

Baby Friendly Hospital Initiatives

INTRODUCTION:

BFHI was launched by WHO / UNICEF in 1991 in Ankara to boost the breast feeding practices. Since the launch of BFHI in India in 1993, it has grown into a unique programme, capturing the imagination and harnessing the support of health workers, breastfeeding advocates, policy makers, and mothers. This movement can, with your help, change not only hospital practices, but evolve into a community change process.

OBJECTIVE OF BFHI:

To achieve the goal of promoting breastfeeding practices in the hospitals both in government and private sectors, this is one of the key interventions towards achieving the goal of reducing infant mortality rates.

GOALS OF BFHI:

- To act and create an environment for exclusive breast feeding from birth of the baby till she or he is 4-6 months old.
- To continue breast feeding with adequate complementary foods for upto 2 years.

10 STEPS OF SUCCESSFUL BREAST FEEDING:

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

In India, BFHI also proposes to provide:

- Improved antenatal care
- Mother friendly delivery services
- Standardized institutional support of immunization
- Diarrhoea management

- Promotion of healthy growth and nutrition
- Widespread availability and adoption of family planning

Breast Feeding

INTRODUCTION:

Balanced and sufficient nutritional intake is most essential for children to promote optimal growth and development, to protect and maintain health, to prevent nutritional deficiency conditions and various illnesses and to reserve for starvation and dietary stress.

OBJECTIVES:

After the session the student will be able to

- Define breast feeding
- List down the advantages of breast feeding
- Explain the preparation of breast feeding
- Explain the position of breast feeding
- Describe the initiation of breast feeding
- Explain indicators of adequacy of breast feeding
- Enlist composition of breast milk
- Discuss techniques of breast feeding
- Classify typical pattern of infant feeding
- Enumerate the contraindication of breast feeding
- Describe problems of breast feeding and its measures to overcome the problem
- Discuss the failure of lactation

TERMINOLOGY:

Myelination:

Latching:

DEFINITION:

Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development.

WHO

Breastfeeding is the feeding of an infant or young child with breast milk directly from female human breasts (i.e., via lactation) rather than from a baby bottle or other container.

Exclusive breast feeding is where an infant is given only breast milk and no other additional foods; liquids or even water is not given to the baby.

COMPOSITION OF BREAST MILK:

The composition of breast milk varies at different stages in the postnatal period to fulfil the needs of the baby.

- **Colostrum**
It is secreted during the 1st 3 days after delivery. It is thick, yellow and small in quantities. It contains more antibodies and cells with higher amount of proteins and fat soluble vitamin (A, D, E, K).
- **Transitional milk**
It follows the colostrum and secretes during the 1st two weeks of post natal period. It has increased fat and sugar content and decreased protein and immunoglobulin content.
- **Mature milk**
It is secreted usually from 10-12 days after delivery. It is watery but contains all nutrients for optimal growth of the baby.
- **Pre term milk**
The breast milk secreted by mother who has delivered a preterm baby is different from milk of a mother who has delivered a full term baby. This milk contains more proteins, sodium, iron, immunoglobulins and calories appropriate for the requirements of the preterm neonates.
- **Fore milk**
It is secreted at the starting of the regular breast feeding. It is more watery to satisfy the baby's thirst and contains more proteins, sugar, vitamins and minerals.
- **Hind milk**
It is secreted towards the end of the regular breast feeding and contains more fat and energy. The mother should feed the baby allowing one breast to empty to provide both fore milk and hind milk. For optimum growth and fulfil adequate fluid and nutritional requirements, both fore milk and hind milk are needed for the baby.

GUIDELINES FOR BREASTFEEDING:

Breastfeeding is the best way to feed the infant. It greatly improves quality of life by providing adequate nutrition, resistance to infection, mental and emotional satisfaction. It helps in building healthy relationship between the mother and the child.

1. Preparation for breast feeding:

Preparation must begin in the antenatal period.

- Mother craft training should be provided and includes benefits of breast feeding which should be given in the pre-pregnant state.

- In the antenatal period, examination of breast and identification of problems, like retracted nipples should be done with necessary advice for interventions.
- Prevention of micronutrient deficiencies, rest, regular exercise, etc should be advised for better health in antenatal period.
- Antenatal counselling, family support, mother-support group should be emphasized as the preparation of mothers for breast feeding.
- Mother should be psychologically prepared to feed her baby immediately after birth.

2. Starting to breastfeed (Initiation of breastfeeding)

Breast feeding should be initiated within 1st half an hour to 1 hour of birth as soon as possible. It should be initiated within 4 hours after caesarean section delivery. Early suckling provides warmth security and colostrums. In case of pre term baby or sick babies, being in special care unit, they should be feed with expressed breast milk. Mother should be instructed to assess the indicators of adequacy of breast feeding and importance of increasing her own dietary intake with extra 550 cal and to drink fluids in response to her thirst.

3. Exclusive breastfeeding for first six months

Exclusive breastfeeding means the infant receives only breastmilk (from his/her mother) and no other liquids, not even water or complementary foods with the exception of undiluted vitamin/mineral drops or syrups, and medicines

Babies should be exclusively breastfed for first six months because:

- water supplementation even in hot weather is unnecessary and leads to reduced desire to suckle and is a dangerous source of infection as well,
- giving other supplements also reduces breastfeeding success,
- babies grow normally for six months with breastmilk alone,
- it contributes to better intelligence development for the baby,
- It provides 98% protection for woman this is Lactational Amenorrhea Method (LAM) of family planning, and it reduces the risk of breast and ovarian cancer.

4. Prelacteal feeding (*anything given to drink or eat before starting to breastfeed*) and pacifiers

Prelacteal feeds or pacifiers should not be given, because:

- giving prelacteal feeds such as sugar water, honey, water or butter etc. lead to sickness in the baby and interfere with breastfeeding success as these reduce the baby's desire for feeding, and
- pacifiers interfere with the success of breastfeeding due to “nipple confusion”, as sucking on rubber nipple and breast is quite different.

4. Breastfeeding in the correct position

Body position: The mother should feed her baby in any comfortable position such as lying or sitting with good eye contact. Good and bad body positions are shown in Fig. a & b.



Fig. a: Good body position

- Baby's head and neck is straight or bend slightly back.
- Baby's body is turned towards the mother.
- Baby's body is close to the mother facing breast.
- Baby's whole body is supported.
- Mother baby eye contact is there.



Fig. b: Bad body position

- Baby's head and neck not straight.
- Baby's body is turned away from the mother.
- Baby's body is away from the mother.
- Baby's body is not supported.
- There is no eye contact between the mother and baby.

POSITION OF BREAST FEEDING:

A. Position of baby

a. The cradle hold



b. Reclining position



d. Sitting position feeding

c. The clutch or football hold



e. Cross over hold



f. Twin feeding



g. The baby's head supported on the mother's forearm



B. Position of the mother.

a. **Lying on her side:** It is appropriate at different times during her lactation. This position is used in caesarean section patients. In this she may need assistance, when feeding from the lower breast it may be helpful to raise her body slightly pillow under her ribs.

b. **Sitting position:** In early days it is particularly important that the mother's back is upright and is at a right angle to her lap.

Sucking position: Babies should be fed in correct sucking position at the breast to ensure effective milk supply from the mother to the baby. Signs of correct/good and incorrect/poor suckling position are shown in figure c & d, respectively.

Good attachment helps in:

- reducing incidence of sore nipples and swelling in the breast, and
- ensuring adequate supply of breastmilk to the baby.

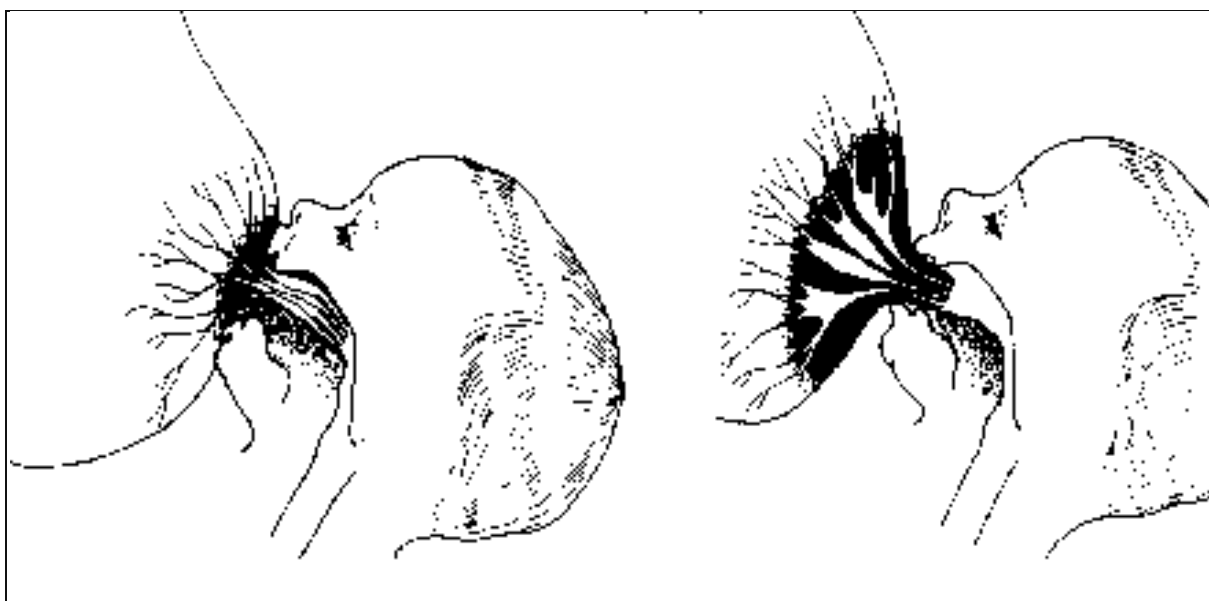


Fig. c: Signs of correct/good attachment:

Fig. d: Signs of incorrect/bad attachment:

<ul style="list-style-type: none"> • Baby's chin is close to the breast, • Baby's mouth is wide open and the lower lip is turned outwards, • More areola is visible above the baby's mouth than below it, • There should be no pain in the nipple area during breastfeeding 	<ul style="list-style-type: none"> • Baby sucks only at the nipple, • Mouth is not wide open, and much of the areola and thus lactiferous sinuses are outside the mouth, • Chin is away from the breast, • Sucking in this position may cause pain to the mother.
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5. Frequent breastfeeding and breastfeeding on demand

Baby should be fed on demand from both breasts many times a day (8-10 times or more in 24 hours). Normally breasts are ready for the next feed in one and a half – hour, hence, demand feeding can be done in less than 2 hours interval. Some babies may like to breastfeed less and some more, and those who are reluctant should be encouraged to feed more frequently but not pushed. A mother having twins can provide enough milk through breastfeeding. The mother should practice frequent and demand breastfeeding including night feeds because:

- more the mother breastfeeds, the more will be the production of breastmilk, and
- breastfeeding at night is particularly helpful as milk producing hormone, (prolactin) is secreted more during night and it provides relaxing effect to the mother.

6. Continued breastfeeding

Continue breastfeeding upto 2 years and beyond along with complementary feeding (complementary feeding is required when breastmilk becomes insufficient to satisfy the growing nutritional requirements of the infant after 6 months of age) because it:

- increases energy intake,
- lessens the risk of being under weight and reduces the chances of infection, and
- helps in emotional bonding.

7. If the mother works outside home

When at work she has following options:

- a. She should express her milk at regular intervals and store in a clean container for use by caregivers at home next day. The breastmilk does not get spoiled for 8 hours at room temperature and 24 hours in the refrigerator. Care-givers should give expressed milk which she has left to feed the baby with the cup and spoon to avoid nipple confusion.
- b. If home is near place of work she should feed her baby during breastfeeding breaks.
- c. If crèche or baby care facilities are available at place of work, she should keep the baby there and go and feed during breastfeeding breaks.
- d. If none is possible, she should express milk and discard it for maintaining better milk flow and to relieve engorgement.

8. If mother or baby is sick

- Breastfeeding should be continued in commonly encountered illnesses in the mother or baby. It is very useful for babies having diarrhoea.
- Breastmilk is particularly important for preterm and low birth weight infants. Expressed breastmilk should be given by cup to the babies who cannot breastfeed by suckling.

INDICATORS OF ADEQUACY OF BREAST FEEDING:

- Audible swallowing sound during the feed.
- Let down sensation in mother's breast.
- Breast is full before feed and softer afterward.
- Wet nappies 6 or more in 24 hours.
- Frequent soft bowel movements, 3-8 times in 24 hours.
- Average weight of 18-30gm /day.
- Baby sleeps well and doesn't cry frequently.
- Baby has good muscle tone and healthy skin.

TECHNIQUES OF BREAST FEEDING:

- Mothers should be comfortable and relaxed physically and mentally before giving breast feed. She should wash her hands and can have a glass of water or milk. Baby should be cleaned and dried before feeding.
- Correct positioning of mother and baby is an important aspect of successful breast feeding.
- Latching: after proper positioning, when baby's chin touches the breast, cheek touches the nipple; baby will open mouth in rooting reflex. Then the baby will be quickly moved on to the breast with the lower lip below the nipple; so that the nipple and most of the areola go into the baby's mouth. The sucking of breast stimulates the milk secretion or prolactin reflex which promotes milk production and secretion. Then by the milk ejection or oxytocin reflex milk flows out from the glands into lactiferous sinuses and ducts and then to the baby's mouth. When baby suckles again and again in regular slow deep sucks with good sucking reflex, the adequate milk flows out and then the baby's cheeks become full with milk. The mother may hear the swallowing sound and does not feel pain in the nipple. The baby should have good swallowing reflex to take adequate feed with sufficient flow of milk.
- Initially breast feeding can be given at 1-2 hours interval and then on self demand by the baby.
- Duration of feeding should be continued till the baby is satisfied. Next feeding should be started with opposite breast ie. which was fed last in the previous feeding.
- Burping is usually not necessary, if the baby is having good latching and attachment during feeding which prevent air entry into the baby's mouth.
- After feeding the mother should make the baby dry and comfortable.
- Breast feeding should be continued exclusively upto 4 months of age or preferably may be upto 6 months if adequate breast feeding is available.

- Complementary foods can be started between 4-6 months exact age may vary but breast feeding should be continue upto 2 years of age or beyond and especially at night.
- Mothers should maintain hygienic measures take daily bath and wash her breast and wear clean blouse during this period to prevent contamination of breast milk.

TYPICAL PATTERN OF INFANT FEEDING:

Age of infant	No. of feeding	Volume / feeding	Total
Birth-2 weeks	6-10	(2-3)OZ (60-90)ml	360-900 ml(12-30)OZ
2wks-1 month	6-8	(3-4)OZ(90-120) ml	540-960 ml(18-20) OZ
1-3 month	5-6	(5-6)oz(150-180)ml	750-1080 ml(25-36)oz
3-7 month	4-5	(6-7)oz(180-210)ml	750-1080 ml(25-36)oz
7-12month	3-4	(7-8)oz(210-240)ml	750-1080 ml(25-36)oz

CONTRA-INDICATION OF BREAST FEEDING:

- Galactosemia
- Phenylketonuria

Maternal conditions –

- ✓ R – radio therapy
- ✓ E – ergot therapy
- ✓ A – antimetabolites therapy
- ✓ L – lithium therapy

*maternal illness should not result in interruption of breast feeding. Expressed breast milk can be given to the baby whenever needed from the mother or mother’s substitute.

ADVANTAGES OF BREAST FEEDING:

The advantages of breast feeding are as follows:

1) Nutritive value

- Breast milk contains all the nutrients in the right proportion which are needed for optimum growth and development of the baby upto 4 – 6 months.
- It is essential for brain growth of the infant.
- It facilitates absorption of calcium which helps in bony growth.
- It contains amino acids like taurine and cysteine which are important as neurotransmitters.
- Breast milk fats are poly unsaturated fats which are necessary for the myelination of the nervous system.

- It has vitamins minerals, electrolytes and water in the right proportion for the infant which are necessary for the maturation of the intestinal tract.
- Its composition is ideal for an infant i.e. it provides 66 calories per 100 ml and contain 1.2 gm protein, 3.8 g fat, 7 g lactose and vitamin A 170 – 670 IU, vitamin C 2- 6 mg, vitamin D 2.2 IU, calcium 35 mg, phosphorus 15 mg in 100 ml.
- It provides specific nutrition for pre term baby in pre term delivery.

2) Digestibility

- The proteins of breast milk are mostly lacto albumin and lacto globulin which forms a soft curd i. e. easy to digest.
- The enzyme lipase in the breast milk helps in the digestion of fats and provides free fatty acids.

3) Protective value

- It prevents infection especially gastrointestinal and respiratory tract infection as it contains IgA, IgM, macrophages, lymphocytes, etc.
- It provides protection against malaria and various viral and bacterial infections like skin infections, septicemia etc.
- It protects the infant from allergy and bronchial asthma.
- It also protects against neonatal hypocalcemia, necrotizing enterocolitis, deficiency of vitamin E and zinc neonatal convulsions and sudden infant death syndrome.
- Exclusive breast feeding baby has less chance of developing malnutrition, hypertension, diabetes mellitus, coronary artery disease, arteriosclerosis, ulcerative colitis etc.

4) Psychological benefits

- It promotes close psychological and emotional bondage with the mother by frequent skin to skin contact, attention and interaction.
- It promotes development of higher intelligence and feeling of security in infant.

5) Maternal benefits

- It reduces the chance of post partum hemorrhage and helps in better uterine involution.
- It can protect from pregnancy for first 6 months if exclusive breast feeding is carried out.
- It improves metabolic efficiency and satisfaction with sense of fulfilment of the mother.
- It reduces the risk of breast and ovarian cancer of the mother.
- It improves slimming of the mother by consuming extra fat which accumulate during pregnancy.
- It is more convenient and time saving for the mother.

6) Family and community benefits

- It is economical in terms of saving of money, time and energy.

- Family has to spend less on milk, health care and illness.
- Community expenditure on health care and contraception are reduced.

PROBLEMS OF BREAST FEEDING:

- Baby who does not suck
- Baby who refused on breast
- Inverted nipples
- Sore nipple
- Engorged breast
- Breast abscess
- Working mother

Common Reasons		Not So Common Reasons	
<i>Breastfeeding factors</i>	<i>Mother: Psychological factors</i>	<i>Mother physical condition</i>	<i>Baby's condition</i>
Delayed Start Infrequent feeds No night feeds Short or uninterrupted feeds Scheduled feeding Poor attachment Bottles, pacifiers Complimentary feeds	Lack of confidence Worry, stress Dislike for breastfeeding Tiredness	Using contraceptive pill, diuretics Pregnancy Severe Malnutrition Alcohol Smoking Retained piece of placenta (rare) Poor breast development (very rare)	Illness Physical abnormality

FAILURE OF LACTATION:

There are many factors which are responsible for failure of successful breast feeding -

- ❖ Prelacteal feeding, bottle feeding, incorrect technique of breast feeding as poor attachment to breast and making the baby wait for breast feeding or delay feeding lessens the milk secretion.
- ❖ Medications like methergine or ergometrine, oral contraceptives also hinders the milk production.
- ❖ Maternal worry, anxiety, lack of interest, poor psychological bondage with baby, suppress the lactation and prevent successful lactation.
- ❖ Acute illness chronic diseases, poor maternal health, breast engorgement, breast abscess, flat nipple, cracked nipple, sore nipple, painful breast feeding inhibit the lactation.

- ❖ Faulty sucking, weak baby or sick baby.
- ❖ Inadequate preparation of breast feeding during antenatal care, infant milk substitute, inadequate maternity leave for working mothers.

MEASURES TO OVERCOME THE PROBLEM OF BREAST FEEDING:

1. Baby who does not suck
 - No unneeded drugs to be given to the breast feeding mothers.
 - No artificial food or water to be given to the baby.
 - Breast feeding to be given to the baby only when the baby is alert and ready.
 - Milk to be expressed to the nipple just prior to feed the baby.
 - Nipple should be placed slightly upward towards the roof of the baby's mouth.
 - Keep the baby's nose free during breast feeding.
2. Baby who refused on breast
 - Baby should be in comfortable position with good attachment to the breast and should be kept warm and dry.
 - Avoid pressure on painful area during feeding.
 - Express breast milk to maintain lactation in both breast.
 - Allowing the baby to feed only one breast.
3. Inverted nipples
 - Treatment should be started after the birth of the baby.
 - Nipple is manually stretched and rolls out several times a day.
 - A pump or a plastic syringe is used to draw out the nipple and the baby is then put to the breast.
4. Sore nipple
 - Correct positioning and latching of the baby to the breast.
 - Frequent washing with soap and water should be avoided.
 - Hind milk to be applied to the nipple after a feeding.
 - Nipples should be allowed to heal in between feeds.
5. Breast engorgement
 - Frequent feeding and correct attachment of the baby to the breast during feeding to be done to prevent engorgement.
 - Treatment to be done with local warm packs and analgesic to the mother to relieve the pain.
 - Milk should be expressed gently to soften the breast and then the baby to be put to the breast with good latching.
6. Breast abscess
 - Treatment to be done with analgesics and antibiotics.
 - Abscess may need incision and drainage.
 - Breast feeding must be continued.
7. Working mother
 - Mother should express her milk in a clean wide mouth container and this milk should be fed to her baby by the caretaker, in the absence of the mother.

- Expressed breast milk can be stored at room temperature for 8 hours and in the refrigerator for 24 hours.
- Expressed breast milk should be given with cup/ bati and spoon.
- Expression of milk should be done by hand which is more easier.

CONCLUSION:

Breast feeding is the best natural feeding and breast milk is best milk. The days when babies will be routinely given bottles and infant formula in hospitals are likely to be over soon. Trained and committed health professionals are now talking about breastfeeding with women; there is whole new trend towards helping mothers to be successful in breastfeeding.

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