UNIT 4 FEEDING TECHNIQUES

Structure

4.0 OBJECTIVES

After going through this unit, you will be able to:

- assess breastfeeding;
- perform the correct technique of expression of breast milk;
- provide expressed breast milk through nasogastric tube or by cup and spoon; and
- demonstrate to the mother to use syringe pump for inverted nipples

4.1 INTRODUCTION

Breast milk is best for all babies whether healthy or sick, premature or low birth weight. By virtue of it's unique biological and biochemical composition, milk is not only species specific but baby specific also. This unit highlights the need for assessing breast feeding in a few special situations and also explains the technique of expressing and storing breast milk in condition where baby can not be put to breast directly. The technique of giving expressed breast milk needs to be learnt in order to meet the caloric requirement till the baby is ready to accept breast feed.

4.2 ASSESSMENT OF BREAST FEEDING TECHNIQUE

Breastfeeding is natural and most mothers take to it without any problem. There are many ways to breast feed and each mother develops her own style to suit her baby. However some mothers and babies need some assistance. Incorrect attachment and position may lead to sore nipple, refusal to suckle and the feeling that there is not enough milk. This may lead to engorged breasts. The infant may be unsatisfied after breast feed and want to feed very often or for a very long time. The infant may get too little milk and not gain weight.

Need for Assessment

Breastfeeding needs assessment in the following situations, if an infant;

- has any feeding difficulty.
- is breast feeding less than 8 times in 24 hours.
- is taking other food or drink than breast milk in first 6 months of life.

- is low weight for age.

Do not assess breastfeeding if:

- the infant is exclusively breast fed, without difficulty and is not low weight for age.
- the infant is not breast fed at all.
- the infant has a serious problem requiring urgent referral to a hospital.

4.2.1 Correct Positioning

It is important to have correct positioning because it will ensure good attachment. (Fig 3.1).

Signs of good position

- Infant's neck is straight or bent slightly backwards.
- Infant's body is turned towards the mother.
- Infant's body is close to the mother, and
- Infant's whole body is supported.

Fig. 3.1 (a): Correct position: Baby's body close, facing breast milk bottom's well supported.

Fig. 3.1 (b): incorrect position

4.2.2 Good Attachment

If the infant has not been fed in the previous hour, ask the mother to put her infant to the breast. Observe the breast feeding for 4 minutes.

Look: Is the infant able to attach?

The four signs of good attachment are (Fig. 3.2):

- Chin touching the breast (or very close)
- Mouth wide open.
- Lower lip turned outward.
- More areola visible above than below the mouth.

If all of these four signs are present, the infant has good attachment (Fig. 3.3(a)). If any of the above signs of attachment is absent, infant is not well attached (Fig. 3.3(b)). If a very sick infant or extremely low birth weight baby can not take the nipple into his mouth and keep it there to suck, he has no attachment at all. He is not able to breast feed at all.

If an infant is not well attached, the result may be pain and damage to the nipples, or the infant may not remove breast milk effectively which may cause engorgement of the breast. The infant may be unsatisfied after breast feeds and want to feed very often or for a very long period. The infant may get too little milk and not gain weight. All these problems improve if attachment is improved by good positioning.

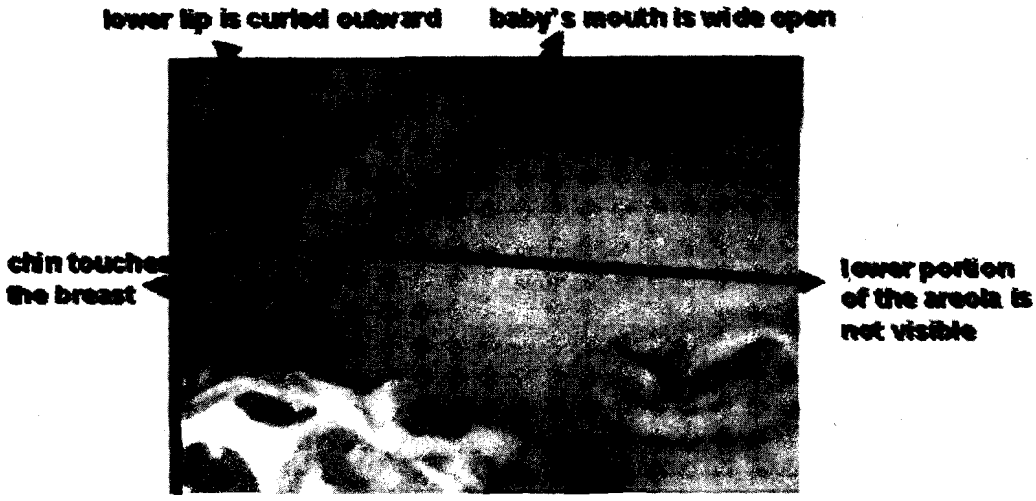

Fig 3.2 Signs of good attachment

Fig. 3.3(a) Good attachment

Fig.3.3(b) Poor attachment

Look: Is the infant suckling effectively?

The infant is suckling effectively if he suckles with slow deep sucks and sometimes pauses. You may see or hear the infant swallowing. Also look for signs that the infant is satisfied. If satisfied, the infant releases the breast spontaneously. The infant appears relaxed, sleepy, and loses interest in the breast.

An infant is **not suckling effectively** if he is taking only rapid, shallow sucks, there is indrawing of the cheeks. The infant is not satisfied at the end of the feed, and may be restless. He may cry or try to suckle again or continue the breast feed for a long time.

It is also important to look for **blocked nose**, which interfere with breast feeding, clear the infant's nose with saline drops and then check whether the infant can suckle more effectively. Also look for ulcers or white patches in the mouth (Thrush) on the tongue or inside of the cheek. Thrush looks like milk curds on the inside of the cheek or a thick white coating of the tongue.

4.2.3 Improving Position and Attachment

If in your assessment of breastfeeding, you found any difficulty with attachment or suckling, help the mother position and attach her infant better. Make sure that the mother is comfortable and relaxed, e.g. sitting on a low seat with her back straight and well supported.

Show her how to help the infant to attach. She should

- touch her infant's lips with her nipple.
- wait until infant's mouth is opening wide.
- move her infant quickly on to her breast, aiming the infant's lower lip well below the nipple.

4.3 BREAST MILK EXPRESSION

It is useful for all mothers to know how to express and store their milk.

Expression of breast milk is required in the following situations:

- To maintain milk production and for feeding the baby who is premature, low birth weight or sick and can not breast feed for sometime.
- Working mothers, who plan to return to work can express the milk in advance and store it for exclusively breast fed babies.
- To relieve breast problem e.g. engorgement.

4.3.1 Technique of Expression

Teach her to:

- Wash her hands with soap and water thoroughly before expression.
- Sit or stand comfortably, and hold the clean container near her breast.
- Put her thumb on her breast above the nipple and areola, and her first finger on the breast below the nipple and areola, opposite the thumb. She supports the breast with her other fingers.
- Press her thumb and first finger slightly inwards towards the chest wall.
- Press her breast behind the nipple and aerola between her finger and thumb (Fig. 3.4). She must press in the lactiferous sinuses beneath the areola. Sometimes in a lactating breast it is possible to feel the sinuses. They are like peanuts. If she can feel them, she can press on them. Press and release, press and release.

  This should not hurt—if it hurts the technique is wrong. At first no milk may come, but after pressing a few times, milk starts to drip out.
- Press the areola in the same way from the sides, to make sure that milk is expressed from all segments of the breast.
- Avoid rubbing or sliding her fingers along the skin. The movements of the fingers should be more like rolling.
- Avoid squeezing the nipple itself. Pressing or pulling the nipple can not express the milk.
- Express one breast for atleast 3-5 minutes until the flow slows; then express the other side; and then repeat both sides. She can use either hand for either breast.

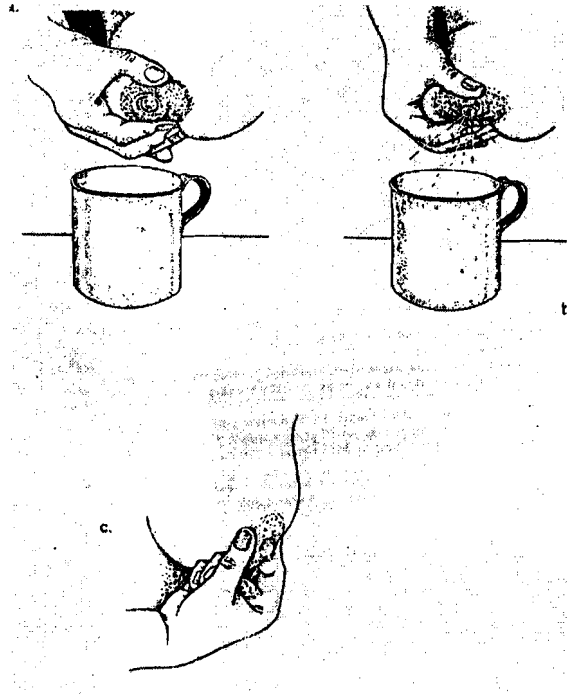

Fig. 3.4: Technique to express breast milk by hand

- Explain that to express breast milk adequately may take 20-30 minutes. Having the baby close or handling the baby before milk expression may help the mother to have a good let-down reflex. It is important not to try to express in a shorter time. To stimulate and maintain production one should express milk frequently—at least 8 times in 24 hours.

4.3.2 Storing Expressed Breast Milk (EBM)

- Wash the container thoroughly with soap and water.
- Cover the container of EBM with a clean cloth or a lid.
- Keep the container with EBM in the coolest place available at room temperature for 8 hours, or in the refrigerator for 24 hours or in the freezer at 20° C for 3 months.
- EBM stays in good condition longer than animal milk because of the protective substances that it contains. It is not advisable to boil the EBM. If it needs to be warmed, place the container in a bowl of warm water.
- Gently shake the container to recombine the separated fat globules with the rest of the milk before feeding.
- Feed with cup or spoon or paladai, never feed with bottle.

4.4 TECHNIQUE OF PROVIDING EBM

The most common indication for providing Expressed Breast Milk (EBM) is low birth weight babies. They are given EBM either through nasogastric/orogastric tube or by cup and spoon depending on the birth weight and gestation of the baby.

4.4.1 Cup and Spoon/paladai Feeding

Indication

To provide breast milk to low birth weight babies who are able to swallow but can not suck effectively.

Equipment:

Cup and spoon and paladai; or any traditional infant feeding vessel.

Procedure

1) Ensure that the cup and spoon or paladai or any other feeding vessel to be used have been sterilised by boiling in a closed clean pan for 20 minutes (after the water has started boiling). Allow the contents to cool.
2) Ensure that the mother/nurse/relative washes her hand before feeding.
3) Mother expressed/requested to express the breast milk into the cup.
4) Hold the baby comfortably in the lap with the head held slightly high.
5) Take small amounts of milk into spoon and pour directly over the tongue. If the paladai or any other traditional vessel is used, pour the milk through the angle of the mouth in small amounts at a time (Fig 3.5).

Fig 3.5: Paladai Feeding

6) Wait till the baby swallows the milk before the milk is poured into the mouth again.
7) Give feeds 2 hourly. Start with a small quantity and increase by 1-2 ml till the desired volume is reached.

Advantages

1) Simple to teach mothers, easy to practice and hygienic.
2) Does not cause nipple confusion when the baby is ready to directly breast feed (in contrast to bottle feeding).

Precautions

1) Do not attempt to feed when the infant is crying.
2) Do not attempt to feed sick newborns using this technique.
3) Low birth weight babies may take time to swallow and consume a lot of time for feeding. Never hurry feeding such babies as they may aspirate the milk.

4.4.2 Nasogastric or Oro-gastric Feeding

Indication

To provide expressed breast milk to low birth weight babies or other babies who are unable to suck or swallow.

Equipment

Feeding can be done by naso-gastric tube or oro-gastric tube. The equipment includes naso-gastric tube (size 5-6), sterile water, syringes, clean closed container, tape and scissors.

Procedure

1) Wash hands thoroughly

2) Insert the tube accurately by following the steps listed below:

a) Select the tube (size 5 for the babies below 2000 gms and size 6 for over 2000 gms).

b) Estimate the length of the tube that has to be inserted as follows:

Nasogastric route: Measure the distance between the bridge of the nose to tragus of the ear and then to the xiphisternum.

Fig. 3.6: Nasogastric tube

Oro-gastric route: Measure the distance between the angle of the mouth to the tragus of the ear and to xiphisternum.

c) Add 1 cm to the estimated length of the tube that has to be inserted and mark it on the tube.

d) Insert the tube in the stomach and check whether the position is correct by aspirating the stomach contents using a clean syringe. Once confirmed, secure the indwelling tube by adhesive tape across the cheek (Fig.3.6).

e) Ensure that the tube is in the correct position before each feed by checking the position of the tube by noting the 'mark' on the tube.

f) Check for residual gastric content before giving the feed.

g) If gastric residue is more than 20% of previous feed, withhold the feed.

3) Adminster the feed following the steps listed below:

a) Check the position of the feeding tube.

In case of subsequent feeds, check the residual gastric contents and take action as necessary.

b) Remove the plunger from the barrel (in case of subsequent feeds, the plunger is already out if the same syringe is re-used).

c) Attach the barrel of the syringe to allow the milk to flow down by gravity.

d) Pour 1 ml of sterile water/boiled and cooled water.

e) Detach the plunger and rinse both the syringe and plunger in boiled and cooled water and leave it in a covered clean container for re-use. Change the syringe every day if re-used.

Precuations

1) Do not force the milk down with the plunger.

2) Check the position of the tube before each feed.

3) Check the residual gastric contents before each feed in case of subsequent feeds.

4) If syringes are re-used, change them after 24 hours.

5) Use a separate syringe for each baby.

4.5 TREATMENT OF INVERTED NIPPLE BY SYRINGE PUMP

Follow the following steps to correct the inverted nipple (Fig. 3.7).

- Show to 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.

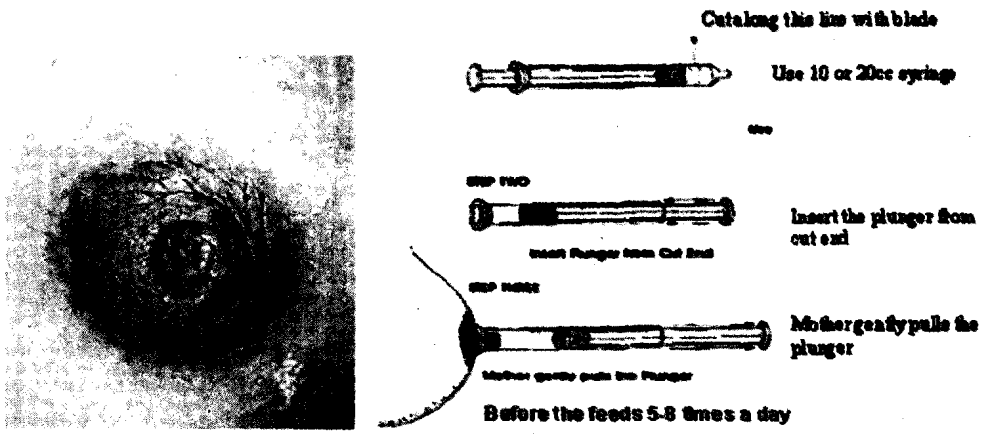

Fig3.7 Inverted Nipple & Steps of its treatment

4.6 LET US SUM UP

This unit should help you learn the skills required for assessing breast feeding. It is important to observe the infant while breast feeding to make this assessment. You should also learn the correct technique of expressing breast milk. You should also be able to feed the infant by spoon and cup or nasogastric/oro-gastric route.