Breastfeeding
An update on practices & problem solving

Sri Lanka College of Paediatricians

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Objectives

• Updates to BFHI

• Why feed breastmilk to babies rather than formula?

• Problems during breastfeeding

• Summary
Why is breastfeeding important?

Importance for baby

- Ideal composition biochemically / nutritionally
- Protects from infections – diarrhoea, otitis media, UTI
- Optimises neurodevelopment (more lactose than cow’s milk)
- Better intelligence than formula-fed babies
- Protects from chronic diseases eg: diabetes (type 1 & 2), childhood cancers, obesity, inflammatory bowel disease, asthma and allergies
- Preterm – breastmilk reduces risk of sepsis, NEC
Protection against infection

1. Mother infected

2. WBC in mother’s body make antibodies to protect mother

3. Some WBCs go to breast and make antibodies there

4. Antibody to mother’s infection secreted in milk to protect baby
Why is breastfeeding important?

Importance for mother

- Reduces risk of hypercholesterolaemia, diabetes, hypertension, cardiovascular disease
- Breast and ovarian cancer are reduced
- Hip fractures and osteoporosis are reduced
- Faster return to pre-pregnancy weight
- Lactational amenorrhea – contraception (partial)
- Stops bleeding after birth of the baby (Oxytocin)
- Stabilizes endometriosis
Oxytocin reflex

Stimulated by:

- Thinks lovingly of baby
- Sound of the baby
- Sight of the baby
- CONFIDENCE

Inhibited by:

- Worry
- Stress
- Pain
- Doubt
Why is breastfeeding important?

Importance for family

• Improves bonding with baby

• No cost

• Convenient (no preparation)

• Fresh
Breastfeeding technique

Positioning

Putting to breast
Attachment

Suckling
Anatomy of breast

- Myoepithelial cells
- Epithelial cells
- Lactiferous sinus ducts
- Nipple
- Areola
- Montgomey gland
- Alveolary gland
- Supporting tissue and fat
Good and poor attachment
What differences do you see?

1. Pain and damage to nipples
   - Breastmilk not swallowed effectively
   - Apparent poor milk supply
   - Breasts make less milk

2. Sore nipples
   - Fissures
   - Baby unsatisfied
   - Refuses to feed
   - Baby falters to gain weight
The mouth is widely open

The lower lip is turned outwards

More areola is visible above the baby’s mouth than below it
Feeding reflexes in the baby

- Positioning
- Putting to breast
- Attachment
- Suckling

Rooting reflex
Sucking reflex
Swallowing reflex
Suckling with a **good positioning and attachment**

- **lower lip is curled outward**
- **baby’s mouth is wide open**
- **chin touches the breast**
- **lower portion of the areola is not visible**
Basic positions for breastfeeding (seated)

- Cradle Hold
- Cross-cradle hold
- Clutch hold
- Football hold
Positions

Breast-Feeding Positions

- Cradle hold
- Criss-cross cradle hold
- Lying on your side
- Football hold
- Laid-back
Putting the baby to the breast

- Mother offering whole breast — this helps the baby to take enough of the breast into his mouth.
- Mother offering nipple as if it is a rubber teat — this leads to the baby sucking only the nipple.

Different ways to offer a breast to a baby.
Suckling with a good attachment

a. A baby suckling in good position.

b. A good suckling position. The breast is stretched into a “teat” in the baby’s mouth.

c. The wave going along the tongue to press the milk from the lactiferous sinuses.

: How a baby suckles.
Suckling with a good positioning and attachment

• Positioning
  - The baby’s whole body is facing his mother and close to her
  - Face is close up to the breast

• Attachment
  - Chin is touching the breast
  - Mouth is wide open
  - Lower lip is curled outwards
  - More areola above baby’s upper lip & less areola below lower lip

• You can see the baby taking slow, deep sucks
• The baby is relaxed, happy and satisfied at the end of the feed
• The mother does not feel nipple pain
• You may be able to hear the baby swallowing
After a feed

Burping
• After each feed
• Not essential if attachment is good

Positioning after a feed
• Supine or to a side
• Not prone
Advice to mothers

• No formula, water, glucose in first 6 mths (even on hot days)
• Only small volume of colostrum necessary on D1/2

• Length of feeds - not fixed; wait until baby finishes
• One or both breasts?
• Night feeding good for maintaining flow; more prolactin

• Cleaning of breasts - normal daily bath

• Working mothers - night feeds, breast milk expression storage, maternity leave
ABM Clinical Protocol #5: Peripartum Breastfeeding Management for the Healthy Mother and Infant at Term, Revision 2013
Continuing support (Step 10)

• Lactation management centres
  • Post discharge
  • Self-referrals
  • Referrals from other units
  • Hotline

• Dedicated lactation nurses
  • Who visit wards

• Public Health Midwives in the field
Expression of breast milk (Step 5)

• Teach correct method of expression
• Discuss with mother antenatally
• Need to start within 6 hours
• Express regularly - at least every 2-3 hours (overnight too)
• Build the mother’s confidence
• Colustrum - even for very sick babies
• Storage
• Opportunities for Kangaroo care; baby’s bedside / photo
• galactagogues
Expressed breast milk storage guidelines

• Following guideline is for healthy term babies

**Table 1. Milk Storage Guidelines**

<table>
<thead>
<tr>
<th>Location of storage</th>
<th>Temperature</th>
<th>Maximum recommended storage duration</th>
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</table>
| Room temperature    | 16–29°C (60–85°F) | 3–4 hours optimal  
6–8 hours acceptable under very clean conditions |
| Refrigerator        | ≤4°C (39°F)    | 72 hours optimal  
5–8 days under very clean conditions |
| Freezer             | ≤−17°C (0°F)   | 6 months optimal  
12 months acceptable |
LACTATION MANAGEMENT CENTERS

LMUs have been established in most of the tertiary units.

Open assess policy for needy mothers.
MOTHER BABY UNITS

Relaxing Environment

Homely Environment

Rooming In
Practice of KANGAROO MOTHER CARE (KMC)

Introduced in 2007
Neonatal resuscitation
DEVELOPMENTAL CARE
Problems during breastfeeding

Maternal

• Normal breast fullness
• Breast engorgement
• Blocked duct
• Mastitis / abscess
• Sore / cracked nipples
• Inverted nipples

Not enough milk
Sleepy baby

Infant pathologies
Problems during breastfeeding

**Normal breast fullness**
when milk is coming-in

- breast may feel hot, heavy and hard
- There will be a free flow of milk
  
  This is normal

To relieve fullness:

- Feed frequently
- Cool compresses between feeds
- The breast will adjust milk production to the baby’s need
Engorged breasts

► Features
  ► Breasts feel hot, heavy and hard
  ► Painful and tender
  ► No free flow of milk from breasts
  ► May have maternal fever lasting less than 48 hours

► Causes
  ► Delay in starting to breast feed
  ► Poor positioning and attachment, so that milk is not removed effectively
  ► Infrequent feeding, not feeding at night or short duration of feeds
Engorged breasts

**Prevention**
- Optimal attachment / latch
- Early and frequent exclusive breastfeeding
- Feeding according to cue of baby
- Not restricting frequency or length of feeds
- Finishing first breast before offering second

**Treatment (above +)**
- Correct positioning and attachment
- NO expression - other than small amount for comfort
- Softening of areola by 'reverse pressure softening'
- NO hot compresses; only cold therapy in between feeds if required
- Paracetamol / rest
Mastitis and abscess

- Part of breast becomes red, hot, swollen & tender.
  - Fever, chills & generalized unwell
  - Fluctuant if an abscess is formed
  - Symptoms are same for non-infective & infective mastitis
Management

- Remove milk frequently by allowing baby to breast feed (if not, an abscess will form) or by expression
- Good attachment
- Offer the baby the affected breast first (if not too painful)
- Wear a loose bra
- Rest with the baby, so that the baby can feed often
- Paracetamol/ibuprofen for pain
- Antibiotics if fever >24 hours, infected cracked nipple, not improving (or worsening) with above measures within 24 hrs.
- Antibiotics for 10-14 days
- An abscess may need surgical drainage
Sore / cracked nipples

- Painful when sucking
- Skin may be normal
- Pale lines (compression) on nipple immediately after suckling

**Treatment**
- Correct attachment
- Wait to remove until baby takes off
- Apply hind milk after a feed
Sore / cracked nipples

• If sore nipple persists more than a week

Think of candidiasis
Look at baby’s mouth

Treatment
Anti fungal 6 hourly for 7 days.
Inverted nipples

- Can BF, therefore reassure

- No antenatal discussion with mother required
  - Most improve and when baby sucks will evert

- Early initiation of breastfeeding

- Extra support to establish attachment

- Once breasts are full – reverse pressure softening / little hand expression
- Draw nipple out by touch
- Nipple-shield may help
Not enough milk

Mostly perceived

- *It might take 15-30 minutes of expression to produce 1 drop initially!*
- First few days volume of milk is small

**Causes**
- Poor technique of breastfeeding
- Prelacteals (feeds other than breast milk)
- Maternal ill health - physical (ask about excessive vaginal discharge) & mental

**Treatment**
- Reassure if perceived
- Find out the cause and correct
Adequacy of breastfeeds

Is my baby getting enough milk?

- About 8 – 12 times a day (may not be regular intervals)
- Generally sleeps for about 2 hours after a feed
- Alert with bright eyes, good skin colour and tone

- Urine output – 6 wet cloth nappies/day (after day 5); pale inoffensive
- Stools – Loose unformed bowel motions; yellow to greenish gold

(about 3 initially; later less)

If weight gain is adequate baby is getting enough milk
Diapers of the Breastfed Baby

Looking at a baby’s poop and pee can help you tell if your baby is getting enough to eat.

The baby’s poop should change color from black to yellow during the first 5 days after birth.

- The baby’s first poop is black and sticky.
- The poop turns green by Day 3 or 4.
- The poop should turn yellow by Day 4 or 5.

Poop can look seedy.
Poop can look watery.
Illness, injury, or allergies can cause blood in poop. Call Doctor.

Babies make some large and some small poops every day. Only count poops larger than this.

By Day 4, most breastfed babies make 3 or 4 poopy diapers every day.

On Day 1 or 2 some babies have orange or red pee.

By Day 3 or 4, breastfed babies should make 3 or 4 wet diapers with pee that looks like clear water.

A wet diaper is as heavy as 3 tablespoons of water.
Sleepy baby

• Baby falls asleep on the breast
• Cries when baby is kept in cot

• Mostly because baby gets too comfortable.

Management
• Undress baby
• Position in football hold
• Try switching sides
Infant problems

- Preterm
- Anatomical
  - Cleft palate / lip
  - Retrognathia
  - Tongue tie
- Other
  - Hypotonia
  - Poor coordination
Breastfeeding may need to be delayed in the following:

- Sick babies
- Preterm babies
- Babies with a GI surgical problems
- Rarely for babies with metabolic problems
Methods of giving expressed breast milk

- Naso/orogastric tube - left insitu rather than gavage if required for every feed

- Spoon

- Cup

- Supplemener at the breast
SUMMARY

• Breast milk is the ideal food for newborns with its numerous advantages nutritionally, immunologically and long term.

• Adherence to 10 steps for successful breastfeeding as part of the Baby Friendly Hospital Initiative is important to ‘protect, promote and support breastfeeding’.

• Exclusively breastfeed for 6 months

• Understanding of breastfeeding anatomy and physiology important

• Most breastfeeding issues can be rectified with proper positioning and attachment
• http://newborns.stanford.edu/Breastfeeding/HandExpression.html
• http://www.youtube.com/watch?v=4ZCm_MhP39M
• https://www.youtube.com/watch?v=7aKt2IV0a68