

Ministry of Health and Family Welfare Government of India





INFANT AND YOUNG CHILD FEEDING

Training Module for ANMs



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भारत सरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय निर्माण भवन, नई दिल्ली - 110011 Government of India Ministry of Health and Family Welfare Nirman Bhavan, New Delhi - 110011



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Preface

Delivering quality healthcare in a timely manner through public health facilities is one of the main goals of the National Health Mission (NHM). For this to happen, it is of paramount importance to augment the knowledge and skills of healthcare providers to deliver quality services in essential maternal and newborn healthcare practices.

Infant and Young Child Feeding (IYCF) is a set of well-known, common and scientific recommendations for appropriate feeding of newborn and children under two years of age. The first two years of life provide a critical window of opportunity for ensuring children's optimal growth and development through adoption of correct infant and child feeding practices. It is a known fact that onset of undernutrition among Indian children occurs early, and undernutrition levels attain peak at 24 months of age. This high burden clearly shows the need for accentuating efforts towards attainment of improved rates of optimal infant and young child feeding practices in the country.

The importance of support to the mother, within the families and at health facilities, is essential towards achieving higher rates of breastfeeding. Skill building of health workers for IYCF is essential to equip them to protect breastfeeding, handle various breastfeeding challenges, counsel on issues such as 'not able to produce enough milk', correct positioning, complementary feeding, growth monitoring, etc.

It has been decided to implement a nationwide programme named 'MAA' (Mothers' Absolute Affection) across States/ UTs, starting from August 2016 to give impetus to optimal IYCF practices. I am delighted that the Child Health Division, with support from Breastfeeding Promotion Network of India (BPNI) and UNICEF, has developed a 'National training module on Infant and Young Child Feeding' to be used for capacity building of healthcare providers under 'MAA' Programme. I am sure that this training module will serve as a comprehensive resource material for learning key IYCF skills and improve delivery of IYCF counselling at health facilities in the country.

C.K. Mishra







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Foreword

With high rates of undernutrition, 38 per cent children being stunted (RSOC, 2014), and high burden of preventable causes of under-five deaths such as pneumonia and diarrhoea, promotion of optimal infant and young child feeding practices remains a priority area for intensification under National Health Mission. Malnutrition is also the underlying cause of around half of under-five deaths in the country. This high burden clearly calls for focus on efforts to promote Infant and Young Child Feeding Practices by States/UTs.

Breastfeeding is an important child survival intervention. Breastfeeding within an hour of birth can prevent 20 per cent of newborn deaths. Babies, who are exclusively breastfed in the first six months of age, are 11 times less likely to die from diarrhoea and 15 times less likely to die from pneumonia, two leading causes of death in children under-five years of age. However, in India, as per recent survey (RSOC 2014), only 44.6 per cent mothers initiate breastfeeding within one hour of birth despite of the fact that about 78.7 per cent deliver in institutions. Further, 64.9 per cent babies are exclusively breastfed in the first six months of age.

The National Health Mission provides a valuable opportunity to bring greater attention and commitment to promote IYCF interventions through the health system, both at the health facility and community outreach levels. ASHA has been the frontrunner for taking messages to the community and thus has contributed towards improving the rates of breastfeeding. Counsellors have also been deployed at all high case load facilities for counselling on reproductive, maternal, newborn, child, and adolescent health (RMNCH+A) issues. Various other interventions have also been designed under the nationwide 'MAA' (Mothers' Absolute Affection) Programme to give an impetus to rates of breastfeeding and child feeding in the country, being launched in August 2016.

Now that high rates of contact of pregnant and lactating mothers with healthcare facilities, and with ASHA is being achieved under the National Health Mission, skill building of frontline workers is of foremost importance. I congratulate Child Health Division for developing this National IYCF training module for healthcare providers especially ANMs and nurses, through consultations with Breastfeeding Promotion Network of India (BPNI) and UNICEF.

I am confident that by using this training module, doctors, nurses, and other service providers will be able to play a key role in taking the IYCF programme forward.

Vandana Gurnani







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Acknowledgement

The healthcare providers both in the facility and community play a major contribution in supporting breastfeeding practices at the time of delivery and maintaining exclusive breastfeeding for six months after birth. During a yearlong 'MAA' (Mothers' Absolute Affection) Programme under National Health Mission, all the healthcare providers are to be skilled in provision of quality counseling and support to mothers for breastfeeding.

A four days training program for healthcare providers both in facility and community has been prepared with support from various stakeholders. The contribution of UNICEF, Breastfeeding Promotion Network of India (BPNI) and Child Health Division of Ministry of Health and Family welfare is acknowledged in finalizing the training program. Dr. M.M.A. Faridi, University College of Medical Sciences, Dr. Satinder Aneja, Lady Hardinge Medical College, Dr. Praveen Kumar, LHMC are the key technical resource persons for this training module. The contribution of Dr. Sila Deb, Deputy Commissioner and Dr. Ruchika Arora, Consultant Child Health is highly appreciated.

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Contents

Obje	Objective of this module		
How to make a model doll and a model breast 4			
1	Why optimal infant and young child feeding	5	
2	Production and intake of breastmilk	9	
3	Assessing and observing a breastfeed	13	
4	Listening and learning	16	
5	Building confidence, giving support and checking understanding	18	
6	Antenatal preparation and establishing community breastfeeding support	20	
7	Positioning the baby at the breast	23	
8	Breast conditions	25	
9	Refusal to breastfeed and crying	29	
10	Expressing breastmilk	31	
11	Not enough milk	33	
12	Breastfeeding low birth weight babies and twins	37	
13	Complementary feeding: foods to fill the nutrient gap	39	
14	Feeding techniques and strategies	44	
15	Sustaining optimal infant and young child feeding	46	
16	Womens' nutrition, health and fertility	48	
17	Women and work	50	
18	Breastfeeding in special circumstances	52	
19	Growth monitoring and recording	54	
20	Growth monitoring by growth charts	56	
21	Measuring growth: taking action	57	



Objective of this Module

To enhance the capabilities of a mother to take care of her infants, specially regarding breastfeeding and complementary feeding needs, right from pregnancy till the child is 2 years of age and help her solve most of the problems.

WHO ARE THE BENEFICIARIES?

• All pregnant women and nursing mothers of the community (area), and family members, specially the mother-in-law and husband.

WHO CAN USE THIS MODULE?

Frontline Worker (FW) or first contact person

- FW or first contact person
- ANMs
- Anganwadi Workers
- ASHAs
- Bal Sevika
- Gram Sevika
- Health Workers/Nurses
- Any grassroot level worker or peer counsellor who works directly with community women

USE OF THE MODULE

- To advise on mothers issues related to mother's nutrition during pregnancy and lactation, nutrition during pregnancy and lactation.
- To counsel them regarding prenatal and postnatal care and refer them regularly to health centres.
- To educate and skill mothers in breastfeeding and complementary feeding of their babies and help solve problems.
- To guide mothers during home visits and in women's group meeting.



HOW TO MAKE A MODEL DOLL

- Find any large fruit or vegetable, a towel or other strong thick cloth, and some rubber bands or string.
- Put the fruit or vegetable in the middle of the cloth, and tie the cloth around it to form the baby's 'neck' and 'head.
- Bunch the free part of the cloth together to form the baby's legs and arms, and tie them into shape.
- If the cloth is rather thin, you may like to stuff some other cloth inside to give the doll more of a 'body'.

HOW TO MAKE A MODEL BREAST

Use a pair of skin-coloured socks, or stockings, or an old sweater or T-shirt. Make the cloth into a round bag shape, and stuff it with other cloth or foam rubber to make it breast shaped. Stitch a 'purse string' around a circle in the middle of the breast to make a nipple. Stuff the nipple with foam or cotton. Colour the areola with a felt pen. You can also push the nipple in, to make an 'inverted' nipple.

If you wish to show the inner structure of the breast, with the lactiferous sinuses, make the breast with two layers, for example with 2 socks. Sew the nipple in the outer layer, and draw the lactiferous sinuses and ducts on the inner layer, beneath the nipple. You can remove the outer layer with the nipple to reveal the inner structure.



Why optimal infant and young child feeding

uring home visits, you should start giving simple and relevant information to expectant mothers and their family members regarding infant and young child feeding, especially when to start and how to breastfeed the baby.

Definition of optimal infant and young child feeding

Optimal feeding includes:

- Early and exclusive breastfeeding from birth to 6 months of age.
- Continued breastfeeding for 2 years or beyond.
- Adequate, safe and appropriate complementary foods and liquids after 6 months of age to meet nutritional needs.

What is exclusive breastfeeding?

Exclusive breastfeeding means giving the baby only mother's milk and no other food or drink to the baby, right from birth to six months of age. In addition to mother's milk, with the exception of syrup/drops of vitamins, minerals and medicines, expressed breast milk is also permitted (Figure 1.1).

An infant's water requirement for the first 6 months is totally met by mother's milk. Even in summer months, water should not be given. Giving water leads to reduced desire to suckle and poses a risk factor for contracting infections.



Figure 1.1: Exclusive breastfeeding

Advantages of breastfeeding

Workers should inform mothers/communities about the advantages of breastfeeding and breastmilk.

Benefits to the baby

- Breastfeed babies are more intelligent than those fed with formula milk.
- The breastfeed babies have better learning and reading ability.
- Breastmilk contains all nutrients necessary for the baby.
- Breastmilk is easily digested and absorbed.
- Breastmilk is clean and free from bacteria, hence protects the child from several infections especially from diarrhoea and pneumonia.
- It is at the right temperature, needs no preparation and is ready to serve whenever the baby needs it.
- It saves the baby from respiratory problems, allergies, asthma and skin infections.
- Breastfeeding fulfills emotional needs of the baby and inculcates a loving relationship between the baby and the mother.

Breastfeeding is beneficial to mothers

- It helps mothers regain their normal figure after delivery.
- It protects mothers' health.
- It protects mothers from anemia by reducing post-delivery bleeding.
- It helps mothers in family planning as it has contraceptive effect and helps delay next pregnancy.
- It protects against breast and ovarian cancer.
- Early initiation of breastfeeding and frequent feeding saves mothers from the problem of breast engorgement.
- It is convenient for the mother, as she does not have to prepare milk in advance as breastmilk is readily available and at the normal temperature.
- Breastfeeding mothers are more relaxed and happy.
- Mothers who exclusively breastfeed better adjust with their babies so far as as far as rearing and behavioral adjustments are concerned.

Benefits to family and society

- It reduces infant mortality rate.
- It reduces financial strain on the family as it saves the cost of medicines, bottles, nipples, milk, water, fuel, etc.
- It helps in better development of the child.

Early Initiation

Early initiation of breastfeeding is extremely important for establishing successful breastfeeding practices. It also helps in better bonding and early milk flow. Babies are normally very alert and responsive within one hour after delivery and are ready to suckle and attach to the breast easily.

An early start also provides the benefits of colostrum (first few days milk after delivery) to the baby.



You should advise all mothers to start breastfeeding within one hour of birth.

Figure 1.2: Early Initiation

What is colostrum?

Colostrum is the first thick yellow milk that comes from the breast when the child is born and it is secreted in small quantities for the first 3-4 days. Although in small quantities, it is sufficient to meet the needs of the newborn baby.

This yellow milk (colostrum) is very nutritious.

- It acts as the first immunization for newborn.
- It has all the necessary nutrients in right amount for the baby's growth.
- It protects the baby against diarrhoea, respiratory problems and other infections.
- It is richer in Vitamin A and K than normal breastmilk.
- It helps to prevent jaundice in the newborn.
- It helps to clean baby's intestine.



Colostrum is necessary for the baby, as it is the first immunization for the baby.

Prelacteal feeding

Babies should not be given any drink or food like gur, ghutti, honey, sweet water, etc. before they start breastfeeding, and also till six months of age.

Prelacteal feeds: Foods given before starting breastfeed

Anything given to the baby to drink before starting breastfeeding is called prelacteal feeding. This can be sugar water, honey, glucose, water, etc. Many people call it "Ghutti" which could be gur, ghutti, bura-ghutti, khand-ghutti, janam ghutti, etc. This is given during first 2-3 days after delivery. Some people give only 'saunf-water' or 'ajwain-water'. These should not be given. Pre-lacteal feeds may lead to infection, interfere with the success of breastfeeding and the baby will not get the advantages of colostrum feeding.

Complementary feeding

Complementary feeding means giving other foods and liquids to the baby after 6 months of age. This is in addition to breastmilk because it is no longer sufficient to meet all the nutritional requirements of the child.

Advantages of appropriate and timely complementary feeding

- Prevents growth faltering
- Decreases risk of nutritional deficiencies
- Lessens risk of illnesses
- Helps in proper development of the child

Continue breastfeeding in the second year

Breastfeeding should be continued upto 2 years and beyond as it is an important source of energy and contains high quality nutrients. These nutrients may not be easily available from the family diet. Continuing to breastfeed during the second year along with appropriate complementary foods can help in preventing malnutrition, especially among children who are most at risk.

Dangers of artificial feeding before 6 months

Artificial feeding means feeding with other types of milk, food and drink than breastmilk before 6 months of age may be dangerous for the child because:

- Artificial feeding interferes with bonding. The mother and baby may not develop such a close, loving relationship.
- An artificially fed baby is more likely to become ill with diarrhoea, pneumonia, ear, and other infections.
- Child doesn't get all the necessary nutrients and is likely to suffer from nutritional disorders.
- Child's mental development may get hampered and may score lower on intelligence tests.
- The risk of chronic diseases such as diabetes, hypertension and obesity is increased when artificially fed babies become adults.
- A mother who does not breastfeed exclusively and starts artificial feeding is more likely to become fertile and pregnant.
- A mother is more at risk of developing breast and ovarian cancer.

So artificial feeding is harmful for children and as well as their mothers.

Recommendations

Frontline workers should see and read these recommendations on the chart paper

- Initiate breastfeeding within 1 hour of birth.
- No prelacteal feeds should be given.
- Babies should be exclusively breastfed for first 6 months of life.
- On completion of 6 months, start appropriate complementary feeding.
- Children should continue to be breastfed up to 2 years of age or beyond.

Message

Breastfeeding is fundamental to child's health and survival, and important for the health of the mother.



Production and intake of breastmilk

he mother should have the knowledge of different parts of the breast. This information is useful in helping mothers to breastfeed. Information about how the milk is formed and how it can be increased, should be given to the mother by you at the time of her pregnancy.

Use your counselling guide to show the mother various parts of the breast:

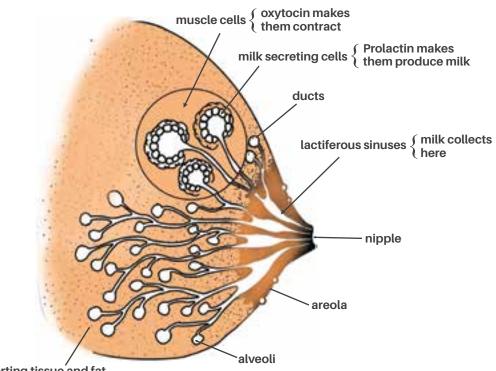
Different parts of the breast are as follows:

Nipple : The part of breast through which the milk flows is called nipple. When the baby suckles, the brain gets necessary message to produce the milk.

Areola : Areola is the circle of dark skin around the nipple. Beneath the areola, the milk is collected. Therefore areola must go inside the baby's mouth in order to draw milk. Areola consists of tiny glands, which produce an oily substance. This keeps the skin healthy.

Bunches of milk secreting cells : There are millions of bunches called "alveoli" made up of milk secreting cells inside the breasts. Different size breasts have same number of these cells. The diagram shows only a few of these bunches, the box shows three of them enlarged. A hormone makes these cells produce milk. Another hormone helps milk flow.

These bunches of milk secreting cells are surrounded by supporting tissue and fat. It is the fat and other tissue which gives the breast its shape, and which makes most of the difference between large and small breasts. Different sized breasts produce milk in the quantity that is sufficient for the child.



supporting tissue and fat

Figure 2.1: Anatomy of a breast

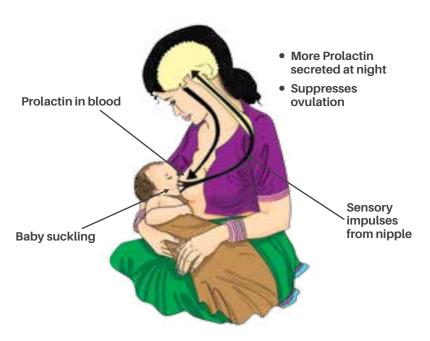
Milk secreting response (prolactin reflex) (Figure 2.2)

When a baby suckles at the breast, sensory impulses go from the nipple to the brain.

In response to this hormone starts secreting and makes secreting cells produce milk.

Some important things to remember about the milk secreting hormone (prolactin):-

1. More milk secreting hormone is produced at night, so breastfeeding at night is especially helpful for keeping up the milk supply.



Increase mother's milk supply

Figure 2.2: The prolactin reflex or the milk secretion response

Message Breastmilk production is dependent on frequent suckling by infants; the more the baby suckles, the more milk is formed. If the baby stops suckling, the breast soon stops secteting milk.

- 2. The milk secreting hormone makes a mother feel relaxed, and sometimes sleepy, so when she breastfeeds at night, she gets more rest.
- 3. The milk secreting hormone suppresses ovulation, so breastfeeding can delay next pregnancy.

The milk flow response (Oxytocin reflex) (Figure 2.3)

The flow of milk is controlled by a hormone which makes the muscle cells around the alveoli contract. This makes the milk which has collected in the alveoli flow along the ducts to the lactiferous sinuses. When the baby suckles, this reflex starts working, and milk flows to the baby's mouth.

Helping and hindering the oxytocin reflex

This reflex also works when a mother hears, sees or thinks about her baby and it works better when she is happy and confident. If the milk flow reflex does not work well, the baby may have difficulty in getting the milk from the breast (the breasts are producing milk, but it is not flowing).

If milk from the breast is not removed through feeding, the breast stops making milk. It is important to remove the milk by hand if baby is not suckling in order to continue milk secretion.

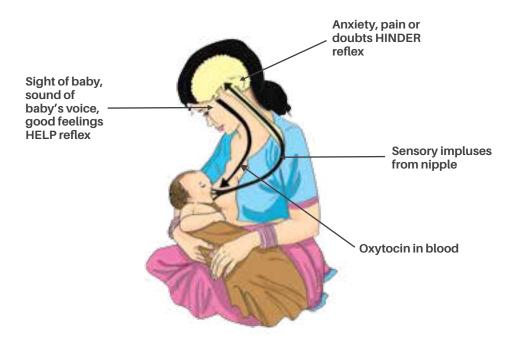


Figure 2.3: The milk flow response

Key Points

- 1. Baby's suckling controls production and flow of milk
- 2. It is the baby suckling which makes the breasts produce more milk
- 3. If the baby is unable to suckle or a mother is unable to breastfeed, frequent expression of breast milk helps in continued production of milk
- 4. Relaxed state of mind is important in making breastfeeding a success as anxiety and fear suppress adequate milk production and its flow.



Message

If a mother thinks lovingly of her baby, hears sounds of baby and feels satisfied with the baby, this helps in production and flow of her milk to baby.

Attachment

Correct and incorrect suckling position

In a good suckling position, a baby takes mouth full of breast (most part of areola and nipple), his mouth is wide open and his nose and chin are close to the breast. In an incorrect suckling position, he takes only nipple, his mouth is not wide open and his nose and chin are away from the breast. If the baby suckles in the correct position, breastfeeding is successful, and mothers do not feel any difficulty. In incorrect suckling position, baby does not get enough milk, does not grow well, and a mother has difficulties and pain during feeding.

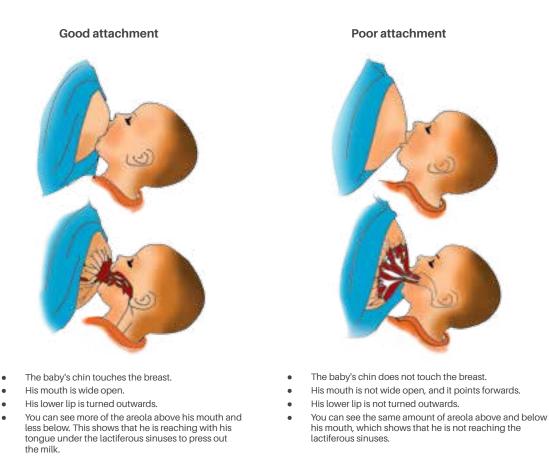


Figure 2.4: Good and poor attachment

Common causes of poor attachment are: use of feeding bottles, inexperience and lack of skilled support

Disadvantages of poor attachment are

- Pain and damage to mother's nipple. She may have sore nipples or fissures in nipple.
- Engorgement of the breast due to improper milk removal.
- Baby remains hungry and frustrated and that leads to refusal to suck.
- Less milk is produced in the breast because baby is not able to feed properly. Due to this either the baby will become malnourished or will lose weight.



Assessing and observing a breastfeed

Before helping mothers in breastfeeding and complementary feeding, it is very important to observe and assess how she is feeding her baby. You, as a frontline worker should observe a breastfeed during home visits (on the first day of delivery and during further visits) or when the mother visits you for help.

HOW TO ASSESS BREASTFEED

- 1. What do you notice about the mother?
- 2. How does the mother hold her baby?
- 3. What do you notice about the baby?
- 4. How does the baby respond?
- 5. How does the mother put her baby onto her breast?
- 6. How does the mother hold her breast during a feed?
- 7. Does the baby look well attached to the breast?
- 8. Is the baby suckling effectively?
- 9. How does the breastfeed finish?
- 10. Does the baby seem satisfied?
- 11. What is the condition of the mother's breasts?
- 12. How does breastfeeding feel to the mother?

Assessing and observing a breastfeed

As a frontline worker you are supposed to observe a breastfeeding mother, and develop your own assessment, by following the guidelines indicated below. In situation 1, the mother and baby are feeding well and in situation 2, there is difficulty. Such mothers needs help.

Situation 1. Breastfeeding is going well	Situation 2. Possible difficulty			
How does the mother hold her baby?				
Mother is holding baby close, facing breast, with baby's ear, shoulder and buttocks in a straight line.	Baby's neck is twisted			
Mother is holding her whole breast	Mother is holding her breast between two fingers			
Mother is sitting or lying straight	Mother is bend towards baby			
Baby is coming from below the breast	Baby is coming from above the breast			
Does the baby look well attached to the breast?				
Mouth is wide open	Mouth is not wide open			
Baby is taking mouthful of breast	Baby is just sucking nipple			
Areola is inside baby mouth	Areola is outside baby's mouth			
What are the condition of the mother's breasts? How does breastfeeding feel to the mother? (for details refer chapter 8)				
Mother is happy	Mother is feeling pain during breastfeeding. Mother has small or inverted nipple or very long nipple. Mother has hard or soft breast. Sore nipple There is redness or lumps in the breast.			

In situation 1, mother and baby are feeding well and in situation 2, there is difficulty. Such mothers needs help (Figures 3.1 and 3.2)

The mother and baby in Figure 3/2 may need help and advice on appropriate positioning of child at breast during breastfeeding. Look at the following figures to understand this more clearly.



Figure. 3.1: Correct position and correctly held



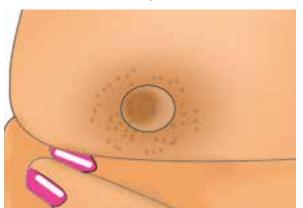
Figure 3.2: Incorrect position and incorrectly held. (No eye-to-eye contact of mother and baby)



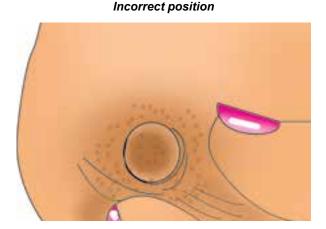
Message

Hold the baby's shoulder and buttocks properly. Offer the baby the whole breast and not just the nipple for successful breastfeeding.

Correct position



a. Resting her fingers on her breast so that her first finger forms a support at the base of the breast



b. Holding her breast too near and close to nipple

Figure 3.3: How a mother holds her breast.

Message

Offer the baby the whole breast and not just the nipple for successful breastfeeding.

How mothers feels about their breastfeeding experiences?

- Whether she feels any pain during breastfeeding?
- Is the child comfortable during breastfeeding sessions?
- Whether engorgement of breast is there?
- Whether she got any advice on positioning of the child during breastfeeding from any source? What was the information and who has given that?

Message

Appropriate positioning of the mother and child during lactation is most important to make breastfeeding a success.



Listening and learning

ounselling is a way of working with people in which you understand how they feel, and help them to
 decide what to do in a different situation like breastfeeding.

A breastfeeding mother may not talk about her feelings easily, especially if she is shy, and with someone whom she does not know well. Here we need the counsellor's skill to listen, and make her feel that we are interested in her. This will encourage her to tell us more and less likely to turn off and say nothing.

1. Use helpful non-verbal communication

Non-verbal communication means communicating through posture, expression, gestures, 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.

Some useful forms of non-verbal communication:

- Sit by the side of the mother
- Maintain appropriate distance
- During discussion keep attention towards the mother (for e.g, eye-to-eye contact)
- Give time to listen to her
- Show affection towards the mother and her baby

2. Ask open questions

Open questions are very helpful, as in answering them a mother can give you some information. Open questions usually start with "How? What? When? Why?" For example: "How are you feeding your baby?"

Closed questions are most commonly asked questions and usually are 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 older babies?"

If a mother says "Yes" to this question, you still do not know if she has breastfed exclusively, or if she also gave some artificial feeds.

To start a conversation, general open questions are helpful.

For example: "How is breastfeeding going for you?"

To continue a conversation, ask more open questions.

For example: "How many hours after s/he was born did s/he have her/his first feed?"

Sometimes it is helpful to ask a closed question, to make sure about a fact.

For example: " Are you giving him/her water or 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?" or "What are you giving him?"

3. Use responses and gestures that show interest

Another way to encourage a mother to talk is to use gestures such as nodding and smiling, and simple responses such as "*hoon*" or "*oon*" or "*anha*" or "*hanha hanha*". This shows a mother that you are also interested in her.

4. Reflect back what the mother says

Reflecting back means repeating 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: "My baby was crying too much last night. "You could say: "Your baby kept you awake crying all night?"

5. Empathize: Show that you understand how she feels

Identify with mother's feelings after she has said how she 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.

6. Try to avoid following words which sound judgemental

Right, wrong, well, badly, good, enough, properly.

If you use these words too much you may make the mother feel that she is wrong or that there is something wrong with her baby.



Good communication skills can facilitate successful breastfeeding by the mother.



Building confidence, giving support and checking understanding

t is necessary that for the breastfeeding mother to have confidence in herself. This confidence ensures success in breastfeeding. This is especially important for first time mothers, who often lose confidence, yield to pressures from family and friends, and start artificial feed for the baby. Your guidance and a helping hand will certainly re-build her confidence to resist these pressures.

As a worker, you need to counsel mother and create trust through your behaviour and give support, to build mother's self esteem.

These skills will develop slowly and you will learn them with practice.

You can take following steps for building confidence in the mother.

1. Accept what she thinks and feels

For example:

Mother says: "I give him/her water because days are warmer now".

Acceptance by worker: "You do feel that sometimes baby needs water".

2. Recognise and praise the right things she does for her baby.

For example:

Mother says: "My child is 15 months old and still breastfeeding. She also eats dalia, khichdi, fruits, etc".

Praise by worker: It is good that you are still breastfeeding your child and also giving her complementary foods.

Praising the mother and her practices in front of others, encourages the mother and also inspires others. After this, the mother will readily accept your suggestions.

3. Practical help given at the appropriate time increases confidence of a mother.

For example:

Mother says: "No, I have not breastfeed him yet, my breasts are empty and it is too painful to sit up".

Practical help by worker: "Let me make you comfortable" and you provide a pillow or chair for her.

In this situation, mother needs your help rather than your advice. You can also help in cleaning and holding the baby or in giving food.

4. Give information which is of immediate relevance.

For example:

To the new mother who wants to give prelacteal feed to the baby.

Relevant information by worker: At this age, the infant needs only colostrum.

Checking understanding

Make sure mother remembers / learns what you have said or helped

For example:

After giving information to a new mother about colostrum feeding, you may ask:

"What first feed you will give to your baby ".

If she says "only colostrum", praise her.

If she says something different again, reinforce importance of colostrum feeding without being critical, judgemental or agressive.

5. Use simple language

For example :

"Exclusive breastfeeding should be done for the first 6 months".

Instead, Worker can say in simple language: "the baby does not need anything other than breastmilk till s/he is 6 months old".

6. Give suggestions instead of commands.

For example:

"Feed your baby by the cup"

Instead worker can suggest: Some mothers feed their babies by the cup.

or

You may feed your baby by cup.

With practice and experience, it will be easier for you to decide, when and how to counsel the mother.

Remember

Building confidence of the mother is the key to successful breastfeeding.



Antenatal preparation and establishing community breastfeeding support

ood community practices regarding infant and young child feeding can have a major effect on success of breastfeeding. Poor practices interfere with breastfeeding and contribute to artificial feeding.

Antenatal preparation for breastfeeding

Pregnancy is a very important period in the life of a woman. Only a healthy woman can give birth to a healthy child. In this period, mothers can learn about breastfeeding and take right decision by themselves. It is very important to educate mothers on every aspect of breastfeeding during their antenatal period like -

- Advantages of breastfeeding and dangers of artifical feeding, which encourage mothers to breastfeed their babies.
- Give simple and relevant information on "How breastfeeding works and How to Breastfeed" (Positioning and attachment of the child at the breast).
- Inform about advantages of keeping the baby in the same bed after delivery (rooming in) and baby should be fed on demand.
- Inform mother about early initiation within one hour as the babies are alert, responsive and able to suckle.
- Discuss questions asked by mothers related to breastfeeding and dispel common myths about feeding practices.
- Inform mothers how and when to express breastmilk.
- Inform mothers and other family members that babies do not need any other food and drinks from birth to 6 months of life.
- It is important to tell young mothers that if they need help after delivery they should contact health worker for successful breastfeeding.

The very purpose of preparing mothers for breastfeeding during the antenatal period is to make mothers prepared and motivated for optimal breastfeeding practices and resolve the problems in case they arise.

Message

Knowledge of breastfeeding given to the mothers during pregnancy encourages them to breastfeed successfully.

It is necessary for the frontline workers to keep in touch with all the pregnant women in her community. She should call them to mothers' meetings and explain the benefits of breastfeeding. During home visits, she should listen to the problems of mothers individually and help them in solving the problems.

Helping mother with an early breastfeed

In some areas, breastfeeding starts after 3 days of birth of the baby. It is a custom that the sister-in-law will come and wash the breast and only then is the mother is allowed to start breastfeeding. The frontline worker/ peer counsellor has a special role in preparing the mother in law, the elderly women (dadi, nani etc.) to help the mother in breastfeeding and also to remove their false beliefs and age-old myths and educate them about the optimal breastfeeding practices.

Even fathers need to be motivated and educated on issues related to infant feeding.

If the mother is worried about shape and size of the breast or nipple, examine her breast and build her confidence by saying that all mothers can breastfeed successfully.

Breastfeeding and misconceptions

There are many myths and misconceptions regarding breastfeeding. The Frontline workers should know about them and try to educate mothers and families about optimal breastfeeding practices.

Discarding colostrum:

Colostrum is discarded by a large number of women in our country. The community should be educated to not discard colostrum and explained the advantages of colostrum.

These practices should be discouraged, and the benefits of early initiation of breastfeeding and thus giving colostrum, should be explained to the family.

Mother's diet and myths

- In some areas, mother is not given cereals for 6 days after childbirth, which is not a good practice.
- After delivery, mother is given sumptuous amounts of *ghee*. This practice should be discouraged as it results in women becoming fat and flabby. At this time, more stress should be given on diet comprising of protein along with leafy vegetables.
- Some mothers entertain the misconception that breastfeeding will make them lose their figure and their breasts will sag. This belief should be changed. Breastfeeding is the most natural way to keep the body in shape. Weight gained during pregnancy gets reduced by itself through breastfeeding.

Remember

Within an hour of delivery, the baby should be attached to the mother's breast, this will increase the flow and quantity of the milk.

Other common myths in society

- 1. Pressing the breast yields more milk. This is merely a misconception which needs to be forsaken.
- If the mother is ill, then babies should not be breastfeed. This is merely a misconception. If a mother is in position to breastfeed her child, then she must do so. This will not make her child ill, infact, breastfeeding the protects the baby from illnesses.
- If the child is sick, then also s/he should not be breastfed. A child should be breastfeed during illness, as breast milk provides the required nutrition and energy to alleviate child's illness.
- 4. Many people rely upon *khas-khas, lassan, adrak,* dry *nariyal, zeera* and fruits for increasing the quantity of breastmilk.

They do not increase breastmilk supply. Only frequent breastfeeding during day and night helps in increasing milk production.

- 5. Increased intake of milk by mother will yield more breastmilk. No, it does not yield more breastmilk.
- 6. Breasts of small size cannot produce adequate quantity of milk. This is a misconception, as size of the breast is related to fats that lie beneath the skin, whereas milk is formed in special glands which are present in sufficient numbers in all women. All mothers are capable of producing enough milk for their children.
- Failure to breastfeed first child, will yield same result for second child.
 If a mother was unable to feed the first child, even then, she can be successful in breastfeeding her second child.

Establishing community breastfeeding support

In every village or urban community, there are groups of women workers like mahila mandals, self help groups, anganwadi workers, helpers, Jan Swasthya Rakshak, which can be involved or mobilized by frontline workers to establish a community breastfeeding support.

- This group should meet together every 1-4 weeks, often in one of their homes, or somewhere in the community. They should discuss "The advantages of breastfeeding".
- They share experiences, encourage each other and discuss practical ideas about how to overcome difficulties. In this way, they learn more about breastfeeding practices.
- The group needs a peer counsellor who is accurately informed about breastfeeding, to train them and who can dispel myths and suggest, and suggests solutions to difficulties. This helps the group to solve problems within themselves.
- The group needs up-to-date materials to educate themselves about breastfeeding. The health worker can help them to get these.
- Successful breastfeeding mothers in this group can also help each other at other times, and not only at meetings. They can also visit each other at their place when they are worried or depressed, or discuss issues when mothers don't know what to do.



Positioning the baby at the breast

alk to mothers and try to know how they feed (position) their babies. A mother should learn good breastfeeding skills as it helps in effective transfer of milk to her baby. Good breastfeeding skills include correct positioning of the baby at the breast and good attachment for sucking.

Positioning

You can feed your baby in any comfortable position such as sitting, lying, or even standing. If the baby suckles properly from the breast he will get sufficient milk. Mother's good thoughts and feelings also help in breastfeeding. Mother's love and comfort always increases breastmilk supply.

In the first few days, newborn and mother may need help, which you can provide. Many mothers and babies may need help later also.

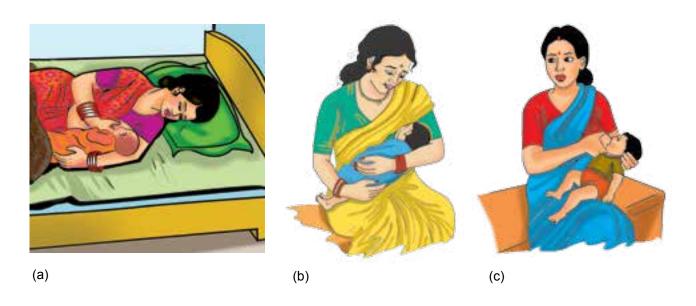


Figure 7.1: Correct positions (a,b) and Incorrect position (c)

Correct position

Make these key points clear:

- Baby turned towards mother and his ears, shoulder and buttock are in a straight line.
- His face should face the breast, with nose opposite the nipple.
- Mother should hold the baby close to her.
- For a newborn, mother should support his bottom with hand, and not just his head and shoulders.

Explain to mothers how to support the breast, with her hand, while offering it to the baby

- With her fingers and palm placed on her chest wall below the breast; so that her first finger forms a support at the base of the breast.
- With her thumb pressing on the top of the breast, so that it is easier for her baby to attach well.

Explain or show her how to bring the baby to the breast:

- Touch baby's lips with her nipple.
- Wait until baby's mouth is wide open.
- Move the baby quickly onto the breast from below.

Message

You can feed your baby in any position, sitting, lying or even standing, the attachment is correct and it is comfortable for both.

HOW TO HELP A MOTHER TO POSITION HER BABY

- Greet the mother and ask her how breastfeeding is going.
- Assess a breastfeed.
- Explain what might help, and ask if she would like you to help her in positioning the baby.
- Make sure that she is comfortable and relaxed.
- You should sit in a comfortable, convenient position.
- Explain how to hold her baby, and show her, if necessary.

The four key points are:

- » With his head and body straight;
- » With his face facing her breast, and his nose opposite her nipple;
- » With his body close to her body; and
- » Supporting his bottom (if newborn).
- 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,: and
 - » 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 wide open; and
 - » 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.



Breast conditions

nderstanding these breast conditions is important in order to help the mother, and to enable her to continue breastfeeding. There are several common breast conditions which, sometimes, cause difficulties with breastfeeding:

- 1. Flat or long nipples and full breast;
- 2. Inverted nipples;
- 3. Engorgement of breast;
- 4. Blocked duct and mastitis;
- 5. Sore nipples and nipple fissure.

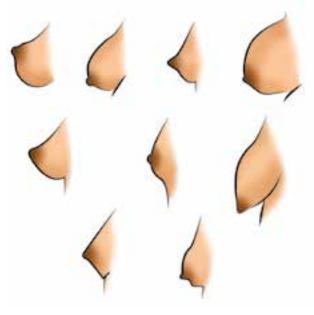


Figure 8.1: Different shapes and sizes of breasts

The shape and size of breast is not a barrier for production of enough breastmilk.

Problems related to size and shape of nipple:

Mothers have breasts of different size and shapes. The differences are due to the amount of fat. It is important to convince mothers that they can produce enough milk, whatever be the size of breast.

Flat nipple

Flat nipple is nipple at the level of areola Mothers with a flat nipple can also feed the baby as she/he suckles from the breast, and not from the nipple. She will need extra help to get the baby to suckle in a good position.

Long nipple

Help such mothers by providing knowledge regarding proper positioning, so that the baby takes more of the areola into his mouth.

Full breasts

Feeling heaviness in the breasts. This is due to collection of milk in the breasts, which is not being fully removed. Milk continues to drip from the breasts.

Counsel such mother's to feed frequently in correct position.

Breast engorgement

The breasts are overfull and milk is not flowing.

The skin of the breast looks shiny and red. It is painful. Sometimes the mother has fever.

This occurs:-

- If the baby does not suckle the breast frequently.
- If there are long intervals between feeds.
- If there is delay in starting breastfeed.

To prevent engorgement, suggest the following:-

- Start breastfeeding within one hour after birth.
- Baby should feed frequently in correct position.
- If the baby is not able to suckle, then milk should be expressed manually.

To help mothers with engorged breast, suggest the following:-

- Fomentation of breast during warm water bath or with towel soaked in warm water, light massage of breast and stimulation of nipples.
- Cold compression of breasts after giving feed or milk expression.
- Pain relieving medicines (paracetamol).

If the condition does not improve in a day, refer to the nearest health centre.

Blocked duct

A painful lump in the breast may be because of:-

- Infrequent breastfeeding.
- Not breastfeeding at night.
- Tight clothing.
- Nipple fissure.
- Large breasts.

To help mothers with a blocked duct, suggest following:-

- Correct suckling position.
- Encourage frequent breastfeeding.
- Gentle massage of the lump towards the nipple during breastfeeding.
- Wear loose clothes.

Mastitis

Swollen breast

It is due to inflammation after blocked duct or engorgement of breast. Mother has fever and the breast is red, hot, swollen and painful.

To help mothers with mastitis, suggest following:-

- Frequent breastfeeding in good position from affected breast and continue feeding from the unaffected side.
- Pain relieving medicine.
- Expression of milk manually.

If she does not improve in a day, refer to the nearest health/IYCF counselling centre.

Nipple fissure and Sore Nipples :

When baby pulls the nipple in and out while in an incorrect suckling position, it damages the skin, resulting in cracks (fissure), wounded and sore nipples which are painful. Frequent washing of breasts with soap might also result in sore nipples.

In such mothers you need to build their confidence for breastfeeding and provide help in positioning correctly.

To help mother with nipple fissures and sore nipples, suggest following:-

- Correct positioning for breastfeeding.
- Expose the affected area to air and sunlight for sometime.
- Wear loose clothes.
- Avoid medicated lotions and ointments.
- Rub hind milk on the nipples and areola after each feed.

Inverted nipple is when the nipple pushed inside the areola. If you try to pull it out it goes deeper into the breast.

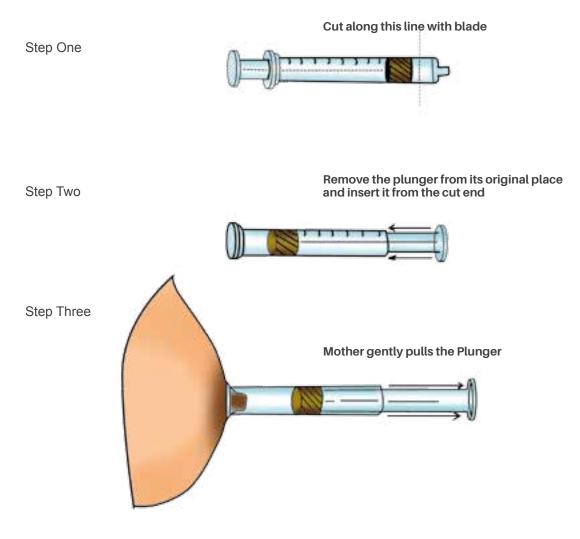
It is a rare condition.

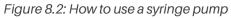
To build confidence of mother with a flat/inverted nipple, and suggest the following:-

- Let the baby explore breasts to provide skin-to-skin contact.
- Help mother to position baby at the breast correctly.
- Help her to make nipple stand out more prominently with massage.
- Use a syringe pump.
- Express breast milk and feed with cup.

Demonstrate to the mother how to use syringe pump

- Show the mother the syringe, 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.
 - » 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 wants to remove the syringe from her breast.
 - » When nipple stands out put the baby on to the breast.







Refusal to breastfeed and crying

Sometimes mothers complain that baby is crying and refusing breastfeed. This may be a cause of her worry and she may feel dejected and frustrated. The frontline worker should assess the reason why the child is refusing to breastfeed and crying excessively

REASONS WHY BABIES CRY		
Discomfort	wet, hot, cold	
Tiredness	too many visitors	
Illness or pain	ear ache or septicemia	
Hunger	not getting enough milk, growth spurt or increased requirement	
Mother's food	any food, sometimes cow's milk	
Drugs mother takes	caffeine, cigarettes, other drugs	
Oversupply of breast milk		
Colic		
'High needs' babies		

Refusal to breastfeed may be due to:

- Sickness and discomfort in the baby (pain, fever, sore mouth, vomiting, diarrhoea and colds).
- Poor technique of breastfeeding.
- Changes, which upset baby (change in body odour, new caregiver, change of place, separation from mother).
- Excessive milk flow.
- Distraction (babies older than 3 months are easily distracted).

Excessive crying may be due to:

- Refusal to breastfeed.
- Hunger (not getting enough milk, growth faster than before or increased requirement).
- High expectation of babies. Some babies cry more than others, and they need to be held and carried more.

In such a situation of breast refusal and crying, the frontline worker should help mothers and suggest the following:-

- If the baby is sick, then refer to nearest health facility.
- If a baby is unable to suckle, give expressed breast milk by cup.
- If a baby has a blocked nose, clear the nostrils by cotton wick, soaked in salt water.

Give practical help

Explain to mother and other family members that the best way to comfort a crying baby is to hold him close, with gentle movement and gentle pressure on his abdomen (Figure 9.1,9.2 and 9.3). Show her how to burp the baby. She should hold him upright on her shoulder and pat the back of the baby.



Figure 9.1



Figure 9.2



Figure 9.3

figure 9.1: Some different ways to hold a baby after breastfeeding



Expressing breastmilk

n some situations when the baby is not sucking the milk properly from the breast due to his/her illness, low birth weight, inappropriate breast conditions or if the mother is working there is a need to express her breastmilk. You, as a frontline worker, can help her in identifying these situations and the correct technique of expressing breastmilk.

The situations requiring expression of breastmilk are:

- To get relief from engorgement.
- To feed a sick baby who cannot suckle.
- To feed a low birth weight baby or a weak baby by cup as they are unable to suckle.
- To maintain the milk supply, when the mother or baby is ill.
- To feed a baby in breast conditions, where she is unable to breastfeed.
- To leave expressed breastmilk, when she is going out for work.

Manual expression

This is one of the easiest and safest methods to express breastmilk.

1. Build a mother's confidence

- If possible keep the baby in the mother's lap.
- Try to reduce any source of her pain and anxiety.
- Help her in thinking lovingly about her baby.

2. Preparation of the vessel/container

- Choose a cup, glass, bowl/katori with a wide mouth.
- Wash the cup with soap and water.

3. Prepare mother for expression

- Sit quietly in a separate room with a supportive friend/helper.
- Take a warm soothing drink. The drink should not be coffee.
- Wash breasts with luke warm water
- Wash hands thoroughly.
- Massage the breast lightly.
- Stimulate her nipple to activate the oxytocin reflex.
- Ask her helper to rub her back from neck on downwards on both sides of the spine. (Figure 10.1a, 10.1b)

4. Expressing by hand

- Sit or stand comfortably and hold the container near the 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 should support the breast with other fingers (Figure 10.2a).
- Press her thumb and first finger slightly inwards towards the chest wall. She should avoid pressing too far, because that can block the milk ducts (Figure 10.2 b).
- Press and release. Again press and release.
- Do this alternatively till the flow of milk starts (Figure 10.2c).
- Press the breast in same way from all sides so that milk flows from all segments.
- Express milk from one breast for at least 3-5 minutes then express the other side and then repeat the process.
- Explain to the mother that generally it takes about 20-30 minutes to get enough milk for the baby.
- Expressed milk can be stored for 8 hours in a clean container without boiling.

DO NOT squeeze the nipple.

DO NOT express milk quickly.

DO NOT rub or slide thumb and finger along the skin.

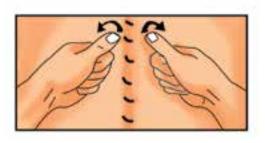






Figure 10.1: A helper rubbing a mother's back to stimulate the oxytocin reflex.

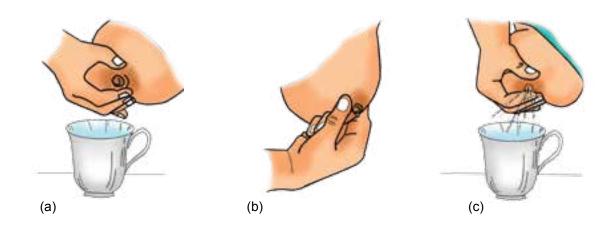


Figure 10.2: How to express breastmilk



Not enough milk

ometimes mothers complain, "I do not have enough milk". This is the story of every mother in every home. This is the most common reason given by the mother for introducing artificial feed.

HOW TO HELP A MOTHER, WHOSE BABY IS NOT GETTING ENOUGH MILK	
Successful breastfeeding requires	Common reasons for not enough milk
Motivation and confidence	Lack of motivation and confidence
Start within one hour	Delayed start
Correct position	Incorrect position
Demand feeding	Schedule feeding
Feeding during night	No night feeding, infrequent feeding
Keeping mothers and babies together	Separating mother and baby
Giving a baby only breastmilk till 6 months	Starting complementary feeding early
Avoiding bottle/rubber nipples and pacifiers	Giving bottle and pacifier

When the mother does not get cooperation and help from her family, she easily loses confidence in herself. She remains tense and, due to this, her milk flow is reduced. If due to any reason, baby does not suckle enough then also the milk supply reduces.

Even when a mother perceives her milk is not enough, her baby is usually getting all the milk s/he needs, You will have to take practical approach to deal with this problem:

- » Decide whether the baby is getting enough milk.
- » Evaluate why baby is not getting enough milk?
- » Help mother and the baby.

Message

As an efficient worker, know how to solve the problem of not enough milk.

Remember

Almost all mothers can produce enough breast milk for one or even two babies, provided the baby suckles effectively.

a. Assess/decide whether the baby is getting enough milk or not.

Reliab	le Signs
Poor weight gain	Less than 500gm in a month Less than birth weight after 2 weeks
Passing small amount of concentrated urine	Less than 6 times a day, yellow and strong smelling
Some other Signs	
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	
No milk comes when mother tries to express	
Breasts did not enlarge (during pregnancy)	
Milk did not 'come in' (after delivery)	

b. Evaluate why baby is not getting enough milk

You should assess the breastfeeding and find out the common reasons for not enough milk (see the box).

Many mothers think that in the following situations their milk is not enough but in fact
THESE DO NOT AFFECT THE BREASTMILK SUPPLY
Age of mother
Sexual intercourse
Return of menstruation
Disapproval of relatives and neighbours
Returning to a job (if baby continues to suckle often)
Age of baby
Caesarian delivery
Many children
Simple, ordinary diet

c. Help mother and the baby

- Build confidence by accepting her ideas and praising what she has been doing good.
- Help her in breastfeeding in correct position.
- Suggest any of the following if it is a reason for not getting enough milk.
 - » Breastfeeding more often, longer, at nights
 - » Stop using bottles or pacifiers
 - » Stopping other feeds
- Follow babies for weight gain and frequency of urine to know that baby is getting enough milk.

Remember

If the baby is gaining weight adequately and passes urine about 6 times a day and baby is exclusively breastfeed, then be confident that the baby is getting enough milk.

Uncommon reasons of not getting enough milk

- Use of contraceptive pills.
- Use of medication for increasing urination.
- Pregnancy.
- Severe malnutrition in the mother.
- Mother alcohol addict, smoker.
- Illness of the baby.
- Congenital abnormalities in the baby.

The problems due to above reasons are created because the mother's information is incomplete and she does not get counselling and practical help at the right time.

Helping the mother in uncommon reasons for not enough milk

You (frontline worker) can help the mother as much as she can, in certain conditions. This is required when:

- Condition of the baby: If the baby is sick or if he seems to be abnormal, she should refer to the health centre.
- Condition of the mother: If the mother is taking contraceptive pills or medication, she should take doctor's advice.
- In any other condition, which is uncommon, help the mother by taking her to the health centre and consult doctors.

Follow up each week till the mother gains confidence. By timely counselling and practical support, you can build the confidence of a mother who assumes that her milk is not enough.

Building self confidence in mother is the right solution to counter negative feeling of not being able to produce enough milk.

HOW TO HELP A MOTHER WHOSE BABY IS NOT GETTING ENOUGH MILK
--

Look for a cause	
Steps to take:	What you may learn:
Listen and learn	Psychological factors, how mother feels
Take a history	Breastfeeding factors, contraceptive pill, diuretics
Assess a breastfeed	Baby's position at breast, bonding or rejection
Examine the baby	Illness or abnormality, growth
Examine the mother and her breasts	Her nutrition and health; any breast problem
Build confidence and give support	
Help the mother to give her baby more breastm	ilk, and to believe that she can produce enough.
A	Her ideas about breastmilk supply
Accept	Her feelings about breastfeeding and her baby
Praise (as appropriate)	She is still breastfeeding and her breasts are good for making milk
Give practical help	Improve baby's attachment to breast
Give relevant Information	Explain how baby's suckling controls milk supply and explain how baby can get more breastmilk
Use simple language	"Breasts will make more milk if baby takes more"
Suggest (as appropriate)	Breastfeed more often, longer, at night Stop using bottles or pacifiers (use cup if necessary) Reduce or stop other feeds and drinks (if baby aged less than 6 months) Ideas to reduce stress, anxiety Offer to talk to family
Help with less common causes	
Baby's condition:	If ill or abnormal, treat or refer
Mother's condition:	If taking estrogen pills or diuretic, help her to change Help as appropriate with other conditions
• Follow-up	
See daily, then weekly until baby is gaining we	ight and mother is confident
It may take 3-7 days for the baby to gain weight	t



Breastfeeding low birth weight babies and twins

ow birth weight infants babies weighing less than 2.5 kg at birth are be babies born before time or at the time of birth they are weak. Low birth weight babies require more breastfeeding than normal babies. _ For such babies, mother's milk is most suited and essential.

Most of these babies are able to breastfeed. Some babies may have to be fed expressed breastmilk by cup. Babies born during 30-34 weeks and less than 1.5 kg body weight should be referred to district hospital.

How to feed a baby by a cup

- Hold the baby sitting upright or semi-upright in your lap.
- Hold a small cup of milk to 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.
- Tilt the cup so that the milk just reaches the baby's lip.
- The baby becomes alert, and opens his mouth and eyes.
- A low birth weight 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.
- When the baby has had enough, he closes his mouth and will not take any more.

Precautions

- DO NOT pour the milk into the baby's mouth (just hold the cup in such a way that milk touches his lips and let him take it himself).
- DO NOT feed while baby is crying.
- DO NOT feed a baby when s/he is not alert.
- DO NOT feed a baby when s/he is lying in the bed.



Figure 12.1: Feeding a low birth weight baby expressed breastmilk from a cup

Full term twins

Most mothers have enough breastmilk to feed twins. Mothers may need support and encouragement to be able to and believe that they can breastfeed both of them.

Some mothers feed both twins at the same time; some feed first one twin, and then the other.

How to help a mother of twins

- Reassure the mother that she can produce enough breastmilk for both babies.
- Remind her that more suckling makes more milk. So if two babies suckle, there will be enough for them.
- Encourage her to make sure that the weaker gets enough breastmilk.
- Both the babies can be fed together.
- One way to breastfeed twins together is to hold the babies with their bodies and legs going under the mother's arms (as shown in the Figure 12.2) Encourage her to make sure that the weaker gets enough breastmilk.
- Talk to her husband and other family members about how they can help her with other work so that she is free to breastfeed the babies.



Figure 12.2: Two ways to hold twins for breastfeeding



Complementary feeding : foods to fill the nutrient gap

B reastfeeding alone is not sufficient for growing children after 6 months of age. After this age, growing babies need other types of complementary foods, along with continued breastfeeding for 2 years or more. If complementary food is not introduced at this age, babies do not grow well, become undernourished and stunted.

Following points should be kept in mind in relation to complementary feeding:

- All young children require complementary feeding after 6 months of age.
- The 6-11 month period is especially a vulnerable time because malnutrition is most common and sets in at this age as infants are just learning to eat solids and may not be able to take sufficient foods.

- By 6 months, an infant is able to swallow soft family foods, teeth begin to erupt and they learn to start biting and they can digest starchy foods.
- By 9 months, an infant can take small bits of family food and eat foods by himself.
- By 15 months, a child can fulfill all his requirements from family food.

Message

Infants should be fed soft foods that they can easily swallow and digest.

When frontline worker counsels the mothers about complementary feeding, then she should keep the following points in mind:



- **1. Affordability:** It is better to advise only locally available and low cost food items for feeding because if mother is advised expensive foods, she will not be able to buy.
- 2. Quality of food: The mother should be advised to give variety of thick semi-solid foods with some fat (*ghee*, oil or butter) consumed at home, along with green leafy vegetables and seasonal fruits.
- 3. Food hygeine: This includes the following practices which should be followed
 - » Clean hands and nails
 - » Clean utensils
 - » Clean foods
 - » Clean water
 - » Clean surface

The cooked food and water should be kept well covered, and the cooked food should be consumed within two hours of cooking. Utensils and hands should be cleaned with soap and water.

4. Myths and misconceptions about foods: People have different kind of myths and beliefs about foods like - "What to give or what not to give after delivery" or some specific foods are "hot" in nature or some foods are "cold" in nature for her child. This food should be eaten; this food should not be eaten, etc. Do not condemn these thoughts straight away. You may clear their myths later once they have gained confidence in you.

Risks of untimely introduction of complementary foods

Early introduction of complementary food:

- Increases the risk of diarrhoea and possibility of catching other infections and diseases.
- Replacing breastmilk by food that is comparatively less nutritious and may lead to growth faltering in the child, and the baby may become malnourished.

Late introduction of complementary food-

- Child does not receive the nutrients needed.
- Growth and development slows down or stops.
- Risk of nutritional deficiencies and malnutrition is increases.
- Increased risk of ill health.



When a child is 6 months old, start giving him/her homemade complementary food.

Complementary feeding

6-8 months

A child's first food should be soft food, which the child can swallow easily, like 'suji kheer, khichari, mashed vegetables, and fruits like banana, papaya and chikoo. The food should be thicker than breastmilk, and should be bland in taste and mashed or strained to homogenize. Mashed, boiled potatoes and seasonal fruits can also be given in this manner.

- Most mothers do not have extra time to cook separately and specifically for their children.
- Home made dal, rice and vegetables can be given without spices. Mash it and make it soft. Add some milk, oil/ghee, and sugar/gur, which increases dietary energy levels.
- Make small pieces of bread or roti and mix it with milk and keep it for sometime, then mash it so that it can be given to the child easily. In place of milk, curry of vegetables or *ghee*/oil can also be used to make it soft and then given to the child.

- Consistency of food needs to be changed gradually from liquid to semisolid and then to solid with advancing age of the child.
- Initially, a baby might spit out the food but that does not mean he does not like it. At other times, the same food could be given and efforts should be made so that child eats it.
- To start with, give 1 or 2 teaspoons of food gradually increase the amount.
- Boiled and mashed egg can be given between 7-8 months. First give yellow of egg and then give whole egg.
- When child starts sitting and teeth begin to erupt, child likes to put everything in his mouth. During this period, finger foods like bread, biscuits, a piece of roti or carrot etc. can be given to the child. We should encourage him to eat by himself.
- Keep in mind that baby has a small stomach and will eat only small amounts at a time. So, food should be given 2-3 times.
- Continue breastfeeding and give semisolids after breastfeeding.

9 - 11 months

Quantity and frequency of above-mentioned foods can be increased gradually and mashed non-vegetarian foods can also be given. At this age most of the babies need 3/4 katori of food 3 times a day with 1 snack in between meals and continued breastfeeding.



Do not prepare special items for the child, give him what you usually eat at home.

1 - 2 years

Give almost every thing cooked at home. Gradually increase the quantity of food. Those who are non-vegetarian, can add fish and minced meat. At this age, babies need 1 katori of food 5 times a day, (3 meals and 2 snacks) and continue breastfeeding.

Whatever food you give, these points should be kept in mind

Remember

- Oil/ghee or sugar/gur should be added in food, to increase the dietary energy levels.
- Green leafy vegetables must be included in child's diet as they prevent anemia.

Variety of complementary Foods



A child of 1-2 years needs half the amount of food that his mother eats.

		OODS TO OFFER the Information Kit)	
Age	Types of food	Frequency	Amount at each meal
6 months	Soft porridge, well mashed vegetable, meat fruits	2-3 times per day plus frequent breastfeeds	2-3 table spoonfuls
7-8 months	Mashed foods	3 times per day plus frequent breastfeeds	Increasing gradually to 2/3 of a 250 ml katori/bowl
9-11 months	Finely chopped or mashed foods, and foods that baby can pick up	3 meals plus 1 snack between meals plus breastfeeds	3/4 of a 250 ml katori/bowl
12-24 months	Family foods, chopped or mashed if necessary	3 meals plus 2 snacks between meals plus breastfeeds	A full 250 ml katori/bowl or more

Remember

Adequate complementary feeding of infants along with continued breastfeeding reduces malnutrition in children.

Key messages (While talking to mothers or families, give these key messages)

- 1. Breastfeeding for at least 2 years of age helps a child to grow strong and healthy.
- 2. Children who start complementary feeding after 6 months grow well.
- 3. Family foods with a thick, soft consistency: foods that stay easily on the spoon, nourish and fill the child.
- 4. Animal foods are special foods for children.
- 5. Legumes peas, beans, lentils and nuts are also good source of nutrients.
- 6. Vitamin C rich foods help body to absorb iron.
- 7. Dark green leafy vegetables and orange/yellow coloured fruits and vegetables help the child to have healthy eyes and fewer infections.
- 8. A growing child needs frequent meals and snacks: give a variety of foods.
- 9. A growing child needs increasing amount of food.



Feeding techniques and strategies

he frontline worker should be able to tell mothers/caregivers how to feed their babies. Babies learn to eat food slowly. The child should be encouraged to learn by responsive and active feeding. Suggest the following feeding practices to the mother.

Responsive and active feeding

- The mother/caregiver should be present when the child is fed.
- The portion of food for the child should be kept separately in a plate and not shared with the rest of the family members (including other children).
- The amount of food in the plate should be so much that after the child has finished eating, some food should be left over in the plate/bowl.

How can a child be encouraged to eat?

- By talking, playing (give example) giving attention, taking interest, having patience devoting time and showing pleasure
- Children should not be forced or bribed to eat.
- Try to give food when the child is hungry and interested in eating. If he refuses to eat, encourage him to eat again later when he is hungry.
- Do not use force to feed the child while giving complementary food to him.
- Children also need a SEPARATE PLATE for their food. Food should be served to the child in a separate plate or in a bowl, which has got pleasing colour and design in which child likes to have his food. This way mother will have a fairly good idea of the quantity of food the child has eaten.
- Encourage the child to feed himself with fingers or spoon.
- Only one food should be introduced at a time. Giving 2-3 foods together at a time means baby would not be able to make a habit of taking any food properly.
- Offer home made, local, non-spicy family food.
- Variety of complementary foods bring taste and variety in your child's diet and makes it more appealing.
- If the child dislikes a particular food, it should be removed from his diet for some time and re-introduced at a later stage or mix the food with another food that the baby likes.

You may help families to encourage young children to eat.

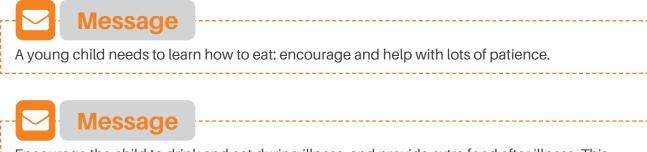
How families can encourage young children to eat.

They can:

- Offer small amounts at times when the child is alert and happy;
- Offer more food if the child shows interest;
- Give foods of a suitable consistency, not too thick or dry;
- Give physical assistance a spoon of a suitable size, food within reach of the child, young child sitting on caregiver's lap while eating;
- Offer verbal encouragement, e.g. "Open your mouth for lovely, tasty food", smiles and other positive facial gestures.

If a child receives more attention for refusing food than for eating it, he may eat less.

When the baby is sick, encourage child to drink and eat with lot of patience, feed small amounts frequently, give child what s/he likes, give a variety of food and continue to breastfeed.



Encourage the child to drink and eat during illness, and provide extra food after illness. This helps to reduce the risk of growth faltering and malnutrition.



Sustaining optimal infant and young child feeding

Being a frontline worker your role is not limited merely to educate mothers about breastfeeding and when and what complementary food is to be given, but to continue to guide the mothers and the community till the child reaches the age of 2 years or more for sustaining optimal infant and young child feeding practices. Vigil needs to be maintained and mothers should receive guidance, suggestions and help for breastfeeding and complementary foods. This will also ensure that mothers breastfeed their children upto age of 2 years or more.

Whenever you meet a mother

- Endorse and praise her good points, which provide encouragement for breastfeeding.
- According to situation, give relevant information on infant feeding practices.
- Give one or two suggestions only.

How frontline workers can sustain optimal infant and young child feeding

- Praise all mothers who are breastfeeding.
 Encourage them to continue, and to help other mothers.
 Remember to praise mother's who breastfeed through the second year.
- Praise all mothers who start homemade staple foods at 6 months of age.
- Help mothers to breastfeed in the most healthy way.
 For example, to breastfeed exclusively for 6 months.
 Help mothers to improve practices which cause problems.
- Encourage mothers to come for help before they decide to start artificial feeds. For example, if they are worried about their breast milk supply. Or if they have a breastfeeding difficulty or any question about breastfeeding.
- Refer mothers to a breastfeeding support group, if appropriate.
- Provide appropriate family planning advice for women who are breastfeeding. Encourage a mother to postpone next pregnancy, until first child is 2 years old or more.
- Provide appropriate information about nutrient needs and feeding techniques for children older than 6 months of age along with breastfeeding.
- Encourage mothers to feed during illness and recovery.
- Remember to encourage exclusive breastfeeding, when you meet a nursing mother.

During the frst week, and at 6 weeks.

- » For family planning.
- » For growth monitoring of the baby (especially poor weight gain of baby).
- » Nutrition education.

- » Immunization (including for measles at 9 months).
- » At the 9 months visit, encourage her to continue breastfeeding the child, with complementary foods, for another 12-15 months or more.
- » Sick baby.
- Help mothers to continue optimal feeding in these difficult situations:
 - » Because they have to return to work.
 - » With twins or low-birth-weight babies.
 - » If a mother is ill.
- Help mothers to feed sick infant and young children.
 A mother can increase her breastfeeds to 12 or more per day.
 If her baby cannot suckle, help her to express her breastmilk to feed him
 She can increase frequency of family foods or the food baby likes.
- Inform your colleagues about what you are trying to do.
 Make sure that workers in other sectors understand about optimal feeding. Ask for their support, and offer to help them if they are caring for mothers and babies.

Remember

Understanding and helping the mother to take right decision, at the right time, will lead to sustained infant and young child feeding.



Womens' nutrition, health and fertility

Womens' nutrition

Remember

You play an important role in educating the community on diet for mothers during pregnancy and lactation. You should advise locally available nutritious staple food, green leafy vegetables and yellow and orange coloured fruits, and also keep in mind the likes and dislikes of the family.

Pregnancy and lactation is a time when a woman needs to pay more attention to her diet. A pregnant mother has to not only nourish herself, but also the growing fetus in her womb. In this period, growing fetus is entirely dependent on the mother. On an average, a pregnant women gains 10-12 kg weight, which includes weight of the fetus. This is possible only when the pregnant women receives all the nutrients from her diet. Similarly, lactating mother breastfeeds her baby for her/his growth and well-being. For this, it is necessary that she should takes an adequate amount of a nutritious diet and liquids that help her to keep healthy.

During pregnancy, if mothers do not take sufficient diet then it affects baby's growth and consequently they are either low birth weight or at the risk of getting malnourished.

Similarly, lactating mothers need sufficient nutritious food to keep themselves fit and healthy and also ensure proper care of their baby.



Pregnant woman should eat more than normal woman daily



Figure 16.1: During pregnancy and lactation mothers need one extra meal

Pregnant and lactating mothers should take 1^{1/2} times of their usual diet.

Important facts related to food and nutrition during pregnancy and lactation

- 1. Period of pregnancy and lactation is a time when a pregnant woman requires more food than a normal woman because she has to nourish not only herself but also the growing foetus in her womb, and after delivery, her growing infant as well.
- 2. She should take extra amount of cereals, beans (*dals*) and vegetables. She should eat more than her normal diet. If she is not able to eat more than normal at lunch, dinner or snack time then she should eat more frequently. She should eat 5-6 times in a day.

3. She should take a mixed diet, i.e, she should use mainly cereals for her energy requirements, mix two different cereals or mix cereal with dal and add vegetables to it. This single recipe will fulfill all nutritional requirements. For example, paushtik khichari, in which rice gives – calories, beans (moong dal) gives – protein and fiber, and added green leafy vegetables like palak and other seasonal vegetables that provide minerals and vitamins. Add 1 tsp. of pure *ghee* and oil to it, which will give extra energy, and taste to it.



- 4. Every day she should eat green leafy vegetables, which are very good source of iron. It will prevent anemia in both her as well as baby. Pregnant woman should take iron and folic acid tablets regularly in her last trimester of pregnancy.
- 5. She should include sufficient amount of *ghee*/oil in her diet because these foods provide more calories. During her pregnancy and lactation period, she requires 500 extra calories more than normal woman.
- 6. Meat, fish, eggs are very good body building foods. Vegetarians can include legumes, beans, dals in place of these foods.
- 7. Seasonal fruits should also be included in her diet. Taking 1-2 fruits daily, will provide energy, minerals, and improve the taste of the food.
- 8. She should take milk, butter milk, fluids and lots of water.
- 9. All pregnant and lactating mothers should use iodized salt.

Health

The frontline workers should tell all pregnant mothers

- » To take 2 hours rest in the day time.
- » To seek medical help when she sick.
- » Breastfeeding mothers should carry their babies with them, if they are hospitalized.
- » She should continue breastfeeding during illness and hospitalization.
- » If she is unable to breastfeed she should continue expressing her milk and feed her baby.
- » When she is well again, she can frequently feed her baby.
- » If she is taking medication, even then, she can continue breastfeeding.

Fertility

The frontline workers should tell mothers

- » If a mother's menstruation has not returned, AND her baby is less than 6 months old, AND s/he is only exclusively breastfed, AND breastfed on demand, the chances of a new pregnancy are very small. In this situation, it is not necessary to use other family planning methods.
- » If a mother's menstruation has returned, OR if her baby is more than 6 months old, OR if he has started to have complementary feeds, it is advisable for her to use another method of family planning.



Good nutrition during pregnancy and lactation protects mothers, and ensures proper growth and development of the child.



Women and work

Now a days more and more women are working, and they either introduce supplements or stop breastfeeding because they have to go to work. Hence, the frontline worker should suggest the following.

Suggestions for working mothers

If possible, take your baby with you to work. (This can be difficult if there is no crèche near your work place, or if the transport is crowded).

If your work place is near to your home, you may be able to go home for breastfeeding during breaks, or ask someone to bring her/him to you at your workplace to breastfeed.

If your work place is far from your home, you can give your baby the benefit of breastfeeding in the following ways:

1. Breastfeed exclusively and frequently for the whole maternity leave period

This gives your baby the benefits of breastfeeding, and it builds up your breastmilk supply.

2. Do not start other feeds before you really need to

Do NOT think "I shall have to go back to work, so I might as well bottle feed straight away."

Don't use a bottle at all, as you can feed the baby from a cup.

Wait until about a week, before you go back to work. Leave just enough time to get the baby used to cup feeds and to train a caregiver how to feed with a cup.

3. Continue to breastfeed at night, in the early morning, and at any other time that you are at home.

- » This helps to keep up your breastmilk supply.
- » It gives your baby the benefit of breastmilk even, if you decide to give him one or two artificial feeds during the day.
- » Many babies 'learn' to suckle more at night, and get most of the milk that they need. They sleep more and need less milk during the day.

4. Leave behind expressed milk

Learn to express breastmilk soon after your baby is born.

This will enable you to do it more easily.

- » To express milk, schedule enough time to express your breastmilk in a relaxed way. You may need to wake up half an hour earlier than at other times. If you are in a hurry, you may find that you cannot express enough milk.
- » Express as much breastmilk as you can, into a clean cup or jar. Some mothers find that they can express 2 cups or more even after the baby has breastfeed. But even 1 cup of 200 ml can give the baby 3 feeds a day.
- » Cover the cup of expressed breastmilk with a clean cloth or plate.

- » Leave the milk in the coolest place that you can find or in a refrigerator if you have one. Expressed breastmilk stays in good condition longer than cow's milk, because of the anti-infective factors in it. Germs do not start growing in the milk for at least 8 hours, even in summers.
- » Before feeding expressed milk, take it out from the refrigerator and keep it for half an hour at room temperature. Do not boil or reheat breast milk. Heat destroys many of the anti-infective factors.

5. Teach the caregiver how to feed expressed breastmilk:

- » Expressed breastmilk should be taken from the storage container in a clean cup/katori and fed. Bottles should not be used for feeding.
- » Teach her not to give the baby a pacifier to calm.

6. While mother is at work, she may need to express breastmilk

- » If she does not express, her breastmilk supply is likely to decrease.
- » She should try to find a suitable place to express the breastmilk.
- » She can keep the expressed breastmilk in a refrigerator/cool place. She should carry a clean jar with a lid to store breastmilk, and to take it home for the baby. She can use it even on the next day.

BREASTFEED IS THE BEST FEED AND EVERY BABY HAS THE RIGHT TO BE BREASTFED



Breastfeeding in special circumstances

Mother can breastfeed her infant/baby in normal circumstances. It is advisable to consult a doctor during maternal illness, which has effect on lactation and may require special precaution. However, in case of serious maternal illness and maternal medications, the frontline worker should take the advice regarding continuation of breastfeeding from the health professionals.

Breastfeeding In special circumstances - Human Immunodeficiency Virus (HIV)

Breastfeeding is known to transmit HIV to infants, if the mother is living with HIV/AIDS. If a mother is HIV positive, then you need to counsel the mothers.

The infant's feeding options to be discussed with women who are HIV - positive are:

- » Giving drugs for HIV infection (ARV/ART) and exclusive breastfeeding for 6 months and continued breastfeeding till 12 months, if infant is HIV negative, and for 24 months if infant is HIV positive.
- » Expression and heat-treatment of her own breastmilk
- » Breastfeeding from an HIV-negative woman or using donor breastmilk
- » Replacement feeding either with home-prepared milk or with commercial formula
- The risk of HIV transmission is greatest with mixed feeding. It is to be ensured that baby either gets exclusive breastfeeding or exclusive animal milk feeding.
- Adequate complementary foods from 6 months of age will be needed in all cases.
- Mothers should give replacement feed only when specific conditions are met (see box below).

Six criteria to assess for replacement feeding

- 1. Safe water and sanitation are ensured at the house hold level and in the community, and
- 2. Mother, or care giver can reliably afford to provide sufficient replacement feed (milk), to support normal growth and development of the infant, and
- 3. The mother or caregiver can prepare it frequently enough in a clean manner so that it is safe and carries a low risk of diarrhoea and malnutrition, and
- 4. The mother or caregiver can, in the first 6 months exclusively give replacement feeding, and
- 5. The family is supportive of this practice, and
- 6. The mother or caregiver can access healthcare that offers comprehensive child health services.

Breastfeeding during emergencies

During emergencies like natural disasters, earthquakes, floods, armed conflicts, breastfeeding is the safest and often the only reliable way to feed infants and young children. Mothers should be counselled about benefits of breastmilk, breastfeeding, and dangers of bottle feeding. Mothers should be provided support by establishment of safe places where she can breastfeed without any stress.

Supply of powder milk should be discouraged, except in exceptional circumstances, as it will lead to reduced breastfeeding and increase the chances of infection and mortality.





Growth monitoring and recording

Definition

- Growth is defined as increase in the physical size and shape of the body. It is measurable. Generally weight is measured in kilograms after neonatal period; weight of newborn baby may be described in grams. Length, and head and chest circumferences are depicted in centimetres.
- Weight, length/height, and head circumference are some important indicators of growth. These are also called age dependent parameters of physical growth.
- The growth takes place in an orderly and linear fashion. The velocity of growth is highest in infancy and early childhood.
- The brain grows very rapidly in infancy and almost 90% of its adult weight and size are achieved by 2 years of age. Head circumference is the surrogate marker of brain growth.
- Adequate energy and micronutrients are essential for optimal growth of the child
- Therefore, optimal feeding of an infant and young child is extremely important for achieving proper physical growth and development.
- If the weight and length/height of the baby does not increase as expected. Baby will suffer from undernutrition and will fall sick more often.
- When complementary feeding is not started on time, inadequate feeding is done, or baby does not take adequate feeds then initially weight is affected; baby looks lean and thin with loose folds of skin in the groin and over buttocks.
- If improper and suboptimal feeding is continued for a long period, then height is also affected and child becomes stunted.
- Thus, weight loss indicates inadequate feeding in the recent past whereas stunting occurs after prolonged deprivation of nutrients.
- In order to assess growth of a child, it is important to measure growth parameters accurately. An exclusively breastfeed baby gains a minimum of 500 gm weight in a month till first 6 month of age. At one year, a girl should weigh 9 kg and a boy should be 9.6 kg
- Below 2 years of age, the head to toe distance is taken in lying down posture and described as length. Beyond 2 years of age, the same distance is measured in standing position and is called height.

If both length and height are taken in a child, then length tends to be more because in standing posture spinal discs and sole tissue get compressed decreasing the height in comparison to length.

- Many parents feel apprehensive and their children get frightened when weight and length/height are measured. Therefore, mother should be greeted first and then made comfortable by offering a seat; praise her and give information about importance of growth monitoring before taking measurements.
- Suggest to parents that the child taken for regular growth measurements and keep the growth charts safely.

Taking weight

- Infants and young children up to 2 years of age are weighed in a basket type of weighing machine. The weighing scales should be able to record weight to nearest 100 gm.
- Before weighing, zero error should be corrected.
- The reading should be read by standing in front of the dial of the weighing scale.

Taking length

- The length is taken from head to toe on infantometer up to 2 years of age. If infantometer is not available, then length may be taken by a non-stretchable measuring tape.
- While taking height, ask child to remove shoes and stand upright on the platform of the stadiometer and look forward. If stadiometer is not available, then child may stand by the side of the wall with both heels, shoulders and head touching the wall and eyes looking forward. Height is then measured by a non-stretchable tape.



Growth monitoring by growth charts

WHO growth charts

- Measuring weight, length/height, head circumference and body mass index (BMI) of the child and keeping record of them at regular intervals are important for assessing growth.
- WHO growth charts have been developed for breastfed infants to record weight, length/height, head circumference, and BMI separately for girls and boys.
- The WHO growth charts are applicable for all children in the world from any region, race, religion or community.
- Age of the child is depicted on the horizontal line. The weight or length/height is marked on the vertical line.
- Each growth chart has a middle line marked "0" that represents normal growth.
- Two lines are below "0" line marked "-2" and "-3" showing increasing degree of malnutrition. Value for any growth parameter falling below the line marked "-3" indicates severe malnutrition.
- Similarly, two lines are above "0" line marked "+2", and "+3" showing that child is gaining more weight and is overweight or obese.
- A child is considered normal if her/his weight and length/height fall between "0" and "-2" or "0" and "+2" lines. In other words, weight and height values falling between "-2" and "+2" lines are regarded normal.

Mother and child protection card (MCP)

- In the ICDS scheme and National Health Mission (NHM), growth monitoring of children is an important activity. Children under 3 are weighed once in a month and children 3-6 years of age are weighed quarterly. To harmonize growth monitoring in government health and nutrition programmes with WHO growth standards, and to track the nutritional status, immunization schedule and developmental milestones for both child, the pregnant and lactating mothers, Mother Child Protection Card (MCP Card) was developed and released on 5 September 2008 by the Government of India.
- MCP card helps in correct assessment of child undernutrition, gender specific link to improved care of the girl child, greater attention to pregnant mother's health and early infancy timely interventions, and promote early and exclusive breastfeeding for the first 6 months of life and optimal Infant and Young Child feeding.

Interpretations of growth curves in MCP cards:

- An upward growth curve, showing adequate weight gain for age of the child indicates the child is growing and healthy.
- A flat growth curve indicates child has not gained weight and requires attention.
- A downward growth curve indicates loss of weight and requires immediate attention.



Measuring growth: Taking action

Growth monitoring

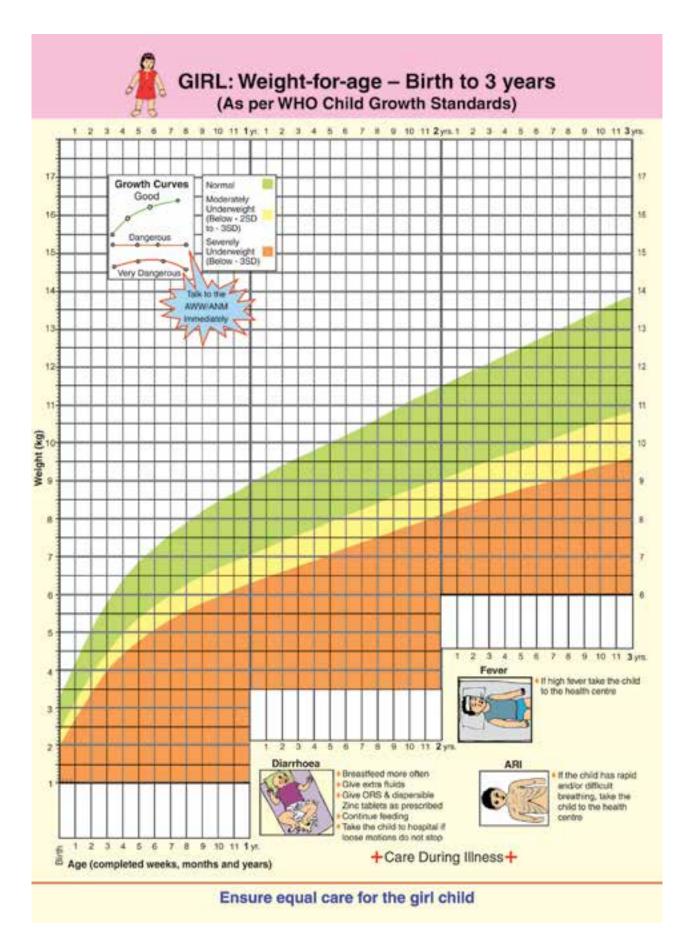
- Growth monitoring is an important tool to detect growth faltering at a very early stage.
- If growth line is following the path between +2 and -2 lines on the growth chart or following the growth trajectory according to the birth weight, then it shows that child is receiving optimal nutrition. Health worker should praise mother and counsel her to reinforcing optimal infant and young child feeding practices.
- Look whether child's weight for age and weight for length/height fall beyond a line representing "-3". If it is, then it indicates severe malnutrition and carries high risk of death and disability. The child requires immediate medical attention.
- When a health worker finds that child's growth line is deviating from beyond +2 or below -2 lines or not following his/her growth trajectory line, she/he should:
 - » Take history of breastfeeding; when breastfeeding was initiated, whether it was exclusive breastfeeding, and difficulty being experienced by the mother.
 - » Enquire about introduction of solid foods; when, what and how complementary feeding is being done? Enquire about difficulties in feeding solid foods by using "listening and learning" skills, ask about consistency and variety of foods being given to the child and if feeding is responsive?
 - » Enquire how much time mother spends away from the child and who generally feeds the baby. Whether she breastfeed elder sibling, if there was one?
 - » Observe and assess breastfeeding and take history of breast conditions.
 - » Then build mother's confidence by using 'confidence building' and 'checking understanding' skills to improve IYCF.
 - » Follow child weekly to record weight. It is the weight which increases first after feeding improves. Assess feeding on follow up. If growth pattern is not satisfactory, ask about difficulties and constraints in practicing optimal infant feeding. Enquire about consistency of food and its quantity. Counsel mother to breastfeed for 2 years or beyond.
 - » If weight does not improve after 2-3 weeks after counselling or shows downward trend, then refer the child to a health facility for further management.
 - » Enquire if child has suffered with any illness in recent past especially diarrhoea and pneumonia.

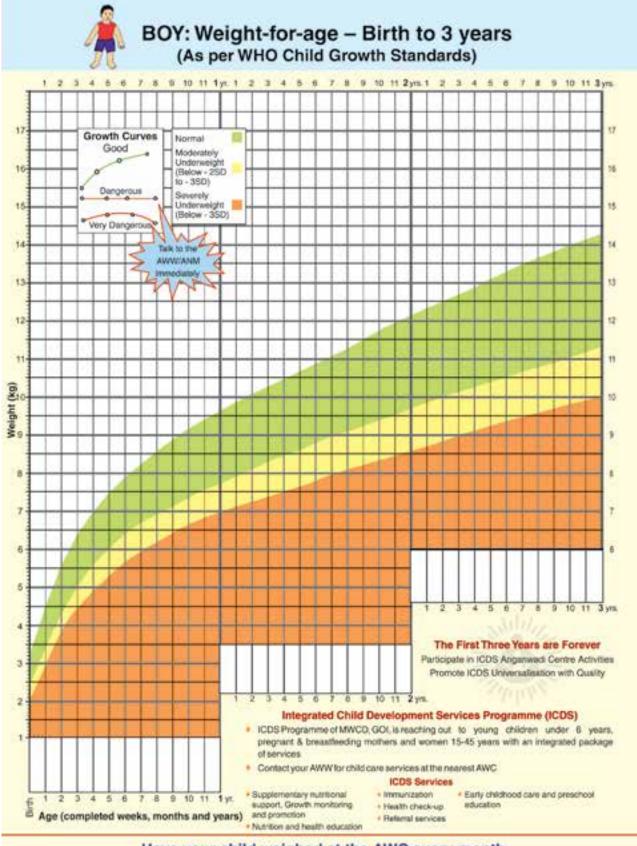
Т	imetable for the 4-day course for frontline workers/peer counselors	
	DAY 1	1
Time	Sessions	Minutes
9.10 am	Registration of participants, introduction of course material	60
10.10.30 am	Теа	30
10.30-11.30 am	Session 1: Why optimal infant and young child feeding	60
11.30-12.30 pm	Session 2: Production and intake of breastmilk	60
12.30-1.30 pm	Session 3: Assessing and observing a breastfeed	60
1.30-2.30 pm	Lunch	60
2.30-3.30 pm	Session 4: Listening and learning	60
3.30-4.00 pm	Теа	30
4.00-5.00 pm	Session 5: Building confidence, giving support and checking understanding	60
5.00-5.30 pm	Session 6: Antenatal preparation and establishing community breastfeeding support	30
	<u>DAY 2</u>	
9.00-10.00 am	Session 7: Positioning baby at the breast	60
10.00-10.30 am	Теа	30
10.30-11.15 am	Session 8: Breast conditions	45
11.15-12.00 am	Session 9: Refusal to breastfeed and crying	45
12.00-12.30 pm		
12.30-1.30 pm	Session 11: Not enough milk	60
1.30-2.30 pm	Lunch	60
2.30-3.00 pm	Session 12: Breastfeeding low birth weight babies	30
3.00-5.30 pm	Tea Home visit/visit to anganwadi centre/health centre (listening and learning, confidence building, assessing to breastfed, feeding history, positioning)	120
	Day 3	
9.00-10.10 am	Session 13: Complementary feeding -: foods to fill the nutrient gap	70
10.10-10.30 am	Теа	20
10.30-11.30 am	Session 14: Feeding techniques and strategies	60
11.30-1.30 pm	Home visit visit to anganwadi centre/Health centre(confidence building, complementary feeding)	120
1.30-2.30 pm	Lunch	60
2.30-3.15 pm	Session 15: Sustaining optimal infant and young vhild feeding	45
3.15-3.35pm	Session 16: Nutrition of lactating mothers their Health and Fertility	20
3.35-4.00 pm	Теа	30
4.00-4.30 pm	Session 17: Breastfeeding by working mothers	30
4.30-5.00 pm	Session 18: Breastfeeding in special circumstances	30
	Day 4	
9.00-10.00 am	Session 19: Growth monitoring and measuring	60
10.00-10.30 am	Теа	30
10.30-11.30 am	Session 20: Growth monitoring by growth charts	60
11.30-12.30 pm	Session 21: Measuring growth-taking action	60
12.30-1.30 pm	Feedback from trainees	60
1.30- 2.30 pm	Lunch	60
2.30-3.45 pm	Valedictory function including distribution of certificates to participants	45

Training Module for ANMs

Growth Charts

These growth charts have been adapted from the WHO Child Growth Standards. http://www.who.int/childgrowth/standards/en/





Have your child weighed at the AWC every month

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