries and fights at the breast, when his mother tries to breastfeed him.
- Sometimes a baby suckles for a minute and then comes off the breast choking or crying. He may do this several times during a single feed.
- Sometimes a baby takes one breast, but refuses the other.

You need to know why a baby is refusing to breastfeed, before you can help the mother and baby to enjoy breastfeeding again.

Most reasons why babies refuse to breastfeed fall into one of these categories.

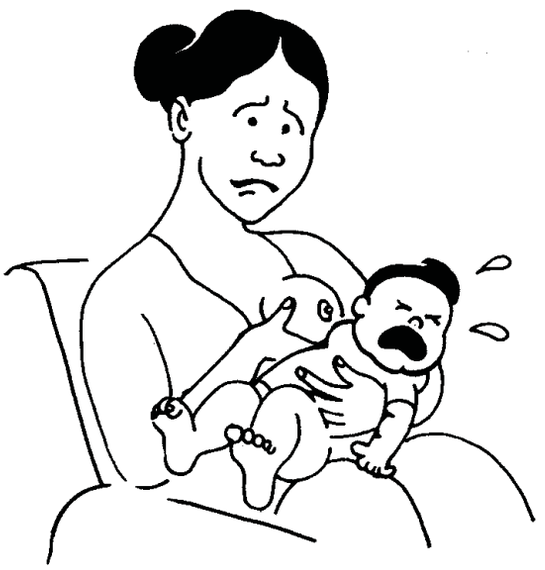
- Baby ill, in pain or sedated
- Difficulty with breastfeeding technique
- Change which upsets baby
- Apparent, not real, refusal.

Fig. 14.3 A baby may be unable to suckle because he is sick.

CAUSES OF BREAST REFUSAL

Illness, pain or sedation	Infection
	Brain damage
	Pain from bruise (vacuum, forceps)
	Blocked nose
	Sore mouth (thrush, teething)
Difficulty with breastfeeding technique	Use of bottles and pacifiers whilst breastfeeding
	Not getting much milk (e.g. poor attachment)
	Pressure on back of head when positioning
	Mother shaking breast
	Restricting length of feeds
	Difficulty co-ordinating suckle
Change which upsets baby (especially aged 3-12 months)	Separation from mother (e.g. if mother returns to work)
	New carer or too many carers
	Change in the family routine
	Mother ill
	Mother has breast problem e.g. mastitis
	Change in smell of mother
Apparent refusal	Newborn - rooting
	Age 4-8 months - distraction
	Above one year - self-weaning

Fig. 14.4 Sometimes a baby refuses because breastfeeding has become unpleasant or frustrating



How to help mothers whose babies refuse the breast

HELPING A MOTHER AND BABY TO BREASTFEED AGAIN

Help the mother to do these things:

- Keep her baby close - no other carers
  - Give plenty of skin-to-skin contact at all times, not just at feeding times
  - Sleep with her baby
  - Ask other people to help in other ways.
- Offer her breast whenever her baby is willing to suckle
  - When her baby is sleepy, or after a cup feed
  - When she feels her ejection reflex working.
- Help her baby to take the breast
  - Express breast milk into his mouth
  - Position him so that he can attach easily to the breast – try different positions
  - Avoid pressing the back of his head or shaking her breast.
- Feed her baby by cup
  - Give her own expressed breast milk if possible; if necessary give artificial feeds
  - Avoid using bottles, teats, pacifiers.

Mrs Banda delivered a baby by vacuum extraction two days ago. He has a bruise on his head. When Mrs Banda tries to feed him, he screams and refuses. She is very upset and feels that breastfeeding will be too difficult for her. You watch her trying to feed her baby, and you notice that her hand is pressing on the bruise.

What could you say to empathize with Mrs Banda?

What praise and relevant information can you give to build Mrs Banda's confidence?

What practical help can you give to Mrs Banda?

Summary

Notice how all the skills you have learnt so far can be used to help mothers in different situations: listening and learning skills; confidence and support skills; assessing a breastfeed; helping a mother to position and attach her baby; taking a detailed feeding history.

In many situations there may be no treatment, so giving the mother relevant information and suggestions is very important.

Notes

Session 15

Expressing Breast Milk

Objectives

After completing this session participants will be able to:

- list the situations when expressing breast milk is useful
- explain how to stimulate the oxytocin reflex
- rub a mother's back to stimulate the oxytocin reflex
- demonstrate how to select and prepare a container for expressed breast milk
- describe how to store breast milk
- explain to a mother the steps of expressing breast milk by hand

Introduction

There are many situations in which expressing breast milk is useful and important to enable a mother to initiate or continue breastfeeding.

Expressing milk is useful to:

- leave breast milk for a baby when his mother goes out or goes to work
- feed a low-birth-weight baby who cannot breastfeed
- feed a sick baby, who cannot suckle enough
- keep up the supply of breast milk when a mother or baby is ill
- prevent leaking when a mother is away from her baby
- help a baby to attach to a full breast
- to help with breast health conditions, e.g. engorgement (see Session 20)
- to transition to another method of feeding or to heat-treat breast milk (see Sessions on HIV and infant feeding)

All mothers should learn how to express their milk, so that they know what to do if the need arises. Certainly all those who care for breastfeeding mothers should be able to teach mothers how to express their milk.

Many mothers are able to express plenty of breast milk using rather strange techniques. If a mother's technique works for her, let her do it that way. But if a mother is having difficulty expressing enough milk, teach her a more effective technique.

Breast milk can be stored for about eight hours at room temperature or up to 24 hours in a refrigerator.

Stimulating the oxytocin reflex

The oxytocin reflex may not work as well when a mother expresses as it does when a baby suckles. A mother needs to know how to help her oxytocin reflex, or she may find it difficult to express her milk.

HOW TO STIMULATE THE OXYTOCIN REFLEX

- Help the mother **psychologically:**
  Build her confidence
  Try to reduce any sources of pain or anxiety
  Help her to have good thoughts and feelings about the baby

- Help the mother **practically**. Help or advise her to:

  Sit quietly and privately or with a supportive friend.
  Some mothers can express easily in a group of other mothers who are also expressing for their babies.

  Hold her baby with skin-to-skin contact if possible
  She can hold her baby on her lap while she expresses. If this is not possible, she can look at the baby. If this is not possible, sometimes even looking at a photograph of her baby helps.

  Take a warm soothing drink
  The drink should not be coffee.

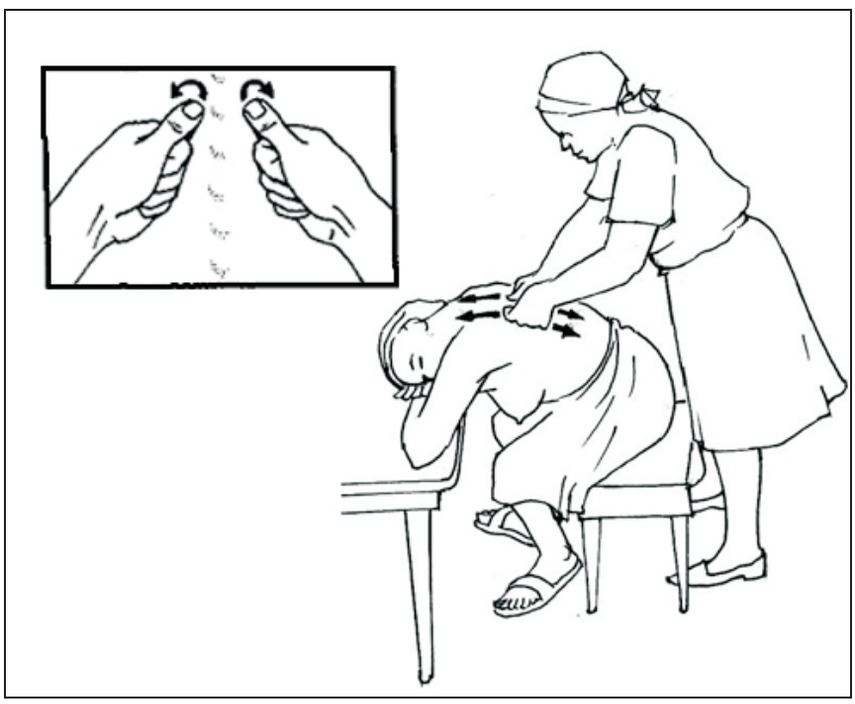
  Warm her breasts.
  For example, she can apply a warm compress, or warm water, or have a warm shower.

  Stimulate her nipples
  She can gently pull or roll her nipples with her fingers.

  Massage or stroke her breasts lightly
  Some women find that it helps if they stroke the breast gently with finger tips or with a comb.
  Some women find that it helps to gently roll their closed fist over the breast towards the nipple.

  Ask a helper to rub her back.

Fig. 15.1 A helper rubbing a mother's back to stimulate the oxytocin reflex



How to express breast milk by hand

Hand expression is the most useful way to express milk. It needs no appliance, so a woman can do it anywhere, at any time.

A woman should express her own breast milk (see card counselling 11 on breast milk expression). The breasts are easily hurt if another person tries.

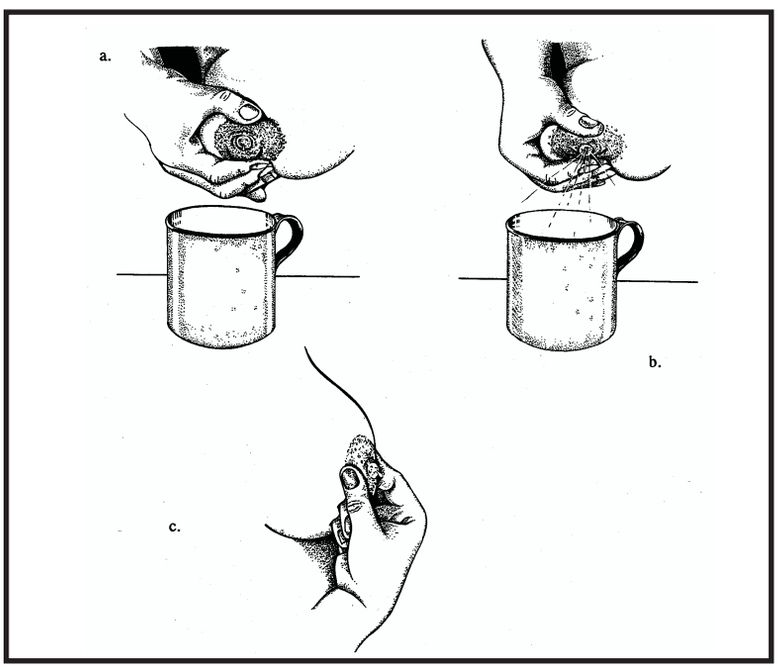
If you are showing a woman how to express, show her on your own body as much as possible, while she copies you. If you need to touch her to show her exactly where to press her breast, be very gentle.

HOW TO SELECT AND PREPARE A CONTAINER FOR EXPRESSED BREAST MILK (EBM)
▪ Choose a cup, glass, jug or jar with a wide mouth.
▪ Wash the cup in soap and water (She can do this the day before).
▪ Pour boiling water into the cup, and leave it for a few minutes. Boiling water will kill most of the germs.
▪ When ready to express milk, pour the water out of the cup.

HOW TO EXPRESS BREAST MILK BY HAND
▪ Teach a mother to do this herself. Do not express her milk for her. Touch her only to show her what to do, and be gentle. Teach her to:
▪ Wash her hands thoroughly.
▪ Sit or stand comfortably, and hold the container near her breast.
▪ Put her thumb on her breast ABOVE the nipple and areola, and her first finger on the breast BELOW the nipple and areola, opposite the thumb. She supports the breast with her other fingers (see Fig.15.2).
▪ Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far or she may block the milk ducts.
▪ Press her breast behind the nipple and areola between her finger and thumb. She should press on the larger ducts beneath the areola. Sometimes in a lactating breast it is possible to feel the ducts. They are like pods, or peanuts. If she can feel them, she can press on them.
▪ Press and release, press and release. This should not hurt - if it hurts, the technique is wrong. At first no milk may come, but after pressing a few times, milk starts to drip out. It may flow in streams if the oxytocin reflex is active.
▪ Press the areola in the same way from the SIDES, to make sure that milk is expressed from all segments of the breast.
▪ Avoid rubbing or sliding her fingers along the skin. The movement of the fingers should be more like rolling.
▪ Avoid squeezing the nipple itself. Pressing or pulling the nipple cannot express the milk. It is the same as the baby sucking only the nipple.
▪ Express one breast for at least 3 -5 minutes until the flow slows; then express the other side; and then repeat both sides. She can use either hand for either breast, and change when they tire.
▪ Explain that to express breast milk adequately takes 20 -30 minutes, especially in the first few days when only a little milk may be produced. It is important not to try to express in a shorter time.

Fig. 15.2 How to express breast milk.

a. Place finger and thumb each side of the areola and press inwards towards the chest wall.
b. Press behind the nipple and areola between your finger and thumb.
c. Press from the sides to empty all segments.



How often a mother should express milk

How often a mother should express her milk depends on the reason for expressing the milk. Usually she should express as often as the baby would breastfeed.

To establish lactation, to feed a low-birth-weight (LBW) or sick newborn she should start to express milk on the first day, as soon as possible. She may only express a few drops of colostrum at first, but it helps breast milk production to begin, in the same way that a baby suckling soon after delivery helps breast milk production to begin.

She should express as much as she can as often as her baby would breastfeed. This should be at least every three hours, including during the night. If she expresses only a few times, or if there are long intervals between expressions, she may not be able to produce enough milk.

To keep up her milk supply to feed a sick baby: She should express at least every three hours.

To build up her milk supply, if it seems to be decreasing after a few weeks: Express very often for a few days (every 2 hours or even every hour), and at least every three hours during the night.

To leave milk for a baby while she is out at work: Express as much as possible before she goes to work, to leave for her baby. It is also very important to express while at work to help keep up her supply.

To relieve symptoms, such as engorgement, or leaking at work: Express only as much as is necessary.

Notes

Session 16

Cup-Feeding

Objectives

After completing this session you will be able to:

- list the advantages of cup-feeding
- estimate the volume of milk to give to a baby according to weight
- demonstrate how to cup-feed safely

The advantages of cup-feeding

- Cups are easy to clean with soap and water, if boiling is not possible.
- Cups are less likely than bottles to be carried around for a long time, giving bacteria time to breed.
- Cup-feeding is associated with less risk of diarrhoea, ear infections and tooth decay.
- A cup cannot be left beside a baby, for the baby to feed himself. The person who feeds a baby by cup has to hold the baby and look at him and give him some of the contact that he needs.
- A cup does not interfere with suckling at the breast.
- A cup enables a baby to control his own intake (refer to counselling card 9 on cup feeding)

How to Feed a Baby by Cup

- Wash your hands.
- Hold the baby sitting upright or semi-upright on your lap.
- Place the estimated amount of milk for one feed into the cup.
- Hold the small cup of milk to the baby's lips.
  Tip the cup so that the milk just reaches the baby's lips.
  The cup rests lightly on the baby's lower lip, and the edges of the cup touch the outer part of the baby's upper lip.
- The baby becomes alert, and opens his mouth and eyes.
  A low-birth-weight (LBW) baby starts to take the milk into his mouth with his tongue.
  A full term or older baby sucks the milk, spilling some of it.
- DO NOT POUR the milk into the baby's mouth. Just hold the cup to his lips and let him take it himself.
- When the baby has had enough, he closes his mouth and will not take any more. If he has not taken the calculated amount, he may take more next time, or you may need to feed him more often.
- Measure his intake over 24 hours - not just at each feed.

Fig. 16.1: Feeding a baby by cup

AMOUNT OF MILK TO GIVE TO BABIES

- Babies who weigh 2.5 kg or more
  150 ml milk per kg body weight per day
  Divide the total into eight feeds, and gives 3hourly feeds

- Babies who weigh less than 2.5 kg (Low birth-weight)
  Start with 60 ml/kg body weight
  Increase the total volume by 20 ml per kg per day, until the baby is taking a total of 200 ml per kg per day
  Divide the total into 8-12 feeds, to feed every 2-3 hours
  Continue until the baby weighs 1800 g or more, and is fully breastfeeding

- Check the baby's 24-hour intake. The size of individual feeds may vary.

Amount of milk to give to babies

The amount of milk that a baby takes at each feed varies with all methods of feeding. Let the baby decide when he has taken enough. If a baby takes a very small feed, offer extra at the next feed, or give the next feed early, especially if the baby shows signs of hunger.

If a mother produces only a small amount of breast milk, be sure to give it all to her baby. Help her to feel that this small amount is valuable, especially to prevent infection. This helps her confidence, and will help her to produce more milk.

Low-birth-weight (LBW) babies need only very small volumes during the early days. If the mother can express even a small amount of colostrum, it is often all that her baby needs.

Example:

Calculate the volume of milk, per feed, for a two-week-old baby who weighs 3.8 kg

The volume of milk the baby needs in 24 hours is 150 ml per kg

How much milk will this baby need in 24 hours?

How much milk should the baby be offered each feed?

Many mothers do not have equipment for measuring volumes. You could explain to the mother how much milk the cup holds, which she uses to feed the baby, and show her how much milk to offer each feed. For example: using the calculation above – if the mother has a cup which holds 150mls, she should offer the baby approximately half a cup of milk per feed.

Notes

Session 17

Overview of HIV and Infant Feeding

Objectives

At the end of this session participants will be able to:

- define HIV and the modes of its transmission
- explain modes and the risks of mother-to-child transmission of HIV
- describe factors which increase mother-to-child transmission(MTCT) of HIV
- outline approaches that can eliminate MTCT of HIV
- State the infant and young child feeding recommendations in the context of HIV

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- define HIV and the modes of its transmission
  - explain modes and the risk of mother-to-child transmission of HIV
  - describe factors which increase mother-to-child transmission(MTCT) of HIV
  - outline approaches that can eliminate MTCT of HIV
  - State breastfeeding and complementary feeding recommendations for HIV negative, positive and women who do not know their status

I. Introduce the session — 7 minutes

- A very sad aspect of the HIV/AIDS epidemic is the number of young children dying from the infection. Most of these children become infected through their mothers. In most cases her sexual partner, often the child's father, usually infects a woman.

A very sad aspect of the HIV/AIDS epidemic is the number of young children who are dying from the infection. Most of these children become infected through their mothers. In most cases her sexual partner, often the child's father, usually infects a woman.

The best way to prevent infection of children is to help their fathers and mothers to avoid becoming infected in the first place. Men's responsibility for protecting their families must be emphasized.

However, many women are already infected, and it is important to try to reduce the risk to their babies. One way is for them to avoid breastfeeding but, as we have seen already, not breastfeeding carries many risks.

You as a health worker can help an HIV-positive woman to make the difficult decision about the best way to feed her baby in her particular circumstances.

Defining HIV and AIDS

HIV

- Human immunodeficiency virus is the virus that causes AIDS

AIDS

Acquired Immune Deficiency syndrome is a condition in which the body becomes less able to fight infections and gets frequently ill

People infected with HIV feel well at first and usually do not know they are infected called asymptomatic phase. They may remain healthy for many as the body produces antibodies to fight HIV.

But the antibodies are not very effective. The virus lives inside the immune cells and slowly destroys them. When these cells are destroyed, the body becomes less able to fight infections. The person becomes ill a phase called symptomatic, and after a time develops AIDS and eventually dies.

An HIV test can be done to determine whether an individual has HIV antibodies in the blood stream. A positive test means that the person is infected with HIV. This is called HIV- positive or sero-positive.

Once someone has the virus in his or her body, s/he can pass on the virus to other people.

Modes of HIV Transmission

HIV can be transmitted through;

- Vaginal or anal unprotected sex with an infected person which is the most common way
- An infected woman can transmit HIV to her child during pregnancy, at the time of birth or through breastfeeding. This is called mother-to-child transmission of HIV or MTCT-the second largest way.
- Contact with blood and secretions of someone with HIV. This is very rare, such as blood transfusion.
- Contaminated sharps (hypodermic needles, blades etc).

HIV is NOT transmitted through:

- Coughing or sneezing of an HIV infected person
- Being bitten by an insect which has bitten an HIV infected person
- Touching or hugging an HIV infected person
- Sharing a public bathroom/ pool, public toilet an HIV infected person
- Shaking hands with an HIV infected person
- Working together with HIV infected mothers, holding their babies or helping to care for the babies
- Using telephones
- Drinking water or preparing or eating food together with an HIV infected person
- Sharing cups, glasses, plates or other utensils with an HIV infected person

NB: It has been found that more women (16.1%) have HIV infection than men (12.3%). ZDHS 2007
This is because of the following;

a) Make up of woman's genital canal (biological factors)

- The makeup of the female genitalia easily attracts the virus (Langerhans cells)
- The vaginal canal accommodates large amounts of infected semen deposited during sexual intercourse.
- Ulcerations of the vulva and/or vagina resulting from traumatic sexual intercourse and vaginal bleeding
- Sexual intercourse with an HIV infected partner during menstruation
- Women who suffer from childbearing infections (e.g. pelvic inflammatory diseases) are 6 times more likely to get HIV infection
- Sexually Transmission Infections (STIs) in women are not easily noticed hence do not get treated in good time

b) Social Cultural Factors

- Gender inequality- Women have no control to have safe sex when spouses are infected with HIV
- Negative traditional beliefs, practices and taboos such as (sexual cleansing/wife inheritance), harmful initiation ceremonies
- Adverse sexual practices such as traditional herbs and other practices applied in the vaginal canal to make sex more pleasurable bruises the vagina making it more prone to HIV infection
- Pressure on women to produce children even if they are HIV infected
- High illiteracy among women prevents them from accessing information on HIV and STI.
- Sex work for income
- Lack of financial empowerment to get access to treatment of STIs

Risk of HIV **Mother-to-child transmission of HIV**

Mother-to-Child Transmission of HIV

Young children who get HIV are usually infected through their mothers:

- during pregnancy across the placenta
- at the time of labour and delivery through blood and secretions
- through breastfeeding

This is called mother-to-child transmission of HIV or MTCT

In Zambia, opt out Policy for HIV testing in pregnancy is practiced. This means every pregnant woman will undergo an HIV test as part of their routine antenatal care, unless she refuses. It is very critical that couples know their HIV status for preventive actions . It is strongly recommended that HIV negative breastfeeding mothers have an HIV test at least every 3 months. Breastfeeding mothers who do not know their HIV status should be counseled to get tested

Estimated risk and timing of mother-to-child transmission of HIV in the absence of Interventions

Estimated risk and timing of mother-to-child transmission of HIV in the ABSENCE of interventions

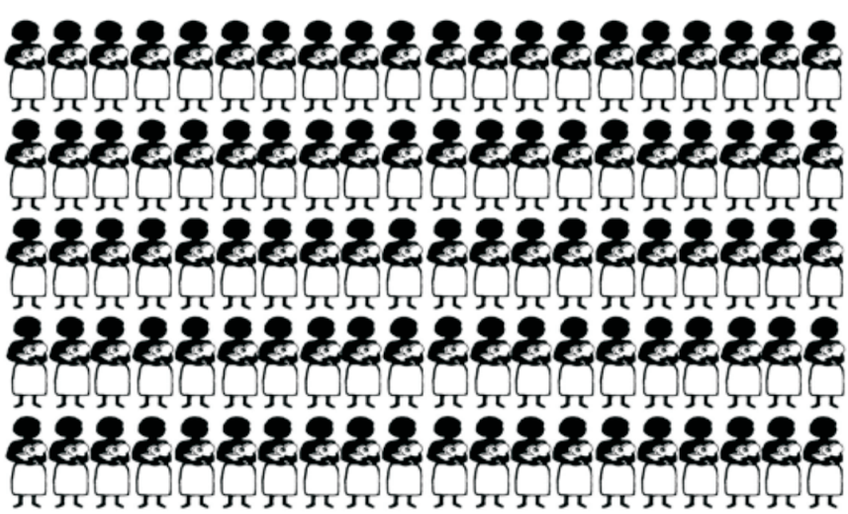
Timing of MTCT of HIV	Transmission Rate
During pregnancy	5-10%
During labour and delivery	10-15%
During breastfeeding	
Many babies get infected during delivery and breastfeeding.	5-20%

Without intervention during pregnancy the chances of an HIV positive woman transmitting the virus to her unborn baby id between 5 and 10%, during labour and delivery the chances are 10 to 15% and during breastfeeding 5 to 20%

The longer the breastfeeding period the higher the risk of HIV transmission. However, HIV transmission is reduced with interventions

Exclusive breastfeeding for the first six months of life carries the lowest (approximately 4%) risk of HIV transmission. On the other hand mixed feeding carries the highest risk

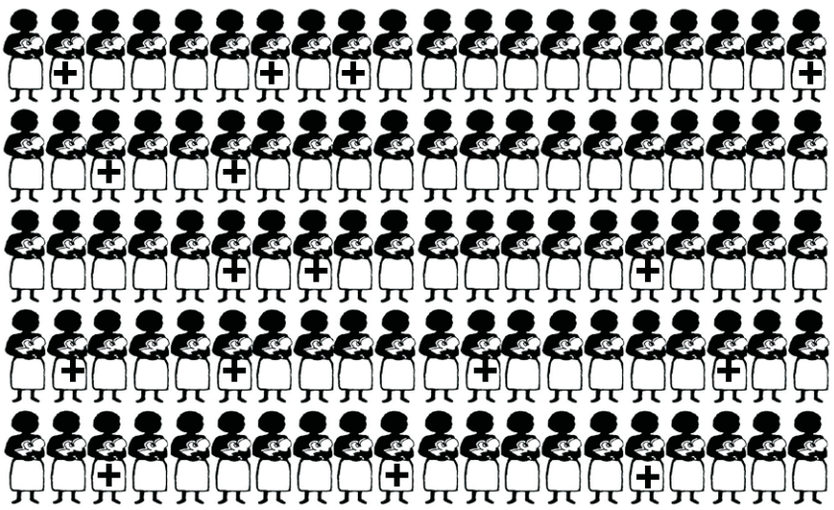
HIV prevalence rate in a population of 100 mothers



This shows 100 mothers with their babies. The antenatal HIV prevalence in Zambia is estimated at about 16%.

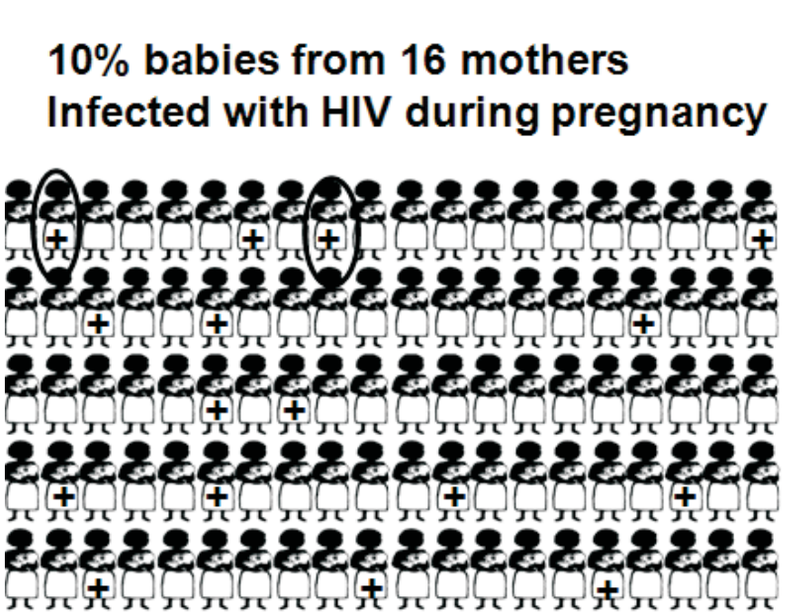
16 % of 100 is 16. This means that 16 of these women will be HIV-positive. The other 84 are HIV-negative

Without interventions the HIV prevalence rate among women is about 16% (ZDHS,2010)



Not all babies born to HIV infected mothers become infected with HIV

Remember the transmission rate of 10% during pregnancy



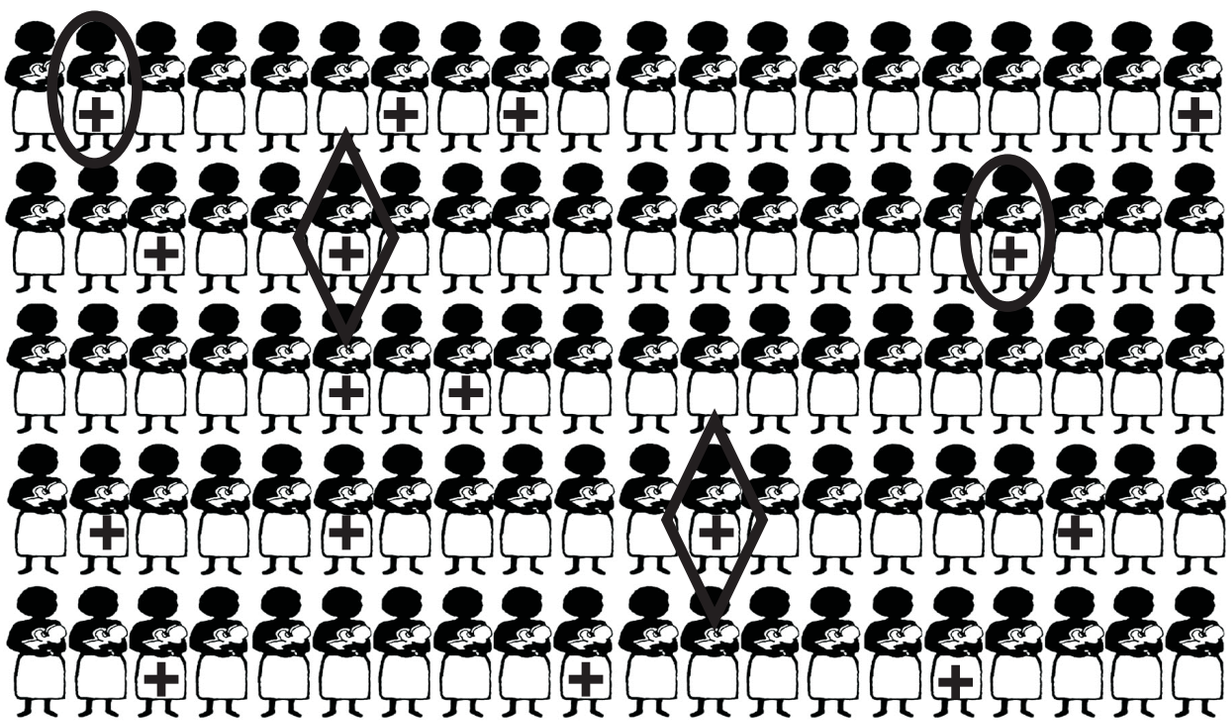
Remember that the HIV prevalence rate is 16% which was16 women in a population of 100 women.

10% of the children from the 16 HIV positive women will get infected with HIV during pregnancy. This means that 2 exposed babies of the 16 women will get HIV from their HIV infected mothers

HIV transmission rate during labor and delivery

- Remember transmission rate of 15% during labor and delivery

15% babies born from 16 HIV positive mothers will be infected with HIV during labour and delivery



Remember that the HIV prevalence rate is 16% which was16 women in a population of 100 women.

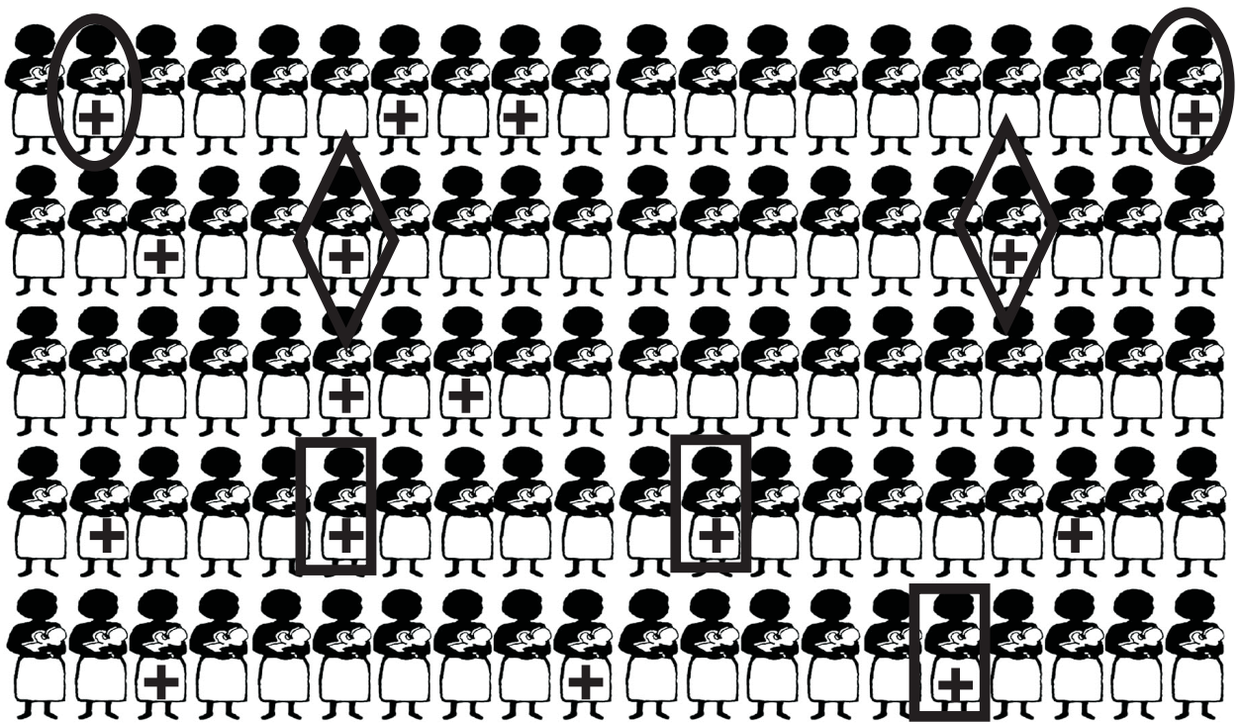
15% of the children from the 16 HIV positive women will get infected with HIV during labour and delivery. This means that 2 exposed babies of the 16 women will get HIV from their mothers

The babies in circles got infected during pregnancy and now we have 2 additional babies in diamonds shapes who get infected during labour and delivery

- Remember the transmission rate of 20% during breastfeeding

HIV transmission rate during breastfeeding

20% babies from 16 mothers Infected with HIV during breastfeeding



Remember that the HIV prevalence rate is 16% which was16 women in a population of 100 women. 20% of the children from the 16 HIV positive women will get infected with HIV during breastfeeding. This means that 3 exposed babies will get infected

The babies in circles got infected during pregnancy and now we have 2 additional babies in diamond shapes who got infected during labour and delivery and 3 more babies in rectangles who will get infected during breastfeeding

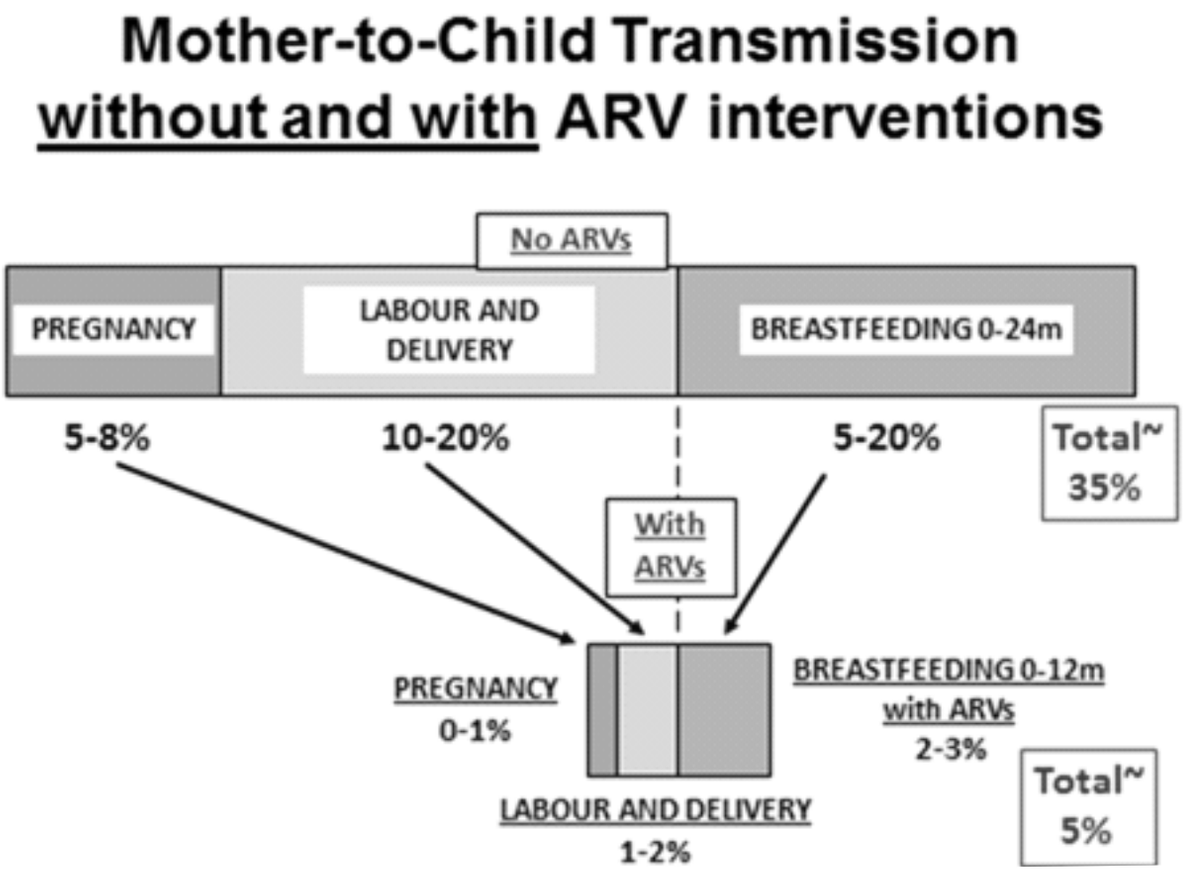
Summary : without interventions, during the whole period 45% (10% pregnancy 2 babies, 15% labour and delivery 2 babies and 20% breastfeeding 3 babies) babies will be infected. In total 7(2+2+3) babies from the 16 HIV infected mothers will be infected with HIV

MTCT of HIV WITH interventions

MTCT of HIV with interventions reduces chances of an HIV positive woman transmitting the virus to her unborn baby during pregnancy 0 to1%, during labor and delivery 1 to 2% and during breastfeeding 2 to 3% (WHO, 2012)

The transmission rates we used sound very exact figures, but they are only estimates (averages) from several research studies.

HIV prevalence rates vary because of differences in population characteristics such as how ill the mothers are, how much virus is in their blood and how long breastfeeding lasts.



So, even among women who know they are HIV positive, not all their infants are likely to be infected through breastfeeding. Even if there is some risk if HIV transmission if a mother who is HIV positive decides to breastfeed her infant, there are also risks if a mother decides not breastfeed. In some cases the risks of illness and death from NOT breastfeeding may be greater than the risk of HIV infection through breastfeeding

Factors which affect mother-to-child transmission

Factors which affect mother-to-child transmission of HIV

- Recent infection with HIV
- New infection with HI
- Severity of disease
- Sexually transmitted infections
- Duration of breastfeeding
- Obstetric procedures (episiotomy, artificial rapture of membranes and instrumental deliveries)
- Poor breastfeeding practices (mixed feeding)
- Condition of the breasts
- Condition of the baby's mouth

FACTORS WHICH AFFECT MTCT OF HIV THROUGH BREASTFEEDING.

Recent HIV infection

If a woman becomes infected with HIV during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent an HIV-negative woman from becoming infected at this time because then both the woman and her baby are at risk.

HIV re-infection

If an HIV positive woman gets new HIV infection during pregnancy or while breastfeeding, she has higher levels of virus in her blood, and her infant is more likely to be infected. It is especially important to prevent HIV-positive woman from becoming infected at this time because then both the woman and her baby are at a higher risk.

Severity of Disease

If the mother is ill with HIV-related disease or AIDS and is not being treated , she has more viruses in her body and transmission to the baby is more likely.

Sexually Transmitted Infections (STIs) increase the risk of HIV transmission by allowing

entry of into the virus lesions.

Obstetric procedures

Procedures such as episiotomy, artificial rapture of membranes and instrumental deliveries increase chances of HIV transmission as there is risk of direct contact between body fluids of the baby and mother.

Duration of breastfeeding

Breast milk of an HIV infected mother contains the HIV virus that can be transmitted at any time during breastfeeding. The longer the breastfeeding period, the higher the risk of MTCT. However, the risk during breastfeeding period is reduced with interventions such as good breastfeeding practices and ART.

Poor infant feeding practices (mixed feeding)

There is evidence that the risk of transmission is greater if an infant less than 6 completed months is given any other foods or drinks at the same time as breast milk. The risk is less if breastfeeding is exclusive. Other foods or drinks may cause diarrhoea and damage the gut, which might make it easier for the virus to enter the baby's body.

Condition of the breasts and the babies mouth

Nipple fissure (particularly if the nipple is bleeding), mastitis or breast abscess(when the baby has mouth sores or thrush ingests these body fluids together with breast milk), may increase the risk of HIV transmission through breastfeeding. Good breastfeeding technique helps to prevent these conditions and may also reduce transmission of HIV.

The list of factors suggests several possible infant feeding strategies that would be useful for all women, whether they are HIV-positive or HIV-negative. They provide ways to reduce the risk of HIV transmission, which can be adopted for everyone, and they do not depend on knowing women's HIV status.

Other strategies, such as the avoidance of breastfeeding, can be very harmful for babies.

Approaches to mother-to-child transmission of HIV during Breastfeeding

- Prevent HIV infection if negative
- Prevent new HIV infection if positive
- Early Infant diagnosis
- HIV testing
- Prevention and treatment of Sexually Transmitted Infections
- Avoid invasive obstetric procedures
- Promote recommended breastfeeding practices(e.g. exclusive breastfeeding)
- Avoid mixed feeding
- Prevention and treatment of breast conditions
- Infant feeding counseling
- ART to prevent severity of HIV infection

Prevent HIV infection during breastfeeding
If negative, breastfeeding women should practice safer sex to prevent infection as contracting HIV increases the viral load predisposing the child to MTC and encourage periodic HIV testing.

Prevent new HIV infection during breastfeeding
If positive, breastfeeding women should practice safer sex to prevent new infection as new infection increases the viral load.

Early Infant diagnosis: can be done to confirm HIV status of an infant with DNA Polymerase Chain Reaction (PCR) at 6 weeks and 6 months.

- An HIV positive PCR means that the infant is infected
- If a PCR test is negative and the infant has continued breastfeeding he still remains at risk of HIV infection

PCR testing sites are few in Zambia. Most health facilities collect dry blood spot samples (DBS) from the HIV exposed infants and send to the reference laboratory.

HIV testing in children can be done at 12months and 18months to confirm HIV status of an infant

HIV testing
Encourage regular HIV testing for the mothers

Prevention and treatment of Sexually Transmitted Infections(STIs)
STIs increase the risk of HIV transmission by allowing entry of virus into through lesions. Early treatment of STIs reduces HIV infection

Avoid invasive obstetric procedures

Invasive obstetric procedures increase chances of HIV transmission as there is risk of direct contact

between body fluids of the baby and mother.

Promote recommended breastfeeding practices

Initiate breastfeeding within 1 hour of birth and then practice exclusive breastfeeding for the first 6 completed months of life, and continue breastfeeding after six months

Avoid mixed feeding

There is evidence that the risk of transmission is greater if an infant less than 6 completed months is given any other foods or drinks at the same time as breast milk. Practice exclusive breastfeeding for the first 6 months of a child's life.

Condition of the breasts

Breast conditions predispose infants to HIV. Seek early treatment

Infant feeding counseling

Counsel the mother/ caregiver on optimal infant feeding practices

ART to prevent severity of HIV infection

Encourage all HIV positive pregnant and breastfeeding mothers to be on ART

Option B+ policy

More than 90% of HIV infection in children are as a result of MTCT. The goal is to reduce risk of MTCT to <5% and to provide comprehensive eMTCT services to at least 95% of pregnant women by 2015.

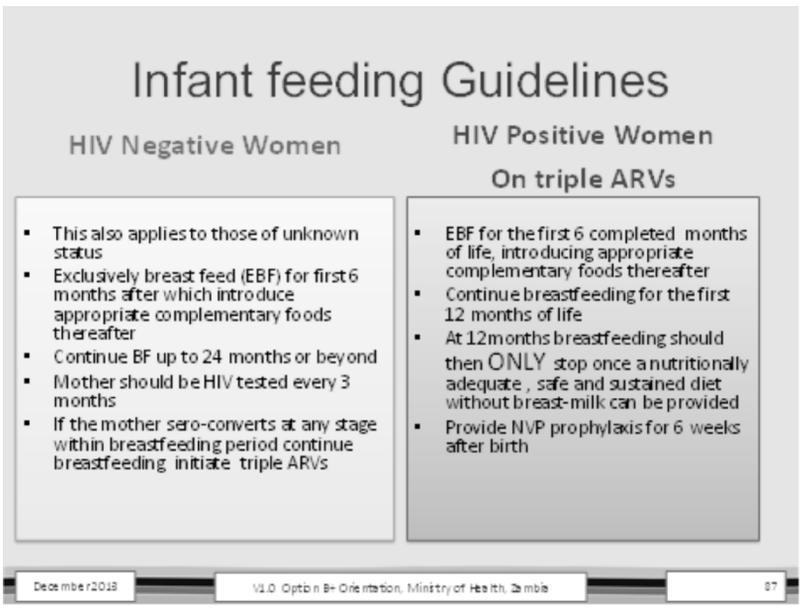
Zambia has made much progress towards reduction of MTCT with option A and B even though there is still more to be done. The country started with implementing Option A which was a monotherapy, later option B a dual therapy was implemented. Implementing option A and B was characterized with a lot of operational challenges. Currently the country has adopted a triple therapy called Option B+.

Option B+ is the use of life-long triple ARV combination in HIV positive pregnant and breastfeeding woman (regardless of the woman's CD4 count or WHO clinical stage) **for treatment** and **for prevention** of transmission of HIV to infants.

Benefits of Option B+

- offers lifelong ART to pregnant and breastfeeding women regardless of immunological or clinical status for their own health and PMTCT
- is much more effective in reducing MTCT
- has maternal health benefits for life
- has no need to wait for CD4 results to determine eligibility for treatment
- offers protection for future pregnancies- woman already on ART
- reduces STIs
- is a simplified regimen
- is easy to implement

Elimination of MTCT in Zambia



The most appropriate infant feeding option for an HIV-infected mother should depend on her individual circumstances, including her health status and the local situation.

Exclusive breastfeeding is recommended for HIV-infected women for the first 6 months of life. However in very special situation such as orphans, emergencies and those who entirely refuse to breastfeed despite counseling can be supported to exclusively replacement feed using commercial infant formula. Conditions for replacement feeding should be adhered to (AFASS – Affordable, Feasible, Acceptable, sustainable and Safe). The risks of replacement feeding should be well explained

Whatever her decision, the health worker must follow up and continue to offer IYCF counseling and support. Schedule for follow up and support should include the ante natal period, delivery process and after delivery.

If a woman opts out of Option B+ counsel her on the benefits of breastfeeding and risks of opting out from treatment. Without ART the viral load is high in the breast milk thus increased risk of HIV transmission.

Policies should serve the best interests of the mother/infant pair, in view of the critical link between survival of the mother and that of the infant.

- Zambia has adopted the policy of supporting breastfeeding; that it should be protected, promoted and supported.

Policy of supporting breastfeeding

"As a general principle, in all populations, irrespective of HIV infection rates, breastfeeding should continue to be protected, promoted and supported."

HIV and Infant Feeding: a policy statement, developed collaboratively by UNAIDS, WHO and UNICEF, 1997.

Session 18

Counselling for Infant Feeding Decisions

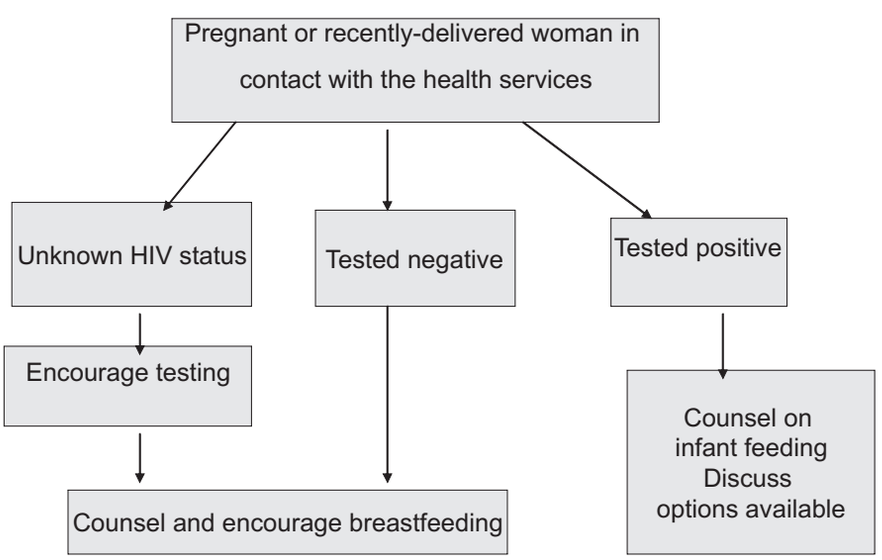
Objectives

After completing this session you will be able to:

- describe the elements to be considered for counselling on infant feeding in relation to HIV
- list the different feeding options available to HIV-positive mothers
- list the advantages and disadvantages of these feeding options

You may be giving infant feeding counselling to a woman who may or may not know her HIV-status. HIV testing may not be available everywhere. A woman may be aware that HIV can pass to her baby and worry about this, in particular about the possibility of transmission through breastfeeding.

Counselling for infant feeding in relation to HIV



For women who have not been tested or do not know their results

Talk to them of the advantages of HIV testing for them and their families. In the absence of a test result, provide counselling about their concerns and encourage them to feed their babies as if they were HIV-negative, that is to breastfeed exclusively for six months and to continue breastfeeding with adequate complementary feeding up to two years or beyond. If a woman does not know her HIV status, it is usually safer for her baby if she breastfeeds. Babies who do not breastfeed are at greater risk of illness.

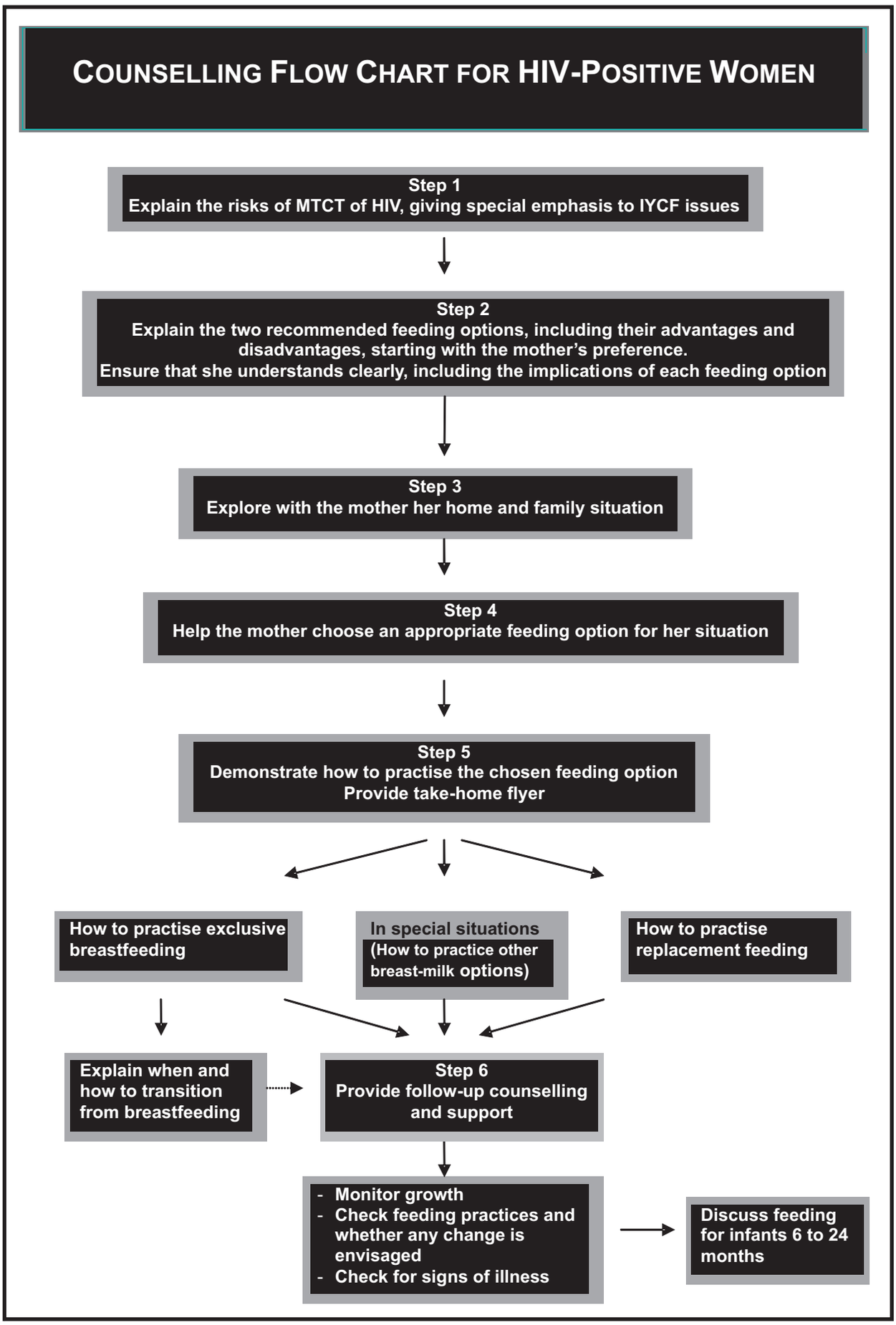
Remember that during group education, breastfeeding in general should be discussed but do not discuss of infant feeding options. Infant feeding counselling should only be done in individual sessions. This is to avoid “spill over” effect

For women who test negative

Talk to them of the risks of becoming infected during pregnancy or while breastfeeding. Suggest that they have a repeat test if they think they have been exposed to HIV since the last test. Suggest that they feed their babies as per the general population recommendation that is to breastfeed exclusively for six months and to continue breastfeeding with adequate complementary feeding up to two years or beyond.

For women who test positive

Discuss with the woman her possible feeding options.

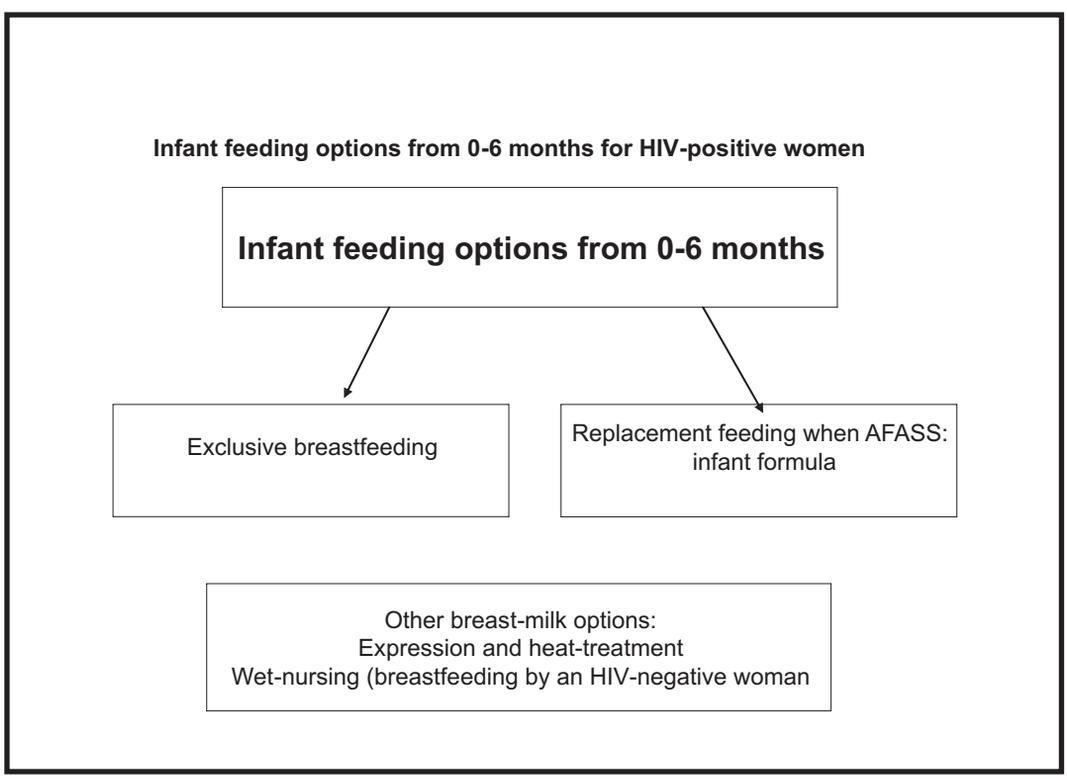

COUNSELLING FLOW CHART FOR HIV-POSITIVE WOMEN
Step 1
Explain the risks of MTCT of HIV, giving special emphasis to IYCF issues
Step 2
Explain the two recommended feeding options, including their advantages and disadvantages, starting with the mother's preference.
Ensure that she understands clearly, including the implications of each feeding option
Step 3
Explore with the mother her home and family situation
Step 4
Help the mother choose an appropriate feeding option for her situation
Step 5
Demonstrate how to practise the chosen feeding option
Provide take-home flyer
How to practise exclusive breastfeeding
In special situations
(How to practice other breast-milk options)
How to practise replacement feeding
Explain when and how to transition from breastfeeding
Step 6
Provide follow-up counselling and support
- Monitor growth
- Check feeding practices and whether any change is envisaged
- Check for signs of illness
Discuss feeding for infants 6 to 24 months

Infant feeding counselling for HIV-positive women may be needed:

- before a woman is pregnant
- during her pregnancy
- soon after her baby is born
- when her baby is older
- when a women fosters a baby whose mother is very sick or has died.

As her baby gets older or if her situation changes, an HIV-positive mother may need on-going infant feeding counselling. She may want to change her method of feeding.

Each woman's situation is different, so health workers need to be able to discuss all the various feeding options.



In Zambia the two recommended infant feeding options are:

- Exclusive breastfeeding for the first 6 months
- Replacement feeding using infant formula when acceptable, feasible, affordable, sustainable and safe.

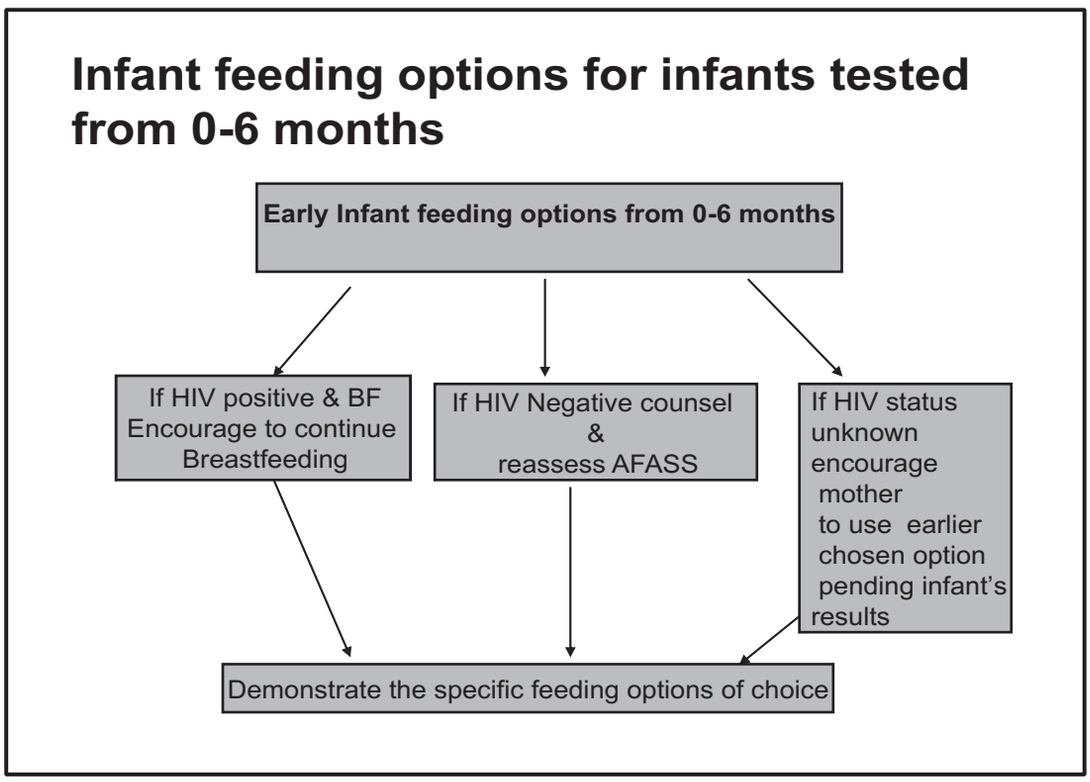
Other breast-milk options to be used in special situations include*:*

- Expressing and heat-treating of the woman's own breast milk (especially during transition from breastfeeding)
- Wet-nursing (breastfeeding from an HIV-negative woman). This option may apply in cases where mother dies and the family cannot meet AFASS for replacement feeding

DEFINITIONS OF ACCEPTABLE, FEASIBLE, AFFORDABLE, SUSTAINABLE AND SAFE
Acceptable: The mother perceives no barrier to replacement feeding. Barriers may have cultural or social reasons, or be due to fear of stigma or discrimination.
Feasible: The mother (or family) has adequate time, knowledge, skills and other resources to prepare the replacement food and feed the infant up to 12 times in 24 hours.
Affordable: The mother and family, with community or health-system support if necessary, can pay for the cost of purchasing/producing, preparing and using replacement feeding, including all ingredients, fuel, clean water, soap and equipment, without compromising the health and nutrition of the family.
Sustainable: Availability of a continuous and uninterrupted supply, and dependable system of distribution for all ingredients and products needed for safe replacement feeding, for as long as the infant needs it, up to one year of age or longer.
Safe: Replacement foods are correctly and hygienically prepared and stored and fed in nutritionally adequate quantities with clean hands and using clean utensils, preferably by cup. According to this concept, the mother and family: ▪ Have access to a reliable supply of clean water (from a piped or protected well source) ▪ Prepare replacement feeds that are nutritionally sound and free of pathogens (germs) ▪ Are able to wash hands and utensils thoroughly with soap and to regularly boil the utensils to sterilize them ▪ Can boil water for preparing each of the infant's feeds ▪ Can store unprepared feeds in clean, covered containers and protect them from rodents, insects and other animals

Replacement feeding

is the process of feeding a child who is not breastfeeding with a diet that provides all nutrients needed by the child until s/he is fully fed on family food



- Testing infants for HIV infection is carried out in some health facilities using PCR at 6 weeks
- If an infant test positive, encourage to continue breastfeeding.
- If the tests result for the infant is negative; counsel the mother and review AFASS. Let the mother make an informed decision based on her own individual situation.
- If an infant's HIV status is not known, counsel the mother to continue with the infant feeding option she settled for earlier

Notes

Session 19

Breastfeeding and Breast-Milk Options for HIV-infected Women

Objectives

After completing this session you will be able to:

- explain the advantages and disadvantages of breastfeeding and breast-milk feeding options for HIV-infected women
- explain the process of transitioning from breastfeeding
- discuss wet-nursing and finding a wet-nurse
- demonstrate how to heat-treat expressed breast milk

We mentioned in Session 18 that

- The recommended breastfeeding option is exclusive breastfeeding for the first six months
- Other breast-milk options that may be used for HIV exposed infants in difficult circumstances include
  - Expressing and heat treating breast milk (during the transition period)
  - Wet-nursing (breastfeeding by another woman, who is HIV-negative).

In this session we will discuss how to help a woman to use any of these options, and to do it as safely as possible.

The Advantages of Breastfeeding

A mother who is HIV-positive may decide that breastfeeding is her best option; she should be supported to establish and maintain it.

ADVANTAGES AND DISADVANTAGES OF EXCLUSIVE BREASTFEEDING FOR AN HIV-INFECTED MOTHER

Advantages:

- Breast milk is the perfect food for babies and protects them from many diseases, especially diarrhoea and pneumonia. Exclusive breastfeeding reduces the risk of dying from these diseases.
- Breast milk gives babies all of the nutrition and water they need. Breastfed babies do not need any other liquid or food.
- Breast milk is free, always available, and does not need any special preparation.
- Exclusive breastfeeding for the first few months may lower the risk of passing HIV, compared to mixed feeding.
- Many women breastfeed, so people will not ask why mothers are breastfeeding.
- Exclusive breastfeeding helps mothers recover from childbirth and protects them from getting pregnant again too soon.

Disadvantages:

- As long as the mother breastfeeds, her baby is exposed to HIV.
- It may be difficult to carryout if the mother gets very sick.

If a woman does breastfeed, it is important for her to breastfeed exclusively. This gives protection for the infant against common childhood infections and possibly also reduces the risk of HIV transmission.

Counselling on infant feeding may need to take into account her disease progression. Recent evidence suggests a very high rate of postnatal transmission in women with advanced disease.

An HIV-infected mother who chooses to breastfeed needs to use a good technique to prevent nipple fissure and mastitis, both of which may increase the risk of HIV transmission. Management of breast conditions will be covered in the next session.

Note however, that exclusive breastfeeding suffers a number of challenges. People may pressurize the mother to give water, other liquids, or foods to the baby while she is breastfeeding. This practice, known as mixed feeding, may increase the risk of diarrhoea and other infections. The mother will need support to exclusively breastfeed until it is possible for her to use another feeding option. It may be difficult to carry out if the mother works outside the home and cannot take the baby with her.

Transitioning from breastfeeding

HIV can be transmitted at any time during breastfeeding. Stopping to breastfeed early reduces the risk of transmission by reducing the length of time the infant is exposed to the virus in breast milk.

The HIV positive mother may consider stopping breastfeeding at certain particular points depending on the individual situation. This may be considered after the baby is tested negative in view of early infant diagnosis or after 6 months of exclusive breastfeeding.

However, it is important that a woman who is considering to change from breastfeeding first receives counseling to review whether replacement feeding will be acceptable, feasible, affordable, sustainable and safe (AFASS) for both her and her baby. This will determine whether stopping to breastfeed is the most suitable decision.

The time period during which a mother stops breastfeeding and changes to replacement milk is known as the transition period. Preliminary experience indicates that mothers can stop breastfeeding in a period of 2-3 days to 3 weeks with counselling and support.

Some mothers may not be able to provide replacement feeding for an infant even from six months onwards. Among other factors, suitable replacement foods may not be available.In that case, mothers should consider continuing to breastfeed in addition to complementary foods. For some infants, the risk of malnutrition and other morbidity may still be greater if they do not receive breast milk than the risk of HIV transmission through continued breastfeeding, even after six months.

When a mother has decided to breastfeed and stop early, she needs guidance about how to transition from breastfeeding and support for her decision. It is important to help the mother to plan in advance how she will carry out the process of stopping to breastfeed and safe transition.

HOW TO TRANSITION FROM BREASTFEEDING

- While a mother is breastfeeding, teach her baby to drink expressed, unheated, breast milk from a cup (see Cards 9 and 11).
- This milk may be heat-treated to destroy the HIV (see Card 12).
- Once the baby is drinking comfortably, replace one breastfeed with one cup-feed using expressed breast milk.
- Increase the frequency of cup-feeding every few days and reduce the frequency of breastfeeding. Ask an adult family member to help cup-feed the baby.
- Stop putting her baby to the breast completely as soon as she and her baby are accustomed to frequent cup-feeding. From this point on, it is best to heat-treat her breast milk.
- If her baby is only receiving milk, check that he is passing enough urine - at least six wet nappies in every 24-hour period. This means that he is getting enough milk.
- Gradually replace the expressed breast milk with formula
- If her baby needs to suck, give a clean finger instead of the breast.
- To avoid breast engorgement (swelling) express a little milk whenever her breasts feel too full. This will help her to feel more comfortable. Use cold compresses to reduce the inflammation. Wear a firm bra to prevent breast discomfort.
- Do not begin breastfeeding again once she has stopped. If she does, she can increase the chances of passing HIV to her baby. If her breasts become engorged, express the milk by hand and discard it.
- Begin using the family planning method of her choice, if she has not already done so, as soon as she start reducing breastfeeds.

You may have noticed that there is much information to provide. You may want to use the relevant take-home flyers to explain to the mother while showing her what to do. Card 15 talks about how to transition from breastfeeding. Remember to use your counselling skills when talking to a woman. Try to use suggestions rather than commands.

Breastfeeding by another woman who is HIV-negative

- Asking another woman who is HIV-negative to breastfeed the baby may be an option. When a woman breastfeeds a baby to whom she did not give birth, it is called *wet-nursing*. Remember that earlier it was emphasized that this is not a routine recommendation. It should only be considered in special situations for example when an infant is orphaned and the family does not meet AFASS.

WET-NURSING (BRESTFEEDING BY ANOTHER WOMAN)
▪ To protect a baby from HIV, the wet-nurse must be HIV-negative. The only way for her to know for sure that she is negative is to be tested at least three months after the last time she had unprotected sex or any other possible exposure to HIV.
▪ The wet-nurse will need to protect herself from HIV infection the entire time that she is breastfeeding.
▪ This means: . not having sex, or . using a condom every time she has sex, or . having sex with only one partner who has tested negative for HIV and who is being faithful to her, and . not sharing any razors, needles or other piercing objects.
▪ The wet-nurse should be available to feed the baby on demand, both day and night.
▪ The wet-nurse should receive counselling about how to prevent cracked nipples, breast infections and engorgement.
▪ If a baby is already infected with HIV, there may be a very small chance that he can pass the virus to the wet-nurse through breastfeeding. The wet-nurse needs to know about this small risk and avoid breastfeeding while the baby has oral thrush or she has cracked nipples.

How to heat-treat expressed breast milk

Expressing and heat-treating breast milk is another option to consider:

- Expressing and heat-treating breast milk is an option that can be considered in special situations such as:
  - During the period of transitioning from breastfeeding when AFASS has been met. This may be following early infant diagnosis and the result is negative or after 6 months of exclusive breastfeeding.

- According to available research, heat-treatment destroys HIV in breast milk making it safe to feed to the woman's own baby.

- Heat-treatment reduces the level of some anti-infective components of breast milk. However heat-treated breast milk remains superior to breast-milk substitutes.

HOW TO HEAT-TREAT AND STORE BREAST MILK

Before heating milk, gather the following:

- clean containers with wide necks and covers, enough to store the milk
- a small pot to heat the milk
- a large container of cool water
- a small cup for feeding the baby
- fuel to heat the milk
- soap and clean water to wash the utensils.

Follow these steps:

- Wash all the pots, cups and containers with soap and water.
- Only heat enough expressed milk for one feed.
- Heat your milk to boiling point and then place a small pot in a container of cool water so that it cools more quickly. If that is not possible, let the milk stand until it cools. Store the boiled milk in a clean covered container, in a cool place and use it within one hour.
- A mother can store unheated breast milk for about eight hours at room temperature or up to 24 hours in a refrigerator.

A mother may be able to follow her infant's sleeping pattern and prepare feeds ready for when she expects the infant to awake. If necessary, to avoid leaving the milk too long, or wasting it, she may sometimes have to wake up her infant for a feed. To avoid having to use more fuel than necessary it may be possible to heat-treat the milk while cooking the family's meals.

Notes

Session 20

Breast Conditions

Objectives

After completing this session participants will be able to recognize and manage these common breast conditions

- flat and inverted nipples
- engorgement
- blocked duct and mastitis
- sore nipples and nipple fissure.

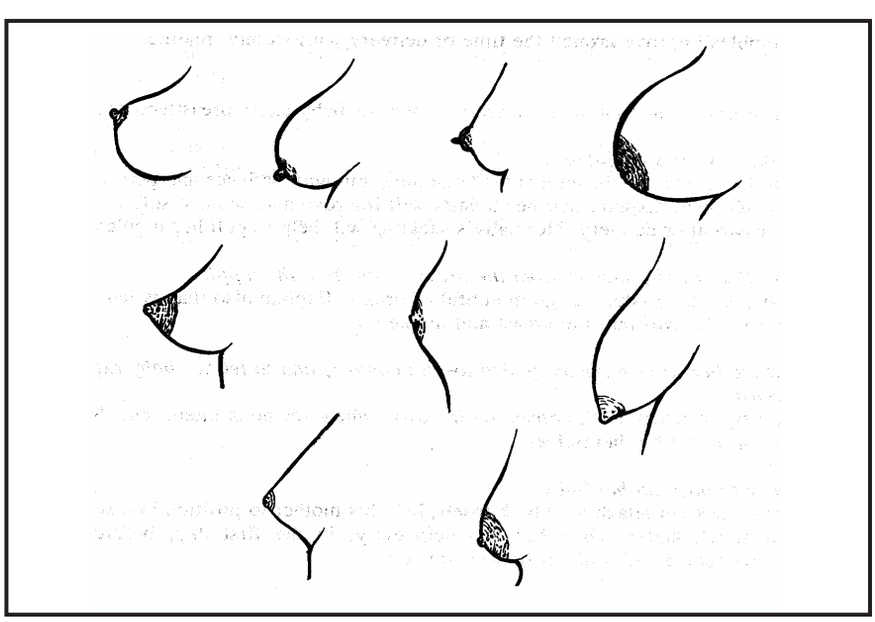
Introduction

Recognition and management of these breast conditions are important both to relieve the mother, and to enable breastfeeding to continue. Treatment differs for some breast conditions if the woman is HIV-infected. We will discuss these during the session.

Different breast shapes

Many mothers worry about the size of their breasts. Women with small breasts often worry that they cannot produce enough milk. Differences in the sizes of breasts are mostly due to the amount of fat, and not the amount of tissue that produces milk. It is important to reassure women that they can produce enough milk, whatever the size of their breasts.

Fig. 20.1 There are many different shapes and sizes of breast. Babies can breastfeed from almost all of them.



MANAGEMENT OF FLAT AND INVERTED NIPPLES

- **Antenatal treatment**

  Antenatal treatment is probably not helpful.

  For example, stretching nipples, or wearing nipple shells does not help.

  Most nipples improve around the time of delivery without any treatment.

  Help is most important soon after delivery, when the baby starts breastfeeding.

- **Build the mother's confidence**

  Explain that it may be difficult at the beginning, but with patience and persistence she can succeed.

  Explain that her breasts will improve and become softer in the week or two after delivery.

  Explain that a baby suckles from the breast - not from the nipple. Her baby needs to take a large mouthful of breast.

  Explain also that as her baby breastfeeds, he will stretch her breast and nipple out.

  Encourage her to give plenty of skin-to-skin contact, and to let her baby explore her breasts (We will be discussing skin-to-skin contact in Session 25).

  Let him try to attach to the breast on his own, whenever he is interested.

  Some babies learn best by themselves.

- **Help the mother to position her baby**

  If a baby does not attach well by himself, help his mother to position him so that he can attach better.

  Give her this help early, in the first day, before her breast milk 'comes in' and her breasts are full.

  Sometimes putting a baby to the breast in a different position makes it easier for him to attach.

  For example, some mothers find that the underarm position is helpful.

  Sometimes making the nipple stand out before a feed helps a baby to attach.

  Stimulating her nipple may be all that a mother needs to do.

  There is another method called the syringe method illustrated below.

  Sometimes shaping the breast makes it easier for a baby to attach. To shape her breast, a mother supports it from underneath with her fingers, and presses the top of the breast gently with her thumb.

- **If a baby cannot suckle effectively in the first week or two, help his mother to try the following:**

  Express her milk and feed it to her baby with a cup. Expressing milk helps to keep breasts soft, so that it is easier for the baby to attach to the breast; and it helps to keep up the supply of breast milk.

  She should not use a bottle, because that makes it more difficult for her baby to take her breast.

  Alternatively she could express a little milk directly into her baby's mouth.

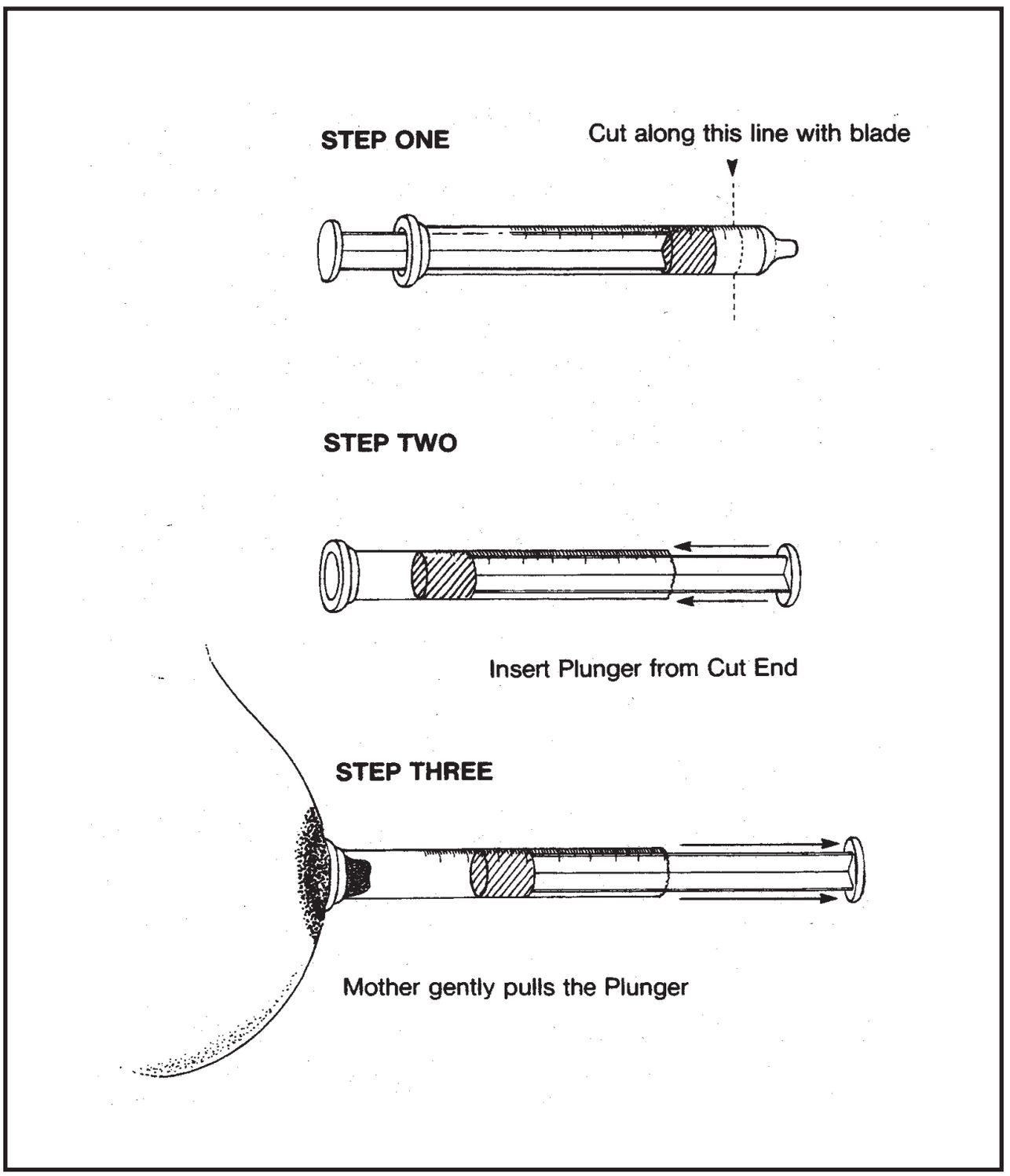
  Some mothers find that this is helpful. The baby gets some milk straight away, so he is less frustrated. He may be more willing to try to suckle.She should continue to give him skin-to-skin contact, and let him try to attach to her breast on his own.

DEMONSTRATION 20.A SYRINGE METHOD FOR TREATMENT OF INVERTED NIPPLES

See Fig.20.2
This method is for treating inverted nipples postnatally, and to help a baby to attach to the breast. It is not certain whether it is helpful antenatally.

- Use a 20 ml syringe that you have prepared, and explain how you cut off the adaptor end of the barrel.
- Put the plunger into the cut end of the barrel (that is, the reverse of its usual position).
- Use a model breast, and put the smooth end of the barrel over the nipple. Pull out the plunger to create suction on the nipple.
- Explain that with a real breast, there is an airtight seal, and the nipple is drawn out into the syringe.
- Explain that the mother must use the syringe herself.
- Explain that you would teach her to:
  - put the smooth end of the syringe over her nipple, as you demonstrate
  - gently pull the plunger to maintain steady but gentle pressure
  - do this for 30 seconds to 1 minute, several times a day
  - push the plunger back to decrease the suction, if she feels pain. This prevents damaging the skin of the nipple and areola.
- Push the plunger back, to reduce suction, when she removes the syringe from her breast.
- Use the syringe to make her nipple stand out just before she puts her baby to the breast.

Fig. 20.2. Preparing and using a syringe for treatment of inverted nipples.



SUMMARY OF DIFFERENCES BETWEEN FULL AND ENGORGED BREASTS	
Full Breasts	Engorged Breasts
Hot	Painful
Heavy	Oedematous
Hard	Tight, especially nipple
	Shiny
	May look red
Milk flowing	Milk NOT flowing
No fever	May be fever for 24 hours

Breasts may become engorged if:

- There has been a delay in starting breastfeeding after birth
- There is poor attachment to the breast so breast milk is not removed effectively
- There is infrequent removal of milk, for example if breastfeeding is not on demand
- The length of breastfeeds are restricted

Engorgement may be prevented by letting babies feed as soon as possible after delivery, making sure the baby is well positioned and attached to the breast and encouraging unrestricted breastfeeding. Milk does not then build up in the breast.

TREATMENT OF BREAST ENGORGEMENT

- Do not 'rest' the breast. To treat engorgement it is essential to remove milk. If milk is not removed, mastitis may develop, an abscess may form and breast milk production decreases.
- If baby is able to suckle he should feed frequently. This is the best way to remove milk. Help the mother to position her baby, so that he attaches well. Then he suckles effectively, and does not damage the nipple.
- If baby is not able to suckle help his mother to express her milk. Sometimes it is only necessary to express a little milk to make the breast soft enough for the baby to suckle.
- Before feeding or expressing, stimulate the mother's oxytocin reflex. Some things that you can do to help her, or she can do are:
  - put a warm compress on her breasts
  - massage her back and neck
  - massage her breast lightly
  - stimulate her breast and nipple skin
  - help her to relax
  - sometimes a warm shower or bath makes milk flow from the breasts so that they become soft enough for the baby to suckle.
- After a feed, put a cold compress on her breasts. This will help to reduce oedema.
- Build the mother's confidence. Explain that she will soon be able to breastfeed comfortably again.

Engorgement in an HIV-infected woman who is stopping breastfeeding

We have just discussed the management of breast engorgement in a woman who wishes to continue breastfeeding.

Engorgement may also occur in a woman who wishes to stop breastfeeding – for example, an HIV-infected woman who is stopping breastfeeding early. When a woman is trying to stop breastfeeding she should only express enough milk to relieve the discomfort and not to increase the milk production. Milk may be expressed a few times per day when the breasts are overfull to make the mother comfortable. Pharmacological treatments to reduce milk supply are not recommended. However, a simple analgesic, for example, ibuprofen, may be used to reduce inflammation and help the discomfort while the mother's milk supply is decreasing. If ibuprofen is not available then paracetamol may be used.

Mastitis

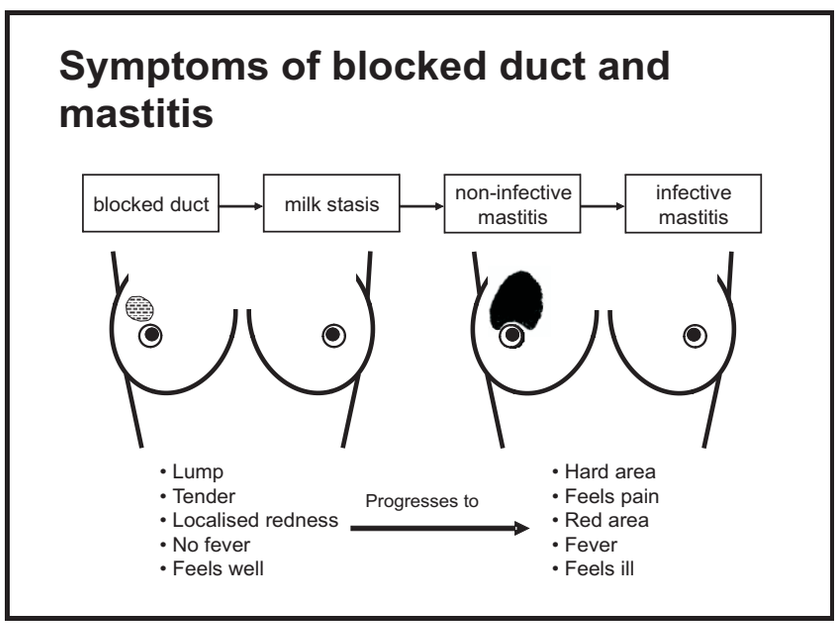
A woman with mastitis has severe pain, fever and she feels ill. Part of the breast is swollen and hard, with redness of the overlying skin.

Mastitis is sometimes confused with engorgement. However, engorgement affects the whole breast, and often both breasts. Mastitis affects part of the breast, and usually only one breast.

Mastitis may develop in an engorged breast, or it may follow a condition called **blocked duct.** Blocked duct occurs when the milk is not removed from part of a breast. Sometimes this is because the duct to that part of the breast is blocked by thickened milk. The symptoms are a lump, which is tender, and sometimes redness of the skin over the lump. The woman has no fever and feels well.

When milk stays in part of a breast, because of a blocked duct, or because of engorgement, it is called **milk stasis**. If the milk is not removed, it can cause inflammation of the breast tissue, which is called **non-infective mastitis**. Sometimes a breast becomes infected with bacteria, and this is called **infective mastitis**.

It is not possible to tell from the symptoms alone if mastitis is non-infective or infective. If the symptoms are all severe, however, the woman is more likely to need treatment with antibiotics.



Poor drainage of the **whole** breast may be due to infrequent breastfeeds or ineffective suckling. Infrequent breastfeeds may occur when a mother is very busy, when a baby starts feeding less often, for example when he starts to sleep through the night, or because of a changed feeding pattern for another reason, for example the mother returning to work. Ineffective suckling usually occurs when the baby is poorly attached to the breast.

Poor drainage of **part** of the breast may be due to ineffective suckling, pressure from tight clothes, especially a bra worn at night, or pressure of the mother's fingers which can block milk flow during a breastfeed.

If a baby is poorly attached and positioned and is suckling at the breast, this may cause a nipple fissure which provides a way for bacteria to enter the breast tissue and may lead to mastitis.

TREATMENT OF BLOCKED DUCT AND MASTITIS

The most important part of treatment is to improve the drainage of milk from the affected part of the breast.

Look for a cause of poor drainage, and correct it:

- Look for poor attachment.
- Look for pressure from clothes, usually a tight bra.
- Notice what the mother does with her fingers as she breastfeeds. Does she hold the areola, and possibly block milk flow?

Whether or not you find a cause, advise the mother to do these things:

Breastfeed frequently.

The best way is to rest with her baby, so that she can respond to him and feed him whenever he is willing.

Gently massage the breast while her baby is suckling.

Show her how to massage over the blocked area, and over the duct that leads from the blocked area, right down to the nipple. This helps to remove the block from the duct. She may notice that a plug of thick material comes out with her milk. (It is safe for the baby to swallow the plug).

Apply warm compresses to her breast between feeds.

Sometimes it is helpful to do these things:

Start the feed on the unaffected breast.

This may help if pain seems to be preventing the oxytocin reflex. Change to the affected breast after the reflex starts working.

Breastfeed the baby in different positions at different feeds.

This helps to remove milk from different parts of the breast more equally. Show the mother how to hold her baby in the underarm position, or how to lie down to feed him, instead of holding him across the front at every feed. However, do not make her breastfeed in a position that is uncomfortable for her.

Sometimes a mother is unwilling to feed her baby from the affected breast, especially if it is very painful. Sometimes a baby refuses to feed from an infected breast, possibly because the taste of the milk changes. In these situations, it is necessary to express the milk. If the milk stays in the breast, an abscess is more likely to develop.

Usually, blocked duct or mastitis improves within a day when drainage to that part of the breast improves.

However, a mother needs additional treatment if there are any of the following:

- severe symptoms when you first see her, OR
- a fissure, through which bacteria can enter, OR
- no improvement after 24 hours of improved drainage.

Treat her, or refer her for antibiotics, analgesics (ibuprofen) and encourage enough rest.

ANTIBIOTIC TREATMENT FOR INFECTIVE MASTITIS		
The commonest bacterium found in breast abscess is Staphylococcus aureus. Therefore it is necessary to treat breast infections with a penicillinase-resistant antibiotic such as either flucloxacillin or erythromycin.		
Drug	Dose	Instructions
Flucloxacillin	250 mg orally 6 hourly for 7 -10 days	Take dose at least 30 minutes before food
Erythromycin	250 -500 mg orally 6 hourly for 7-10 days	Take dose 2 hours after food

Treatment of mastitis in an HIV-infected woman

In a woman who is HIV-positive, mastitis may increase the risk of HIV transmission. Therefore, the recommendation to increase the frequency and duration of feeds is not appropriate for these women.

If an HIV-positive woman develops mastitis she should avoid breastfeeding from the affected side while the condition persists. It is the same if she develops an abscess.

She must express milk from the affected breast, to ensure adequate removal of milk. This is essential to prevent the condition becoming worse, to help the breast recover, and to maintain milk production. The health worker should help her to ensure that she is able to express milk effectively.

If only one breast is affected, the infant can feed from the unaffected side, feeding more often and for longer to increase milk production. Most infants get enough milk from one breast. The infant can feed from the affected breast again when it has recovered.

If both breasts are affected, she will not be able to feed from either side. The mother will need to express her milk from both breasts. Breastfeeding can resume when the breasts have recovered.

The health worker will need to discuss other feeding options for her to give meanwhile. The mother may decide to heat-treat her expressed milk, or to give home-prepared or commercial formula. The infant should be fed by cup.

Give antibiotics for 10-14 days to avoid relapse. Give pain relief and suggest rest as in the HIV-uninfected woman.

Sometimes a woman may decide to stop breastfeeding at this time, if she is able to give another form of milk safely. She should continue to express enough milk to allow her breasts to recover and to keep them healthy, until milk production ceases.

Nipple Fissure

The most common cause of sore nipples and a nipple fissure is poor attachment to the breast. If a baby is poorly attached, he pulls the nipple in and out as he sucks, and rubs the skin of the breast against his mouth. This is very painful for his mother. At first there is no fissure. The nipple may look normal; or it may look squashed with a line across the tip when the baby releases the breast. If the baby continues to suckle in this way it damages the nipple skin and causes a fissure.

If a mother has sore nipples or a fissure, help her to improve her baby's position so that he is well attached.

Suggest to the mother not to wash her breasts more than once a day and not to use soap or rub hard with a towel. Washing removes natural oils from the skin and makes soreness more likely. Do not recommend medicated lotions and ointments because these can irritate the skin. Suggest that after feeding she rubs a little expressed breast milk over the nipple and areola with her finger. This promotes healing.

Candida Infection (Thrush)

The second commonest cause of sore nipples is infection with candida, also known as 'thrush'. Candida infection can make the skin sore and itchy. Candida infections often follow the use of antibiotics to treat mastitis and other infections.

Some mothers describe a burning or stinging which continues after a feed. Sometimes the pain shoots deep into the breast. A mother may say that it feels as though needles are being driven into her breast. Suspect Candida if sore nipples persist even when the baby's attachment is good. Check the baby for thrush. He may have white patches inside his cheeks or on his tongue. He may have a rash on his bottom.

Treat both the mother and the baby with nystatin. Suggest to the mother to stop using pacifiers (dummies).

In women who are **HIV-infected** it is particularly important to treat breast thrush and oral thrush in the infant promptly.

TREATMENT OF CANDIDA OF THE BREAST
Nystatin cream 100,000 IU/g: Apply to nipples 4 times daily after breastfeeds. Continue to apply for 7 days after lesions have healed.
Nystatin suspension 100,000 IU/ml: Apply 1 ml by dropper to child's mouth 4 times daily after breastfeeds for 7 days, or as long as mother is being treated.
Stop using pacifiers, teats, and nipple shields

Notes

Session 21

Replacement Feeding in Exceptionally Difficult Circumstances in the First Six Months

Objectives

After completing this session participants will be able to:

- describe how infant formula can be used for replacement feeding
- list foods that are unsuitable in the first six months
- describe why home modified formula is not recommended for replacement feeding

Replacement feeding

Replacement feeding with commercial infant formula can only be used in special circumstances such as:

- Death of the mother
- Separation from the mother or long periods. This may be due to war or severe (physical and mental) illness, abandonment
- Mothers simply refuses to breastfeed despite counseling

Replacement feeding
is the process of feeding a child less than 6months who is not breastfeeding with a diet that provides all the nutrients the child needs until the child the child is fully fed on family foods in this case with infant formula

In the event that the child is not breastfeeding replacement feeding should be exclusive for the first 6 completed months.

The replacement feeds should be prepared according to manufacturer instructions. This means that the stipulated quantity of water and milk powder for the particular age group should be strictly adhered to.

Safe and hygienic preparation practices should be followed (details are in session 22).
Fresh feeds should be prepared each time the child needs to feed. Left over milk should be discarded after 10minutes.

A cup should be used to feed the baby and **NOT a FEEDING BOTTLE**

Advantages:

- Giving only formula carries no risk of transmitting HIV to the baby.
- Other responsible family members can help feed the baby. If a mother falls ill, others can feed the baby while she recovers.

Disadvantages:

- Unlike breast milk, infant formula does not contain antibodies that protect a baby from infections.
- A formula-fed baby is more likely to get seriously sick from diarrhoea, chest infections, and malnutrition, compared with a breastfed baby especially if the formula is not prepared correctly.
- A mother should not mix feed. Only formula must be given to the infant and not together with Breastmilk or the risk of transmitting HIV to the baby will increase.
- A mother needs fuel and clean water (boiled vigorously for 1 to 2 seconds) to prepare the formula, and soap to wash the baby's cup.
- People may wonder why a mother is using formula instead of breastfeeding, and this could cause them to suspect she is HIV-positive.
- Formula takes time to prepare and must be made fresh for each feed (unless the mother has a refrigerator).
- Formula is expensive, and the mother must always have enough at hand. The baby needs forty (40) 500g tins for the first 6 months
- The best way to give baby infant formula is from a cup. Babies can learn how to do this even when they are young, and it may take time to learn.
- A mother may get pregnant again sooner than she wishes.

Information on advantages and disadvantages of infant formula is also on counselling card number 3

- Infant formula has been modified so that the proportions of different nutrients are appropriate for infant feeding, and micronutrients have been added. Formula needs only to be mixed with the correct amount of water.
- It is important to remember however, that although the *proportions* of nutrients in either infant formula can be altered, their *quality* cannot be made the same as breast milk. Also, the immune factors and growth factors present in breast milk are not present in animal milk or formula, and they cannot be added

Why home prepared formula is not recommended for replacement feeding

- In full strength full cream milk, the level of protein and some minerals is too high, and it is difficult for an infant's immature kidneys to excrete the extra waste. These milks require some modification to make the proportions more appropriate.
- You need to dilute with water. But, diluting with water makes the energy content too low. It requires that sugar be added to increase the energy. If too little water is added, the infant's kidneys may be overloaded with mineral and protein waste. If too much water is added the infant will not get enough of some nutrients and may not grow well.
- Fresh animal milk needs to be boiled to make the protein easier to digest, and less likely to irritate and damage the baby's intestinal mucosa.
- In addition to diluting, adding sugar and boiling animal milk, it is necessary to give the micronutrients. Breast milk contains the micronutrients that a baby needs, and if not breastfeeding these need to be provided in another way.
- Micronutrients are the vitamins and minerals that the body needs in small amounts to keep it working well.
- The micronutrients that may not be available easily from other milks are iron, zinc, vitamin A, vitamin C and folic acid.
- Micronutrient supplements are added to infant formula when it is manufactured.
- However, infants receiving home-prepared formula should be given additional micronutrients.
- The recommended micronutrients should be in formulations which will provide all the micronutrients needed for an infant aged 0-6 months of age. However, this is not feasible at household level.
- Animal milk also lacks essential fatty acids making home prepared formula to be deficient.

Because of all these challenges, home prepared formula (also referred to as home modified animal milk) is not recommended for replacement feeding in Zambia.

RECIPES FOR HOME-PREPARED FORMULA

Fresh cow's or goat's milk

40 ml milk + 20 ml water + 4g sugar = 60 ml prepared formula
60 ml milk + 30 ml water + 6g sugar = 90 ml prepared formula
80 ml milk + 40 ml water + 8g sugar = 120 ml prepared formula
100 ml milk + 50 ml water + 10g sugar = 150 ml prepared formula

If a baby was to receive of home - prepared infant formula, micronutrient supplements that would have to be given in the specified formulations below:

Micronutrients to Give With Home -Modified Animal Milk per day [1]	
Minerals:	
Manganese	7.5 µg
Iron	1.5 mg
Copper	100 µg
Zinc	205 µg
Iodine	5.6 µg
Vitamins:	
Vitamin A	300 IU
Vitamin D	50 IU
Vitamin E	1 IU
Vitamin C	10 mg
Vitamin B1	50 µg
Vitamin B2	80 µg
Niacin	300 µg
Vitamin B6	40 µg
Folic acid	5 µg
Pantothenic acid	400 µg
Vitamin B12	0.2 µg
Viatmin K	5 µg
Biotin	2 µg

Remember that this is not a recommended option

[1] Adapted from the Codex Standard for Infant Formula, Codex Standard 72-1981. The amount for each micronutrient was calculated by substracting the amount found in cow's milk from the amount recommended by the Codex Standard.

Session 22

Hygienic Preparation of Feeds

Objectives

After completing this session you will be able to:

- explain ways of achieving clean and safe feeding practices for young children

Requirement for clean and safe feeding

A baby who is not breastfed is at increased risk of illness for two reasons:

- Replacement feeds may be contaminated with organisms that can cause infection.
- The baby lacks the protection provided by the breast milk.

After six months of age all children require complementary feeds. Clean, safe preparation and feeding of complementary foods are essential to reduce the risk of contamination and the illnesses that it causes.

The main points to remember for clean and safe preparation of feeds are:

- Clean hands
- Clean utensils
- Safe water and food
- Safe storage

Safe water and food

Safe water and food

- Treat water for drinking and baby's feeds
- Keep water in clean covered container
- Boil milk before use
- Give freshly prepared complementary foods

Water can be made safe for feeding babies by bringing the water to a rolling boil before use. This will kill most harmful micro-organisms. A rolling boil is when the surface of the water is moving vigorously. It only has to 'roll' for a minute.

The water should then be stored in a clean, covered, container. The best kind of container has a narrow top, and a tap through which the water comes out. This prevents people from dipping their hands and cups into it.

If the water has been stored for more than 48 hours it is better to use it for something else, for example cooking or washing other things.

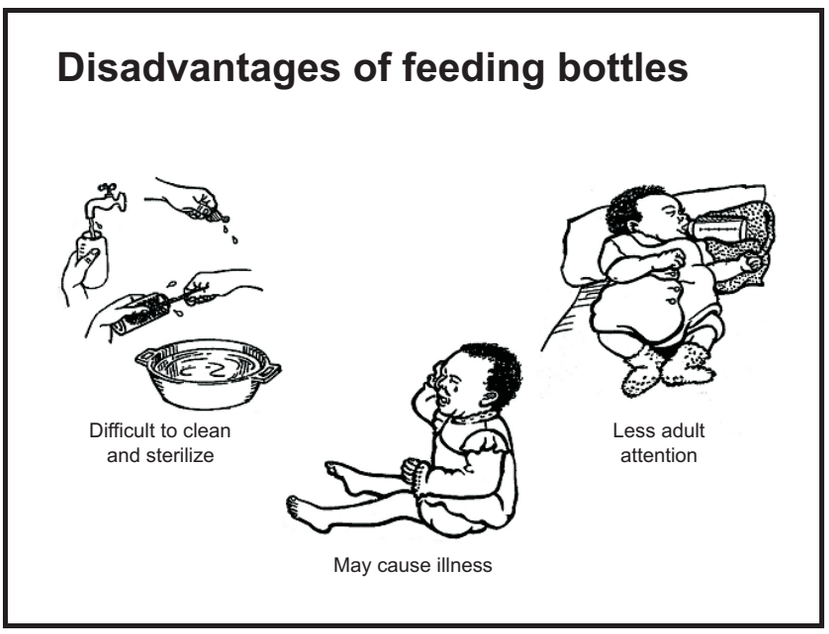
If a baby is above 6 months of age, full cream fresh milk can be given as long as it is boiled.

Some families keep water cool in a pottery jar, which allows evaporation of water from the surface. This method is not safe for milk.

If a mother is giving complementary foods, she should prepare them freshly each time she feeds the baby, especially if they are semi-liquid.

Safe storage

Disadvantages of feeding bottles



Cleaning a cup

To clean a cup, wash it and scrub it in hot soapy water each time it is used. Dip the cup into boiling water, or pour boiling water over it just before use. An open, smooth surfaced cup is easiest to clean. Avoid tight spouts, lids or rough surfaces where milk could stick and allow bacteria to grow.

Cleaning feeding bottles and teats

Bottles and teats are more difficult to clean than cups and you should discourage their use.

Bottles and contaminated milk make babies ill. For these reasons feeding bottles are not recommended for feeding.

FIVE KEYS TO SAFER FOOD

Keep clean

- Wash your hands before handling food and often during food preparation.
- Wash your hands after going to the toilet, changing the baby or in contact with animals.
- Wash very clean all surfaces and equipment used for food preparation or serving.
- Protect kitchen areas and food from insects, pests and other animals.

Separate raw and cooked foods

- Separate raw meat, poultry and fish from other foods.
- Use separate equipment and utensils such as knives and cutting boards for handling raw foods.
- Store foods in covered containers to avoid contact between raw and prepared foods.

Cook thoroughly

- Cook food thoroughly, especially meat, poultry, eggs and fish.
- Bring foods like soups and stews to boiling point. For meat and poultry, make sure juices are clear not pink.
- Reheat cooked food thoroughly. Bring to the boil or heat until too hot to touch. Stir while re-heating.

Keep food at safe temperatures

- Do not leave cooked food at room temperature for more than 2 hours.
- Do not store food too long, even in a refrigerator.
- Do not thaw frozen food at room temperature.
- Food for infants and young children should ideally be freshly prepared and not stored at all after cooking.

Use safe water and raw materials

- Use safe water or treat it to make it safe.
- Choose fresh and wholesome foods.
- Use pasteurized milk.
- Wash fruits and vegetables in safe water, especially if eaten raw.
- *Do not use food beyond its expiry date.*

For more information refer to counselling card 8

Notes

Session 23

Preparation of Milk Feeds - Measuring Amounts

Objectives

After completing this session you will be able to:

- specify amounts of milk needed for a baby who is not breastfed
- make measuring utensils for liquids
- translate measures into a mother's home utensils

HIV-positive mothers who choose not to give breast milk, and other caregivers, need to know how to prepare replacement feeds for their infants. Replacement feeds must be prepared in the safest possible way, to reduce the risk of illness.

Mothers need to practise this skill with a health worker present, either in the health facility or at home, so they can do it easily and in the same way every time.

When a mother makes replacement feeds, it is very important that the milk and water are mixed in the correct amounts. Wrongly prepared feeds may make a baby ill, or he may be underfed.

The amount of milk to give if a baby is not breastfeed

A baby who is cup-fed can control how much he takes, by refusing to take any more when he has had enough. The amount that a baby takes at each feed varies. But the mother must decide how much to put in a cup to offer the baby.

A term baby, weighing 2.5kg or more, needs an average of 150ml/kg body weight/day. This is divided into 6,7 or 8 feeds according to the baby's age. The exact amount at one feed varies.

Approximate Amount of Milk Needed to Feed a Baby Each day			
Baby's age	Number of feeds per day	Amount of milk or formula per feed	Total milk or formula per day
Birth to 1 month	8	60 ml	480 ml
1 to 2 months	7	90 ml	630 ml
2 to 4 months	6	120 ml	720 ml
4 to 6 months	6	150 ml	900 ml

A newborn infant is fed small amounts frequently. The amount gradually increases as the infant grows.

If a baby takes a very small feed, offer extra at the next feed, or give the next feed earlier, especially if the baby shows signs of hunger.

Remember, if a baby is not gaining enough weight, he may need to be fed more often, or given larger amounts at each feed, according to his expected weight at that age.

APPROXIMATE AMOUNTS OF INFANT FORMULA NEEDED BY MONTH			
Month	Number of 500g tins needed per month	Number of 450g tins needed per month	Number of 400g tins needed per month
First month	4	5	5
Second month	6	6	8
Third month	7	8	9
Fourth month	7	8	9
Fifth mo nth	8	8	10
Sixth month	8	9	10
Total for 6 months (approximately)	40 X 500g (20 kg)	44 X 450g (approx 20 kg)	51 X 400g (approx 20 kg)

This table shows approximately how much infant formula milk a baby needs in the first six months. The numbers are rounded rather than exact. An individual baby may need more or less than the amount listed. This table is also found on Counselling Card 10.

How to make measures for the mother
Infant formula comes with a special measure (called a scoop) in the tin of powder. This should be used only for that brand of infant formula.

Different brands may have different size measures. Scoops always have to be levelled. Use a clean knife or the handle of a spoon. Do not use heaped scoops.

You will have to show the mother how to measure water. If the mother does not have a measuring jug or other container marked with amounts, ask her to bring a container from home that you can mark for her as a measure. The container should be:

- easily available
- easy to clean and sterilize
- see-through
- able to be marked with paint, permanent marker, or by scratching a line on it.

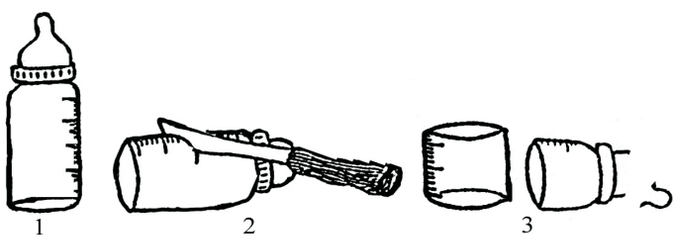
Alternatively the container of of a required volume could be used as a measure simply by filling it to the top.

Measure the correct amount of water or milk in your own measure, put it into the mother's measure, and make a mark at the level it reaches. If you have a measuring jug you can use that as your measure.

CUT-OFF FEEDING BOTTLE

- You can make a measure from a feeding bottle by cutting off the top.

Fig. 23 .1 Making a Measure



Step 1. Take a plastic feeding bottle which is straight up and down, and which has clear measures marked on the side.

Step 2. Cut off the top, at a place well above the mark for 100 ml.

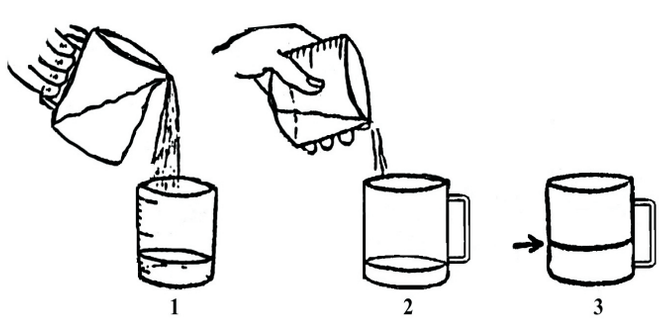
Step 3. This leaves you with a straight -sided measure, which should be easy to keep clean. (No-one can be tempted to put a teat on it and use it to feed a baby. Cut up the teat and throw it away) .

- The cut-off bottle is a way for a health worker to show appropriate amounts using a mother's own container. The mother does not have to buy her own bottle to use as a measure.

❒ Make these points

- Decide what volume you are going to measure. This will depend on the type of milk you are preparing and the volume of the feed. For this example we will use 60 mls for a infant formula feed for a baby from birth to one month.
- Put water into your measure, to reach the 60 ml mark.
- Pour the 60 ml water from your measure into the mother's container.
- Help the mother to mark the level that the water reaches. For the measure to be accurate, the line should be thin and straight, not thick or sloped.
- Explain to the mother that to make up a feed of 60 ml from infant formula, she needs to measure this amount of water and the scoops that are written on the tin of the infant formula.

Fig. 23.2 Mark a measure



Notes

Session 24

Practical Session 3

Preparation of Milk Feeds

Objectives

After completing this session you will be able to:

- demonstrate how to prepare replacement milks

Helping mothers to prepare feeds is easier if you have done it yourself using equipment similar to that which mothers have at home.
Mothers have several options for replacement feeding. Knowing what is needed and how long these different options take to prepare is part of the information that you will need to give them.

In this session, working in small groups of 3-4 you will:

- prepare one type of replacement feed with infant formula
- prepare a specific volume of feed
- use one kind of locally appropriate fuel
- give a clear demonstration to other members in your group of what to do, as if demonstrating to a 'mother'.
- Check that the 'mother' understands by helping her to practise making the feeds.

You will also:

- Observe other participants preparing feeds, noticing what they do correctly (and praising them). If they do anything incorrectly, help them to improve their technique using your counselling skills
- consider the following as you observe other participants preparing feeds:
  - Are they preparing the feed in a clean and safe manner?
  - Are they mixing the correct amounts?
  - Are they heating and mixing the feeds correctly?
  - Are they explaining what they are doing in a clear way?

You will follow the appropriate Infant Feeding Counselling Take Home Flyers as you prepare the milk feeds.

- Use the recipe on the flip chart to prepare home-modified animal milk as a group. This accords you the opportunity to experience the challenges associated with it.

- In your group, you will then fill out table on micro nutrient mix and make comparisons between the individual micronutrients composition of the products made available against the recommended figures.

INFANT FEEDING COUNSELLING FLYER
HOW TO PREPARE INFANT FORMULA

How to prepare infant formula

- Wash your hands before you start preparing the formula.
- Always use a marked cup or glass to measure wate r and a scoop to measure the formula powder.
- Measure the exact amount of powder that you will need for one feed.
- Boil enough water vigorously for 5 to 10minutes.
- Add the hot water to the infant formula. The water should be added while it is still hot and not after it has cooled down.
- Only make enough formula for one feed at a time unless you have a refrigerator in good working condition.
- Do not keep milk in a thermos flask because if contaminated the germs will quickly multiply and cause diarrhoea.
- Feed the baby 6-8 times every 24 hours using a cup. Wash the cup after giving the feed
- Give any unused formula to an older child or drink it yourself.
- Wash the utensils after preparing each feed.

NB: Advise the mother to come back to see you at a later date.
Make sure that you practice cup feeding

How to Prepare Home Modified Formula

For class practice only: This is not a recommended option.

How to prepare fresh milk

- Wash your hands before preparing the home-modified formula.
- Use a marked cup or glass to measure water and milk.
- Boil more water than you require in a pot
- Put more milk than you require in a pot and boil it
- Fill the cup or glass to the "Milk" mark with the boiled milk.
- Fill the cup or glass to the "water" mark with the boiled water.
- Mix the measured water and milk
- Measure the sugar by filling the spoon until it is level/rounded/heaped (circle one). Put in 2 spoonfuls. Add the sugar to the liquid. Stir well. Keep it covered as it cools.
- Feed the baby using a cup.
- Wash the utensils after preparing the feed.
- The baby should also a micronutrient supplement (having components shown in table below) every day.

Micronutrients to Give With Home - Modified Animal Milk per day					
Micronutrient	Quantity required per day	Does the local micro nutrient mix available on the market provide what is recommended if the infant is on Home Modified Animal Milk? Tick where applicable			
		Multivitamin – mineral mix 1.	Multivitamin – mineral mix 2	Multi1itamin – mineral mix 3	Multi1itamin – mineral mix 4
Minerals:					
Manganese	7.5 µg				
Iron	1.5 mg				
Copper	100 µg				
Zinc	205 µg				
Iodine	5.6 µg				
Vitamins:					
Vitamin A	300 IU				
Vitamin D	50 IU				
Vitamin E	1 IU				
Vitamin C	10 mg				
Vitamin B1	50 µg				
Vitamin B2	80 µg				
Niacin	300 µg				
Vitamin B6	40 µg				
Folic acid	5 µg				
Pantothenic acid	400 µg				
Vitamin B12	0.2 µg				
Vitamin K	5 µg				
Biotin	2 µg				

If you were to give the modified animal milk would the baby get sufficient micronutrients? Also remember that modified milk does not provide essential fatty acids. It is therefore not a recommended option.

Notes

Session 25a

Health Care Practices

Objectives

After completing this session you will be able to:

- List the TEN STEPS TO SUCCESSFUL BREASTFEEDING
- Describe the three additional components of BFHI
- Describe health care practices summarized by 'THE TEN STEPS TO SUCCESSFUL BREASTFEEDING'
- Explain why the "Baby-friendly Hospital Initiative" (BFHI) is important in areas with high HIV prevalence
- Describe BFHI implementation process at health facility level

Introduction

Health care practices can have a major effect on breastfeeding. Poor practices interfere with breastfeeding, and contribute to the spread of artificial feeding. Good practices support breastfeeding, and make it more likely that mothers will breastfeed successfully, and will continue for a longer time.

In 1989, WHO and UNICEF issued a joint statement called 'Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services'. This describes how maternity facilities can support breastfeeding. The *Ten Steps to Successful Breastfeeding* provides a summary of the main recommendations of the Joint Statement. They form the basis of the 'Baby-friendly Hospital Initiative', a world-wide project launched in 1991 by WHO and UNICEF. If a maternity facility wishes to be designated 'Baby-friendly' it must follow all of the *Ten Steps.*

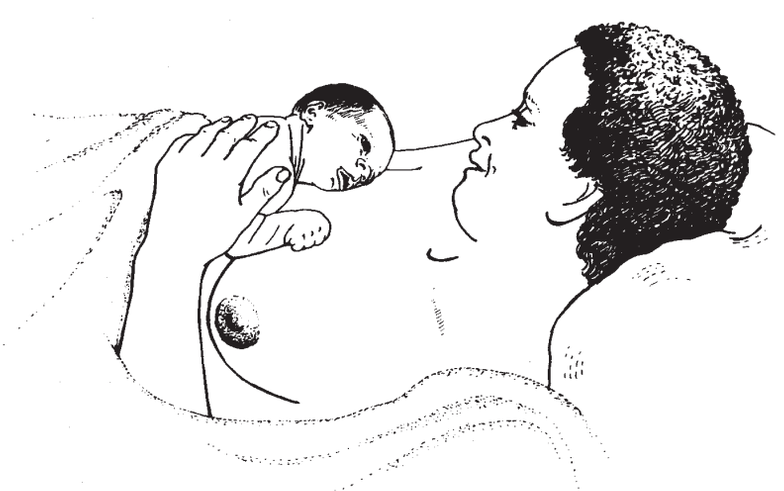


Fig. 25.1: Skin-to-skin contact in the first hour after delivery helps foster successful breastfeeding and bonding

THE TEN STEPS TO SUCCESSFUL BREASTFEEDING

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within an hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they are separated from their infants.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practise rooming-in: allow mothers and infants to remain together for 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

In Zambia, forty six facilities were declared 'Baby-friendly' from 1993-1997. It is a requirement that every facility in Zambia providing care for mothers and babies implement BHFI. You are therefore reminded that from this training, you will be expected to take a lead role in BFHI implementation at your facility.

Since the launch of the Baby-friendly Hospital Initiative in 1991, the growing HIV/AIDS pandemic, especially in sub-Saharan Africa and parts of Asia, has raised concerns and questions about promoting, protecting and supporting breastfeeding where HIV is prevalent. These concerns arise because breastfeeding is known to be one of the routes for infecting infants with HIV.

However, Baby-friendly practices improve conditions for all mothers and babies, including those who are not breastfeeding. It is especially important to support breastfeeding for women who are HIV-negative or of unknown status.

Antenatal preparation for breastfeeding (Step 3)

It is important to talk to all women about breastfeeding when they come to an antenatal clinic. Show that you support breastfeeding, and that you want to help them.

It is especially important to talk to young mothers who are having their first baby. They are the ones who are most likely to need help.

There are some things that you can discuss with a group of mothers together, in an antenatal class. There are other things that it is usually better to discuss with mothers individually.

ANTENATAL PREPARATION FOR BREASTFEEDING

With mothers in groups:

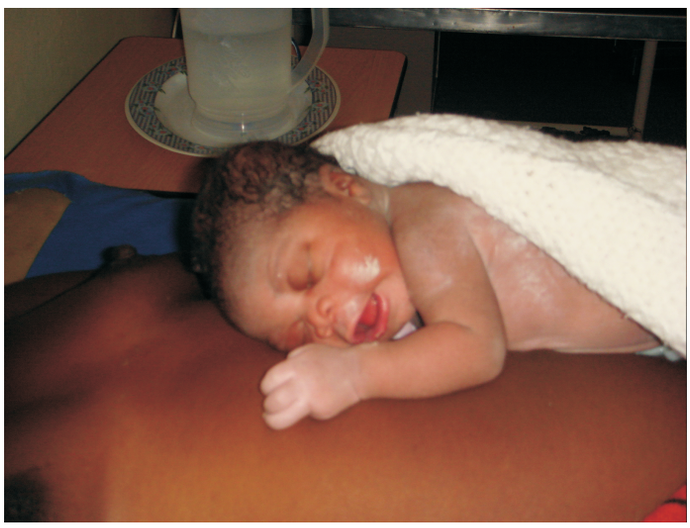
- Explain the benefits of breastfeeding especially exclusive breastfeeding.
- Most mothers decide how they are going to feed their babies a long time before they have the child - often before they become pregnant. If a mother has decided to use formula milk, she may not change her mind. But you may help mothers who are undecided, and give confidence to others who intend to breastfeed. You may encourage a mother to breastfeed exclusively instead of partially.
- Talk about early initiation of breastfeeding; what happens after delivery; explain about the first breastfeeds, and the practices in the hospital, so that they know what to expect.
- Give simple relevant information on how to breastfeed e.g. demand feeding and positioning a baby.
- Discuss mothers' questions.
- Let the mothers decide what they would like to know more about, for example some of them may worry about the effect that breastfeeding may have on their figures. It may help them to discuss these worries together.

With each mother individually:

- Ask about previous breastfeeding experience.
- If she breastfed successfully, she is likely to do so again. If she had difficulties, or if she formula fed, explain how she could succeed with breastfeeding this time. Reassure her that you will help her.
- Ask if she has any questions or worries.
- Examine her breasts only if she is worried about them.
- She may be worried about the size of her breast or the shape of her nipples. It is not essential to examine breasts as a routine if she is not worried about them.
- Build her confidence, and explain that you will help her.
- Mostly you will be able to reassure that her breasts are all right, and that her baby will be able to breastfeed. Explain that you or another counsellor will help her.

Note: Antenatal education should not include group education on formula and its preparation. Such information should be utilized when counselling an HIV positive mother in view of AFASS (Refer to Session 21).

Initiation of breastfeeding (Step 4)



This mother is holding her baby immediately after delivery. They are both naked, so that they have skin-to-skin contact. A mother should hold her baby like this as much as possible in the first two hours after delivery.

Skin-to-skin contact between a mother (or father) and baby has been found to help both bonding and breastfeeding, probably because it stimulates the secretion of prolactin and oxytocin.

If a baby is too sick to move, contact can be between the mother's hand and the baby's body. If a baby is well enough, let his mother hold him next to her body. Usually the best place is between her breasts, inside her clothes. This is called *kangaroo care.* It has the following advantages:

- The warmth of the mother's body keeps her baby warm. He does not get cold, and he does not use up extra energy to keep warm. There is less need for incubators.
- The baby's heart works better, and he breathes more regularly.
- The baby cries less and sleeps better.
- It is easier to establish breastfeeding.

Dry the baby, and cover both him and his mother with the same blanket.

The mother should let the baby suckle when he shows that he is ready. Babies are normally very alert and responsive in the first 1-2 hours after delivery. Most babies want to feed between half to one hour after delivery, but there is no exact fixed time.

Try to delay non-urgent medical routines for at least one hour.

If the first feed is delayed for longer than about an hour, breastfeeding is less likely to be successful. A mother is more likely to stop breastfeeding early.

The dangers of prelacteal feeds (Step 6)

Prelacteal feeds are artificial feeds or drinks given to a baby before breastfeeding is initiated.

Prelacteal feeds replace colostrum as the baby's earliest feed. The baby is more likely to develop infections such as diarrhoea.

If milk other than human milk is given to the baby he is more likely to develop intolerance to the proteins in the feed.

A baby's hunger may be satisfied by prelacteal feeds so that he wants to breastfeed less.

If a baby has even a few prelacteal feeds, his mother is more likely to have difficulties such as engorgement. Breastfeeding is more likely to stop early than when a baby is exclusively breastfed from birth.

Many people think that colostrum is not enough to feed a baby until the mature milk 'comes in'. However, the volume of an infant's stomach is perfectly matched to the amount of colostrum produced by the mother.

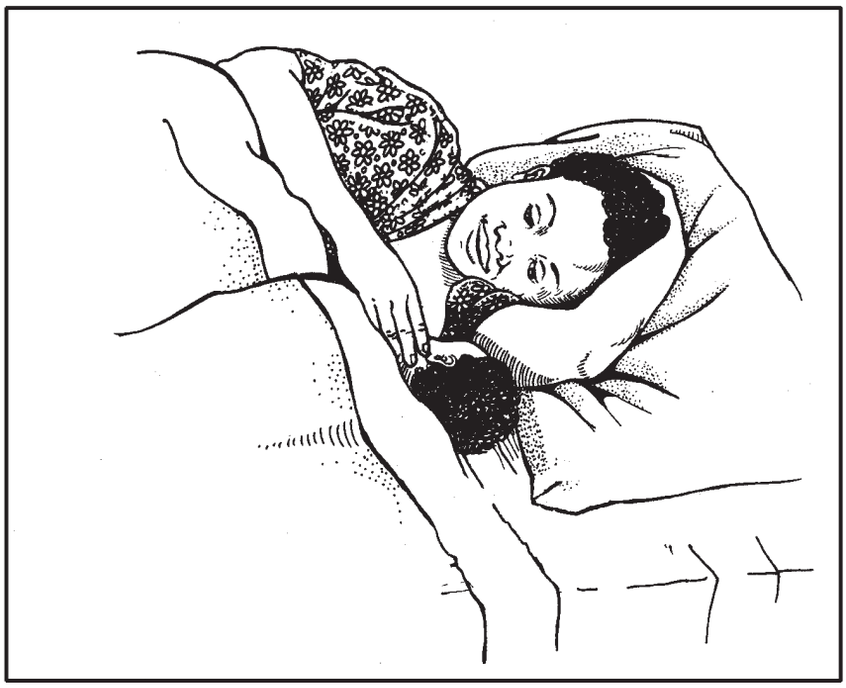
The advantages of rooming-in (Step 7)

The advantages of rooming-in are:

- It enables a mother to respond to her baby and feed him whenever he is hungry. This helps both bonding and breastfeeding.
- Babies cry less so there is less temptation to give bottle feeds.
- Mothers become confident about breastfeeding.
- Breastfeeding continues longer after the mother leaves hospital.

All healthy babies benefit from being near their mother, rooming-in or bedding-in. Mothers who are HIV-positive do not need to be separated from their babies. General mother-to-child contact does not transmit HIV.

Fig. 25.2: 'Bedding-in' allows a mother to rest while breastfeeding



Advantages of breastfeeding on demand (Step 8)

Breastfeeding on demand means breastfeeding whenever the baby or mother wants, with no restriction on the length or frequency of feeds.

The advantages are:

- There is earlier passage of meconium.
- The baby gains weight faster.
- Breast milk 'comes in' sooner and there is a larger volume of milk intake on day 3.
- There are fewer difficulties such as engorgement.
- There is less incidence of jaundice.

Let a baby suckle as long as he wants, provided he is well attached. Some babies take all the breast milk they want in a few minutes; other babies take half an hour to get the same amount of milk, especially in the first week or two. They are all behaving normally.

Let a baby finish feeding on the first breast, to get the fat-rich hind milk. Then offer the second breast, which he may or may not want. It is not necessary to feed from both breasts at each feed. If a baby does not want the second breast, his mother can offer that side first next time, so that both breasts get the same amount of stimulation.

Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants (Step 9)

Teats, bottles and pacifiers can carry infection and are not needed, even for the non-breastfeeding low-birth weight infant.

Cup-feeding is recommended, as a cup is easier to clean and also ensures that the baby is held and looked at while feeding. It takes no longer than bottle feeding. (Remember what you learnt about cup feeding in Session 16).

If a hungry baby is given a pacifier instead of a feed, he may not grow well.

Babies can be encouraged to suck on the mother's clean finger or other body areas other than the nipple, if not breastfeeding.

Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic (Step 10)

The key to best breastfeeding practices is continued day-to-day support for the breastfeeding mother within her home and community

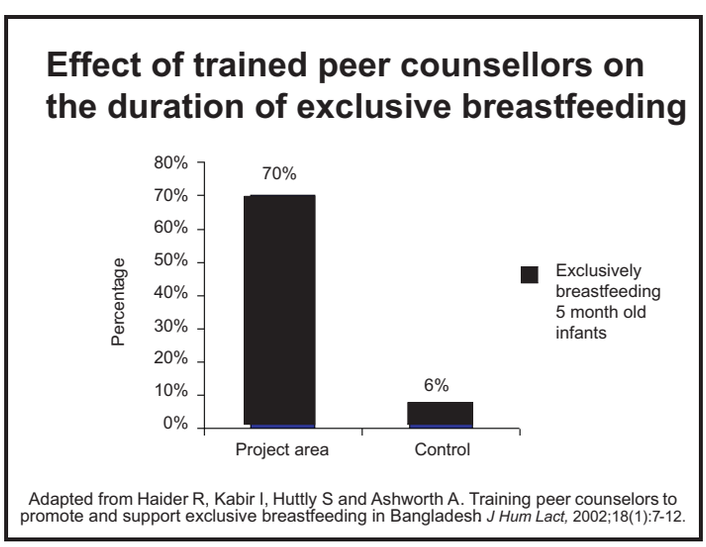
Those who support breastfeeding mothers in the community do not have to be medically trained personnel.

There is a lot of research which shows the effect of trained peer or lay counsellors on the duration of exclusive breastfeeding. These counsellors visit the mothers in their homes after discharge from the clinic or hospital, and support them to continue breastfeeding.

Effect of peer counsellors on the duration of exclusive breastfeeding

This graph shows how trained peer counsellors in Bangladesh increased the proportion of infants who were still exclusively breastfeeding at five months of age.

70% of those mothers who had received support from a peer counsellor were still exclusively breastfeeding at five months compared to 6% of those who had not had support.



Adapted from Haider R, Kabir I, Huttly S and Ashworth A. Training peer counselors to promote and support exclusive breastfeeding in Bangladesh *J Hum Lact,* 2002;18(1):7-12.

Fig. 25.3: Talk to family members about a new mother's needs. Fathers can be an important source of support for breastfeeding.

Other components of BFHI

Other components of BFHI

- The code of marketing of breast milk substitutes
- HIV and infant feeding
- Mother friendly care

- The Code of Marketing of Breast milk substitutes, HIV and infant feeding and Mother friendly care

- BFHI materials were revised and up-dated to further address emerging issues including HIV. Other aspects included in the revised material were the Code of Marketing of Breast milk Substitutes and Mother-Friendly Care

- The inclusion of HIV in BFHI is meant to address the needs for infants born to HIV positive mothers

- Breast milk substitutes marketing influence health workers' and mothers' behaviours related to infant feeding. Compliance with the Code is required for baby friendly health facilities. This Code will be discussed in detail during session 26.

- Mother Friendly Care are important for physical and psychological health of the mothers themselves and have also been shown to enhance their infants start in life including breastfeeding

PROCESS OF IMPLEMENTING BFHI AT FACILITY LEVEL

Plan for initiation and/or re -vitalisation of BFHI

Planning for BFHI implementation is cardinal. BFHI should be incorp orated in the facility, district and provincial and national level annual action. It is important to ensure the BFHI implementation is addressed during the quarterly or periodic action plan review.

Self appraisals

The facility should use a standard self appraisal questionnaire (see annex 1 of the participants manual) to identify strengths and areas that need improvement. This enables the facility develop action points and identify areas for external assistance.

Address gaps & training

Based on the action points drawn the facility make the necessary adjustments to the routines, staff training, establish new patterns of care and maintain necessary documentations. This process needs to be systematic and therefore, may take a few months.

- **Monitoring/pre -assessment**

If the facility makes necessary adjustments, it can request for pre-assessment to determine whether it meets the global criteria. This is also used as an opportunity to monitor the progress of BFHI implementation. The performance assessment and technical support visits should also be used to strengthen implementation at facility and district level.

- **External assessments**

The facility should request for external assessment when they are ready. The external assessors use other tools based on the global criteria. This process also involves interviewing mothers and relevant support staff.

- **Declaration/Designation**

After external assessment, the facility will be designated baby friendly if meets the global criteria. A plague will also be provided.

- **Continued follow up**

In order to maintain the standard the facility requires monitoring the various areas of service provision

- Advocacy, coordination with an establishment of committee (infant and Young Child Committee), a demonstration of benefits to facility/Hospital, development of facility based strategies including training strategy to ensure long lasting changes in facility practices and establishment of links with community support systems are all important in BFHI implementation.

BFHI should be integrated existing Child Health, Reproductive Health and Nutrition services

Notes

Session 25b

Practical Session 5

Conducting a self assessment

Objectives

After completing this session you will be able to:

- Conduct a self assessment at their respective health facilities

The *Self Appraisal Tool* has been developed for use by health facilities to evaluate how their current practices measure up to the *Ten Steps to Successful Breastfeeding* and how they practice other recommendations of the 1989 WHO/UNICEF Joint statement titled *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services.* It also assists facilities in determining how well they comply with the *International Code of Marketing of Breast milk Substitutes* and subsequent relevant World health Assembly resolution, how well they support HIV-positive women and their infants, and whether they provide mother-friendly care.

The Self Appraisal tool that you are being given will permit facility managers to make an appraisal of the facility or review its practices in support of breastfeeding. Completion of the self-appraisal checklist is the first sate of the process, but does not in itself qualify the facility for designation as Baby-friendly.

The Global criteria will guide you in assessing the effectiveness of your breastfeeding programme. Self appraisal will provide you with the opportunity to explore areas in your institution which require improvement and the appropriate action that needs to be taken.

- The scenarios that have been provided will be a source of information for a representative health facility since you will not have all the information from your own facilities that is needed to answer the questionnaire.

- Each group will be given the first and second pages and the last page of the questionnaire. These pages have general information for the health facility under appraisal (first 2 pages) and the summary form. The summary form will be filled out at the end of the exercise.

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time to read them to remind you about what to do during the session. During the practical session, you work in small groups. One participant takes the lead and the others act as respondents.

What to have with you:

You will need:

- A copy of the self assessment questionnaire
- A sample of a filled out questionnaire which will help to respond to those questions for which you may not have information
- Scoring sheets
- Summary sheets
- A sample health facility policy

These materials will be made available to you by your facilitators

If you are the group leader:

The group may select the type of facility that they "belong" to whether health centre, district hospital, general hospital etc. as indicated on the sample filled out questionnaire that is provided.

You will ask the group to supply information that is required by the questionnaire one item at a time. Ensure that the group avoids unnecessary discussion which will waste time. You will fill in the questionnaire based on the group's responses as provided in the sample filled out questionnaire.

What the remainder of the group will do:

- The group members will elect one person to take the lead in the self assessment. The other members will act as Matron, Sister-in-charge, and Hospital Administrator etc.
- The leader will pose the questions on the questionnaire and the remainder of the team will respond using information on the sample that is provided
- When all the responses have been filled, the team will share parts of the filled out questionnaire equally and will score each step.
- The group will check the score for each step and present the score for their facility to the plenary session if called upon

What will happen after the training?

- You will be required to do a self appraisal at your respective facilities within one month of the training (that is, before you receive a follow-up visit by your facilitators). The results of the self appraisal should also be shared with health facility management and the DHMT

- It may be helpful to have another person outside your facility to assist the your team to conduct the appraisal

- In a real setting, conducting a self appraisal takes about 3-4 hour

- The results of the self appraisal should be shared with health facility management and the DHMT

Notes

Session 26

International Code of Marketing of Breast-milk Substitutes

Objectives

After completing this session you will be able to:

- explain how manufacturers promote formula milks
- summarize the main points of the International Code of Marketing of Breast- milk Substitutes
- describe how the International Code of Marketing of Breastmilk Substitutes helps to protect breastfeeding
- describe the Zambian legislation on marketing of marketing of breast milk substitutes
- explain the difficulties with donations of formula milk

Introduction

All manufacturers **promote** their products, trying to persuade people to buy more. Formula manufacturers also promote their products, to persuade mothers to buy more formula.

This promotion undermines women's confidence in their breast milk, and makes them think that it is not the best for their babies. This harms breastfeeding.

Breastfeeding needs to be **protected** from the effects of formula promotion. One essential way to protect breastfeeding is to regulate the promotion of formula, both internationally and nationally.

Individual health facilities and health workers can also protect breastfeeding, if they resist letting companies use them to promote formula. This is an important responsibility.

The International Code of Marketing of Breast-milk Substitutes
In 1981, the World Health Assembly (WHA) adopted The International Code of Marketing of Breast-milk Substitutes, which aims to regulate the promotion and sale of formula. This Code is a minimum requirement to protect breastfeeding.

The Code is a code of **marketing**. It does not ban infant formula or bottles, or punish people who bottle feed. The Code allows baby foods to be sold everywhere, and it allows every country to make its own specific rules.

The Code covers all breast-milk substitutes – including infant formula, any other milks or foods, including water and teas and cereal foods which are sometimes marketed as suitable for infants under six months of age; and also feeding bottles and teats.

Zambia is a signatory to the 1981 WHA Resolution on marketing of breast milk substitutes and the voluntary Code of Ethics of Marketing of Breastmilk Substitutes which was adopted by the WHA in 1982.

At country level, the voluntary code of Ethics was revised in 1994. In 2006, the code regulations were adopted as a component of the Food and Drug Act. It is now no longer voluntary but mandatory.

SUMMARY OF THE MAIN POINTS OF THE INTERNATIONAL CODE

1. No advertising of breast -milk substitutes and other products to the public.
2. No free samples to mothers.
3. No promotion in the health service.
4. No company personnel to advise mothers.
5. No gifts or personal samples to health workers.
6. No pictures of infants or other pictures idealizing artificial feeding, on the labels of the products.
7. Information to health workers should be scientific and factual.
8. Information on artificial feeding, including that on labels, should explain the benefits of breastfeeding and the costs and dangers associated with artificial feeding.
9. Unsuitable products , such as sweetened condensed milk, should not be promoted for babies.

Summary of Zambian legislation on marketing of marketing of breast milk substitutes

Food & Drugs (Marketing of Breast milk Substitutes) Regulations, 2006.

Provisions of the Statutory Instrument

Manufacturer or a distributor NOT to advertise breast milk Substitutes and other designated products

- No promotion
- No sample to pregnant women
- No sale enticement in form of prizes, gifts etc
- No dispensing to pregnant women, mothers etc
- Manufacturer or distributor shall not offer financial or material gift to pregnant women, mothers or infants and their families or health care facilities

Health Care Facility not to be used for promoting breast milk substitutes and other designated products

- No promotions at facility
- No displays at facility
- No distribution of materials and equipment
    - Including note pads, pen, calendars, posters, growth charts and toys

Prohibitions for manufacturer and distributor and or their agents

- No gifts in cash or kind to health worker
- No salary, wages other incomes
- No donations or selling less than 80%
- No sponsoring of events aimed at pregnant women, mothers of infants or their families

Prohibitions for health workers and proprietors

- No display of materials within facility
- No acceptance of gifts, benefits etc from manufacturer or distributors
- No health worker to give gift of a designated product
- No acceptance of scholarship

Power of Relevant Authority to give donation

- Relevant Authority – Food & Drugs Board under Act
- On condition that:
    - Medical condition
    - Orphaned infants, orphanages, disasters, relief operations
    - Supply as long as infant needs them

Marketing Personnel

- Shall not gain access to target audience
- Shall not instruct target population in a matter of nutrition or feeding of infants
- Shall not solicit target population to use a designated product

Examination for screening information and educational materials

The following should be explained:

- Importance of Breastfeeding
- Interference of artificial feeding
- Health hazards of bottle feeding
- Importance of introducing complementary foods at six months

Labelling of Infant formula designated products

- Labels not to included photography, drawing, graphic representation other than the method of preparation
- More information should be provided:
- Breast milk is the best for your baby
- Follow cleaning and sterilisation instructions carefully
- Health hazards warnings of inappropriate preparation
- Age at which product is recommended

Breast milk Substitutes to be of recognised Standard

- Food and Drugs Act
- The Standard Act
- Codex Alimentarius Commission
- Codex Code of hygienic Practices for foods for Infants and Children

If you observe any violations of the legislation you should inform your supervisor, an environmental health officer, District Health Office (DHMT) or indeed the MOH. It is important that your facility complies with ALL the provisions of the legislation

HIV and the Code
Some people are confused and think that The Code no longer applies where there are women living with HIV and who may choose to feed their infants artificially. However, the Code is still relevant, and it fully covers the needs of mothers with HIV.

If formula is made easily available, there is a risk that women who are HIV-negative or who have not been tested, will want to use it. They may lose confidence in breastfeeding, and decide to feed their babies artificially. This spread is called 'spill-over'.

So implementing The Code, is in fact, even more important, both to protect HIV-positive mothers and to help prevent spill-over.

Supplies of breast-milk substitutes (where needed) should be distributed in a manner that is accessible and sustainable. They should be distributed in a way that avoids spill-over to women who are breastfeeding.

Difficulties with donations of formula

You may have heard that some manufacturers and distributors have offered to donate formula for women who are HIV-positive. This is what The Code says:

> "Where donated supplies of infant formula are distributed the institution or organization should take steps to ensure that the supplies can be continued as long as the infants concerned need them."

Under The Code and its subsequent resolutions these donations cannot be given through the health care system – that is, through maternity or paediatric wards, Maternal and Child Health (MCH) department or family planning clinics, private health institutions and child care institutions.

The health system if it wishes can provide free or subsidized formula to HIV-positive mothers, but the health service has to BUY the formula to give to mothers, in the same way that it does for most drugs and food for patients and other supplies.

In addition the health service should ensure that the mother will have a supply of formula for as long as her infant needs it – that is at least 12 months according to the Zambian legislation – and milk in some form after that.

If hospitals and health centres have to buy formula, as they usually buy drugs and food, it is more likely that they will ensure that it is given out in a carefully controlled way, and not wasted or misused. Formula is more likely to be given only to mothers who are HIV-positive, who have been counselled and chosen to use formula.

In summary, supplies need to be reliable and sustainable. Short-term supplies can be dangerous. It is risky to rely on donated supplies. When a woman has started to use formula, it is difficult to go back to breastfeeding

Notes

Session 27

Counselling Cards and tools

Practice Counselling Scenarios

Objectives

After completing this session you will be able to:

- counsel HIV-positive women on infant feeding options, using counselling cards, flow chart and take-home flyers.

During this session you will practise counselling using a variety of tools:

- A **Flipchart**, that includes a flow chart illustrating the counselling process and Counselling Cards to be used during one-to-one sessions with pregnant women and/or mothers.
- A set of take-home **Flyers** for mothers on how to practise the chosen feeding option safely.
- A **Reference Guide** to provide additional information for you, the counsellors.
- The **Flow Chart** is included in the flipchart to help you to work through the feeding options with a woman in a logical way. It is important that a woman is not overwhelmed with many choices and given little time to express her own feelings.

Flipchart The first page is a **Flow Chart** of the recommended steps to follow for HIV and infant feeding counselling. On the left-hand side there are some simple instructions for how to use the flow chart, depending on the type of session (first session, follow-up) and whether the woman is pregnant or her baby is already born. Each of the cards we will now look at has a step number which fits in with the steps on the flowchart.

Cards 2 to 5 illustrate the feeding options discussed in earlier sessions. Each card shows the Advantages and disadvantages of one option.

Card 1 is called 'The risk of mother-to-child transmission'. Use this card to help you to explain to a woman the chances of her child being infected. Remember from Session 17, if all the mothers of the babies shown are HIV-positive, only three of the babies are likely to get HIV through breastfeeding.

Card 2 is called 'Advantages and disadvantages of exclusive breastfeeding'. Exclusive breastfeeding for the first few months is one option for a woman to consider when replacement feeding is not acceptable, feasible, affordable, sustainable or safe.

Card 3 is called 'Advantages and disadvantages of infant formula'.

Card 4 shows 'Advantages and disadvantages of expressing and heat-treating breast milk'.

Card 5 shows 'Advantages and disadvantages of wet-nursing'. Another woman who must be HIV-negative breastfeeds the baby, while the mother carries out all other kinds of feeding and care for her baby.

Card 6 The table shown in this card should be used with mothers who are pregnant or have infants under six months old. It helps the counsellor to explore the woman's living conditions in order to help her choose the most suitable feeding method for her situation. This table is not designed as a scoring tool or to make the mother's choice for her. The mother should choose herself after learning the advantages and disadvantages of each method.

The first step is to ask the woman about all of the things in the first column. For example:

Where do you get your drinking water?

Keep a mental note of the woman's responses to each question. You will use this information to help her choose a feeding option.

When you use the cards it is important to use your counselling skills and not to tell a woman what to do. Do not simply read out the points on the card. It is important to use open questions, to listen and learn from the woman and to support her in the choice she makes.

It may take a woman more than one counselling session to make up her mind about the feeding option she will choose. It is important for you to give the woman as much time as she needs and not to force her to make a decision when she is not ready.

Practise counselling skills

Two of the trainers will demonstrate using the Counselling Cards in the following demonstration. A pregnant woman has recently tested positive for HIV. She has come to see the counsellor to discuss her options for feeding her baby. Note how the counsellor uses counselling skills and does not tell the mother what to do.

Counsellor: "Hello Miyoba. Thank you for coming to talk to me about ways you could feed your baby. We want to help you to make a choice which is best for you, in your situation, and which gives the best chance for your baby to remain healthy."

Comment: **Here the counsellor introduces the session, explaining that the purpose is to help the mother to make an appropriate feeding choice. The counsellor also emphasizes the idea that we want a healthy baby. In many cases we have to balance the risks of HIV transmission with the risk of a baby getting very sick from diarrhoea or pneumonia.**

Now we will see the counsellor moving to Step 1: "explain the risks of mother-to-child transmission."

Counsellor: "What have you heard about the ways in which HIV can be transmitted from a mother to her baby?"

Miyoba: "Well, I know that the baby can be infected during birth, and if I choose to breastfeed."

Counsellor: "It is true that babies may get HIV in these ways. Let me show you a picture which may help you to understand." Show Card #1 to Miyoba

Comment: **The counsellor shows Card #1.**

Counsellor: "What do you see in this picture?"

Miyoba: "I see some babies, and some of them have different coloured shirts on."

Counsellor: "This card shows 20 babies born to HIV-positive women. As you mentioned HIV can be passed to the baby at three stages: during the time you are pregnant, during delivery and during breastfeeding. The babies with white shirts are the babies that will NOT be infected at all. The babies with black shirts were already infected with HIV through pregnancy and delivery. The babies with grey shirts are the ones who may be infected with HIV through breastfeeding."

Miyoba: "So don't all babies get HIV through breastfeeding?"

Counsellor: "No – as you see most of them will not be infected. Some things can increase the risk of passing HIV through breastfeeding. For example, there is a higher chance if you have been recently infected with HIV or if you breastfeed for a long time. There are ways of reducing the risk of transmission by practising a feeding option that is appropriate for your situation. What other questions do you have about what I have just told you?"

Miyoba: "I think I understand. I am relieved to hear that not all babies are infected through breastfeeding"

Counsellor:	"There are various ways you could feed your baby. Is there any particular way you have thought of?"
Miyoba:	"Well, now that I know not all babies are infected through breastfeeding, can we talk about that first, as I breastfed my other children?"
Counsellor:	"Yes, what do you see in this picture?" Show Card #2 to Miyoba.
Comment:	**At this point the counsellor shows Card #2 to Miyoba to help explain the next points.**
Miyoba:	"I see a mother breastfeeding her baby, and someone trying to give her baby a bottle. The mother seems to be refusing."
Counsellor:	"Yes, this is about exclusive breastfeeding. What do you think exclusive breastfeeding means?"
Miyoba:	"Well, I'm not sure, but I saw something about it on a poster once."
Counsellor:	"Yes, there are a lot of posters about exclusive breastfeeding these days. Exclusive breastfeeding means giving only breast milk and no other drinks of foods, not even water. Exclusive breastfeeding for the first few months may lower the risk of passin g HIV, compared to mixed feeding. Breastfeding is a perfect food because it protects against many illnesses. Also, it prevents a new pregnancy. On the other hand, as long as you breastfeed, there is some chance that your baby might get HIV."
Comment	**At this stage the counsellor would go through the other advantages and disadvantages of exclusive breastfeeding with Miyoba using Card #2.**
Counsellor:	"How do you feel about breastfeeding now?"
Miyoba:	"Oh, well, I could think about it. I'd still be worried about the baby getting HIV, though.
Comment:	**The counsellor then covers other feeding options with Miyoba.**
Counsellor:	"Well, there are several other ways of feeding your baby you may like to think about. You could breastfeed and then transition from breastfeeding or you could use formula bought from a store. There are also other ways to make your breast milk safe."
Comment:	**Only mention the methods that are practised and feasible in your community.**
Miyoba:	"Oh, I didn't know there were so many ways. I just thought I would have to use formula, but I didn't know."
Counsellor:	"Yes, there are a number of possibilities. Which one would you like to hear more about?"
Miyoba:	"Well, maybe using the infant formula."
Counsellor:	"That's fine. Let me show you another card."
Comment:	**The counsellor will discuss the questions and messages on Card #3, using counselling skills. Let us imagine that she has done this.**
Counsellor:	"How do you feel about infant formula?"

Miyoba:	"I'm not sure. My husband really wants me to breastfeed but I think I would like to try formula. If I start formula could I change back later?"
Counsellor:	"That is really difficult to do."
Comment:	**The counsellor would discuss the options that are suitable and appropriate for the local area with Miyoba.** **It is important to be led by Miyoba's preferences, and not to overwhelm her with information in a series of lists. Leave time for Miyoba to ask questions and check she understands what is being discussed.** **Imagine the different feeding options have been discussed with Miyoba. Now the counsellor moves to Step 3: Explore with the woman her home and family situation.**
Counsellor:	"We have just discussed different feeding methods. After hearing all of this information, which method are you most interested in trying?"
Miyoba:	"I would like to use formula, since they give it for free here at the clinic."
Comment:	**Note that this is not the final decision by Miyoba. She may change her mind at a later stage.**
Counsellor:	"Let's think together about the things you will need in order for you to decide if formula is the best choice for you."
Miyoba:	"Yes, OK."
Comment:	**The counsellor shows Miyoba Card #6.**
Counsellor:	"Where do you get your drinking water from?"
Miyoba:	"We have a tap in our kitchen with clean water."
Counsellor:	"That's good – you need clean water to make formula. Can you prepare each feed with boiled water and clean utensils?"
Miyoba:	"That seems like too much work. Do I need to boil the water each time if we have clean water from the tap?"
Counsellor:	"Yes, it's recommended."
Miyoba:	"OK, well then….I guess I could manage. I could ask my niece to help me."
Counsellor:	"That's a good idea. What about preparing formula at night? Would you be able to do this two or three times each night?"
Miyoba:	"Can't I just prepare it before I go to bed and then just keep the bottle near the bed and use it all night?"
Counsellor:	"I understand why this might seem easier, but it's best to prepare the formula fresh for each feed. This will prevent your baby from getting sick….Perhaps we could talk about the cost of formula now?"
Miyoba:	"Oh, but I thought it was free?"
Counsellor:	"Even though you are getting the formula for free, you may run out before you can get more, or the clinic might temporarily run out. Formula costs about K31, 800 per 500g tin If you had to buy 3 or 4 tins, could you afford do to this?"
Miyoba:	"Yes, my husband has steady work. We could find the money if we need to."
Counsellor:	"That's good. The cost is not too much of a problem if your husband is working. Does your husband know that you are HIV-positive?"
Miyoba:	"Yes, he does. He's HIV-positive too."

Counsellor:	"It must be difficult for you, but it can be helpful that you both know. What about the rest of your family?"
Miyoba:	"We haven't told anybody else. We are afraid of what they might say."
Counsellor:	"Oh, that must be a worry, In this case, how will your family feel if you don't breastfeed?"
Miyoba:	"My mother-in-law might get upset, since she breastfed all her children. She really thinks it's the best thing to do."
Counsellor:	"What reason do you think that you could give her for why you don't want to breastfeed?"
Miyoba:	"Maybe I could tell her that I am taking some medicine which will affect the breast milk. That happened to our neighbour last year."
Counsellor:	"Do you think that your mother-in-law would accept this explanation? Or would she insist that you breastfeed?"
Miyoba:	"I think that she would accept it. That neighbour is a friend of hers, and her baby is doing OK."
Comment:	**At this stage the counsellor would ask Miyoba if she would like to go through any other feeding options and whether she has any questions. The counsellor then moves to Step 4: "Help Miyoba choose an appropriate feeding option."**
Counsellor:	"We have talked about many things today. After all we have discussed, what are your thoughts about how you might like to feed your new baby?"
Miyoba:	"I am so confused. There seem to be good things and bad things about each feeding option for me. What would **you** suggest that I do?"
Counsellor:	"Well, let's think through the different ways, looking at your situation. You have breastfed your other children and your mother-in-law wants you to breastfeed."
Miyoba:	"Yes, she does."
Counsellor:	"Also, your husband knows that you are HIV-positive, so perhaps he could support you to exclusively breastfeed ... On the other hand, you do have all the things needed for you to be able to prepare formula feeds safely. You have clean water, fuel, and money to buy the formula."
Miyoba:	"That's right"
Counsellor:	"As your husband knows your status, he could help to support and to formula feed and perhaps talk to his mother."
Miyoba:	"Mmm. I would like to think more about this and discuss it with my husband. But I think I would like to give formula feed to this baby. I could explain to my husband about what you have said. I think he'll understand."
Comment:	**The counsellor did not tell Miyoba what to do. She summarized the reasons why the different feeding options would be suitable for her. Miyoba then made an initial choice, but will go home to discuss this with her husband. The counsellor would then go on to Step 5 – "Explain how to practise the chosen feeding options and provide a take-home flyer."**

You will use role-plays to practise counselling women on feeding choices.
You will work in groups of 3-4, taking turns to be a 'mother' or a 'counsellor' or an observer.

When you are the 'mother' use the story on the card you are given. The 'counsellor' counsels you about your situation. The other participants in the group observe. Give yourself and your baby (if your story has one) names and tell them to your 'counsellor'. Answer the counsellor's questions from your story. Do not give all the information at once. If your counsellor uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.

When you are the 'counsellor' greet the 'mother' and introduce yourself. Ask for her name and her baby's name, and use them. Ask one or two open questions to start the conversation and to find out why she is consulting you. Use each of the counselling skills to encourage her to talk to you. Use the Cards to help you to counsel the mother. Use the Table to help her to make her feeding choice based on her circumstances. If you feel comfortable, also use the relevant Cards and take-home Flyers on how to practise the chosen feeding option. When you use the Card, do not just read it. Use your skills to summarize the information without being prescriptive.

When you are observing, use your COUNSELLING SKILLS CHECKLIST. Observe which skills the counsellor uses, which she does not use, and which she uses incorrectly. Mark your observations on your list in pencil. After the role-play, praise what the 'counsellor' does right, and suggest what she could do better.

Notes

Session 28

Importance of complementary feeding

Objectives

After completing this session participants will be able to:

- define complementary feeding
- explain the importance of continuing breastfeeding
- explain why there is an optimal age for children to start complementary feeding
- list the Key Messages from this session
- list current complementary feeding activities

Introduction

So far we have concentrated on the time from birth to six months of age. The time from six months of age until two years is also crucial in the child's growth and development. You have an important role in helping families during this time.

During the next few sessions we will develop a list of 10 Key Messages to discuss with caregivers about when to start complementary feeds. The Key Messages are listed in the back of your Manual.

Definition of complementary feeding

Complementary feeding means giving other foods in addition to breast milk.
These other foods are called complementary foods.

Additional foods and liquids are called complementary foods, as they are additional or complementary to breastfeeding, rather than adequate on their own as the diet. Complementary foods must be nutritious foods and in adequate amounts so the child can continue to grow.

During the period of **complementary feeding**, the young child gradually becomes accustomed to eating family foods, though breastfeeding continues to be an important source of nutrients and protective factors until the child is at least two years old.

Sustaining breastfeeding

Breast milk alone, **exclusive breastfeeding**, should continue for the first six months.
From 6-12 months, breastfeeding continues to provide half or more of the child's nutritional needs, and from 12-24 months, at least one-third of their nutritional needs. As well as nutrition, breastfeeding continues to provide protection from many illnesses for the child and provides closeness and contact that helps psychological development.

Feeding counsellors like you can do a lot to support and encourage women who want to breastfeed their babies. You can help to protect good practices in a community. If you do not actively support breastfeeding, you may hinder it by mistake.

Every time you see a mother, try to build her confidence. Praise her for what she and her baby are doing right. Give relevant information, and suggest something appropriate.

Key Message 1

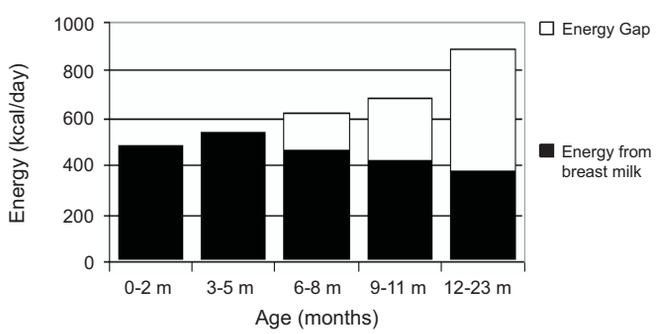
Breastfeeding for two years or longer helps a child to develop and grow strong and healthy.

The optimal age to start complementary feeding

Our body uses food for energy to keep alive, to grow, to fight infection, to move around and be active. Food is like the wood for the fire – if we do not have enough good wood, the fire does not provide good heat or energy. In the same way, if young children do not have enough good food, they will not have the energy to grow and be active.

Energy Gap

Energy required by age and the amount supplied from breast milk



On this graph, each column represents the total energy needed at that age. The columns become taller to indicate that more energy is needed as the child becomes older, bigger and more active. The dark part shows how much of this energy is supplied by breast milk.

From about six months onwards there is a **gap** between the total energy needs and the energy provided by breast milk. The gap increases as the child gets bigger.

Therefore, for most babies, six months of age is a good time to start complementary foods. Complementary feeding from six completed months helps a child to grow well and be active and content.

Key Message 2

Starting other foods in addition to breast milk at six completed moths helps a child to grow well.

At six completed months, babies need to learn to eat thick porridge, puree and mashed foods as these foods fill the energy gap more than liquids.

At six completed months of age it becomes easier to feed thick porridge, puree and mashed food because babies:

- show interest in other people eating and reach for food
- like to put things in their mouth
- can control their tongue better to move food around their mouth
- start to make up and down 'munching' movements with their jaws.

In addition, at this age, babies' digestive systems are mature enough to begin to digest a range of foods.

Most babies do not need complementary foods before six months of age. If the baby is less than six months old, counsel the mother on how to breastfeed exclusively in a way that helps the baby to get enough breast milk.

If the baby is not receiving breast milk, continue using adequate replacement milk feeding until six months of age rather than add complementary foods early.

CONSEQUENCES TO STARTING COMPLEMENTARY FOODS TOO EARLY

Adding complementary foods **too soon** (before six months) may:

- take the place of breast milk, making it difficult to meet the child's nutritional needs
- result in a diet that is low in nutrients if thin, watery soups and porridges are used because these are easy for babies to eat
- increase the risk of illness because less of the protective factors in breast milk are consumed
- increase the risk of diarrhoea because the complementary foods may not be as clean or as easy to digest as breast milk
- increase the risk of wheezing and other allergic conditions because the baby cannot yet digest and absorb non-human protein well
- increase the mother's risk of another pregnancy if breastfeeding is less frequent

CONSEQUENCES TO STARTING COMPLEMENTARY FOODS TOO LATE

Starting complementary foods **too late** is also a risk because:

- the child does not receive the extra food required to meet his/her growing needs
- the child grows and develops slower
- might not receive the nutrients to avoid malnutrition and deficiencies such as anaemia from lack of iron.

Most babies do not need complementary foods before six completed months of age.
All babies older than six completed months of age should receive complementary foods.

EXERCISE 28.A ASSESS YOUR PRACTICES				
Does this practice occur?	With all children	With some children	Does not occur	Comments
Weigh child				
Measure child's length				
Look at child's growth chart				
Discuss how the child is feeding				
Note on child's chart that feeding was discussed				
Carry out demonstrations of young children's food preparations and feeding techniques				
Make home visits to assess foods and feeding practices				
Other Activities				

Indicate the most frequent activities occurring in your health facility

Indicate the least frequent activities occurring in your health facility

Summary

The nutritional status of a child affects overall health. Health is not only growth and development but also the ability to fight off illness, and recover from illness. This means the nutritional status of children is important to all health staff, and that all health staff should promote good feeding practices.

Creating a health facility environment that gives importance to children's nutrition will go a long way in promoting healthy children.

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Session 29

Foods to Fill Energy Gap

Objectives

After completing this session you will be able to:

- list the local foods that can help fill the energy gap in young children
- explain the reasons for recommending using foods of a thick consistency to feed young children
- describe ways to enrich complementary foods
- list the Key Message from this session

Foods that can fill the energy gap

All foods provide some energy. However, every community has at least one *staple* or main food. People generally eat large amounts of these staples and they provide much of the energy needed. Staples also provide some protein and other nutrients, but they cannot provide all the nutrients needed on their own. The staple must be eaten with other foods for a child to get enough nutrients.

It is important that you know what the main staples that families eat in your area are. Then you can help them to use these foods for feeding their young children.

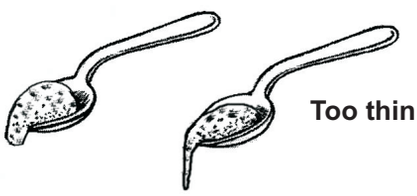
The stomach of a young child is small. At eight months of age the stomach can hold about 200 mls at one time. Thin foods and liquids fill it quickly before the energy requiremtn is met.

The consistency or thickness of foods makes a big difference to how well that food meets the young child's energy needs. Foods of a thick consistency help to fill the energy gap.

Key Message 3

Foods that are thick enough to stay in the spoon give more energy to the child.

Just right



Too thin

WAYS TO ENRICH A CHILD'S FOODS

Foods can be made more energy and nutrient rich in a number of ways:

- For a porridge or other staple
  - Prepare with less water and make a thicker porridge as we just saw. Do not make the food thin and runny.
  - Roast cereal grains before grinding them into flour. Roasted flour does not thicken so much, so less water is needed to make porridge.

- For a soup or stew
  - Take out a mixture of the solid pieces in the soup or stew such as beans, pumpkin leaves, bean leaves and meat. Mash this to a thick puree and feed to the child instead of the liquid part of the soup.

- Add energy or nutrient rich food to the porridge, soup or stew to enrich it. This enriching is particularly important if the soup is mostly liquid with few beans, vegetables or other foods in it
  - Replace some (or all) of the cooking water with fresh or soured milk, goat milk, or cream.
  - Add a spoonful of milk powder after cooking.
  - Mix legume, (bean, cowpeas, Bambara nut) flour with the mealie meal before cooking.
  - Stir in a paste made from nuts or seeds such as groundnut paste (peanut butter) or pumpkin seed paste.
  - Add a spoonful of margarine, butter, red palm oil (chikondya).

Fats and Oils

- Oils and fats are concentrated sources of energy. A little oil or fat, such as one-half teaspoon, added to the child's bowl of food, gives extra energy without adding much volume. The addition of fatty/oily foods also makes thicker porridge or other staple softer and easier to eat.
- Fats and oils can also be used for frying foods, or spread on foods such as bread. The fat or oil should be fresh as it can go bad with storage.
- If a large amount of oil is added, the child may become full before they have eaten all the food. This means they may get the energy from the oil but less of the other nutrients because they eat less food overall.
- If a child is growing well, extra oil is usually not needed. The child who takes too much oil or fried foods can become overweight.
- Sugar and honey are also energy-rich and can be added to foods in small quantities to increase the energy concentration. However, these foods do not contain any other nutrients.
- Caregivers need to watch that sugary foods do not replace other foods in the diet. For example, sweets, sweet biscuits and sugary drinks used instead of a meal for a young child.
- Essential fatty acids are needed for a child's growing brain and eyes, and for healthy blood vessels. These essential fatty acids are present in breast milk (see Session 2).
- For children over six months old, who are not breastfed, good sources of essential fatty acids are fish, avocado, nut pastes and vegetable oil. Animal-source foods also provide essential fatty acids (see Session 30).

FERMENTED PORRIDGE OR GERMINATION OF GRAIN FOR FLOUR.

Fermented porridge

- Fermented porridge can be made in two ways - the grain can be mixed with water and set to ferment overnight or longer before cooking. The ground grain and water is cooked into porridge and then fermented. Sometimes a portion of previous batch of fermented porridge is added (starter) to speed up the fermentation process. Porridge made from germinated ground grain can also be fermented.
- The advantages of using fermented porridge are:
  - It is less thick than plain porridge so more grain/flour can be used for the same amount of water. This means each cupful of porridge contains more energy and nutrients than plain (unfermented) porridge.
  - Children may prefer the taste of 'sour' porridge and so eat more.
  - The absorption of iron and some other minerals is better from the soured porridge.
  - It is more difficult for harmful bacteria to grow in soured porridge, so it can be kept for a day or two.
- Grain is also fermented to make alcohol. However, the short fermentation talked about here to make fermented porridge will not make alcohol or make the child drunk!

Germinated or sprouted flour

- Cereal (maize) or legume (beans, cowpeas etc) are soaked in water and then left to sprout. The grains are then dried (sometimes toasted) and ground into flour. A family can do this at home but it is more common to buy flour already germinated.
- Mixed flours that include germinated (or malted) flour in addition to the main flour may be available in the store.
- If families in your area use germinated grain, the following ways can be used to make a thicker and more nutritious porridge:
  - Use this germinated flour to make porridge. This type of flour does not thicken much during cooking so less water can be used.
  - Add a pinch of the germinated flour to cooked thick porridge that has cooled a little bit. The porridge should be boiled again for a few minutes after adding the germinated flour in order to kill off any microorganisms that may be in the germinated cereal flour. The addition of the germinated cereal flour makes the porridge softer and easier for the child to eat.
- Germination also helps more iron to be absorbed.

Notes

Session 30

Foods to fill Iron and vitamin A Gaps

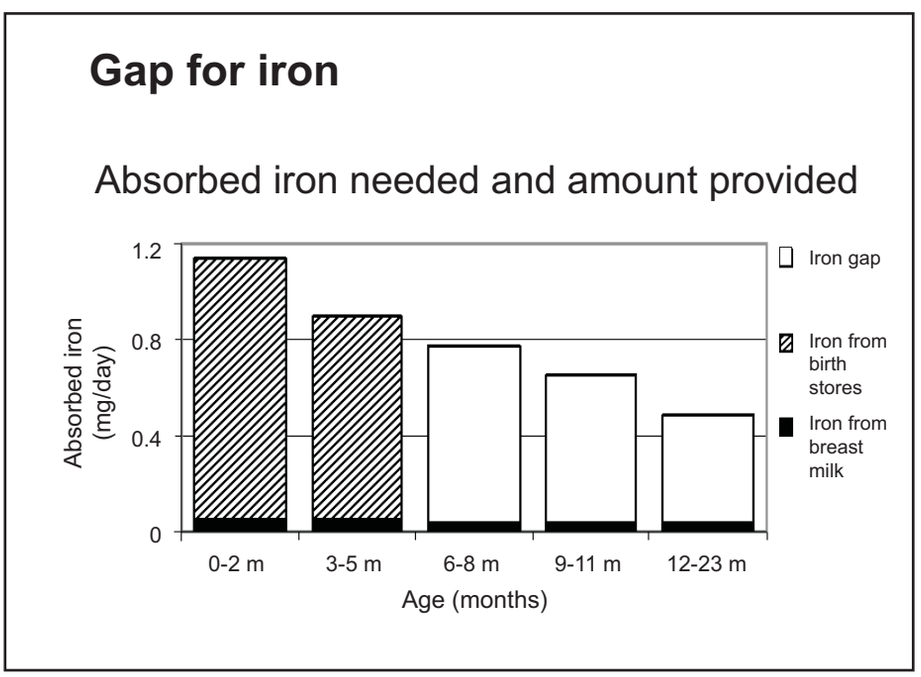
Objectives

After completing this session you will be able to:

- list the local foods to fill the iron and vitamin A gaps
- explain the importance of animal source foods in feeding young children
- explain the importance of legumes in feeding young children
- explain the use of processed complementary foods
- explain the fluid needs of young children
- list the Key Messages from this session

Iron Gap

Another nutrient gap to be filled is for iron. The young child needs iron to make new blood, to assist in growth and development and to help the body to fight infections.



In this graph, the top of each column represents the amount of absorbed iron that is needed per day by the child. A full-term baby is born with good stores of iron to cover their needs for the first six months *(This is the striped area).*

The black area along the bottom of the columns shows us that there is some iron provided by breast milk all the time breastfeeding continues.

The young child grows faster in the first year than in the second year. This is why the need for iron is higher when the child is younger.

These iron stores are used up over this first six months, so after that time we see a gap between the child's needs and what they receive from breast milk. This gap needs to be filled by complementary foods *(The white area – this is the gap).*

Zinc is another nutrient that helps children to grow and stay healthy. It is usually found in the same foods as iron, so we assume if they are eating foods rich in iron they are also receiving zinc.
Your goals, as health workers, are:

- to identify local foods and food preparations that are rich sources of iron
- to assist families to use these iron rich foods to feed their young children.

The importance of animal-source foods

Foods from animals, the flesh (meat) and organs/offal such as liver, heart and blood, as well as milk, yoghurt, cheese and eggs are rich sources of many nutrients.

The meat and organs of animals, birds and fish (including kapenta), as well as foods prepared with blood, are the best sources of iron and zinc. Liver is not only a good source of iron but also vitamin A.
Animal-source foods should be eaten daily or as often as possible. This is especially important for the non-breastfed child.

Foods from animals such as milk and eggs are good for children because they are high in protein and other nutrients. However, milk and milk products, such as cheese and yoghurt, are not good sources of iron.

Milk fat (cream) contains vitamin A so foods made from whole milk are good sources of vitamin A.
Foods made from milk (whole milk or skimmed or powdered) and any food containing bones, such as pounded dried fish, are good sources of calcium to help bones to grow strong.
Egg yolk is another store of nutrients and a rich source of vitamin A.

It can be hard for children to meet their iron needs without a variety of animal foods in their diet. Fortified or enriched foods such as fortified flours, pasta, cereals, or instant foods, helps to meet these nutrient needs. Some children may need supplements if they do not eat enough iron containing foods or if they have particularly high needs for iron.

In Zambia vitamin A supplementation programmes are conducted at childrens clinics and during health week (CHW)

Key Message 4

Animal-source foods are especially good for children,
to help them grow strong and healthy.

The importance of legumes - pulses, nuts and seeds

Legumes or pulses such as groundnuts, beans, cowpeas, and peas as well as other nuts and seeds, are good sources of protein. Legumes are a source of iron as well.

Key Message 5

Peas, beans, lentils, and nuts and seeds
are also good for children.

Some ways these foods could be prepared in a way that would be easier for the child to eat and digest are:

- Soak beans before cooking and throw away the soaking water.
- Remove skins by soaking raw seeds and then rubbing the skins off before cooking.
- Boil beans then sieve to remove coarse skins.
- Roast nuts and seeds and pound to a paste.
- Add beans/lentils to soups or stews.
- Mash cooked beans well.

Eating a variety of foods at the same meal can improve the way the body uses the nutrients. For example, combining a cereal with a legume (example: nshima and beans), or adding a milk product or egg to the legume (example: maize meal with milk).

Iron absorption

As well as pulses, dark-green leaves such pumpkin leaves, amarathas and sweet potato leaves are also a source of iron. However, it is not enough that a food has iron in it, the iron must also be in a form that the child can absorb.

IRON ABSORPTION

The amount of iron that a child absorbs from food depends on:

- the amount of iron in the food
- the type of iron (iron from meat and fish is better absorbed than iron from plants and eggs)
- the types of other foods present in the same meal (some *increase* iron absorption and others *reduce* absorption)
- whether the child has anaemia (more iron is absorbed if anaemic).

Eating these foods at the same meal increases the amount of iron absorbed from eggs and plant foods such as cereals, pulses, seeds, and vegetables:

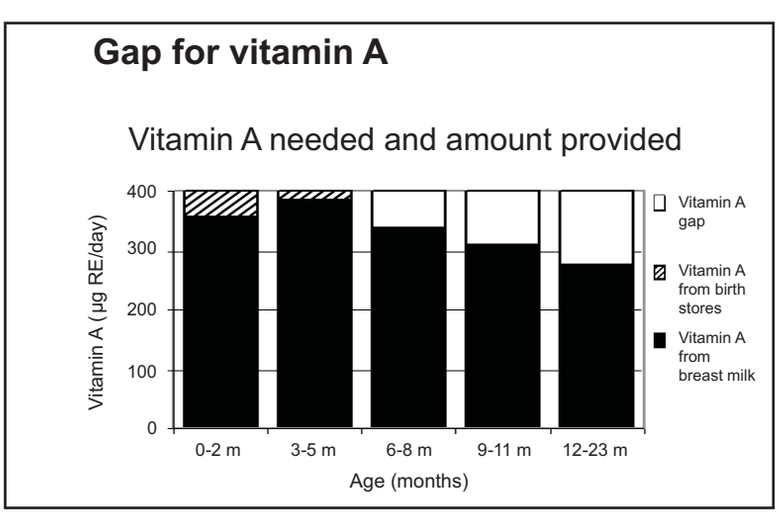
- foods rich in vitamin C such as tomato, broccoli, guava, mango, pineapple, pawpaw, orange, lemon and other citrus fruits
- small amounts of the meat or offal of animals, birds, fish and other sea foods.

Iron absorption is decreased by

- drinking teas and coffee
- foods high in fibre such as bran
- foods rich in calcium

Foods that can fill the vitamin A gap

Another important nutrient is vitamin A, which is needed for healthy eyes and skin and to help the body fight infections.



Again, on this graph the top of each column represents the amount of vitamin A that the child needs each day. Breast milk supplies a large part of the vitamin needed provided the child continues to receive breast milk and the mother's diet is not deficient in vitamin A. As the young child grows, there is a gap for vitamin A that needs to be filled by complementary foods.

Good foods to fill this gap are dark-green vegetables such as pumpkin leaves, amaranthus, rape, spinach and sweet potato and yellow-coloured vegetables and fruits such as carrots, pumpkins, yellow sweet potatoes, pawpaw and mangoes. Other sources of vitamin A that we mentioned already were:

- liver from animals
- milk and foods made from milk such as butter, cheese and yoghurt
- egg yolks
- margarine, dried milk powder and other foods fortified with vitamin A.

Unbleached red palm oil (chikodya) is also rich in vitamin A.
Vitamin A can be stored in a child's body for a few months. Encourage families to feed foods rich in vitamin A as often as possible when these foods are available, ideally every day. A variety of vegetables and fruits in the child's diet help to meet many nutrient needs.

Health workers need to be aware of the products that are available in the area. If the health worker knows about the products, they can discuss with an individual family if these products are useful for their child or not.

Key Message 6

Dark-green leaves and yellow-coloured fruits and vegetables help a child to have healthy eyes and fewer infections.

In some countries, there are low priced processed complementary foods such as iron fortified flour and fortified baby cereals that are made locally. These are usually convenient and nutritious and families can be made aware of them.

FORTIFIED COMPLEMENTARY FOODS

When discussing fortified complementary foods with caregivers, there are some points to consider:

What are the main contents or ingredients?
The food may be a staple or cereal product or a flour. It may have some vegetables, fruit or animal-source foods in it.

Is the product fortified with micronutrients such as iron, vitamin A or other vitamins?
Added iron and vitamins can be useful, particularly if there are few other sources of iron containing foods in the diet.

Does the product containingredients such as sugar and/or oil to add energy?
These added ingredients can make these products a useful source of energy, if the child's diet is low in energy. Limit use of foods that are high in sugar and oil/fat but with few other nutrients.

What is the cost compared to similar home-produced foods?
If processed foods are expensive, spending money on them may result in families being short of money.

Does the label or other marketing imply that the product should be used before six months of age or as a breast-milk substitute?
Complementary foods should not be marketed or used in ways that undermine breastfeeding. To do so is a violation of the International Code of Marketing of Breast-milk Substitutes and subsequent resolutions and should be reported to the company concerned and the appropriate government authority.

Fluid needs of young children

The baby who is exclusively breastfeeding receives all the liquid he needs in the breast milk. When other foods are added to the diet, the baby may need extra fluids. Likewise, a baby who is under six months of age and only receiving replacement milks does not need extra water.

Offer fluids when the child seems thirsty. Extra fluid is needed if the child has a fever or diarrhoea.

FLUID NEEDS OF THE YOUNG CHILD

- Water is good for thirst. A variety of pure fruit juices can be used also. Too much fruit juice may cause diarrhoea and may reduce the child's appetite for foods.
- Drinks that contain a lot of sugar may actually make the child thirstier as their body has to deal with the extra sugar. If packaged juice drinks are available in your area, find out which ones are pure juices and which ones have added sugar. Fizzy drinks (sodas) are not suitable for young children.
- Teas and coffee reduce the iron that is absorbed from foods. If they are given, they should not be given at the same time as food or within two hours before or after food.
- Sometimes a child is thirsty during a meal. A small drink will satisfy the thirst and they may then eat more of their meal.
- Drinks should not replace foods or breastfeeding. If a drink is given with a meal, give only small amounts and leave most until the end of the meal. Drinks can fill up the child's stomach so that they do not have room for foods.
- Remember that children who are not receiving breast milk need special attention and special recommendations. A non-breastfed child aged 6-24 months of age needs approximately 2-3 cups of water per day in a hot climate. This water can be incorporated into porridges or stews, but clean water should also be offered to the child several times a day to ensure that the infant's thirst is satisfied.

EXERCISE 30.A WHAT IS IN THE BOWL?

Choose foods that are available to families in your area to form one meal for a young child, aged _____

What are Key Messages you could give for the foods that you have chosen?

Notes

Session 31

Quantity, Variety and Frequency of Feeding

Objectives

After completing this session you will be able to:

- Explain the importance of using a variety of foods in complementary feeding
- Explain the need for increased frequency of complementary feeding
- Discuss the quantity of complementary food to be offered to a child
- List the recommendations for feeding a non-breastfed child
- List the Key Messages from this session

The importance of using a mixture or variety of foods

Most adults and older children eat a mixture of foods at mealtime. In the same way, it is important for young children to eat a mix of good complementary foods.

When you build on the usual food preparations in a household, it is easier for families to feed their young children a diet with nutritious complementary foods.

The gaps for iron and for energy may be the hardest to fill.

Animal-source foods are special foods for children. These foods should be eaten every day or as often as possible. If foods fortified with iron are available, these could be used to help fill the iron gap.
If an iron-rich food is not available, you as the health worker may need to recommend using a micronutrient supplement to ensure he gets sufficient iron and other micronutrients.

To give more energy foods, families can give some extra foods between meals that are easy to prepare. These extra foods are in addition to the meals – they should not replace them. These extra foods are often called snacks. However, they should not be confused with foods such as sweets, crisps or other processed foods, which may include the term snack foods in their name.

Good snacks provide both energy and nutrients. Sour milk,yoghurt and other milk products; bread or biscuits spread with butter; margarine, nut paste or honey, fruit, bean cakes, cooked potatoes, are all good snacks.

Suggest that families try each day to give a dark-green vegetable such as pumpkin leaves, amarathas, rape, spinach and sweet potato or yellow-coloured fruit or vegetable such as carrots, pumpkins, yellow sweet potatoes, pawpaw and mangoes and an animal-source food in addition to the staple food.

The frequency of feeding complementary foods

Key Message 7

A growing child needs 3 meals plus snacks per day:
give a variety of foods.

Recommendations for the non-breastfed child

Recommendations for feeding the non-breastfed child

The non-breastfed child should receive:

- extra water each day (2-3 cups in temperate climate and 4-6 cups in hot climate)
- essential fatty acids (animal-source foods, fish, avocado, vegetable oil, nut pastes)
- adequate iron (animal-source foods, fortified foods or supplements)
- milk (1-2 cups per day)
- extra meals (1-2 meals per day)

Amount of complementary food to be offered

When a child starts to eat complementary foods, he needs time to get accustomed to the new taste and texture of the foods. A child needs to learn the skill of eating. Encourage families to start with 2-3 small spoonfuls of the food twice a day.

AMOUNTS OF FOODS TO OFFER			
Age	**Texture**	**Frequency**	**Amount of food an average child will usually eat at each meal [1]**
6-8 months	Start with thick porridge, well mashed foods • continue with mashed family foods	2-3 meals per day plus frequent breastfeeds Depending on the child's appetite 1-2 snacks may be offered	Start with 2-3 tablespoonfuls per feed increasing gradually to ½ of a 250 ml cup
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	1/2 of a 250 ml cup/bowl
12-23 months	Family foods, chopped or mashed if necessary	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	3/4 to 1 of a 250 ml cup/bowl
If baby is not breastfed, give in addition: 1-2 cups of milk per day, and 1-2 extra meals per day.			

As the child gets older, the amount of food offered increases. Give as much as the child will eat with active encouragement.

Key Message 8

A growing child needs increasing amounts of food.

[1] Adapt the chart to use a suitable local cup/bowl to show the amount. The amounts assume an energy density of 0.8 to 1 Kcal/g.

EXERCISE 31.A AMOUNTS TO OFFER

Age of child	Frequency	Amount
Initiation of complementary foods		
22 months		
8 months		
12 months		
7 months		
15 months		
9 months		
13 months		
19 months		
11 months		
21 months		
3 months		

Notes

Session 32

Building Confidence Exercises – Part 2

Exercise 32.a: Accepting what a mother THINKS

How to do the exercise:

Examples 1-2 are mistaken ideas which mothers might hold.
Beside each mistaken idea are three responses. One agrees with the idea, one disagrees, and one accepts the idea, without either agreeing or disagreeing.
Beside each response write whether the response agrees, disagrees or accepts.

Example:		
Mother of a healthy 19month- old baby whose weight is on the 50th percentile:	"You are worried about giving him milk?"	*Accepts*
"I am worried that my child will become a fat adult so I will stop giving him milk".	"It is important that children have some milk in their diet until they are at least two years of age".	*Disagrees*
	"Yes, fat babies tend to turn into fat adults."	*Agrees*

Example:

Mother of a healthy 19-month- old baby whose weight is on the 50th percentile:

Examples 1-2:	
1. Mother of a 7-month-old baby: "My child is not eating any food that I offer so I will have to stop breastfeeding so often. Then he will be hungry and will eat the food."	"Oh, no, you must not give him less breast milk. That is a bad idea." "I see…". "Yes, sometimes babies do get full up on breast milk?"
2. Mother of a 12-month-old child: "My baby has diarrhoea so I must stop giving him any solids."	"Yes, often foods can make the diarrhoea worse." "You are worried about giving foods at the moment?" "But solids help a baby to grow and gain weight again– you must not stop them now."

How to do the exercise:

Examples 3-4 are some more mistaken ideas which mothers might hold.
Make up a response that accepts what the mother says, without disagreeing or agreeing.

Examples 3-4:	**Possible responses to accept what the mother thinks are:**
1. "My neighbour's child eats more than my child and he is growing much bigger. I must not be giving my child enough food." 2. "I am worried about giving my one-year-old child family food in case he chokes."	

Exercise 32.b: Accepting what a mother FEELS

How to do the exercise:
After the Stories A, and B below, there are three responses.
Mark with a ✓ the response which shows acceptance of how the mother feels.

Example:
Masowe's baby boy has not gained much weight over the past two months. As Masowe tells you about it, she bursts into tears.
Mark with a ✓ the response which shows that you accept how Masowe feels.

	a. Don't worry– I am sure he will gain weight soon.
	b. Shall we talk about what foods to give your baby?
▪	c. You're really upset about this aren't you?

To answer:

Story A. Muleya is in tears. Her baby is refusing to eat vegetables and she is worried.	
	a. Don't cry – many children do not eat vegetables.
	b. You are really worried about this, I know.
	c. It is important that your baby eats vegetables for the vitamins he needs.

Story B. Bumba is crying. Since starting complementary feeds her baby has developed a rash on his buttocks. The rash looks like a nappy rash.	
	a. Don't cry - it is not serious.
	b. Lots of babies have this rash– we can soon make it better.
	c. You are really upset about this rash, aren't you?

Exercise 32.c: Praising what a mother and baby are doing right

How to do the exercise:

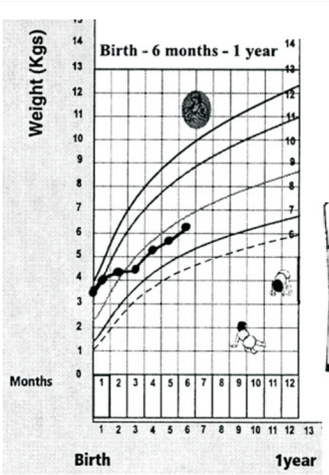
For Stories C and D below, make up a response which praises something the mother and baby are doing right.

Example:

(In your answer, you only need to give ONE answer):	
A mother is giving her ninemonth-old baby fizzy drinks. She is worried that he is not eating his meals well. He is growing well at the moment. She offers him three meals and one snack per day.	*"It is good that you are offering him three meals and one snack per day."* *"Your child is growing well on the food you are giving him."*

To answer:

Story C.	
A 15-month-old child is breastfeeding and having thin porridge and sometimes tea and bread. He has not gained weight for six months, and is thin and miserable.	
Story D. A nine-month-old baby and his mother have come to see you. Here is the growth chart of the baby.	



Exercise 32.d: Giving a little, relevant information

How to do the exercise:
Below is a list of four mothers with babies of different ages.
Beside them are four pieces of information (a, b, c and d) that those mothers may need; but the information is not opposite the mother who needs it most.

Match the piece of information with the mother and baby in the same set for whom it is MOST

RELEVANT AT THAT TIME
After the description of each mother there are four letters.
Put a circle round the letter which corresponds to the information which is most relevant for her.

To answer:

Mothers 1-4		Information
1. Mother with a seven-month old baby	a b c d	a. Children need extra water at this age – about 4-5 cups in a hot climate.
2. Mother with a 15-month-old baby who is getting two meals per day.	a b c d	b. Children who start complementary feeding at six completed months of age grow well.
3. Mother with a 12-month-old baby who thinks that the baby is too old to breastfeed any longer. 4. Mother of a non-breastfed child who is 11 months old.	a b c d a b c d	c. Growing children of this age need three meals plus two snacks per day, in addition to milk. d. Breastfeeding to at least two years of age help a child to grow strong and healthy.

Exercise 32.e: Using simple language

How to do the exercise:

Below are two pieces of information that you might want to give to mothers.
The information is correct, but it uses technical terms that a mother who is not a health worker might not understand.

Rewrite the information in simple language that a mother could easily understand.

Example:

Information:	Using simple language:
Dark-green leaves and yellow - coloured fruit and vegetables are rich in vitamin A.	*"Dark-green leaves and yellow - coloured vegetables help the child to have healthy eyes and fewer infections."*

To answer:

Information:	Using simple language:
1. Breastfeeding beyond six months of age is good as breast milk contains absorbable iron, calories and zinc.	
2. Non-breastfed children aged 14 months should receive protein, zinc and iron in appropriate quantities.	

Exercise 32.f: Making one or two suggestions, not commands

How to do the exercise:
Below are some commands which you might want to give to a mother.
Rewrite the commands as suggestions.

Example:

Command:	**Suggestions:** (In your answer, you only need to give ONE answer):
"You must start complementary foods when your baby is six completed months old."	*"Children who start complementary foods at six completed months grow well and are active and content."*
	"Could you start some foods in addition to milk now that your baby is six completed months old?"

To answer:

Command:	**Suggestions**
"You must use thick foods."	
"Your child should be eating a full bowl of food by one year of age."	

Notes

Session 33

Gathering Information on Complimentary Feeding

Objectives

After completing this session you will be able to gather information on complementary feeding practices by:

- demonstating appropriate use of conselling skills
- observing a mother and child, 6 – 23 months
- using the FOOD INTAKE JOB AID

Introduction

If you are going to counsel a caregiver on complementary feeding you need out find out what the child is eating. This is quite complicated because children eat different things at different times in a day.

In this Session 13 you looked at the FEEDING HISTORY JOB AID. You learnt how to take a feeding history. Now we are going to look at assessing the intake of complementary feeds in more detail.

In Session 4 you learnt about assessing a breastfeed. We talked about how important it is to observe a mother and her baby, and the breastfeed itself. Observation is just as important when you are gathering information about complementary feeding, as it is when you assess a breastfeed.

The FOOD INTAKE JOB AID

A useful way to find out what a child eats is to ask the mother what the child ate yesterday. This information can be used to praise the good feeding practices that are there already and to identify any

Key Messages to help improve practises.

The FOOD INTAKE JOB AID helps you to do this.
The mother is asked to recall everything the child consumed the previous day. This includes all foods, snacks, drinks, breastfeeds and any vitamin or mineral supplements.

INSTRUCTIONS TO COMPLETE FOOD INTAKE JOB AID

1. Greet the mother. Explain that you want to talk about the child's feeding.
2. Fill out Monde birth date, age in completed months or years and today's date.
3. Ask to see the growth chart and observe the pattern of the growth.
4. Start with: *"Mrs Mubita, let us talk about whatMonde ate yesterday."*
5. Continue with: *"As we go through yesterday, tell me all Monde ate or drank, meals, other foods, water or breastfeeds."*
   "What was the first thing you gaveMonde after he woke up yesterday?"
   "Did Monde eat or drink anything else at that time or breastfeed?"
6. If the mother mentions a preparation, such as a porridge or stew, ask her for the ingredients in the porridge or stew.
7. Then continue with:
   "What was the next food or drink or breastfeed Monde had yesterday?"
   "Did Monde eat/drink anything else at that time?"
8. Remember to 'walk' through yesterday's events with the caregiver to help her remember all the food/drinks/breastfeeds that the child had.
9. Continue to remind the mother you are interested in what the child ate and drank yesterday (Mother may talk about what the child eats/drinks in general).
10. Clarify any points or ask caregivers for further information as needed.
11. Mark on the FOOD INTAKE JOB AID the practices that are present. If appropriate, show the mother the pictures of thin and thick consistency (for porridge and mixed foods). Ask her which drawing is most like the food she gave the child. Was it thick, stayed in the spoon and held a shape on the plate, or thin, flowed off the spoon and did not hold its shape on the plate?
12. Praise practices you wish to encourage. Offer 2-3 Key Messages as needed and discuss how the mother might use this information.
13. If the child is ill on that day and not eating, give the Key Message 10 :
    Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly.
14. See the child another day and use the FOOD INTAKE JOB AID 6 – 23 months when the child is eating again.

At your health facility you will need to put copies of the FOOD INTAKE JOB AID, the FOOD INTAKE REFERENCE TOOL and THE THIN AND THICK CONSISTENCY pictures in the screening room, MCH and paediatric in-patient and out-patient departments so that health workers can refer to it as they attend to clients. The information gathered should be integrated into the already existing relevant client records.

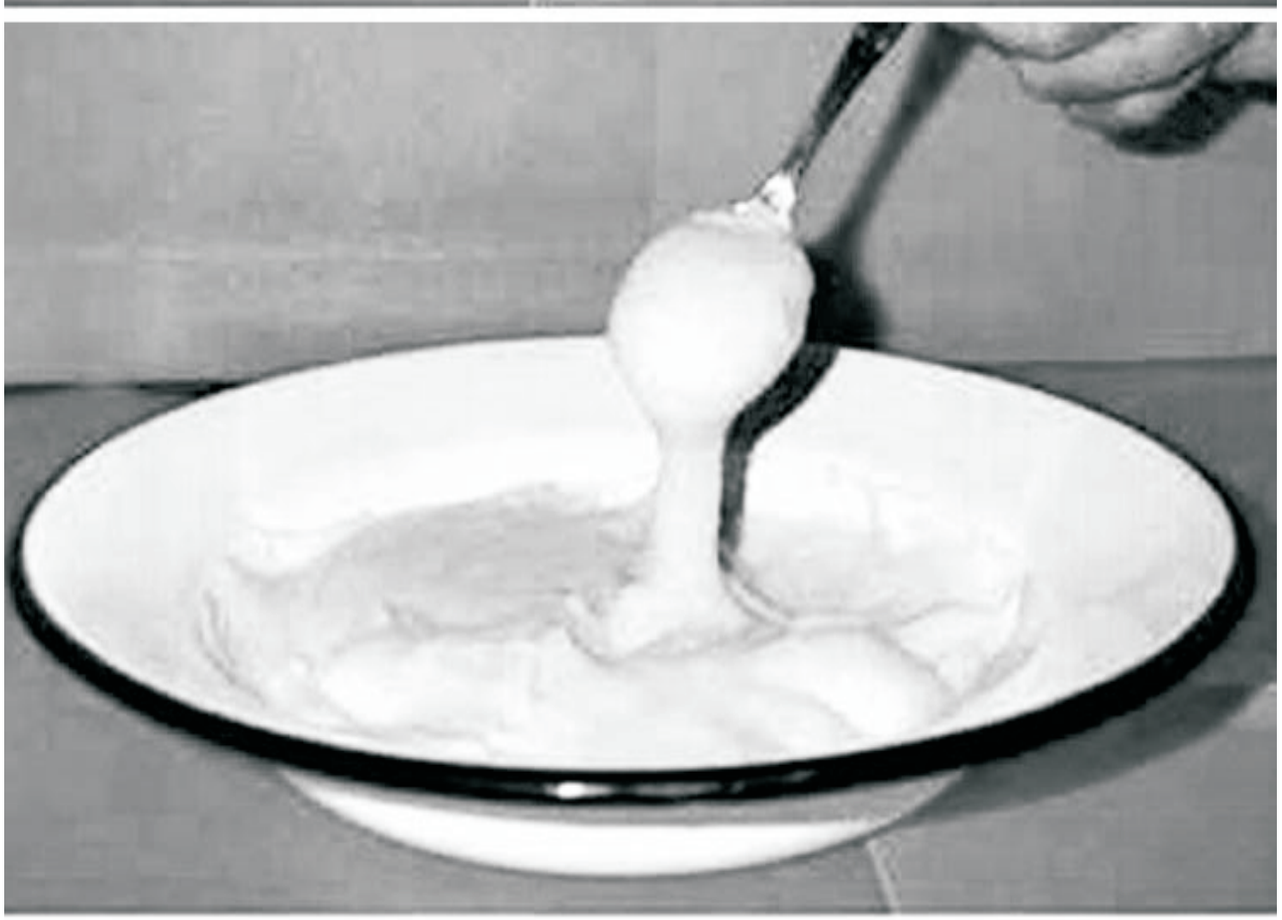
Instructions:

Enter ✓ in the Yes column if the practice is in place.
Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL for the message).

FOOD INTAKE JOB AID		
Child's name		
Date of birth	**Age of child at visit**	
Feeding practice	**Yes / number where relevant**	**Key Message given**
Growth curve rising?		
Child received breast milk?		
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)		
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?		
Child ate a dairy product yesterday?		
Child ate pulses, nuts or seeds yesterday?		
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?		
Child ate sufficient number of meals and snacks yesterday, for his/her age?		
Quantity of food eaten at main meal yesterday appropriate for child's age?		
Mother assisted the child at meals times?		
Child took any vitamin or mineral supplements?		
Child ill or recovering from an illness?		

FOOD INTAKE REFERENCE TOOL		
Feeding Practice	**Ideal Feeding Practice**	**Key Messages to help counsel mothers**
Growth curve rising?		*Look at the shape of the growth curve of the child: is the child growing?*
Child received breast milk?	Yes	Breastfeeding for 2 years of age or longer helps a child to develop and grow strong and healthy
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	3 meals	Foods that are thick enough to stay in the spoon give more energy to the child
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	Animal-source foods should be eaten daily	Animal-source foods are especially good for children to help them grow strong and lively
Child ate a dairy product yesterday?	Try to give dairy products daily	Animal-source foods are especially good for children
Child ate pulses, nuts or seeds yesterday?	If meat is not eaten pulses or nuts should be eaten daily, with an iron enhancer such as a vitamin C rich food	Peas, beans, lentils, nuts and seeds are good for children
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	A dark-green or yellow vegetable or yellow fruit should be eaten daily	Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections
Child ate sufficient number of meals and snacks yesterday, for his/her age?	Child 6 – 8 months: 3 meals Child 9 – 23 months: 3 meals and 1 – 2 snacks	A growing child needs 3 meals plus snacks: give a variety of foods
Quantity of food eaten at main meal yesterday appropriate for child's age?	Child 6 – 8 months: gradually increased to approx. 2/3 cup at each meal Child 9 – 11 months: approx. 3/4 cup at each meal Child 12 – 23 months: approx. a full cup at each meal	A growing child needs increasing amounts of food
Mother assisted the child at meals times?	Yes, assists with learning to eat	A young child needs to learn to eat: encourage and give help… with lots of patience
Child took any vitamin or mineral supplements?	Vitamin and mineral supplements may be needed if child's needs are not met by food intake	*Explain how to use vitamin and mineral supplements if they are needed*
Child ill or recovering from an illness?	Continue to eat and drink during illness and recovery	Encourage the child to drink and eat during illness and provide extra food after illness to help them recover quickly

THIN AND THICK CONSISTENCY



Instructions:

Enter ✓ in the Yes column if the practice is in place.
Enter your initials if a message is given (see FOOD INTAKE REFERENCE TOOL for the message)

FOOD INTAKE JOB AID		
Child's name: *Baba, son of Moda*		
Date of birth: *January 6, 2003*	**Age of child at visit:** *11 months*	
Feeding practice	**Yes / number where relevant**	**Key Message given**
Growth curve rising?	*slowly*	
Child received breast milk?	•	
How many meals of a thick consistency did the child eat yesterday? (use consistency photos as needed)	2	Yes
Child ate an animal-source food yesterday? (meat/fish/offal/bird/eggs)?	•	
Child ate a dairy product yesterday?	•	
Child ate pulses, nuts or seeds yesterday?	•	
Child ate a dark-green or yellow vegetable or yellow fruit yesterday?	•	
Child ate sufficient number of meals and snacks yesterday, for his/her age?	•	
Quantity of food eaten at main meal yesterday appropriate for child's age?		Yes
Mother assisted the child at meals times?	•	
Child took any vitamin or mineral supplements?	-	
Child ill or recovering from an illness?	-	

Practising gathering information on complementary feeding practices

You will use role-play to practise gathering information to assess complementary feeding practices. You will work in small groups, taking turns to be a 'mother' or a 'health worker'. When you are the 'mother', play the part of the story on your card. The 'health worker' gathers information about your child's feeding. The other participants in the group observe.

When you are the 'mother':

- Give yourself and your child names and tell them to your 'health worker'.
- Answer the health worker's questions from your story. Do not give all the information at once.
- If the information to answer a question is not in your story, make up information to fit with the history.
- If your health worker uses good listening and learning skills, and makes you feel that she is interested, you can tell her more.
- When you are the 'health worker':
- Greet the 'mother' and introduce yourself. Ask for her name and her baby's name, and use them.
- Ask one or two open questions to start the conversation and to find out in general how the child is.
- Explain that you would like to learn about how her child is eating. Ask the mother to tell you about the child's eating in the previous day. Prompt as needed. Fill out the FOOD INTAKE JOB AID as you listen.
- Try to praise the things the mother is doing right. At the end of the counselling session try to think suggestions you would make and Key Messages to give to the mother.

When you are observing:

- Follow the pair practice with the FOOD INTAKE JOB AID and observe if the 'health worker' gathers useful information.
- Notice which counselling skills the health worker uses and which she does not use.
- After the role-play, be prepared to praise what the health worker does right, and suggest what she could do better.
-

Notes

Session __: **Women's Nutrition**

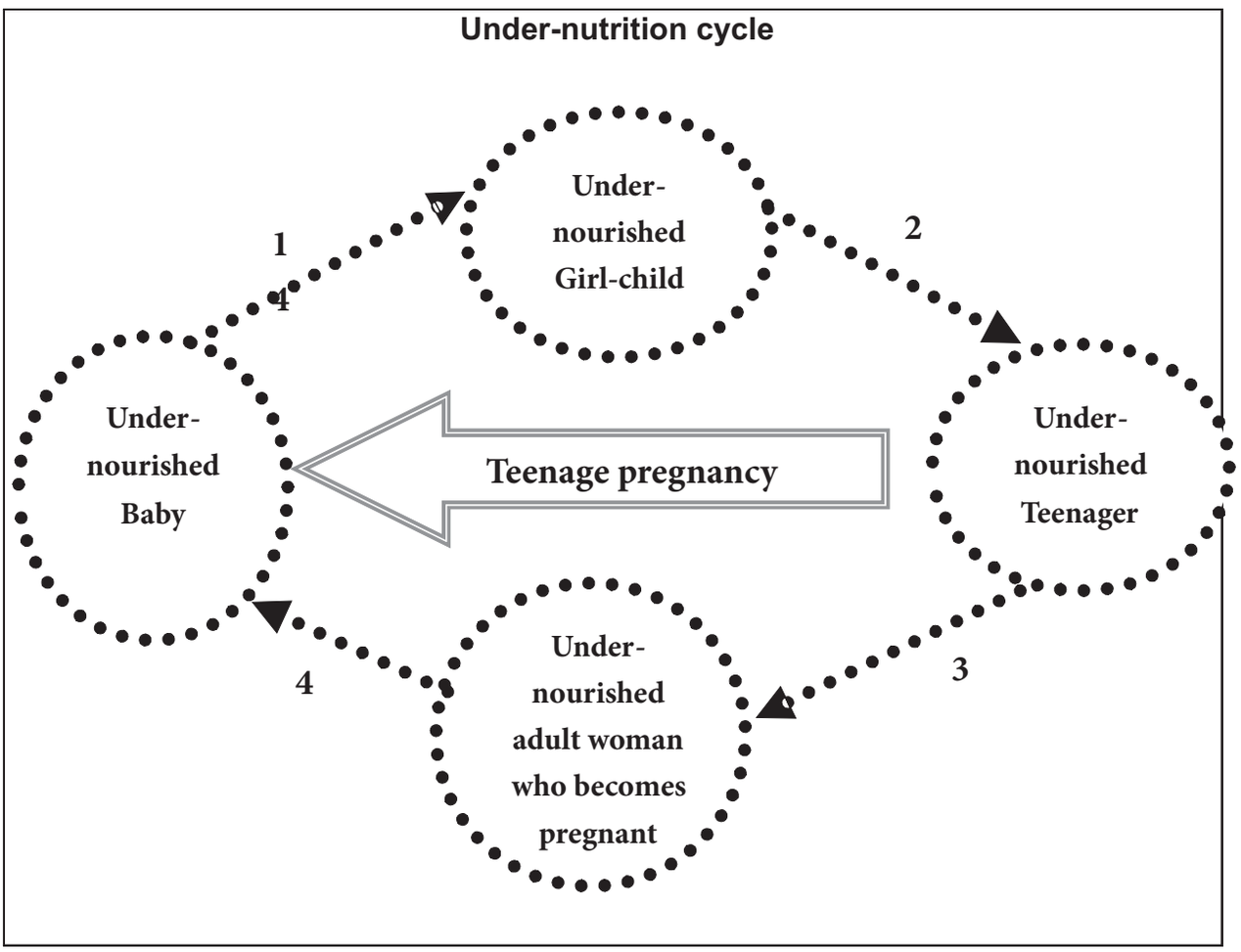
Objectives

After completing this session participants will be able to:

- Explain appropriate nutrition in women
- Describe the under nutrition cycle.
- Describe the nutrition actions that can break the under nutrition cycle

1. Introduction

- Health and nutrition before a woman is pregnant is very important because this sets the foundation of good health for her time of pregnancy.
- She should prepare adequately to ensure that she is well-nourished before and after pregnancy. To attain this wellness, there should be adequate nutrition throughout the woman's life.
- Nutrition for women needs to be adequate while they are still in the mother's womb to ensure that they are born with adequate nutrition status that will support growth and development later in life.
- Appropriate feeding practices should be adhered to right from the time of birth through the second year of life and continued through adulthood.
- Adolescence is a period of rapid stage of growth and development.
- It is important for adolescents to understand that they are growing rapidly and lack of healthy diets can lead to deficiencies.
- An average adolescent's diet should include extra calories, protein, calcium, iron, zinc and most vitamins.



Actions to Break under-nutrition Cycle for Baby and Girl Child

- Encourage early initiation of breastfeeding
- Exclusive breastfeeding for the first six complemented months
- Timely introduction of complementary foods at six completed months with continuation of breastfeeding up to two years or beyond
- Feeding a variety of locally available foods at each serving
- Using iodated salt
- Feeding a child frequently during illness and after recovery
- Encourage other non-feeding actions
  - Appropriate Hygiene,
  - Attending GMP and immunisation sessions,
  - use of insecticide treated Nets
  - Deworming
  - Prevention and treatment of infection
  - Vitamin A supplementation

Actions to Break Malnutrition Cycle for Adolescent

- Nutrition Counselling on health eating habits

- Avoid highly processed / fast foods
- Avoid intake of tea, coffee with meals
- Increase consumption of variety and quantity of locally available foods
- Encourage parents to give boys and girls equal access to education. Under-nutrition decreases when girls / women receive more education.
- Encourage families to delay marriage for young girls.
- Encourage good hygiene practices
- Delay first pregnancy until her own growth is completed
- Preventing and seeking early treatment of infections
- Encouraging use of ITNs

Adolescent pregnancy and its consequences

- In adolescent girls, early marriage and pregnancy will perpetuate both maternal and child under-nutrition.
- The younger the mother, the greater the risk of pregnancy complications such as still births, fistula, death. .
- When pregnant, she needs enough nutrients to support both her baby and her own continued growth and physical development.
- Failure to meet her nutritional needs results in under nutrition and anaemia leading to increased morbidity in mother, lower maternal body weight, lower pregnancy weight gain, giving birth to low birth weight and obvious deficiencies in child-care practices of these young girls.
- Under-nutrition in Adolescents leads to **increased** perinatal mortality, poor child caring practices, neonatal mortality (NNM) and infant mortality rate (IMR).
- In addition, girls who become pregnant have to drop out of school affecting future earning in terms of income. Though they may re-enter school there is an added cost of school and child care.

To reduce on the effects, nutritional counselling is important for adolescent. Many adolescents are underweight prior to pregnancy, so food intake and weight gain are even more important to consider when counselling.

Actions to Break Malnutrition Cycle for Adult Woman

- Eat a variety of locally available foods, 3 to 4 meals a day and healthy snacks in between.
- Preventing and seeking early treatment of infections
- Encourage good hygiene practices
- Delay first pregnancy to 20years of age or more
- Encourage couples to use appropriate family planning methods
- Encourage male involvement
- Encouraging use of ITNs
- Use of Intermittent Presumptive Treatment (IPT) and deworming
- Complete anti-tetanus immunisation for pregnant women.Resting more especially during the third trimester pregnancy
- Giving iron folate supplementation to the mother
- Giving Vitamin A supplementation within 8 weeks of delivery.
- Drink more water atleast 2.5litres per day.

- Use iodated salt but in moderation
- Avoid tea and coffee as these hinder with absorption of nutrients such as iron.
- Avoid alcohol because it is linked with complications for the baby, such as birth defects, mental retardation, low birth weight and reduced growth rate.

Pregnant women who have good nutrition are more likely to give birth to a healthy baby. They are more likely to successfully breastfeed their babies and to have babies and young children who grow and develop well during their first two years.

Pregnant and breastfeeding women need to eat healthy - balanced diet because it:

- makes them feel well and active
- helps the baby to grow healthy and strong
- makes birth easier with less or no complications
- helps them to breastfeed the baby successfully
- Calcium is needed in the body to build strong bones and teeth. It also allows the blood to clot normally, nerves to function properly, and the heart to beat normally. Eat or drink dairy products or foods rich in calcium.

If pregnant:

- the mother needs more energy than usual, particularly towards the end of the pregnancy.

If Breastfeeding

- the mother needs more energy when breastfeeding than during pregnancy because the mother has to feed herself and the baby.
- A woman should wait at least 2 to 3 years before getting pregnant again. After pregnancy and breastfeeding, the body needs time to recover and rebuild strength. If the body is not strong and healthy, the woman is at higher risk of miscarriages and of giving birth to a sick or undernourished baby.
- Lactational Amenorrhea Method (LAM) is another way that can help a woman space her children. This can happen if the mother is exclusively breastfeeding, has not yet started menses and the infant is less than six months of age. LAM is more than 98% effective if woman meets the three criteria mentioned above.
- A malnourished mother should be encouraged to eat a health balanced diet more than normal amounts and encourage to breast feed the baby even if she is undernourished.
- Breastfeeding problems such as sore nipples, swollen breasts, thrush in the baby's mouth should be attended to quickly.
- Even if one is overweight, in pregnancy it is not an acceptable time to lose weight. The mother or the baby could be missing essential nutrients for optimal growth.
- Regular physical activity or exercise during pregnancy promote muscle tone and strength needed for labour and delivery, improves circulation and body posture, reduces discomforts such as swelling, leg cramps, and shortness of breath, backache, varicose veins and constipation.

Maternal smoking can cause serious complications including premature separation of the placenta (a life-threatening condition for the fetus), pre-term delivery and fetal growth retardation.

Myths/taboos/cultural practices during pregnancy and breastfeeding

- There are certain practices or food beliefs in communities that may affect maternal nutrition negatively or positively. These are opinions that are enforced by communities and keep on changing with improvement in innovations. It is important to be aware of these beliefs and take action whenever necessary to improve nutrition.

- Cravings during pregnancy are quite common. Care should be taken to ensure that cravings for unhealthy foods such as those high in calories (fried potatoes (chips) chocolates, ice creams) and salt do not hinder consumption of health foods such as fruits, vegetables, whole grains and legumes that are rich in nutrients needed for growth

- Some cultures promote eating to have large babies while others promote less food consumption to have small babies that pose less danger during childbirth. These beliefs should be carefully dealt with to promote good nutrition.

- Some taboos observed during pregnancy and lactation put restriction on certain food intake that may provide good nutrition. The belief that colostrum is dirty and it should be thrown away for example, denies the child of the best first immunization and nutrient dense food in its life.

Consequences for poor maternal nutrition

On the woman's health

- Increased risk of maternal complications and death
- Increased infection
- Anaemia
- Lethargy and weakness, lower productivity
- obvious deficiencies in child-caring practices of these young girls

On the unborn baby and infant health

- Increased risk of foetal, neonatal, and infant death
- Intrauterine growth retardation, low birth weight, prematurity
- Birth defects
- Cretinism
- Brain damage
- under-nutrition in child because of poor child caring practices

- If a woman is undernourished she has increased risk of complications due to small borne structure and death due to bleeding and other complication increases.
- The pregnant woman may also suffer from increased risk to infection due to weakened immune system
- Anaemia may lead to Lethargy and weakness that may affect the productivity of the pregnant and lactating mother.

- The effects of under-nutrition in a pregnant woman extends to a foetus and baby by increasing risk of death and retarded growth while in the womb.
- It may further result in low birth weight, prematurity, birth defects, cretinism and brain damage to the foetus and baby.

Table--- Weight Gain Recommendations for Pregnancy

Pre-pregnancy Weight Category	**Recommended Total Gain (Goal)** (Kgs)
BMI < 19.8	12.5 – 18.0
BMI 19.8 to 26.0	11.5 – 16.0
BMI > 26.0 to 29.0	7.0 – 11.5

1. *Institute of Medicine. Nutrition During Pregnancy, 1990.In Linkages* ***Maternal Nutrition During Pregnancy and Lactation.*** *BMI = body mass index (weight in kg divided by height in meters squared, or kg/m2)*

- **Weight Gain Recommendations for Pregnancy** is based on pre-pregnancy weight.
- Individual energy requirements vary according to pre-pregnancy height and weight, metabolic rate, and activity level. However, on average a woman is expected to gain weight by increasing in the range of 11.5kg to 12.5kg during pregnancy.
- Energy requirements will increase in special circumstances such as adolescence, multiple pregnancies, and HIV infection.
- Assess the nutritional situation of women of reproductive age (15-49yrs) and tailor antenatal care messages about dietary intake, healthy levels of weight gain during pregnancy, and gradual weight loss during lactation according to pre-pregnancy body mass index (BMI).

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Session 34

Feeding Techniques

Objectives

After completing this session you will be able to:

- describe feeding practices and their effect on the child's food intake
- explain to families specific techniques to encourage a young child to eat
- list the Key Message from this session

Feeding care practices and their effect on intake

A child needs food, health and care to grow and develop. Even when food and health care are limited, good care giving can help make best use of these limited resources.

Care refers to the behaviours and practices of the caregivers and family that provide the food, health care, stimulation and emotional support necessary for the child's healthy growth and development. An important time to use good care practices is at mealtimes – when helping young children to eat.

RESPONSIVE FEEDING PRACTICES

Assist children to eat, being sensitive to their cues or signals.
Feed slowly and patiently, encourage but do not force.
Talk to children during feeding with eye-to-eye contact.

Assist children to eat, being sensitive to their cues or signals

A child needs to learn how to eat, to try new food tastes and textures. A child needs to learn to chew, move food around the mouth and to swallow food. The child needs to learn how to get food effectively into the mouth, how to use a spoon and how to drink from a cup.

Therefore, it is very important also to talk to caregivers and offer suggestions about *how* to encourage the child to learn to eat the foods offered. This can help families to have happier meal times.

Families tend to feed their young children in one of three different ways:

- One way is **high control** of the feeding by the caregiver who decides when and how much the child eats. This may include force-feeding.

- Another feeding style is that the **children are left to feed themselves**. The caregiver believes that the child will eat if hungry. The caregiver may also believe when the child stops eating that they have had enough to eat.

- The third style is feeding **in response to the child's cues** or signals using encouragement and praise.

Feed slowly and patiently, encourage but do not force.

RESPONSIVE FEEDING TECHNIQUES

- Respond positively to the child with smiles, eye contact and encouraging words
- Feed the child slowly and patiently with good humour
- Try different food combinations, tastes and textures to encourage eating
- Wait when the child stops eating and then offer again
- Give finger foods that the child can feed him/herself
- Minimize distractions if the child loses interest easily
- Stay with the child through the meal and be attentive.

Talk to children during feeding with eye to eye contact

Feeding times are periods of learning and love. Children may eat better if feeding times are happy. Feed when the child is alert and happy. If the child is sleepy or over-hungry and upset, he may not eat well. Regular mealtimes and the focus on eating without distractions, may also help a child learn to eat.

Key Message 9

A young child needs to learn to eat: encourage and give help
…with lots of patience.

Notes

Session 35

Practical Session 4

Gathering information on complementary feeding practices

Objectives

After completing this session participants will be able to:

- demonstrate how to gather information about complementary feeding using counselling skills and the FOOD INTAKE JOB AID
- provide information about complementary feeding and continuing breastfeeding to a mother of a 6-24 month old child

These notes are a summary of the instructions that the trainer will give you about how to do the practical session. Try to make time before hand to read them to remind and guide you about what to do during the session.

During the practical session, you will work in small groups of 3-4 and take turns to talk to a mother while the others in your group observe.

When you talk with a mother:

Introduce yourself to the mother and ask for permission to talk with her. Introduce your group and explain that you are interested in learning about feeding young children in general.
Find a chair or stool to sit on, so you are at the same level as the caregiver.
Practise as many of the counselling skills as possible as you gather information from the mother using the FOOD INTAKE JOB AID. Listen to what the mother is saying and try not to ask a question if you have been told the information already.

Use the information you have gathered and then try to praise two things that are going well and offer the mother two or three pieces of relevant information that are useful at the time.

If the mother has any question about feeding her child, encourage her to discuss it with their health worker or health facility.

When you are the observer:

Mark a ✓ on the COUNSELLING SKILLS CHECKLIST for every skill that you observe the 'counsellor' practising. Remember to observe what the 'counsellor' is doing rather than thinking about what you would say if you were talking to the mother. The observer does not ask the mother any questions.
Remember to use your counselling skills when giving feedback to the participant who was doing the counselling.
Notice other feeding practices in the area such as:

× if children are eating any food or drinks
× whether children are given a bottle or soother/pacifier while waiting
× general interaction between mothers and children any posters or other information on feeding in the area.

Notes

Session 36

Checking Understanding and Arranging Follow-up

Objectives

After completing this session you will be able to:

- demonstrate how to ensure that a mother understands information provided by using checking questions
- arrange referral or follow - up of a child

Checking understanding

Often you need to check that the caregiver understands a practice or action they plan to carry out. Ask open questions to find out if further explanation is needed. Avoid asking closed questions, because they suggest the answer and can be answered with a simple 'yes' or 'no'. They do not tell you if the caregiver really understands.

Checking understanding also helps to summarize what you have talked about.

Arrange follow-up or referral

All children should receive regular visits to check their general health and feeding. If a child has a difficulty that you are unable to help with, you may need to refer him for more specialized care.

Follow-up is especially important if there has been any difficulty with feeding, or any major change in the feeding methods. Ask the caregiver to visit the health facility within two weeks for follow-up.

This follow-up includes checking what foods are used and how they are given, checking the child's weight, general development and care.

The follow-up visits also give an opportunity to praise and reinforce practices thus building the caregiver's confidence, to offer relevant information and to discuss suggestions as needed.

It is especially important for children with special difficulties, for example children whose mothers are living with HIV to receive regular follow-up from health workers. These children are at special risk. In addition it is important to follow-up how the mother is coping with her own health and difficulties.

Notes

Session 37

Feeding During Illness and Low-Birth-Weight Babies

Objectives

After completing this session you will be able to:

- explain why children need to continue to eat during illness
- describe appropriate feeding during illness and recovery
- describe feeding of low-birth-weight babies
- estimate the volume of milk to offer to a low-birth-weight baby
- list the Key Message from this session

Why children need to continue to eat during illness

During infections, the child needs more energy and nutrients to fight the infection. If they do not get extra food, their fat and muscle tissue is used as fuel. This is why they lose weight, look thin and stop growing.

The goal in feeding a child during and after illness is to have him return to the growth he had before illness.

Key Message 10

Encourage the child to drink and to eat during illness and provide extra food after illness to help a child recover quickly.

Appropriate feeding during illness and recovery

Sick children often need *extra* drinks and food during illness – for example if they have fever or diarrhoea. A sick child may prefer breastfeeding to eating other foods. Do not withhold food from a sick child.

FEEDING THE CHILD WHO IS ILL

- Encourage the child to drink and to eat – with lots of patience
- Feed small amounts frequently
- Give foods that the child likes
- Give a variety of nutrient-rich foods
- Continue to breastfeed – often ill children breastfeed more frequently

Feeding during recovery

A child's appetite may be poor during illness. Even with encouragement to eat, the child may not eat well. The child's appetite usually increases after the illness so it important to continue to give extra attention to feeding after the illness. This is a good time for families to give extra food so that lost weight is quickly regained. This allows 'catch-up' growth.

Young children need extra food until they have regained all their lost weight and are growing at a healthy rate.

FEEDING DURING RECOVERY

- Give **extra** breastfeeds
- Feed an **extra** meal
- Give an **extra** amount
- Use **extra** rich foods
- Feed with **extra** patience.

Low-birth-weight babies

The term low-birth-weight (LBW) means a birth weight of less than 2,500 grams. This includes babies who are born before term, and who are premature and babies who are small for gestational age. Babies may be small for both these reasons.

In Zambia, 16% of all babies are low-birth-weight (DHS 2001/2).

Low-birth-weight babies are at particular risk of infection and hyppothemia. They need breast milk more than larger babies. To prevent hypotemia Skin-to-skin contact between a mother and baby has been found to help both bonding and breastfeeding, probably because it stimulates the secretion of prolactin and oxytocin. If a baby is too sick to move, contact can be between the mother's hand and the baby's body. If a baby is well enough, let his mother hold him next to her body. Usually the best place is between her breasts, inside her clothes. This is called *kangaroo care.* It has the following advantages:

- The warmth of the mother's body keeps her baby warm. He does not get cold, and he does not use up extra energy to keep warm. There is less need for incubators.
- The baby's heart works better, and he breathes more regularly.
- The baby cries less and sleeps better.
- It is easier to establish breastfeeding.

Kangaroo care can be provided by any caregivers.

LBW babies need breast milk yet they are given artificial feeds more often than larger babies.

Many LBW babies can breastfeed without difficulty. Babies born at term, who are small-for-dates, usually suckle effectively. They are often very hungry and need to breastfeed more often than larger babies, so that their growth can catch up.

Babies who are born preterm may have difficulty suckling effectively at first. But they can be fed on breast milk by tube or cup, and helped to establish full breastfeeding later. Breastfeeding is easier for these babies than bottle feeding.

Mothers of LBW babies need skilled help to express their milk and to cup-feed.

It is important to start expressing on the first day, within six hours of delivery if possible. This helps to

start breast milk to flow, in the same way that suckling from soon after delivery helps breast milk to 'come in'.

If a mother can express just a few millilitres of colostrum it is valuable for her baby.
Babies of about 32 weeks gestational age or more are able to start suckling on the breast.
Babies between about 30-32 weeks gestational age can take feeds from a small cup, or from a spoon.
Babies below 30 weeks usually need to receive their feeds by a tube in hospital.

Let the mother put her baby to her breast as soon as he is well enough. He may only root for the nipple and lick it at first, or he may suckle a little. Continue giving expressed breast milk by cup to make sure the baby gets all that he needs.

When a LBW baby starts to suckle effectively, he may pause during feeds quite often and for quite long periods. For example, he may take 4-5 sucks and then pause for up to 4 or 5 minutes. It is important not to take him off the breast too quickly. Leave him on the breast so that he can suckle again when he is ready. He can continue for up to an hour if necessary. Offer a cup-feed after the breastfeed.

Make sure that the baby suckles in a good position. Good attachment may make effective suckling possible at an earlier stage.

The best positions for a mother to hold her LBW baby at the breast are:

- across her body, holding him with the arm on the opposite side to the breast
- the underarm position.

Low-birth-weight babies need to be followed up regularly to make sure that they are getting all the breast milk that they need.

Low-birth-weight babies of mothers who are HIV-positive and who have chosen to replacement feed should also be followed regularly to make sure they are growing. Encourage mothers to feed the replacement milk to their babies by cup.

AMOUNT OF MILK FOR LOW-BIRTH-WEIGHT BABIES WHO CANNOT BREASTFEED

What milk to give

Choice 1: Expressed breast milk (EBM) (if possible from the baby's mother)

Choice 2: Formula made up according to the instructions

Babies who weigh less than 2.5 kg (Low-birth-weight)

Start with 60 ml/kg body weight

Increase the total volume by 20 ml per kg per day, until the baby is taking a total of 200 ml per kg per day

Divide the total into 8 -12 feeds, to feed every 2 -3 hours

Continue until the baby weighs 1800 g or more, and is fully breastfeeding

Check the baby's 24- hour intake

The size of individual feeds may vary

Notes

Session 38

Food Demonstration

Objectives

After completing this session you will be able to:

- prepare a plate of food suitable for a young child
- explain reasons for their choice of foods
- conduct a food demonstration with a mother

To teach a new skill or behaviour, you could:

- tell the mother how to do it - this is good
- ask the mother to watch while you talk and prepare the food – this is better
- help the mother to actually prepare the food themselves – this is the BEST method

AMOUNTS OF FOODS TO OFFER			
Age	**Texture**	**Frequency**	**Amount of food an average child will usually eat at each meal 1**
6-8 months	Start with thick porridge, well mashed foods	2-3 meals per day plus frequent breastfeeds	Start with 2-3 tablespoonfuls per feed
	continue with mashed family foods	Depending on the child's appetite 1-2 snacks may be offered	increasing gradually to ½ of a 250 ml cup
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	1/2 of a 250 ml cup/bowl
12-23 months	Family foods, chopped or mashed if necessary	3-4 meals plus breastfeeds Depending on the child's appetite 1-2 snacks may be offered	3/4 to 1 250 ml cup/bowl
If baby is not breastfed, give in addition: 1-2 cups of milk per day, and 1-2 extra meals per day.			

[1] Adapt the chart to use a suitable local cup/bowl to show the amount. The amounts assume an energy density of 0.8 to 1 Kcal/g.

EXERCISE 38.A PREPARING A YOUNG CHILD'S MEAL		
Group:		
Task	Achieved	Comments
Mixture of foods: Staple		
Animal-source food		
Bean / pulse *plus* vitamin C fruit or vegetable		
Dark-green vegetable or yellow-coloured fruit or vegetable		
Consistency		
Amount		
Prepared in a clean and safe manner		

Key Messages:

1.

2.

Watching a demonstration is useful. However, it is easier to remember a new skill if a mother actually prepares the food herself.

How you assist a mother to learn is important. Your counselling can also be used when helping a mother to learn a new skill.

You can use your skills to:

- use open questions to find out if the mother understands
- avoid judging words and sounding critical, and praise the mother
- explain things in a simple and suitable way to help her understand.

Whenever possible, let the mother prepares the food herself, with your support, until she is confident and competent. Watching a health worker prepare foods is not enough, particularly if there is a difficulty with the child's weight gain or feeding. Supportive teaching can help to build her confidence as well as making it easier for her to learn.

Planning Guide for a Group Demonstration of the Preparation of Young Children's Food

Gather the Equipment and Materials

- Cooked food for the preparation
- Plates and utensils for the preparation
- Utensils for mothers and infants to taste the preparation
- Table on which to prepare the food
- Facilities for washing hands

Review Objectives of the Demonstration:

1. Teach mothers how to prepare a simple and nutritious food for young children using local ingredients (to learn through doing).
2. Demonstrate to mothers the appropriate consistency (thick) for these foods.
3. Demonstrate the taste and acceptability of the food preparations for mothers and young children.

Decide the Key Messages

- Select 1-3 Key Messages to say to mothers (see Key Messages, inside back cover)
- Follow each message with a checking question (a question that you cannot answer with a simple 'yes' or 'no').

For example:

1. Foods that are thick enough to stay in the spoon give more energy to the child.
   Checking question: What should the consistency of foods be for a small child? (*Answer:* thick, so the food stays in the spoon).

2. Animal-source foods are especially good for children, to help them grow strong and lively.
   Checking question: What animal-source food could you give your child in the next two days?
   (*Answer:* meats, fish, egg, milk, cheese - these are special foods for the child).

3. A young child needs to learn to eat: encourage and give help … with lots of patience.
   Checking question: How should you feed a child learning to eat?
   (*Answer:* with patience and encouragement).

Give the Participatory Demonstration

- Thank the mothers for coming.
- Present the recipe that will be prepared.
- Hold up each of the ingredients. Mention any ingredients that can be easily substituted, for example oil for butter, powdered milk or tinned milk (unsweetened) for fresh milk, or cooking water or boiled water if no milk is available.
- Invite at least two mothers to prepare the food. If possible, have enough ingredients to have 2 or 3 pairs of mothers to participate in the preparation, each pair working with their own plate of ingredients and utensils.
- Talk the mothers through each step of the preparation, for example:
  - Wash hands
  - Mashing a potato

- Adding the correct quantity of fish or egg, etc.
- Adding correct quantity of milk or water.

- Point out the consistency of the preparation as the mothers are making it, and demonstrate with a spoon when they are finished.

- Reinforce the use of local inexpensive and nutritious ingredients, especially using foods from the family pot.

- Ask the mothers if they would have difficulty in obtaining any of the ingredients (suggest alternatives). Ask the mothers if they could prepare the food in their household.

Offer Food Preparations to Taste

- Invite the mothers who prepared the food to taste it in front of the rest and give their opinion (use clean spoons).
- Invite all the mothers to taste the preparation and to give it to their small children (who are at least six months old). Use a clean spoon for each child.
- Use this time to stress the Key Messages you decided to use when planning the demonstration.

Ask Checking Questions

- What are the foods used in this recipe? Wait for responses.
- Then the health worker reads out the list of the foods again.
- Ask the mothers when they think they can prepare this food for their young child (e.g. tomorrow).
- You may repeat the Key Messages and checking questions again.

Conclude Demonstration

- Thank the mothers for coming and participating.
- Ask the mothers to share their new knowledge of preparing this food with a neighbour who has small children.
- Invite mothers to visit the health facility for nutrition counselling and growth checks.

Recipes for Food Demonstration - fill in the food and the amount needed

Recipe 1

Family food for a 10-month-old child's main course
(about ¾ cupful – a cup/bowl that holds 250 ml)

Staple:_____

Meat or fish or beans:_____

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption: _____

Dark-green or yellow vegetable: _____

Milk or hot boiled water or soup water if milk is not available: 1 Tablespoon (large spoon)

Wash hands and use clean surface, utensils and plates.
Take the cooked foods and mash them together.
Add the oil or margarine and mix well.

Check the consistency of the mashed food with a spoon – it should stay easily on the spoon without dripping off.
Add the milk or water to the mashed foods and mix well. Only add a small amount of milk or water to make the right consistency.

Recipe 2

Family food for a 15-month-old child's main course (at least a full cup)

Staple:_____

Meat or fish or beans:_____

If using beans or egg instead of meat, include a source of vitamin C to help iron absorption:
_____

Dark-green or yellow vegetable: _____

Oil or margarine: 1 teaspoon (small spoon)

Wash hands and use clean surface, plates and utensils.
Take the cooked foods cut them into small pieces or slightly mash them together (depending on the child's age).
Add the oil or margarine and mix well.

Gather the Equipment and Materials

- Cooked food for the preparation
- Plates and utensils for the preparation
- Utensils for mothers and infants to taste the preparation
- Table on which to prepare the food
- Facilities for washing hands

Review Objectives for the Demonstration:

1. Teach mothers how to prepare a simple and nutritious food for young children using local ingredients (to learn through doing).
2. Demonstrate to mothers the appropriate consistency (thick) for these foods.
3. Demonstrate the taste and acceptability of the food preparations for mothers and young children.

Decide the Key Messages

Select 1-3 Key Messages to say to mothers (see Key Messages, inside back cover)
Follow each message with a checking question (a question that you cannot answer with a simple 'yes' or 'no')

For example:

1. Foods that are thick enough to stay in the spoon give more energy to the child.
   Checking question: What should the consistency of foods be for a small child?
   (Answer: thick, so the food stays in the spoon).

2. Animal-source foods are especially good for children, to help them grow strong and healthy.
   Checking question: What animal-source food could you give your child in the next two days?
   (Answer: meats, fish, egg, milk, cheese – these are special foods for the child).

3. A young child needs to learn to eat: encourage and give help…with lots of patience.
   Checking question: How should you feed a child learning to eat?
   (Answer: with patience and encouragement).

Give the Participatory Demonstration

- Thank the mothers for coming.
- Present the recipe that will be prepared.
- Hold up each of the ingredients. Mention any ingredients that can be easily substituted, for example oil for butter, powdered milk or tinned milk (unsweetened) for fresh milk, or cooking water or boiled water if no milk is available.
- Invite at least two mothers to prepare the food. If possible, have enough ingredients to have 2 or 3 pairs of mothers to participate in the preparation, each pair working with their own plate of ingredients and utensils.
- Talk the mothers through each step of the preparation, for example:
  * Wash hands
  * Mashing a potato or _____
  * Adding the correct quantity of fish or egg, etc.
  * Adding correct quantity of milk or water.

- Point out the consistency of the preparation as the mothers are making it, and demonstrate with a spoon when they are finished.

- Reinforce the use of local inexpensive and nutritious ingredients, especially using foods from the family pot.

- Ask the mothers if they would have difficulty in obtaining any of the ingredients (suggest alternatives). Ask the mothers if they could prepare the food in their household.

Offer Food Preparations to Taste

- Invite the mothers who prepared the food to taste it in front of the rest and give their opinion (use clean spoons).
- Invite all the mothers to taste the preparation and to give it to their small children (who are at least 6 months old). Use a clean spoon for each child.
- Use this time to stress the Key Messages you decided to use when planning the demonstration.

Ask Checking Questions

- What are the foods used in this recipe? Wait for responses.
- Then the health worker reads out the list of the foods again.
- Ask the mothers when they think they can prepare this food for their young child (e.g. tomorrow.)
- You may repeat the Key Messages and checking questions again.

Conclude Demonstration

- Thank the mothers for coming and participating.
- Ask the mothers to share their new knowledge of preparing this food with a neighbour who has small children.
- Invite mothers to visit the health facility for nutrition counselling and growth checks.

Recipes for Food Demonstration - fill in the food and the amount needed

Notes

Session 39

Follow-up After Training

Objectives

After completing this session you will be able to:

- describe the contents and arrangement of the table of competencies expected to be acquired
- describe components of the follow - up session
- list the tasks to be completed for the follow - up session

You will receive a follow-up session between one and three months after this course. This follow-up is not an exam or a test. It is to designed to help you to continue to learn the competencies expected of participants, and to help you with any difficulties you may have come across in infant feeding when you return to your facilities.

The trainer who comes to conduct this follow-up session might be one of the trainers who has facilitated on this course or another trainer who you may not have met. However, it will be someone who is experienced in infant feeding counselling and who is a trainer on this course.

Competencies

On page 241 of your Manual you will see a table of competencies. To become competent in something you need to have the relevant knowledge and also the relevant skills. The table has three columns – a column for the competency, a column for the knowledge required and a column for the skills required. Most people find that they obtain the 'knowledge' part of the competency more quickly than the 'skills' part.

You will see that the competencies at the top of the table are essential for managing many situations. For example, the counselling skills that you have learnt in this course will be used in most situations. As you go further down the table you will see situations where you have to correctly apply a number of the competencies that are higher up in the table.

You may feel that you already have acquired much of the knowledge listed in the table from attending this course. However, you may feel that you need much more practice to develop the skills listed - for example the skill to cup-feed a low-birth-weight baby or the skill to use counselling skills to gather information on complementary feeding using the FOOD INTAKE JOB AID.

When you go back to your facility you will have the opportunity to practise many of these skills. The more you practise the more skilled you will become.

The follow-up session

The follow-up session will take one full day. The trainer who is coming to assess you will make arrangements with your facility for this follow-up to occur.

The morning will be practical sessions and the afternoon will be used to go over written exercises and

to discuss any difficulties you have had. This is the time to discuss any difficult cases you may have seen.

If there are a few of you at one facility the afternoon discussion can take place together, but the written exercises will be individual.

The competencies that you will be assessed on in the morning are all in the table you have in your Manual. You may be taken to the post-natal ward and asked to teach a mother with a new born baby to position and attach her baby. Or you may be asked to counsel a mother with HIV on infant feeding options. Or you may be asked to plot and interpret a child's growth chart.

Preparation for the follow-up session

There are some things you need to prepare for the follow-up session.

1. Complete the exercises on page 251 of your Manual. These are all exercises on breastfeeding difficulties so that you can practise applying the knowledge and counselling skills that you have learnt. Complete your answers in pencil your Manual, as you have been doing during this course. During your follow-up session the trainer will go over these exercises individually with you.

2. Complete the log of skills practised on page 250 of your Manuals. This log has three columns. There is one column for skills, one column for the date and one column for any comments. When you practise a skill at your facility you should list the skill and write the date next to it and any comments. Remember the list of skills which you are expected to learn are on pages 244-249 of your Manual.

So, for example. On the 1st July 2005 you practise the skill of assessing a breastfeed using the BREASTFEED OBSERVATION JOB AID. You would write the date in the first column and the skill in the second column.

Perhaps you found that the mother was not holding her breast in the recommended way, but was using the scissor grip. You might have suggested to her that she tries to hold her breast in a different way. Note this down in the third column.

Make particular notes of any difficult cases you have had to deal with so that you can discuss these with your trainer when she comes for follow-up.

3. Finally on page 252 of your Manuals there is a place where you can note down any difficulties you have experienced in trying to implement what you have learnt during the course. For example, you may have had difficulty counselling mothers about complementary feeding practices because the clinic in which you work is too crowded and there are too few staff. You may have had difficulties trying to help mothers who have had a caesarean section to give the first breastfeed because their babies are kept in the nursery after delivery. These difficulties can be discussed with your trainer at the follow-up session.

During the afternoon of the follow-up session the trainer will look at your log of skills with you and see which skills you have been able to practise.

Competencies participants will be expected to master during training and follow-up

Competency	Knowledge	Skills
1. Use Listening and Learning skills to counsel a mother	• List the 6 Listening and Learning skills • Give an example of each skill	• Use the Listening and Learning skills appropriately when counselling a mother on feeding her infant or young child
2. Use Confidence and Support skills to counsel a mother	• List the 6 Confidence and Support skills • Give an example of each skill	• Use the Confidence and Support skills appropriately when counselling a mother on feeding her infant or young child
3. Assess a breastfeed	• Explain the contents and arrangement of the BREASTFEED OBSERVATION JOB AID	• Assess a breastfeed using the BREASTFEED OBSERVATION JOB AID • Recognize a mother who needs help using the BREASTFEED OBSERVATION JOB AID
4. Help a mother to position a baby at the breast	• Explain the 4 key points of positioning • Describe how a mother should support her breast for feeding • Explain the main positions – sitting, lying, underarm and across	• Recognize good and poor positioning according to the 4 key points • Help a mother to position her baby using the 4 key points, in different positions
5. Help a mother to attach her baby to the breast	• Describe the relevant anatomy and physiology of the breast and suckling action of the baby • Explain the 4 key points of attachment	• Recognize signs of good and poor attachment and effective suckling according to the BREASTFEED OBSERVATION JOB AID • Help a mother to get her baby to attach to the breast once he is well positioned

Competency	Knowledge	Skills
6. Explain to a mother about the optimal pattern of breastfeeding	• Describe the physiology of breast milk production and flow • Describe unrestricted (or demand) feeding, and implications for frequency and duration of breastfeeds and breast usage	• Explain to a mother about the optimal pattern of breastfeeding and demand feeding
7. Help a mother to express her breast milk by hand	• List the situations when expressing breast milk is useful • Describe the relevant anatomy of the breast and physiology of lactation • Explain how to stimulate the oxytocin reflex • Describe how to select and prepare a container for expressed breast milk • Describe how to store breast milk	• Explain to a mother how to stimulate her oxytocin reflex • Rub a mother's back to stimulate her oxytocin reflex • Help a mother to learn how to prepare a container for expressed breast milk • Explain to a mother the steps of expressing breast milk by hand • Observe a mother ex pressing breast milk by hand and help her if necessary
8. Help a mother to cup-feed her baby	• List the advantages of cup-feeding • Estimate the volume of milk to give a baby according to weight • Describe how to prepare a cup hygienically for feeding a baby	• Demonstrate to a mother how to prepare a cup hygienically for feeding • Practise with a mother how to cup -feed her baby safely • Explain to a mother the volume of milk to offer her baby and the number of feeds in 24 hours
9. Plot and interpret a growth chart	• Explain the meaning of the reference curves • Describe where to find the age and the weight of a child on a growth chart	• Plot the weights of a child on a growth chart • Interpret a child's individual growth curve
10. Take a feeding history for an infant or y oung child 0-24 months	• Describe the contents and arrangement of the FEEDING HISTORY JOB AID	• Take a feeding history using the job aid and appropriate counselling skills according to the age of the child
11. Teach a mother the 10 Key Messages for complementary feeding	• List and explain the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6) • Explain when to use the food consistency pictures, and what each picture shows • List and explain the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7 - 8) • List and explain the Key Message about how to feed an infant or young child (Key Message 9) • List and explain the Key Message about how to feed an infant or young child during illness (Key Message 10)	• Explain to a mother the 6 Key Messages about what to feed to an infant or young child to fill the nutrition gaps (Key Messages 1-6) • Use the food consistency pictures appropriately during counselling • Explain to a mother the 2 Key Messages about quantities of food to give to an infant or young child (Key Messages 7-8) • Explain to a mother the Key Message about how to feed an infant or young child (Key Message 9) • Explain to a mother the Key Message about how to feed an infant or young child during illness (Key Message 10)

Competency	Knowledge	Skills
12. Counsel a pregnant woman about breastfeeding	• List the Ten Steps to Successful Breastfeeding • Describe how the International Code of Marketing of Breast-milk Substitutes helps to protect breastfeeding • Discuss why exclusive breastfeeding is important for the first six months • List the special properties of colostrum and reasons why it is important	• Use counselling skills appropriately with a pregnant woman to discuss the advantages of exclusive breastfeeding • Explain to a pregnant woman how to initiate and establish breastfeeding after delivery, and the optimal breastfeeding pattern • Apply competencies 1, 2 and 6
13. Help a mother to initiate breastfeeding	• Discuss the importance of early contact after delivery and of the baby receiving colostrum • Describe how health care practices affect initiation of exclusive breastfeeding	• Help a mother to initiate skin-to-skin contact immediately after delivery and to introduce her baby to the breast • Apply competencies 1, 2, 4 and 5
14. Support exclusive breast feeding for the first six months of life	• Describe why exclusive breastfeeding is important • Describe the support that a mother needs to sustain exclusive breastfeeding	• Apply competencies 1 to 10 appropriately
15. Ability to conduct BFHI self appraisal	• Conduct a BFHI self apppraisal of health facilities	• List 10 steps to successful breastfeedong • State how the International Code of marketing of breastmilk substitutes and the Zambian legislation help to protect breastfeeding • Describe how mother friendly care helps promote successful breastfeeding • Explain IYCF recommendations in the context of HIV • Apply commpentencies 22, 24, 25, 26 and 27
15. Help a mother to sustain breastfeeding up to 2 years of age or beyond	• Describe the importance of breast milk in the 2nd year of life	Apply competencies 1, 2, 9 and 10, including explaining the value of breastfeeding up to 2 years and beyond
16. Help a mother with 'not enough milk'	• Describe the common reasons why a baby may have a low breast milk intake • Describe the common reasons for apparent insufficiency of milk • List the reliable signs that a baby is not getting enough milk	• Apply competencies 1, 3, 9 and 10 to decide the cause • Apply competencies 2, 4 , 5, 6, 7 and 8 to overcome the difficulty, including explaining the cause of the difficulty to the mother
17. Help a mother with a baby who cries frequently	• List the causes of frequent crying • Describe the management of a crying baby	• Apply competencies 1, 3, 9 and 10 to decide the cause • Apply competencies 2, 4, 5 and 6 to overcome the difficulty, including explaining the cause of the difficulty to the mother • Demonstrate to a mother the positions to hold and carry a colicky baby

Competency	Knowledge	Skills
18. Help a mother whose baby is refusing to breastfeed	• List the causes of breast refusal • Describe the management of breast refusal	• Apply competencies 1, 3, 9 and 10 to decide the cause • Apply competencies 2, 4 and 5 to overcome the difficulty, including explaining the cause of the difficulty to the mother • Help a mother to use skin-to-skin contact to help her baby accept the breast again • Apply competencies 7 and 8 to maintain breast milk production and to feed the baby meanwhile
19. Help a mother who has flat or inverted nipples	• Explain the difference between flat and inverted nipples and about protractility • Explain how to manage flat and inverted nipples	• Recognize flat and inverted nipples • Apply competencies 2, 4, 5, 7 and 8 to overcome the difficulty • Show a mother how to use the syringe method for the treatment of inverted nipples
20. Help a mother with engorged breasts	• Explain the differences between full and engorged breasts • Explain the reasons why breasts may become engorged • Explain how to manage breast engorgement	• Recognize the difference between full and engorged breasts • Apply competencies 2, 4, 5, 6 and 7 to manage the difficulty
21. Help a mother with sore or cracked nipples	• List the causes of sore or cracked nipples • Describe the relevant anatomy and physiology of the breast • Explain how to treat candida infection of the breast	• Recognize sore and cracked nipples • Recognize candida infection of the breast • Apply competencies 2, 3, 4, 5, 7 and 8 to manage these conditions
22. Help a mother with mastitis	• Describe the difference between engorgement and mastitis • List the causes of a blocked milk duct • Explain how to treat a blocked milk duct • List the causes of mastitis • Explain how to manage mastitis, including indications for antibiotic treatment and referral • List the antibiotics to use for infective mastitis • Explain the difference between treating mastitis in an HIV-negative and HIV-positive mother	• Recognize mastitis and refer if necessary • Recognize a blocked milk duct • Manage blocked duct appropriately • Manage mastitis appropriately using competencies 1, 2, 3, 4, 5, 6, 7, 8 and rest, analgesics and antibiotics if indicated. Refer appropriately • Refer mastitis in an HIV-positive mother appropriately

Competency	Knowledge	Skills
23. Help a mother to breastfeed a low-birth-weight baby or sick baby	• Explain why breast milk is important for a low-birth-weight baby or sick baby • Describe the different ways to feed breast milk to a low-birth-weight baby • Estimate the volume of milk to offer a low-birth-weight baby per feed and per 24 hours	• Help a mother to feed her LBW baby appropriately • Apply competencies, especially 7, 8 and 9, to manage these infants appropriately • Explain to a mother the importance of breastfeeding during illness and recovery
24. Counsel an HIV-positive woman antenatally about feeding choices	• Explain the risk of mother-to-child transmission of HIV • Outline approaches that can prevent MTCT through safer infant feeding practices • State infant feeding recommendations for women who are HIV+ve and for women who are HIV •ve or do not know their status • List advantages and disadvantages of these feeding options	• Apply competencies 1 and 2 to counsel an HIV-positive woman • Use the Flow Chart and the Counselling Cards to help an HIV-positive woman to come to her own decision about how to feed her baby
25. Support an HIV-positive mother in her feeding choice	• List the different types of replacement milks available locally and how much they cost • Explain how to prepare the milks • Describe hygienic preparation of feeds and utensils • Explain the volumes of milk to offer a baby according to weight • Explain exclusive breastfeeding and stopping early • Explain how to heat-treat and store breast milk • Describe the criteria for selection of a wet-nurse	• Help a mother to prepare the type of replacement milk she has chosen • Apply competency 8-cup feed a baby • Show a mother how to prepare replacement feeds hygienically • Practise with a mother how to prepare replacement feeds hygienically • Show a mother how to measure milk and other ingredients to prepare feeds • Practise with a mother how to measure milk and other ingredients to prepare feeds • Explain to a mother the volume of milk to offer her baby and the number of feeds per 24 hours • Apply competencies 1, 2, 3, 4, 5, and 6 to support a mother to breastfeed exclusively and optimally • Show a mother how to heat-treat breast milk and apply competencies 7 and 8 • Apply competencies 1, 2, 3, 4, 5 and 6 to support the wet-nurse • Use the Counselling Cards and Flyers appropriately
Competency	**Knowledge**	**Skills**
26. Follow-up the infant of an HIV-positive mother 0-6 months who is receiving replacement milk	• Describe hygienic preparation of feeds • Explain the volumes of milk to give to a baby according to weight • Explain when to arrange follow-up or when to refer • Explain about feeding during illness and recovery	• Show a mother how to prepare replacement feeds hygienically • Practise with a mother how to prepare replacement feeds hygienically • Apply competency 8-cup feed a baby • Recognize when a child needs follow-up and when a child needs to be referred • Explain to a mother how to feed her baby during illness or recovery • Use the Counselling Cards and Flyers appropriately

27. Help an HIV-positive mother to cease breastfeeding early and make a safe transition to replacement feeds	• Describe the difficulties a mother may encounter when she tries to stop breastfeeding over a short period of time • Explain how to manage engorgement and mastitis in a mother who stops breastfeeding over a short period of time • Show the ways to comfort a baby who is no longer breastfeeding • List what replacement feeds are available & how to prepare them • Explain when to arrange follow-up or when to refer	• Explain to a mother how she should prepare to stop breastfeeding early • Practise with a mother how to prepare replacement feeds hygienically • Apply competencies 7 and 8 • Manage breast engorgement and mastitis in an HIV-infected woman who is stopping breastfeeding (competencies 20 and 22) • Explain to a mother ways to comfort a baby who is no longer breastfeeding
Competency	**Knowledge**	**Skills**
28. Help mothers whose babies are over six months of age to give complementary feeds	• List the gaps which occur after six months when a child can no longer get enough nutrients from breast milk alone • List the foods that can fill the gaps • Describe how to prepare feeds hygienically • List recommendations for feeding a non-breastfed child, including quantity, quality, consistency, frequency and method of feeding at different ages	• Apply competencies 1, 2, 9 and 10 • Use the FOOD INTAKE JOB AID to learn how a mother is feeding her infant or young child • Identify the gaps in the diet according to the FOOD INTAKE JOB AID • Explain to a mother what foods to feed her child to fill the gaps, applying competency 11 • Demonstrate preparation of a meal for an infant or young child at different ages (8, 10, 15 months) • Practise with a mother how to prepare meals for her infant or young child • Show a mother how to prepare feeds hygienically • Explain to a mother how to feed a non-breastfed child
29. Help a mother with a breastfed child over six months of age who is not growing well	• Explain feeding during illness and recovery • Describe how to prepare feeds hygienically	• Apply competency 15 to help a mother to sustain breastfeeding up to 2 years of age or beyond • Apply competencies 1, 2, 9, 10 and 11 • Explain to a mother how to feed during illness and recovery • Demonstrate to a mother how to prepare feeds hygienically • Recognize when a child needs follow-up and when a child needs referral
30. Help a mother with a non-breastfed child over six months of age who is not growing well	• Explain about the special attention to give to children who are not receiving breast milk • List the recommendations for feeding a non-breastfed child, including quantity, quality, consistency, frequency and method of feeding • Explain feeding during illness and recovery • Describe how to prepare feeds hygienically	• Apply competencies 1, 2, 9, 10 and 11 • Explain to a mother how to feed a non-breastfed child • Explain to a mother how to feed during illness and recovery • Demonstrate to a mother how to prepare feeds hygienically • Recognize when a child needs follow-up and when a child needs referral

LOG OF SKILLS PRACTISED		
Date	Skill practised	Comments

LOG OF SKILLS PRACTISED		
Date	Skill practised	Comments

DIFFICULTIES EXPERIENCED		
Date	Difficulty experienced	Comments

DIFFICULTIES EXPERIENCED		
Date	Difficulty experienced	Comments

EXERCISES TO BE COMPLETED

There are 12 exercises to be completed in your Manual before the follow-up session. The trainer will go through these exercises with you at the follow-up session and discuss any difficulties you had answering them.

How to do the exercise:

Read the stories and write your answers to the questions in pencil in the spaces provided. These exercises are based on Sessions 14 and 20 in your Manuals. The exercises also use the counselling skills from Sessions 5 and 10. Refer to these Sessions to help you with these exercises.

Example:

Mrs A says that both her breasts are swollen and painful. She put her baby to her breast for the first time on the third day, when her milk 'came in'. This is the sixth day. Her baby is suckling, but now it is rather painful, so she does not let him suck for very long. Her milk is not dripping out as fast as it did before.

What is the diagnosis?

Engorged breasts.

What may have caused the condition?

Delay starting to breastfeed.

How can you help Mrs A?

Help her to express her milk, and help her to position her baby at her breast, so that he can attach better.

To answer:

Mrs B says that her right breast has been painful since yesterday, and she can feel a lump in it, which is tender. She has no fever and feels well. She has started to wear an old bra which is tight, because she wants to prevent her breasts from sagging. Her baby now sometimes sleeps for 6 - 7 hours at night without feeding. You watch him suckling. Mrs B holds him close, and his chin is touching her breast. His mouth is wide open and he takes slow, deep sucks.

What could you praise Mrs B about?

What could you say to empathize with Mrs B's worries about her figure?

What is the diagnosis?

What may be the cause?

What three suggestions would you give Mrs B?

Mrs C has had a painful swelling in her left breast for three days. It is extremely tender, and the skin of a larger part of the breast looks red. Mrs C has a fever and feels too ill to go for work today. Her baby sleeps with her and breastfeeds at night. By day, she expresses milk to leave for him. She has no difficulty in expressing her milk. But she is usually very busy, and it is difficult for her to find time to express milk, or to breastfeed her baby during the day.

What could you praise Mrs C about?

What could you say to empathize with Mrs C?

What is the diagnosis?

Why do you think that Mrs C has this condition?

How would you treat Mrs C?

Mrs D complains of nipple pain when her 6-week-old baby is suckling. You examine her breasts while her baby is asleep, and can see no fissures. When he wakes, you watch him feeding. His body is twisted away from his mother's. His chin is away from the breast, and his mouth is not wide open. He takes rapid, shallow sucks. As he releases the breast, you notice that the nipple looks squashed.

What is the cause of Mrs D's nipple pain?

What could you say to build Mrs D's confidence?

What practical help could you give her?

Mrs E's baby was born yesterday. She tried to feed him soon after delivery, but he did not suckle very well. She says that her nipples are inverted, and she cannot breastfeed. You examine her breasts, and notice that her nipples look flat. You ask Mrs E to use her fingers and to stretch her nipple and areola out a short way. You can see that the nipple and areola are protractile.

What could you say to accept Mrs E's idea about her nipples?

How could you build her confidence?

What practical help could you give Mrs E?

Mrs F's baby is 3 months old. She says that her nipples are sore. They have been sore on and off since an attack of mastitis several weeks ago. The mastitis cleared up after a course of antibiotics. This new pain feels like needles going deep into her breast whenever her baby suckles. You watch her baby breastfeeding. His mouth is wide open, his lower lip is turned out, and his chin is close to the breast. He takes some slow deep sucks and you see him swallow.

What might be the cause of Mrs F's sore nipples?

What treatment would you give to her and her baby?

How would you build Mrs F's confidence?

Mrs G is 16 years old. Her baby was born 2 days ago, and is very healthy. She has tried to breastfeed him twice, but her breasts are still soft, so she thinks that she has no milk, and will not be able to breastfeed. Her young husband has offered to buy her a bottle and some formula.

What could you say to accept what Mrs G says about her breast milk?

Why does Mrs G think that she will not be able to breastfeed?

What relevant information would you give her, to build her confidence?

What practical help could you give Mrs G?

Mrs H says that her breast milk seems to be decreasing. Her baby is 4 months old, and has gained weight well from when he was born. Last month she started giving him cereal three times a day. She says that he is breastfeeding less often, and for a shorter time than before she started cereal feeds. Mrs H is at home all day, and her baby sleeps with her at night.

What are Mrs H and her baby doing right?

Why do you think that Mrs H's breast milk seems to be decreasing?

What could you suggest to Mrs H, so that she continues to breastfeed?

What relevant information could you give Mrs H?

Mrs I's baby is 7 weeks old. She says that her breast milk is not good. Her baby does not seem satisfied after breastfeeds. He cries and wants to feed again, often within the hour. He cries and wants to breastfeed often at night too. Mrs I feels exhausted. He passes urine about 5 times a day. When he breastfeeds, you notice that his lower lip is turned in, and there is more areola visible below his bottom lip than above his top lip. The baby weighed 3.7 kilos at birth. He now weighs 4.8 kilos.

What could you praise, to build Mrs I's confidence?

Is Mrs I's baby getting as much breast milk as he needs?

What may be the reason for his behaviour?

What practical help would you offer to Mrs I?

What relevant information would you give Mrs I?

Mrs J says that she is exhausted, and will have to bottle feed her 2-month-old baby. He does not settle after breastfeeds, and wants to feed very often - she cannot count how many times in a day. She thinks that she does not have enough breast milk, and that her milk does not suit her baby. While she is talking to you her baby wants a feed. He suckles in a good position. After about two minutes, he pauses, and Mrs J quickly takes him off her breast. The baby's growth chart shows that he gained 250 g last month.

What could you say to show that you accept Mrs J's ideas about her milk?

Is Mrs J's baby getting enough breast milk?

What is the reason for this?

What can you suggest to help Mrs J?

Mrs K says that her 3-month-old baby is refusing to breastfeed. He was born in hospital and roomed-in from the beginning. He breastfed without any difficulty. Mrs K returned to work when her baby was 2 months old. Her baby has 2-3 bottle feeds while she is at work. For the last week, he has refused to breastfeed when she comes home in the evening. She thinks that her milk is not good, because she works hard and feels hot all day.

What could you say to accept Mrs K's ideas about her milk?

What praise could you give to build Mrs K's confidence?

What might be the cause of her baby's refusal to breastfeed?

What could you suggest that she does to breastfeed again, if she decides to try?

What relevant information could you give to Mrs K?

Mrs L has a one month old baby. The baby was born in hospital, and was given three bottle feeds before he started to breastfeed. When Mrs L went home, her baby wanted to breastfeed often, and he seemed unsatisfied. Mrs L thought that she did not have enough milk. She continued to give bottle feeds, in addition to breastfeeding, and hoped that her breast milk supply would increase. Now her baby is refusing to breastfeed. When Mrs L tries to breastfeed, he cries and turns away. Mrs L wants very much to breastfeed, and she feels rejected by her baby.

What could you say to empathize with Mrs L?

Why is Mrs L's baby refusing to breastfeed?

What relevant information might be helpful to MrsL?

What practical help would you offer to Mrs L so that she and her baby can enjoy breastfeeding again?

KEY MESSAGES FOR COMPLEMENTARY FEEDING

1. Breastfeeding for two years of age or longer helps a child to deve lop and grow strong and healthy.
2. Starting other foods in addition to breast milk at 6 months helps a child to grow well.
3. Foods that are thick enough to stay in the spoon give more energy to the child.
4. Animal-source foods are specially good for children, to help them grow strong and lively.
5. Peas, beans, lentils, and nuts and seeds, are good for children.
6. Dark-green leaves and yellow-coloured fruits and vegetables help the child to have healthy eyes and fewer infections.
7. A growing child needs 3 meals and snacks: give a variety of foods
8. A growing child needs increasing amounts of food
9. A young child needs to learn to eat: encourage and give help…with lots of patience.
10. Encourage the child to drink and to eat during illness and provide extra food after illness to help them recover quickly.

Notes

Session 40

Action planning

Objectives

After completing this session you will be able to:

- Draw action plans for enhancing IYCF practices

Introduction

In this session you will be introduced to the aspects of action planning for infant and young child feeding. Please note that you should only include aspects in the action plan of activities that you will learn during this training. Be reminded that the action plan will be integrated into the general action plan for your institution for implementation.

What is an action plan?

An Action Plan is a simple list of all of the tasks that you need to carry out to achieve an objective. In other words an action plan is a set of concrete steps of activities to be undertaken.

Why draw up an action plan?

Whatever your goals, whatever stage you are at in the decision making process, you will most likely make progress if you break down the tasks you have to do into small steps and then identify the actions you need to take for each step.

Many action plans fail because the tasks appear too difficult. You may have several goals – but you need to break each down into a list of tasks. Set a timescale for each action – but be realistic – do not expect the impossible.

Writing an action plan

To draw up an Action Plan, simply list the tasks that you need to carry out to achieve your goal, in the order that you need to complete them. Keep the Action Plan by you as you carry out the work and update it as you go along with any additional activities that come up. To use the action plan simply carry out each

Structure of an action plan

There are several ways of structuring action plans. In this session you will use the basic action plan template used in the MOH. There is need to be very clear indicating the what, who, with what and when aspects.

- **What?**
  This identifies the activities to be carried out. These must be clear and listed in order of priority. They must be written as instructions or orders e.g. Cook nshima or write a book.

- **Who is to carry out the activity? [Responsibility]**
  Include in the action plan the specific position, title or name of individual or group that will undertake the action. Note that persons identified as responsible do not necessarily have to

carry out the activity personally but are held accountable for ensuring that it gets done.

- **With what [resources/inputs]**
  Indicate resources needed for each activity. These include human effort, finances, materials [books, paper, chalk etc] breasts, dolls, cups, etc; facilities and equipment. Time and effort is important but often underrated

- When [Timing….]
  Include the starting and completion dates for all activities. It is best to start with completion date for the activity then work backwards to the present. It is dangerous to set very tight timelines. Although it may be motivating for some but it sets the stage for failure because of unexpected events. Therefore make allowance for other activities or workload responsibilities.

Basic action plan template

Priority area: IYCF **Priority rating: 1**

Objective: To increase the percentage of mothers who breastfeed their babies within 1hour of birth from 25% to 35%

Priority area: IYCF **Priority rating: 1**

Objective: To increase the percentage of mothers who breastfeed their babies within 1hour of birth from 25% to 35%

Activity Description (what who, where when)	Cost Item (inputs)	Cost Item Code	Cost each	No.	Total Cost '000
What To train 10 members of the Matero Breastfeeding mother support Group in supporting mothers to initiate and maintain correct breastfeeding practices at **Who**? **Where** Matero health centre **When** In the first week of the first quarter	▪ Flip charts ▪ Model breast ▪ dolls ▪ markers etc	430 430 430 430	30,000	2	60,000
Total					

Guide for planning IYCF activities
You may include the following aspects in drawing up your action plans:

- Advocacy , monitoring and collaboration for IYCF
- Breastfeeding promotion
- -BFHI and BFCI (Baby Friendly Community Initiative)
- Complementary feeding
- IYCF in PMTCT and Paediatric care
- The Code

Why draw up an action plan in this training
An action plan is drawn to ensure that the newly acquired information is shared with others and also to be able to apply the newly acquired knowledge and skills in our own organisations.
For each goal determine:

- What actions you will take
- How you will take action
- Who or what will help you

- Why you might not take action
- When you will take action

Once you have drawn up your Action Plan make sure you use it. Put it in a prominent place, so that you have a constant reminder of what you need to do. From time to time review your strategy and action plan and revise them in the light of new information and feedback.

Tips for Action Plan Writing

- First of all you should clarify your goal.
- Try to imagine a visual picture of expected outcome.
- Determine criteria that allow you to see if you have reached your destination.
- Make your goal measurable.
- Determine what constraints you have. It may be limits on time, money or other resources.
- Compose a list of actions you have to take in order to achieve your goal. Write down as many ideas as possible. Don't analyze and criticize on this stage.
- Then you should analyze your ideas and distribute them by categories.
- Mark the most necessary and effective steps by setting them high priority status.
- Decide on the order of your actions. Start from actions with higher priority statuses. For each of them determine what other steps should be completed before this action. Rearrange your actions and ideas into clear to do list.
- Look at your action plan again and try to simplify it even more.
- Review the action plan regularly. If you have any new information, make changes in your plan taking it into account.
- Monitor the execution of your plan and keep an eye on how much have you moved up to your goal.

Checklist for Action Planning

In order to ensure that nothing is left to chance, use the under listed checklist:

- Is the plan consistent with the values, vision and mission of organisation?
- Are the timelines realistic?
- Does organisation have financial resources necessary to carry out the plan?
- Does the organisation have human resources needed in place?
- Is the workload realistic for individuals and groups?
- Are activities listed in order of priority, the most important being first and not the most urgent
- Are activities manageable and clearly defined?
- Is the plan workable?
- Do people in the organisation know about plan? Are they committed to it?"
- Will activities lead the organisation towards its vision, and meeting the goals and objectives?"

- Remember, the old adage still holds true: Failing to plan is.....planning to fail

Notes


USAID
FROM THE AMERICAN PEOPLE


unicef


World Health
Organization


UKaid
from the British people


Irish Aid
Department of Foreign Affairs
An Roinn Gnóthaí Eachtracha


care


SWEDEN


CONCERN
worldwide


NAZ
Good Nutrition
for a better Zambia