Breast feeding the compromised child

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Outline

• Current guidance
• Normal lactation and breastfeeding
• Breastfeeding assessment (compared to bottle feeding)
• Commonly used specialist breast feeding STRATEGIES and when to apply them
• TROUBLE SHOOTING feeding issues and what to do
Current UK Guidance

Policy documents

The Public Health Outcomes framework 2016: prioritises breastfeeding initiation and breastfeeding prevalence at 6-8 weeks as indicators of health improvement.

Public Health England's Health Matters: focuses on ensuring the best possible start for children from pregnancy through to age two, and recommends the Baby Friendly Initiative as a robust evidence-based framework to develop a whole system approach for promoting and supporting breastfeeding.

Public Health England High Impact Areas report identifies breastfeeding initiation and duration as one of six areas where health visitors have the greatest impact on the health and wellbeing of children aged 0-5.


The Healthy Child Programme (2009): The English policy framework ‘Giving all children a healthy start in life’, is underpinned by the Healthy child programme which recommends the Baby Friendly Initiative as a minimum standard to support breastfeeding and reduce obesity.

The Chief Medical Officer report (2013) Our children deserve better: Recommends increasing involvement with WHO and UNICEF’s Baby Friendly Initiative, as a minimum standard, to support breastfeeding. Recommendations include the need to monitor and examine the effects of formula advertising on child health outcomes.

The IHW’s National Framework for continuing professional development for health visitors recommends the Baby Friendly initiative as an evidence-based programme to improve breastfeeding rates.
World Health Organisation (WHO) and UNICEF recommendations

• BFI (Baby friendly initiative) 10 Steps
• Initiation of breastfeeding within the first hour after the birth
• Exclusive breastfeeding for the first six months
• Continued breastfeeding for two years or more
• Together with safe, nutritionally adequate, age appropriate, responsive complementary feeding starting in the sixth month.
Artificially fed babies are at greater risk of...

- Respiratory and gastrointestinal infections
- SIDS
- Asthma
- Type 2 Diabetes
- Obesity
- Otitis Media

Mothers who don’t breastfeed are at greater risk of...

- Post partum bleeding
- Pre-menopausal breast cancer
- Type 2 diabetes after gestational diabetes
- Postpartum depression
Benefits of Breast milk for the hospitalised infant

• Oral colostrum – immune protection
• Oral colonisation benefits (MRSA, less thrush)
• Taste, smell, avoid sensory feeding aversion
• NEC, gut maturity
• Better tolerated/less GOR
• Bonding: one thing mother “can do”
• Enteromammmary pathway, tailor made immunity
The Lactation process: Pregnancy

• Pregnancy
  – Mammary growth/Mammogenisis
  – Lactogenesis I
    • Change from non-specific mammary cells to lactocytes capable of milk production
    • Colostrum is produced
    • Started in most women by 22 weeks gestation
The Lactation process:
After birth

• Colostral phase (Lactogenesis II)
  – Less than 50mls per day
  – Delivery of placenta causes surge in prolactin causing increased milk production/volume
  – Copious milk production (30-40hrs post delivery)
  – Homonally driven phase (occur regardless or not of mother feeding baby)

• Transfer from endocrine to autocrine control (Lactogenesis III)
  – Milk production governed by milk removal
  – 750-1050 mls total milk volume in 24 hours (day 40) with gradual increase from birth.
Figure 1 - Interrelation between several variables that lead to low milk production, infant’s insufficient weight gain and complementary feeding.
Normal Breastfeeding patterns

• Feed usually 1-3 hourly
• Feed without time restrictions
• 8-12 feedings per 24 hours is typical: it can vary
• Some infants will cluster feed (on the breast for 2-6 hours with only short breaks) others will breast feed every 2-3 hours day and night
Normal Breastfeeding patterns

• On average infants feed 15-20 minutes on each breast; some will feed longer and some are satisfied with only one breast
• Sleepy infants need to be awakened for feedings until appropriate weight gain pattern is established
Positioning

- Neutral alignment
- Natural flexion

Rugby hold

Cross Cradle
1. Sit comfortably, bring the baby to the breast.
2. Line the baby up ‘tummy to tummy’
3. Lip stimulation – moving the nipple from the nose to the lips helps elicit rooting reflex – wide open mouth
4. Head tilts back
5. Nipple points towards the roof of the mouth
6. The baby’s tongue protrudes over bottom gum
7. The chin leads towards the breast
8. A large mouthful of breast tissue is taken into the mouth

Pictures: Copyright Evenflo & Ameda
Milk removal from the breast

Milk Ejection Reflex

Main mechanism of removal of milk from the breast is vacuum / suction coupled with milk ejection reflex

Tongue moves up and down but does not have peristaltic stripping

Milk flows when the tongue is down

Geddes

Components of sucking: Suction and compression
Bottle and Breastfeeding Differences

- **BREAST**
  - Breast tissue drawn into mouth
  - Vacuum/suction + Milk ejection reflex (MER)
  - Up /down tongue movement
  - Milk flows when tongue is down
  - NNS and NS combined
  - Variable suck, swallow breathe ratios dependent on MER

- **BOTTLE**
  - Teat placed in the mouth
  - Rooting reflex not required (overrides cues)
  - Suction + spontaneous flow of milk
  - Peristaltic stripping tongue movement
  - Teat compression with milk ‘squeezed’ out
  - 1:1:1 suck, swallow breathe ratio when newborn
Implications for assessment:
Different norms

• Non nutritive and nutritive sucking (speed, rate, absent swallows)
• Suck swallow breathe ratio – not always 1:1:1 (2:1:1, 3:1:2)
• Variable MER (average 30 ml) but +/- 22ml
Signs of milk transfer: Mother

- Milk Ejection reflex (MER)
- Increased lochia flow/uterine contractions *(NB first few days after delivery)*
- Thirst
- Breast softening/emptying
- Milk dripping from other breast
Signs of milk transfer: Baby

- Signs of nutritive sucking - Slow rhythmic jaw movement (seen in front of ear)
- Audible swallows
- Milk in the corner of the mouth
- Elongated and wet nipple after feed (not compressed)
Strategy: Pre-feed interventions

• Colic hold
• Swing baby in a blanket
• Non nutritive sucking on dummy/finger
• Swaddle in flexion (hands to face +/-swaying)
• Environment
Strategy: Skin to skin contact

• Baby in a nappy only placed on mother bare chest
  – Organising
  – Facilitates physiological stability (breathing/heartrate)
  – Calming and soothing
  – Temperature regulation
  – Supports maternal lactation and breastfeeding
Strategy: Nipple shields

- Thin silicone shield
- Invert and roll on
- Nipple and some breast tissue inside
- Express after use
- Weaning plan
Strategy: Natural /laid back breastfeeding position

- Micrognathia
- Large tongue
- GORD
- Respiratory issues
- Aspiration
- Hypertonia
- Difficulties latching
Strategy: Straddle hold

• Tongue elevation
• Cleft palate/VPI
• GORD
• Stimulates vestibular system/alertness
Strategy: Supplemental Nursing System (SNS)

- Commercially available (Medela) or homemade
- Size 4 NGT attached to 20 ml syringe
- Tape above areola once baby attached
- Gravity feed/pacing with sucking
- NB: Only for use in babies who have good underlying suck and swallow
Troubleshooting: Attachment (getting on & staying on)

- Movement after attachment
- Hands and fingers around the nipple/areola
- Express before the feed
- Elongate/stimulate the nipple
- Cushions/Pillows
Troubleshooting: Attachment (getting on & staying on)

• V hold/breast shaping
Troubleshooting: Attachment (getting on & staying on)

• Exaggerated latch
Troubleshooting: coughing/poor SSB co-ordination

- Express through the first MER
- Remove baby from the breast as MER occurs
- Pacing
- Nipple shield
Troubleshooting: Sleepy baby

- Timing feeds to coincide with nappy changes/bath time and visa versa
- Movement
- Unwrap/undress
- Tickle palms of hands and feed
- Avoid rhythmic stroking of face and head
Troubleshooting: Reflux and CMPA

- Less than 1% of EBF babies are said to develop Allergies to cows milk proteins in their mothers milk
- Compared to 1.9-4.9% generally
- Symptoms – normal infant behaviour
- Elimination diet
- NICE guidance
Troubleshooting: Mothers of poor feeders

- Ineffective/disordered feeding WILL effect milk production: not established or down regulated
  - Express after feeds
- Emotional (feelings of failure)
- Encouragement
  - Any amount of breast milk is protective and of benefit to the baby
Support

- International Board Certified Lactation Consultants (IBCLC)
- Breast feeding support groups
Questions