



GUIDELINES FOR OLCHC STAFF CARING FOR MOTHERS BREASTFEEDING THEIR SICK INFANTS IN OLCHC


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Appendix 1 – WHO Definitions

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1.0 Introduction

Our Lady's Children's Hospital Crumlin (OLCHC) believes that breastfeeding is the healthiest way for a woman to feed her infant. Staff in OLCHC support mothers who choose to breastfeed according to the Breastfeeding Policy Statement (Nurse Practice Committee (NPC) 2015). World Health Organisation (WHO) (2002) recommends exclusive breastfeeding for six months and continued breastfeeding for a minimum of two years; this is inclusive of the consumption of expressed breast milk (EBM). Nurses should enable and encourage mothers to maintain breastfeeding with the provision of timely and appropriate support (McGorrian et al 2010). Before breastfeeding mothers are discharged from maternity settings they should be able to demonstrate how to position and attach the infant to the breast and identify signs that the infant is feeding well (National Institute for Health and Care Excellence (NICE) 2008). However due to the unexpected nature of some newborn illnesses, this may become the role of the nurse in OLCHC. Therefore, these guideline aims to assist nurses to provide consistent and accurate advice and education, and to provide appropriate support and encouragement for mothers breastfeeding their sick infants in OLCHC.

2.0 Definition of breastfeeding

Many definitions exist for breastfeeding with WHO's (1996) definition leading the way by defining it as children receiving breast milk directly from the breast or indirectly via expression of breast milk (Appendix 1). World Health Organisation (WHO)(1989; 2002), FSAI (2011) and HSE (2011) also recommends that infants breastfeed exclusively until 6 months of age and complementary diet with continued breastfeeding until 2 years or older.


3.0 Benefits of breastfeeding/breast milk: (this is not an exhaustive list)

Breast milk is associated with long and short term health benefits and has been shown to:

Reduce the risk of developing:

GI infections
Respiratory Infections
Otitis Media
Juvenile onset diabetes
Obesity
Clinical Asthma, Atopic Dermatitis, and Eczema
Dental Caries
Leukaemia
Childhood Inflammatory Disease
SIDS
Celiac Disease (<i>when gluten is introduced while breastfeeding</i>)

- Promote brain growth and cognition
- Enhance intellectual and visual development
- Protect preterm infants against infection
- Improve GI function and maturity
- Prime the GI tract to protect against microbial invasion
- Improve glucose tolerance
- Stimulate the maturity of the immune system
- Reduced mortality rate among preterm and low birth weight infants from necrotising enterocolitis (NEC)

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4.0 Informed decision to breastfeed or not

Mothers feeding decisions are guided not only by their own attitudes, beliefs and skills, but also by the perceptions of other people (Schmied et al 2011)). Mothers partners and family support networks can influence and support mother's decision to breastfeed (Demirtas 2012, Odom et al 2013, Mitchell-Box et al 2013, de Montigny et al 2018) as well as health professionals (McFadden et al 2017). In children's hospitals, mothers may have made their feeding decisions prior to admission, however due to the unexpected nature of their infants illness especially in the newborn period and the nature of hospitalisation mothers feeding intentions may change. Therefore nurses should make the most of this valuable opportunity to influence mother's decision to breastfeed, without applying undue force (Harris 2008). The benefits of breastfeeding should be discussed (Stuebe 2009) with parents (Hoddinott et al 2012) and the additional benefits to the sick child. This information should be reinforced with written information (WHO 2008) as parents are entitled to receive information regarding breastfeeding in order to make informed feeding decisions for their infants (WHO 1981, WHO 1989, Spicer 2001). Therefore; nurses in OLCHC should direct parents to the following information leaflets available at: www.breastfeeding.ie/hse_publications

- Breastfeeding your baby
- Breastfed is Best fed: An Introduction to Breastfeeding your Baby,
- Breastfeeding your ill or premature baby

The parent's choice of feeding method should be clearly recorded in the Health Care Records on admission. Once mothers decides to breastfeed, it is the nurses' role to support mothers to continue breastfeeding for as long as they choose (NICE 2008).


5.0 Breastfeeding and Maternal Medication

Almost all prescription and over-the-counter medications taken by the mother are safe during breastfeeding American Academy of Family Physicians (2015). Nevertheless, mothers should be asked if they are taking any medications (either recreational, 'over the counter' or prescribed). Several resources are available to help estimate the degree of medication exposure an infant will receive through breast milk and medication compatibility with breast milk. These resources include the Pharmacy Department in OLCHC, with reference to Briggs et al (2016) or for out of hours advice use: www.ukmicentral.nhs.uk. Other Medication and Lactation databases include www.toxnet.nlm.nih.gov and www.uktis.org. This compatibility should also be performed in consultation with the infants medical team to determine the compatibility of medication with breastfeeding or if a safer alternative can be found. Rarely does breastfeeding have to be disrupted.

Infant's exposure to such medications is dependent on the:

- extent of medication transfer into breast milk,
- effects of medication on milk production and composition, and
- extent and consequent effects of exposure to medication in breast milk on breast-fed infants
- infants age
- action of medications may vary among mothers over periods of time (absorption, distribution, metabolism, excretion)

(Briggs et al 2016, AAP 2012)

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6.0 Principles of teaching breastfeeding

Mothers who receive breastfeeding education and support were more likely to be breastfeeding at discharge (Ahmed 2008). The best way to support breastfeeding is difficult to define, as many methods can be useful (Hannula et al 2008). **Hands-off Technique (HOT)** is one principle that can be used to teach mothers how to breastfeed with the minimal intervention of 'showing' rather than 'doing' the attachment for mother (Ingram et al. 2002). Nurses are also encouraged to educate and facilitate the mother and infant to attach independently with the assistance of teaching aids like information leaflets, dolls, and demonstrate attachments (Ingram et al. 2002, Hannula et al 2008, McGorrian et al 2010, LLL 2012). Mothers should be given verbal and written information on breastfeeding to assist in consolidating the verbal advice given by nursing staff in OLCHC.


Regardless of how well breastfeeding has been established for mothers, WHO (1989) stipulates that mothers should be assisted to learn the skill of hand expression before discharge from maternity services. This skill ensures that expressing is effective to establish and/or maintain an adequate breast milk supply (Becker et al 2011). However, due to the nature of emergency admissions from maternity to children's hospitals, this skill may not be taught. Therefore, it is important that nurses in OLCHC teach this skill to mothers who choose to breastfeed their infants (NPC 2015).

7.0 Breastfeeding education for nursing staff

Numerous national and international studies highlight that health professionals provide breastfeeding mothers with inaccurate and misleading information (McGorrian et al 2010) and inappropriate professional breastfeeding support (Furber and Thomson 2008, Harris 2008). To overcome this, WHO (1998) recommended that all health professionals in contact with mothers who breastfeed must receive education and clinical experience in breastfeeding management. All qualified nursing staff caring for mothers breastfeeding their sick infants in OLCHC are recommended to attend a 'Breastfeeding Education Session' in the management of breastfeeding, within six months of commencing employment in that area or as soon as possible. These sessions have the theoretical and practical content required to ensure that nurses acquire the skills necessary to promote, support and protect breastfeeding within children's hospitals. By increasing nurses' knowledge and skills on breastfeeding management, mothers will receive consistent evidence-based information and effective support leading to effective breastfeeding (McGorrian et al 2010, Kaunonen et al 2012, Yang et al 2018). All health professionals supporting breastfeeding mothers should have the skills necessary to do so effectively (McGorrian et al 2010), hence these sessions are available to all health professionals in OLCHC who support breastfeeding mothers. For nurses to maintain an up to date level of knowledge and skill to provide accurate information and support to parents (Nursing and Midwifery Board of Ireland 2015) including breastfeeding mothers, continuing education and updating of skills should be carried out after this initial training at a minimum of every two years.

7.1 Breastfeeding Supports in OLCHC

There are various breastfeeding supports available to mothers' breastfeeding their sick infants in OLCHC. Some of these supports include the breastfeeding champions, Peer to Peer Support Groups and electronic breastfeeding information. Breastfeeding Champions are health care workers working within OLCHC. This role is in addition to their normal workload. The aim of the role is to help support breastfeeding mothers and mothers providing breast milk for their sick infants. Breastfeeding Champions have received additional breastfeeding training. Peer to Support Group for mothers expressing is also available in OLCHC. This group is facilitated by the Department of Nutrition and Dietetics.

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There is also breastfeeding information available on the OLCHC internet and intranet to support healthcare workers and mothers breastfeeding their sick infants in OLCHC:

<http://www.olchc.ie/Children-Family/Breastfeeding-/Breastfeeding-and-Expressing-Milk-Documents-.html>
<http://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Nursing-Practice-Guidelines.html>

8.0 Breastfeeding in public versus breastfeeding in private

Mothers who choose to breastfeed are welcomed in OLCHC. By promoting a culture where breastfeeding is visible, it will be seen as the norm and more women may choose to breastfeed in the future (Kim et al 2017). Mothers have a legal right to breastfeed in public, whenever and wherever the need arises. Irish legislation (such as the Equal Status Act (2000) (Government of Ireland 2000) and the Intoxicating Liquor Act (2003) (Government of Ireland 2003)) protects these mothers against discrimination and harassment to access and while using public services. All OLCHC staff aim to cater for the needs of breastfeeding mothers in OLCHC.

Some mothers may feel they need more privacy when breastfeeding in public (Owens et al 2016, Claesson et al 2018), therefore public service areas (shopping centres, hotels etc.) should be encouraged to provide separate infant feeding facilities. Lack of facilities, acceptability and embarrassment associated with breastfeeding 'in public' or 'around others' has been cited as deterrents for mothers to initiate breastfeeding (McGorrian et al 2010, McKenzie 2018). Facilities are available for mothers who wish to breastfeed in private while their sick infants are hospitalised in OLCHC. Privacy can be maintained by providing a single cubicle space where possible with screens/curtains, a bed for mothers and a 'do not disturb' sign. This may mean the reallocation of beds in a clinical area, with due consideration for the medical condition, and infection risk of infants involved. A single cubicle space for mothers also allows mothers to rest both day and night and facilitates Kangaroo care (Ludington-Hue 2011). Privacy is essential as embarrassment may also affect the milk ejection reflex. For mothers breastfeeding their infants on an out-patient basis can do so in private, this can be maintained by availing of breastfeeding / expressing rooms in OLCHC's (located in Nazareth Ward, St Peter's Ward, Children's Heart Centre) if available or by using a vacant room in the Out Patients Department if available.


9.0 Accommodating resident mothers to breastfeed siblings of hospitalised child

The breastfeeding relationship should not be interrupted by the hospitalisation of a sibling. Therefore, OLCHC endeavour to facilitate siblings who are being breastfed by mothers who wish to be resident with their sick child in OLCHC, if required, under the supervision of the parents (NPC 2015). OLCHC will also endeavour to facilitate the process of expressing breast milk if mother do not wish to have siblings residents but wishes to maintain a breast milk supply.

All breastfeeding mothers will sign the 'Conditions for mothers breastfeeding in OLCHC' Document (Appendix 2) on admission to OLCHC, acknowledging and accepting that the health and safety of breastfed siblings is their sole responsibility during their time of residence in OLCHC. A copy is filed in the patient Healthcare record and a copy is also given to the parent.

10.0 International Code for the Marketing of Breast Milk Substitutes (WHO 1981)

This Code is an international health policy framework for breastfeeding promotion adopted by WHO (1981) and updated in 2017 (WHO 2017). It applies to the marketing, and practices related to all breast milk substitutes and other products (including bottles, teats and soothers) to ensure that mothers are not discouraged from breastfeeding and that substitutes if needed are used safely.

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Some of the key articles of the Code include:


- No advertising of these products to the public
- No free samples to mothers or members of their families
- No formula to be sold through the hospital shop
- No free formula to be given to mothers on discharge.
- No promotion of products in healthcare facilities
- No company personnel to advise mothers or members of their families
- No gifts or personal samples to health workers
- No words or pictures idealising bottle-feeding, including pictures of infants on the labels of the products
- All infant formula should be kept out of sight on the hospital wards
- All information on infant feeding should explain the benefits of breastfeeding and the costs and hazards associated with bottle-feeding

The code seeks to encourage and maintain women's right to breastfeed and infants right to have access to its mothers own milk (WHO 2017). As all staff in OLCHC comply with this Code by informing mothers of the benefits of breastfeeding, endorsing breast feeding as the preferred feeding method of choice and supporting mothers who choose this method of feeding. The code does not prevent mothers from bottle-feeding if they choose as some infants will be bottle fed prior to admission to OLCHC.

11.0 Establishing breastfeeding

The breastfeeding experience for mothers of sick/premature infants often involves the following steps:

- Expression and storage of milk (See the Guidelines for mothers expressing breast milk in OLCHC (NPC 2013b) for more details)
- Kangaroo Care/Skin to Skin Contact (See the Guidelines for mothers expressing breast milk in OLCHC (NPC 2013b) for more details)
- Non-nutritive sucking (NNS) and oral stimulation (See the Guidelines for mothers expressing breast milk in OLCHC (NPC 2013b) for more details)
- Breastfeeding Assessment Tools (BAT) (*See Appendix 3*)
- Breastfeeding Assessment Tool (Mothers Version) (*See Appendix 4*)
- Transitioning from Tube feeding to breastfeeding Guide (*See Appendix 5*)
- Beginning breastfeeding (supplementary (additions) EBM/formula feedings given as needed)
- Full breastfeeding (Refer to the Guidelines for nursing staff on expressing breast milk in OLCHC (NPC 2013b) for more details)

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12.0 Milk Ejection Reflex (MER)?

To obtain quantities of milk by any method requires an effective milk ejection or 'let down' reflex (WHO 2006, Becker et al 2011). This reflex is dependent on the hormone oxytocin, produced in the posterior pituitary gland. Oxytocin causes the contraction of the myoepithelial cells surrounding the alveoli and makes the milk flow from the alveoli and down the ducts (Riordan and Wambach 2015).

12.1 Milk Ejection Reflex responses

Milk ejection reflex responses differ between the early days of establishing milk supply to when milk supply is well established, and can also depend on:

- mothers parity
- previous breastfeeding experience
- gestation of infant at birth
- mothers level of distress

(Becker et al 2011)

12.2 Signs of the Milk Ejection Reflex

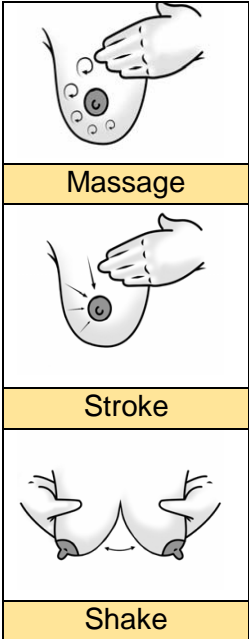
After birth, mothers may experience:

- Painful uterine contractions
- Spraying of milk from the breast
- Leaking from the breast not being suckled
- An increase in thirst
- Feeling a squeezing sensation
- Breast's feel tingly, with a warm sensation during milk ejection
- Slow deep sucks and swallowing by the baby

(WHO 2006, WHO 2009, Noonan 2011)

Mothers are more likely to feel the MER at the beginning of full breast release (LLL 2012). However, not all mothers feel the MER happen and therefore, taken on its own, cannot be used as a reliable sign of milk sufficiency (West and Marasco 2009).

12.3 How to stimulate the Milk Ejection Reflex?

ACTION	DIAGRAMS	RATIONALE & REFERENCE
<p>Mothers should decontaminate their hands</p> <p>Allow plenty of time</p> <p>Encourage mothers to use relaxation techniques such as deep breathing exercises, visualisation techniques such as picturing their infant, assisted with photo or recordings of their infant, and their clothing for tactile and olfactory reminders.</p> <p>Choose a comfortable chair with a high back and supportive arms.</p> <p>Facilitate expressing at the infant's bedside</p> <p>Maintain privacy to express: Beside the infant using a screen or curtains in a single cubicle space</p> <p>Place warm moist compresses (face cloth) on your breasts.</p> <p>Do not feel rushed while expressing.</p> <p>Mothers should:</p> <ul style="list-style-type: none"> • Massage around their breasts gently in small circular motions with their fingers from the chest towards the nipple, • Stroke their breasts from the chest towards the nipple, and • Lean forward and shake their breasts gently. 	 <p>The diagrams show three hand techniques for breast stimulation. The first, labeled 'Massage', shows a hand with fingers moving in small circles around the breast. The second, labeled 'Stroke', shows a hand with fingers moving in a straight line from the chest towards the nipple. The third, labeled 'Shake', shows a hand supporting the breast from underneath, with the fingers slightly curled as if to gently shake the breast.</p>	<p>Prevention of cross infection (HSE 2009a, HMBANA 2011, OLCHC 2013, 2015, 2017)</p> <p>To promote a relaxing atmosphere (LLL 2012)</p> <p>The use of relaxation/visualisation techniques and tactile/olfactory stimulation has been shown to help stimulate MER and improve milk yield (Jackson 2010, Conde-Agudelo et al 2011, LLL 2012).</p> <p>To help stimulate MER and express effectively and comfortably</p> <p>To help stimulate MER and improve milk yield</p> <p>To help stimulate MER and assist the milk to flow</p> <p>To help stimulate MER and assist the milk to flow</p> <p>To help stimulate MER and assist the milk to flow</p> <p>To help stimulate MER and assist the milk to flow (Morton et al 2009) and improve the quality of breast milk (Foda et al 2004)</p> <p>To help stimulate MER and assist the milk to flow</p> <p>To help stimulate MER and assist the milk to flow</p>

13.0 Individualised nutritional assessment

Some infants medical condition may affect their nutritional requirements making it necessary to add additions (such as infant formula powder, carbohydrate/protein supplementation or breast milk fortifier). EBM and other rare conditions may necessitate the discontinuation of breastfeeding and the use of an alternative feed (Shaw and Lawson 2001). Therefore, sick infant's nutritional requirements should be assessed on an individual basis by the medical team, dietician, or the multidisciplinary team. The nutritional needs of infants and how they can be best met will be discussed with parents who can therefore make informed choices in consultation with health care professionals caring for their infant. The assessment and proposed feeding plan will be recorded in infant's healthcare records (Breastfeeding Care Plan: Appendix 6) to ensure clarity and continuity of care.

14.0 Recognise feeding cues

Infants may get overly distressed if left too long for feeds and sleepy infants may not get enough feeds. These problems are less likely to happen if mothers are taught how to recognise infant feeding cues (LLL 2012)

EARLY CUES	OBVIOUS CUES	LATE CUES
Eyes moving behind eyelids before they even open	Rooting to their side / chest if held	Body and mouth tense
Hands coming towards face	Whimpering	Breathes faster
Mouth movements	Squeaking	Starts to cry
If fed at this time infants will probably feed gently and easily	If fed at this time infants will probably feed gently and easily	Need to calm the infant before trying to feed

15.0 Positioning an infant for a breastfeed

Teaching mothers to correctly position and attach their infants to the breast facilitates effective and pain free breastfeeding, and avoids the problems of sore nipples, engorgement and poor milk supply. Infants can breastfeed in several different positions in relation to their mothers.

Some of the common positions include:

- across the chest and abdomen (Cradle hold Cross cradle hold/transition hold),
- under the mothers arm (Football/clutch hold),
- mother and infant lying down side by side- usually recommended for night feeds and after a caesarean section

Less common positions include:

- Dancer - (suitable for infants with muscular weakness) (Mothers supports the infants chin and head to keep the mouth close on to the breast)
- Modified football
- Straddle
- Hands and knees - mother raises herself on her hands and knees over the infant, who lies flat on their back elevated by pillow to breast height (suitable for infants on Gallows traction), alternatively mothers can lean over the cot

(LLL 2012, WHO 2009, Colson 2005a)

15.1 Laid back breastfeeding

Laid back breastfeeding is a mother-centred approach to breastfeeding, encouraging mother and infant to develop their natural breastfeeding instincts. This position stimulates latching and sucking even when mothers and infants are lightly dressed (Colson et al 2008).

This involves:

Mothers:

- lie in a semi-reclined position with their head and shoulders well supported
- Pillows can be used for support

Infants are placed on their chest, with infants:

- tummy facing the mothers body
- face/cheek resting near the mothers breast
- legs and feet touching the mothers legs
- Being helped as much as mothers desired.

Mothers can hold the breast if desired

(Colson 2005b)

There are several different positions for successful breastfeeding, but some key positioning points need to be followed:

ACTION	RATIONALE & REFERENCE
<p>Mothers position: Can be sitting, lying back, side-lying or standing, if they wishes</p> <p>Needs to be relaxed and comfortable, and without strain, particularly of their back.</p> <p>Drop their shoulders</p> <p>Do not lie flat on back</p> <p>If sitting, their back needs to be supported, and should be able to hold the infant at their breast without leaning forward.</p> <ul style="list-style-type: none"> ● The nipples usually point slightly downwards, <p>Infants position Whatever the mothers or infants position, while breastfeeding the infants:</p>	<p>(WHO 2009)</p> <p>(WHO 2009)</p> <p>If shoulders are pulled up - a stress response of learning a new task, mothers arm will also pull up, and infants will follow causing misalignment of the infant at the breast (Power 2008)</p> <p>This can cause neck strain when mothers raise their heads to establish eye contact with their infant (Colson 2005b) and can hinder self-attachment as even a slight maternal body slope appears to aid infant feeding reflexes in laid back feeding (Colson 2005b)</p>

<ul style="list-style-type: none"> • Should be directly facing mothers breasts • Head (Ears) and body (shoulders and hips) are in a straight line, not bent or twisted • Nose should be in line with the mothers nipple immediately prior to attaching • Chin is close to the breast • Head titled back slightly • body should be close to the mother • body should be supported with: <ul style="list-style-type: none"> - on the mother's lap or arm - on a pillow - on the bed 	<p>To ensure the infant doesn't have to turn their head to reach the breast (WHO 2009)</p> <p>To ensure the infant doesn't have to turn their head, neck or body to strain and reach the breast (WHO 2009) and can swallow easily without twisting their head (WHO 2009)</p> <p>So when the infant mouth open the head can tilt back and allow the infants mouth line up with the nipple</p> <p>Infants need to be able to tip their head back freely</p> <p>To able the infants to reach the mothers breast easily</p> <p>To enable the infant to be close to the breast, and to take a large mouthful (WHO 2009)</p> <p>To ensure the infant feels secure and to maintain the position throughout the breastfeed without undo stain to the mother or infant</p>
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15.2 Bed Sharing and Breastfeeding

Bed sharing has been associated with increased rate and duration of breastfeeding (Vennemann et al 2009). Hauck et al (2011) and Thompson et al (2017) acknowledges that breastfeeding is protective against SIDS, with its protect benefits increasing as the duration of breastfeeding increases. However, Mitchell et al (2017) study is not supportive of the protective role for bed sharing, stating that the interaction of bed sharing with other risk factors increases the associated risks of Sudden Infant Cot Death (SIDS) even further. Therefore, OLCHC recommend that infants who are medically stable should be allowed to share a bed with their mother **only for the duration of a breast feeding, but must be returned to their cot to sleep.** Mothers should be informed verbally and in writing of the increased risk SIDS and bed sharing (UNICEF Baby Friendly Initiative 2017, HSE 2017).

16.0 Attaching your Infant

To stimulate the nipple and remove milk from the breast, and to ensure an adequate supply and a good flow of milk, infants needs to be well attached to suckle effectively (WHO 2009). Difficulties often occur if infants don't take the breast into their mouth properly, and so cannot suckle effectively (WHO 2009).

ACTION	RATIONALE & REFERENCE
<p>Assist the infant to open their mouth wide by using:</p> <ul style="list-style-type: none"> the mothers nipple to tickle the infants lower lip <p>or</p> <ul style="list-style-type: none"> The index finger of the hand supporting their breast to press firmly down on the infants chin as they pull the infant on. <p>As the mouth opens to its widest point, mothers should:</p> <ul style="list-style-type: none"> direct the nipple into the center of the infants mouth use their arm behind the infant to pull the infant in very close to them. not lean forward to push their breast toward the infant <p>If mothers support infants head and upper neck while feeding, mothers should place their:</p> <ul style="list-style-type: none"> thumb and index fingers should surround the infants neck, palm (hand) should rest high on infants spine <p>The mother should not:</p> <ul style="list-style-type: none"> hold or push on the back of the infant's head while breastfeeding grasp the infants bottom while breastfeeding <p>Mother can adjust the infants body</p>	<p>To ensure infants sucks on a good mouthful of breast tissue, not just on the top of your nipple If infants suck only on the nipple, mother will get very sore nipples and infants won't get enough milk (Power 2008)</p> <p>To encourage them to open their mouth wide--really wide.</p> <p>To prevent infants pulling away from the breast if the mother's hands push against the back of their head and stabilises the top of infants back and neck (Power 2008)</p> <p>This can pull infant too far out to the side, and make it difficult for the infant to get their chin and tongue under the areola.</p>

17.0 How to assess a good latch/attachment

When infants have a **good attachment**, ensure that:

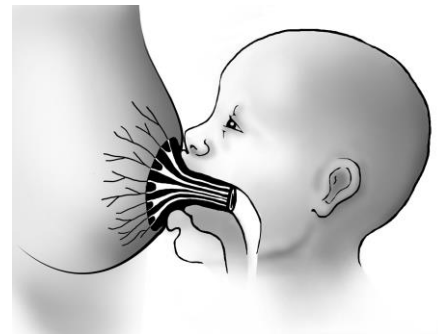
- much of the areola are in the infants mouth; breast is stretched out to form a long 'teat', (the nipple only forms about one third of the 'teat') enabling the nipple to touch the infants palate (This suction is used to stretch out the breast tissue and hold it in their mouth)
- the infants tongue is forward over the lower gums and beneath the milk ducts, cupping around the sides of the 'teat' to allow their tongue to reach well underneath the breast tissue and press the ducts
- the infants is suckling from the breast, not from the nipple.
- the infants' mouth and tongue do not rub or traumatise the skin of the nipple and areola.

(WHO 2009)

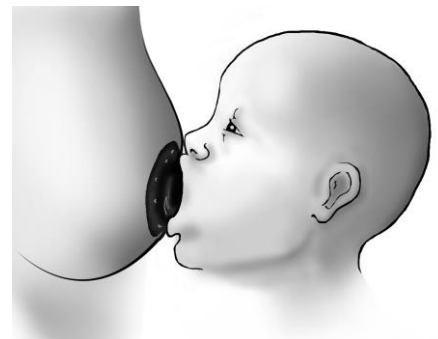
As infants suckles,

- a wave passes along the tongue from front to back,
- pressing the teat against the hard palate and
- pressing milk out of the sinuses into the infants' mouth from where they swallows it.

This action along with MER allows the breast milk flow along the ducts and into the infants' mouth.



Cross Section

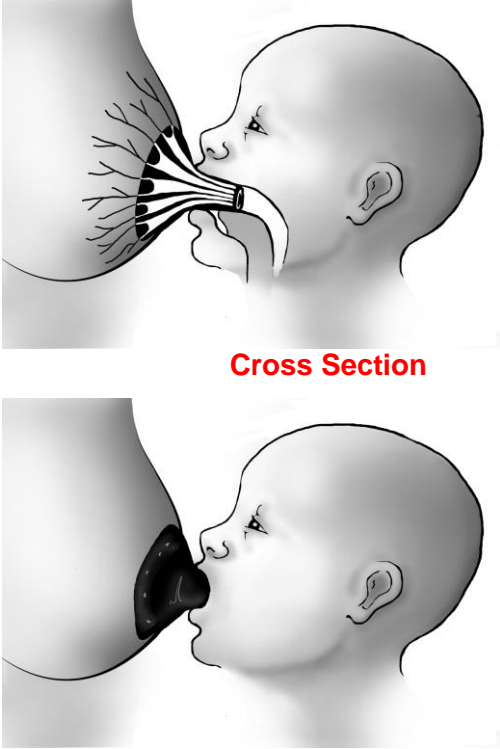


External View

ACTION	RATIONALE & REFERENCE
<p>If the infant is attached correctly to the breast, mothers should:</p> <ul style="list-style-type: none"> • See <ul style="list-style-type: none"> - Infants mouth is wide open - Infants upper and lower lips are turned outwards - Infants cheeks should look full and rounded when infants suck - more of the areola is visible above the infants top lip than below the lower lip (May be visible to mother) 	<p>To allow the mouth to take in plenty of breast (WHO 2009)</p> <p>Infants lips should be flared upon the breast creating a vacuum (Power 2008)</p> <p>Infants mouth is full of areolar and breast</p> <p>This allows the power of infants lower jaws to evacuate the milk on the underside of the breast (Power 2008), and shows that infants are taking the breast and nipple from below, enabling the nipple to touch infants palate, and reach well underneath the breast tissue, and press on the ducts (WHO 2009)</p>

<ul style="list-style-type: none"> - Infants chin is (almost) touching the breast - Infants jaw is moving, up near his ear - infants are able to breathe freely through their nose • Hear <ul style="list-style-type: none"> - quiet swallowing, <u>not</u> smacking sounds • Feel <ul style="list-style-type: none"> - Comfortable/pain free 	(WHO 2009)
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17.1 How to assess a poor latch/attachment


<p>Infants have a poor attachment when the following may be observed:</p> <ul style="list-style-type: none"> • Only the nipple is in the infants mouth, not the underlying breast tissue or ducts; • The infants tongue is back inside their mouth, and cannot reach the ducts to press on them. 	 <p style="text-align: center;">Cross Section</p> <p style="text-align: center;">External View</p>
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ACTION	RATIONALE & REFERENCE
<p>If the infant is not attached correctly to the breast, mothers may:</p> <ul style="list-style-type: none"> • See <ul style="list-style-type: none"> - infants lower lip is turned inwards - Infants cheeks should be hollow when infants suck 	<p>If the infant's lips are tucked-in the flow of the milk may be impeded as the vacuum seal is compromised, also causing very sore and bruised nipples (Power 2008) when infants are very close to the breast, it can be difficult to see what is happening to the lower lip</p> <p>The infants mouth is not full of nipple and breast</p>

<ul style="list-style-type: none"> - infants mouth is not wide open - infants chin is away from the breast - more of the areola is visible below the infants bottom lip than above the top lip - or the amounts above and below are equal (may be observed by mother) • Hear <ul style="list-style-type: none"> - smacking • Feel <ul style="list-style-type: none"> - Uncomfortable or painful <p>Mothers with large areola: Sometimes much of the areola may be outside the infants mouth, but by itself this is not a reliable sign of poor attachment</p> <ul style="list-style-type: none"> • If the amount of areola above and below the infants' mouth is equal, or if there is more below the lower lip, these are more reliable signs of poor attachment than the total amount outside. <p>If poor attachment is suspected, mothers should release the infants from the breast by:</p> <ul style="list-style-type: none"> • press down on the breast <p>or</p> <ul style="list-style-type: none"> • gently insert a clean finger in the corner of the infants mouth to break the suction and try to attach again. 	<p>(WHO 2009)</p> <p>The infants mouth cannot facilitate the nipple and breast</p> <p>(WHO 2009)</p> <p>Some mothers may have very big areolas, which cannot all be taken into the infants mouth</p> <p>To comfortably release the latch without causing further damage to the nipple and breast (LLL 2004)</p>
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17.2 Causes of poor attachment

Suckling with poor attachment may be uncomfortable or painful for mothers, and may damage the skin of the nipple and areola, causing sore nipples and fissures (or "cracks"). Poor positioning and attachment is the commonest and most important cause of sore nipples, nipple trauma, breast engorgement, and may result in inefficient removal of milk and apparent low supply and early weaning (Riordan and Wambach 2015). Use of a feeding bottle before breastfeeding is well established can cause poor attachment, as the mechanism of suckling with a bottle is different. Functional difficulties such as flat and inverted nipples, infants (anterior or posterior) tongue tie, or very small or weak infants, are also causes of poor attachment. However, the most important causes are inexperience of the mother and lack of skilled help from the health workers who attend her. Many mothers need skilled help in the early days to ensure that infants attach well and can suckle effectively. Health workers need to have the necessary skills to give this help. Frequent feeding is important in the establishment of a milk supply (WHO 2009).

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18.0 How to assess an effective suck

If infants are well attached at the breast, then they can suckle effectively indicating that milk is flowing into infants' mouths.

Signs of effective suckling

- Infants takes slow, deep suckles followed by a visible or audible swallow about once per second.
- Sometimes infants pause for a few seconds, allowing the ducts to fill up with milk again.
- When infants starts suckling again, they may suckle quickly a few times, stimulating the MER, and then the slow deep suckles begin.

Towards the end of a feed

- suckling usually slows down, with fewer deep suckles and longer pauses between them. This is the time when the volume of milk is less, but as it is fat-rich hindmilk, it is important for the feed to continue.

At the end of the feed, when infants are satisfied, infants usually releases the breast spontaneously. The nipple may look stretched out for a second or two, but it quickly returns to its resting form.

18.1 Signs of ineffective suckling

Infants who are poorly attached are likely to suckle ineffectively:

- may suckle quickly all the time, without swallowing, and
- their cheeks may be drawn in as they suckle showing that milk is not flowing well into infants mouths.

When infants stops feeding the nipple may:

- stay stretched out, and
- look squashed from side to side,
- have a pressure line across the tip, showing that the nipple is being damaged by incorrect suction.

18.2 Consequences of ineffective suckling

When infants suckle ineffectively, transfer of milk from mother to infant is inefficient. As a result:


- the breast may become engorged, or may develop a blocked duct or mastitis as not enough milk is removed;
- infants intake of breast milk may be insufficient, resulting in poor weight gain.

19.0 Breastfeeding patterns, frequencies and duration


To ensure adequate milk production and flow for 6 months of exclusive breastfeeding, infants needs to feed as often and for as long as they wants, both day and night (Riordan and Wambach 2015). This is called demand feeding, unrestricted feeding, or baby-led feeding. OLCHC staff will support a flexible breastfeeding schedule. While infants are sick in OLCHC, this may be difficult to establish and/or maintain due to infants conditions and ability to tolerate feed. However as infants recover and reestablish breastfeeding after an illness, it is anticipated that they can feed as often and for as long as they wants, both day and night.

ACTION	RATIONALE & REFERENCE
<p>Frequency Breastfeeding frequency may vary depending on the infants' clinical condition. Ideally breastfeeding is infant led</p> <p>Encourage mothers to design a breastfeeding regimen that works for both mother and infant once the infant is clinically stable and tolerating feeds</p> <p>Mothers should be advised to tailor their breastfeeding frequency to their breast storage capacity</p> <p>If the infants is a newborn mothers should aim to:</p> <ul style="list-style-type: none"> • Breastfeed as soon as possible after delivery • Breastfeed "on demand", as often as infants wants day and night • Breastfeed 8-10 times in 24 hours • avoid leaving gaps of more than three hours (during the day) • Breastfeed every 5-6hours (at night) • If short of time mothers are advised to breastfeed for short periods (5-10minutes) more frequently than to leave long gaps between feeds. • Be aware that mothers will produce small amounts initially. <p>If the infant is not a newborn, mothers should aim</p>	<p>Mothers should be encouraged to feed their infants frequently and to leave them feeding at the breast until they are satisfied (Riordan and Wambach 2015 , LLL 2004)</p> <p>Breast storage capacity and infant nursing style varies widely. To ensure that mothers are still producing sufficient milk to facilitate their infants demands (Meier et al 1998, LLL 2012)</p> <p>Breast storage capacity and infant nursing style varies widely</p> <p>To increase mother breast milk supply. Maximum total milk production is set early in lactation (LLL 2012)</p> <p>Restricting the frequency of feeds may reduce the hindmilk obtained (Becker et al 2011)</p> <p>Restricting the frequency of feeds may reduce the hindmilk obtained (Becker et al 2011) To mimic their infants usual breastfeeding pattern (Riordan and Wambach 2015)</p> <p>Prolactin, the hormone necessary for milk production, is released in greater quantities during night-time suckling, thus milk production may get its greatest boost when infant feeds at night (LLL 2004). Night feeds may also provide infants with a substantial amount of their 24 hour intake.</p> <p>Prolactin, the hormone necessary for milk production, is released in greater quantities during night-time suckling, thus milk production may get its greatest boost when infant feeds at night (LLL 2004). Night feeds may also provide infants with a substantial amount of their 24 hour intake.</p> <p>Colostrum is produced in small quantities and therefore expression times, and quantities, in the first few days will be minimal (Riordan and Wambach 2015)</p> <p>To mimic their infants usual breastfeeding pattern</p>

<p>to:</p> <ul style="list-style-type: none"> • breastfeed at regular intervals or at the same times their infant would usually breastfeed. <p>If the infant is starting to breastfeed after receiving expressed breast milk for a while, mothers may need to:</p> <ul style="list-style-type: none"> • continue expressing EBM until the infant is totally established on breast feeds (allowing infants to breastfeed first and then express) <p>Provide the 'Breastfeeding Log Book' for mother breastfeeding their infants in OLCHC' (<i>Appendix 7</i>) (available in OLCHC Intranet) and review daily</p> <p>Document same in the Nursing Care Plans</p> <p>Praise mothers throughout this process regardless of the duration, frequency of breastfeeding</p> <p>To minimise disturbances to breastfeeds with in OLCHC:</p> <ul style="list-style-type: none"> • All medical and nursing care will be planned around breastfeeding where possible • Standard pre-anesthetic fasting times for breast milk are at least 4 hours, however, certain procedures or surgery may require a longer fasting time (determined by the anesthetist or medical team) • Post procedures, infants will be fed as soon as they are alert and willing to feed, unless medically 	<p>(LLL 2004)</p> <p>To maintain their breast milk supply and provide adequate nutrition for their infant</p> <p>Frequent feeding is important in the establishment of a milk supply. The composition of breast milk changes throughout the course of a feed, the fat content of the feed increases throughout the feed, the highest fat content being towards the end of the feed (Jones 2005, Bankhead et al 2009)</p> <p>To detect alterations in mothers breastfeeding patterns so that remedial action to increase supply can be taken (Riordan and Wambach 2015). To empower mothers, informing them of newborn feeding patterns. It also provides a guide to initiate purposeful discussion with health professionals (Colson 2008)</p> <p>Good clinical records are essential to provide documentary evidence of the delivery of quality patient care (Nursing and Midwifery Board of Ireland 2015, National Hospitals Office 2007)</p> <p>To boost mother confidence in their expressing abilities</p> <p>That breastfeeding can continue and to minimise the disturbance to breastfeeding (NPC 2015)</p> <p>To ensure minimal residual gastric volume and minimise the risk of vomiting and aspirating stomach contents into the lungs during induction of anaesthetic (McQueen et al 2012, ABM 2012). Formula milk is digested more slowly than breast milk and takes longer to clear the stomach than breast milk (Splinter and Schreiner 1999, Adeel et al 2009, American Society of Anesthesiologists Committee 2011, ABM 2017)</p> <p>Breastfeeding can help to soothe infants, increase their comfort and reduce their fasting time (ABM</p>
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<p>contra-indicated</p> <ul style="list-style-type: none"> Mothers will be encouraged to use SSC and their breast to settle, soothe, comfort their infant, this may also assist in providing non-pharmacological pain relief for their infant. 	<p>2012, McQueen et al 2012). Therefore should be fed when medically stable</p> <p>Infants will settle more quickly at the mothers' breast and may reduce the need for analgesia (Shah et al 2007)</p>
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20.0 Breastfeeding Assessment Tool: Recognising that infants are feeds well

Nurses should discuss the normal feeding behaviour of breastfed infants with mothers and flexible infant-led feeding should be aimed for when infants are medically stable. The Breastfeeding Assessment Tool (BAT) can help to determine when infants are breastfeeding well and in consultation with medical team and dietician as clinically indicated (See Breastfeeding Assessment Tool, Appendix 3) and Table 1 below. The BAT is performed on a daily basis, with green indicating effective breastfeeding and pink indicating a breastfeeding problem that needs to be resolved.

This Breastfeeding Assessment Tool, is available as a Mothers Version (Appendix 4) and is available for download on www.olchc.ie so mothers can also assess their infant's breastfeeding progress.

Addressograph Label

Breastfeeding Assessment Tool (BAT)

This assessment is performed on admission (when the infants mother arrives on the ward/unit) and once per 24 hours when an infant is feeding directly at the breast. The infants medical/surgical condition should be taken into consideration. Document the assessment outcome in the Breastfeeding Care Plan/Nursing Notes. If any responses in the pink column are ticked; watch a FULL breastfeed, update the Breastfeeding Care Plan/Nursing Notes including revisiting positioning and attachment and/or refer to Breastfeeding Champion is required. Any additional concerns should be followed up as needed.

24hour period	Wet Nappies	Stools	Day5	Wet Nappies	Stools
Day 1-2	At least 1-2	At least 1-2 (meconium) black/dark green	Day5	At least 5-6 (heavy)	At least 2 (large), soft, yellow and seedy
Day3-4	At least 3 (heavier)	At least 2, green changing to yellow	Day 7+	At least 6 (heavy) (pale yellow/clear)	At least 2 (large), soft, yellow and seedy

		Indication of effective feed (Green Indicators)	Answer suggests a problem (Pink Indicators)
1	Infants Urinary/Stool Output	As per table above	Not within the tables limits above
2	Infant Colour	Centrally and peripherally pink / Normal for infants condition	Jaundice worsening or not improving
3	Infant Alertness	Alert when awake, wakes to feed, engages in the feeding process	Lethargic to feed, not waking to feed
4	Infants Tone	Good	Poor
5	Weight (post initial birth loss)	No more than 7-10% of birth weight loss, regained birthweight by 2 weeks, otherwise gaining weight 30 – 40 g per day	Weight loss greater than 10%, gaining less than 30g per day
6	Number of Feeds	At least:- 10-12 feeds in 24hours (1 st Week) 8-10 feeds in 24hours (2 nd -3 rd Week)	Fewer than 8 feeds in last 24 hour
7	Infants behaviour during feeds	Generally calm and relaxed	Infant comes on & off breast frequently during the feed or refuses to breastfeed
8	Infants Latch	Correct - full cheeks, lips flanged out, if any areola visible, more visible on top than bottom	Incorrect - sunken cheeks, lips flanged in, minimal amounts of areolar in mouth
9	Infant Position	Head, neck and body in alignment, 'tummy to mummy'	Gap between mother & infant, head, neck and body not in alignment
10	Sucking/Swallowing Pattern during feeds	Starts with short sucks then longer sucks, pausing now and again (by Day 5) Strongly, slowly, steadily and swallowing often (audible)	No change in sucking pattern or noisy feeding (eg. clicking)
11	Length of feeds	5-40 minutes at most feeds	Feeds for less than 5 minutes or longer than 40 minutes
12	End of feeds	Infants let go spontaneously, or when breast is gently lifted	Infant not releasing breast spontaneously, mother removing infant
13	Offered 2 nd Breast	Offered 2 nd breast but may or may not feed depending on appetite	Mother restricts infant to one breast per feed or insists on two breasts per feed
14	Infants behaviour after feeds	Content after most feeds	Unsettled after feeds
15	Shape of nipples at the end of the feed	Same shape when feed began or slightly elongated	Misshapen or pinched at the end of feeds
16	Mothers report of her breasts & nipples	Breast and nipple comfortable	Nipples sore or damaged; engorgement or mastitis
17	Use of soother/nipple shield/formula	None used	Yes - explore why; attachment difficulty? Infant not growing? Infant unsettled?

Adapted from UNICEF UK Baby Friendly Initiative 2010 and Guidelines for mothers HSE 2015

Date assessed	Time	Pink Indicators Nos.	Signature/NMBI No	Date assessed	Time	Pink Indicators Nos.	Signature/NMBI No	Date assessed	Time	Pink Indicators Nos.	Signature/NMBI No

Developed by Quality Improvement Breastfeeding Team.

Date issued: April 2018

Date of review: April 2018

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Table 1: Breastfeeding Assessment Tool (Nurses Version)

21.0 How to maintain and increase mothers breast milk supply?

ACTION	RATIONALE & REFERENCE
<p>Maintain: Mother should aim to breastfeed in a pattern similar to their infants typical breastfeeding rhythm. Encourage mothers to design a breastfeeding regimen that works for both mother and infant</p> <p>By ensuring that breasts are emptied after each breastfeed, milk production is more likely to be maintained.</p> <p>Useful techniques to increase mothers breast milk supply: Use the techniques advised in Section 12.3</p> <p>Mothers should perform:</p> <ul style="list-style-type: none"> • breast massage • Kangaroo care / Skin-to-Skin Contact (See below) <p>Mothers should breastfeed more often than presently doing</p> <p>Breastfeed in short bursts more often for a period of time</p> <p>Mothers should also:</p> <ul style="list-style-type: none"> • make time for meals, snack regularly • drink plenty of drinks available 	<p>To ensure that mothers are still producing sufficient milk to facilitate their infants demands (Meier et al 1998, LLL 2012)</p> <p>To ensure that mothers are still producing sufficient milk to facilitate their infants demands (Meier et al 1998, LLL 2012)</p> <p>See Section 12.3 for further details</p> <p>See Section 12.3</p> <p>Kangaroo Care can increase breastfeeding initiation and exclusivity rates (Cleveland et al 2017)</p> <p>To increase the amount of stimulation at the breast, therefore increasing the breast milk production (LLL 2004, Jones and Hartmann 2005)</p> <p>Increased frequency of feeding by breastfeeding infants increases mothers breast milk supply (LLL 2004)</p> <p>See Section 12.3</p>

22.0 How mothers can wean and stop breastfeeding?

ACTION	RATIONALE & REFERENCE
<p>Ensure the decision to wean and/or stop breastfeeding is an informed decision</p> <p>Weaning should be planned and gradual</p> <p>Mothers should consider the following:</p> <ul style="list-style-type: none"> • Choose a milk formula if under 1 year (if not 	<p>Parents are entitled to make informed decisions about their infants' feeding (WHO 1981, WHO 1989, Spicer 2001).</p> <p>Abrupt weaning can cause physical discomfort, as milk will continue to be produced and without sufficient removal mothers can become full and engorged which can lead to mastitis or breast abscesses (LLL 2004)</p>

<p>commenced or established on complementary foods)</p> <ul style="list-style-type: none"> • Commence regular full fat milk if over 1 year • The type of feeding bottle/cup to introduce <p>Commence the introduction of complementary food from 6 months onwards while continuing to breastfeed</p> <p>Mothers can continue to breastfeed until infants are at least 2 years of age</p> <p>Mothers who are about to stop breastfeeding should wean gradually rather than suddenly stop (reduce by one breastfeed every 2-3 days) and breastfeed for comfort as needed</p> <p><u>Weaning and the bereaved mother:</u> Using their previous breastfeeding schedule: mothers should start expressing for shorten pumping sessions and lengthen the time between pumping sessions without causing discomfort</p>	<p>To substitute alternative feeds and feeding devices to deliver same (LLL 2004)</p> <p>Complementary foods can be commenced safely at 6 months of age (WHO 1989; 2002)</p> <p>Infants are recommended to be breastfeed exclusively until 6 months of age and supplemental diet with continued breastfeeding until 2 years or older (WHO 1989, 2002)</p> <p>When mothers stop breastfeeding, breast milk may not be removed in sufficient quantities by her infant leading to engorgement and, if it occurs continually, it can lead to a diminished milk supply and mastitis (LLL 2004)</p> <p>To gradually wean milk production without excessive discomfort and remove enough milk to reduce the pressure in the breasts. This process can take one to two week depending on the frequency and duration of mothers breastfeeding schedule prior to their infant death (HMBANA 2012). For further information refer to the End of Life Care Folder</p>
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23.0 Introducing Complementary Foods

Complementary food means giving other foods in addition to breast milk (WHO 2000) when breast milk is no longer sufficient to meet the nutritional needs of infants (WHO 2003). It is recommended that term infants should not commence complementary foods before 17 weeks (4 months) and not later than 26 weeks (6 months) and preterm infants only commence complementary foods under the specific advice and guidance of a healthcare professional (FSAI 2011). Introducing complementary foods before 4 months has been linked with the development of allergy and chronic diseases such as coeliac disease, as well as with an increased risk of choking. Delaying this process beyond 7 months of age may also lead to problems such as nutrient deficiency and delayed oro-motor development. Furthermore, delaying the introduction of foods containing gluten after 7 months may be associated with an increased risk of developing coeliac disease in later years (FSAI 2011). Therefore, it is recommended that small amounts of foods containing gluten be introduced from 6 months, while continuing to breastfeed (FSAI 2011, HSE 2015a).

Developmental signs of readiness for complementary foods, are that infants

- can stay sitting upright without support and hold their head steady,
- have the hand control to pick up a small item and move it to their mouth by themselves,
- can move food around their mouth with their tongue.

(Naylor and Morrow 2001).

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24.0 Discharge Support and Information


ACTION	RATIONALE
<p>Inform the Public health nurse prior to discharge of all infants receiving EBM/being breastfed.</p> <p>Inform all mothers who are breastfeeding prior to discharge of the breastfeeding support network (PHN or Voluntary) in their local area. Leaflets are available and the following web sites may be accessed and information printed.</p> <p>Our Lady's Children's Hospital, Crumlin has breastfeeding support information: http://www.olchc.ie/Children-Family/Breastfeeding-/Breastfeeding-and-Expressing-Milk-Documents-.html</p> <p>http://www.olchc.ie/Healthcare-Professionals/Nursing-Practice-Guidelines/Nursing-Practice-Guidelines.html</p> <p>Voluntary Breastfeeding supports in their local area: www.breastfeeding.ie/</p> <p>Private Lactation Consultant Supports may be recommended: www.alcireland.ie/</p>	<p>Mothers who are breastfeeding/expressing EBM may require extra support following their discharge from hospital to enable the continuation of lactation.</p> <p>Mothers will have easy access to practical accurate support from appropriately trained breastfeeding personnel to provide comprehensive breastfeeding support (Begley et al 2008, McGorrian et al 2010, CDC 2012, LLL 2012)</p> <p>Provide contact details for local voluntary organisations offering ongoing support to complement local community public health services (HSE 2009b, NICE 2006)</p> <p>International Board Certified Lactation Consultants (IBCLC) are health professionals who specialise in the clinical management of breastfeeding to assist the mother-infant breastfeeding dyad (CDC 2012)</p>

25.0 Trouble Shooting Guide

Mothers who develop breastfeeding related problems should be given accurate advice and support. Some of the common problems include: (This is not an exhaustive list)

- Mastitis
- Blocked Ducts
- Engorgement
- Cracked Nipples
- Perceived Poor Supply
- Refusal to latch/ Difficulty to latch infant on
- Breast and Nipple Thrush

Information leaflets are available in each ward area (though not on public display), and additional copies are available from the Neonatal Nurse Specialist.

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- Establishing and increasing your milk (LLL and the Health Promotion Unit)
- Sore Nipples (LLL and the Health Promotion Unit 2000)
- Sore Breasts (LLL and the Health Promotion Unit)

Displaying leaflets on breastfeeding problems can display a negative impression of breastfeeding to the public. Therefore, can be disseminated if particular problem arise to support the verbal information imparted from health care professionals.

25.1 Mastitis

Mastitis is usually caused in the first place by milk staying in the breast, or *milk stasis*, which results in *non-infective inflammation*. Infection may occur if the stasis persists. The condition may then become *infective mastitis*. Mastitis is commonest in the first 2–3 weeks after delivery but can occur at any time.

Symptoms:

- Hard swelling in the breast, with redness of the overlying skin
- Severe pain
- Usually only a part of one breast is affected
- Fever
- Feeling ill / flu like symptoms (feeling hot and cold with aching joints)

Common causes


- Poor attachment to the breast
- Nipple damage
- Infrequent breastfeeding or scheduled frequency or duration of feeding, missed feeds
- Breasts which are too full
- Incomplete removal of milk
- Unrelieved engorgement
- Blocked milk ducts
- Stopping breastfeeding too quickly
- Overly tight bra/ car seat belt /clothing around the chest area
- Infants with tongue-tie who's having problems attaching to the breast

Management:

Improve the removal of milk and try to correct any specific cause that is identified.

Advise mothers to:

- Continue to breastfeed frequently
- Avoid leaving long gaps between feeds
- Start breastfeeding on the unaffected breast first to stimulate the oxytocin reflex and milk flow
- Vary the position of the infant
- Apply warm compresses to the affected breast
- Use Analgesics/Antipyretics (non-steroidal anti-inflammatory to reduce breast inflammation; or paracetamol)
- Rest to aid recovery

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If symptoms are severe, or if no improvement is seen after 24 hours of improved milk removal, the treatment should then include an antibiotic. However, antibiotics will not be effective without improved removal of milk (ABM 2014, WHO 2009)

25.2 Blocked Ducts

Blocked ducts will almost always resolve spontaneously within 24 - 48 hours after onset, even without any treatment at all.

Symptoms

A tender, hot, localised lump in one breast, with redness in the skin over the lump

Common Cause

- Failure to remove milk from part of the breast, which may be due to infrequent breastfeeds
- Poor attachment
- Tight / constricting clothing
- Duct to one part of the breast is blocked by thickened milk
- Trauma to the breast

Management

Improve removal of milk and correct the underlying cause:-


- Continue to breastfeed especially on the affected breast (emptying the affected breast)
- Position the infant so their chin “points” to the area of blocked duct while breastfeeding
- Vary the position of the infant
- Use breast compression while breastfeeding by positioning their hand between the rib cage and the blocked duct and apply pressure.
- Apply warm compresses
- Gentle breast massage over the lump and towards the nipple while breastfeeding (a string of the thickened milk comes out through the nipple, followed by a stream of milk and rapid relief of the blocked duct)

Lecithin, one capsule (1200 mg) 3 or 4 times a day can also prevent recurrent blocked ducts

25.3 Engorgement

Symptoms

- Swollen and oedematous breasts
- Skin looks shiny and diffusely red
- Usually the whole of both breasts are affected
- Painful breasts
- Fever that usually subsides in 24 hours
- Nipples may become stretched tight and flat resulting in attachment and milk removal issues
- Breast milk does not flow well

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Common cause

Failure to remove breast milk, especially in the first few days after delivery when the milk comes in and fills the breast, and at the same time blood flow to the breasts increases, causing congestion.

Management

- Mother must remove the breast milk from the breast ensuring that infants
 - Attach well and suckle,
 - Breastfeed at least 8-10 times daily on demand (if newborn) or breastfeed more frequently.
- If infants are not able to attach and suckle effectively, mothers should express their milk until the breasts are softer, so that infants can attach better, and then get him or her to breastfeed frequently.
- Apply warm compresses to the breast or take a warm shower before feeding or expressing to help the milk to flow
- Use cold compresses after feeding or expressing to help reduce oedema

25.4 Cracked Nipples

Symptoms

- Open wound on nipple
- Sore
- Bleeding

Common causes

- Poor attachment
- Poor latching
- Ill-fitting breast shield for breast pump
- Breast pump suction too high


Management

- Assess the infants latch
- Alter the infants breastfeeding position (if required)
- Use a breast shield on the effected breast until the nipple has healed
- Briefly apply a cold pack to numb the injured area before nursing
- *After breastfeeding*
 - Nipples should be cleaned gently to reduce the risk of developing an infection
 - Apply lanolin to relieve pain and allow the wounds to heal much faster without forming a scab
 - Analgesia (if applicable) about 30 minutes before nursing can help lessen pain and swelling

25.5 Poor supply

Signs

If infants are gaining weight according to the expected growth velocity, and passing dilute urine 6 or more times in 24 hours, then their milk intake is adequate. If the mother thinks that she does not have enough milk, then it is *perceived insufficiency*.

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Common causes

Poor attachment is likely to be the cause if infants:

- wants to feed very often (more often than 2 hourly all the time, with no long intervals between feeds);
- suckles for a long time at each feed (more than one half hour, unless newborn or low birth weight);
- is generally unsettled.

Management (General)

- Perform a feeding history to understand the difficulty, particularly if there may be psychological factors affecting breastfeeding
- Observe a breastfeed, ensuring the signs of good attachment and sucking are present
- Assess mother's physical condition
- Assess infants condition and weight
- Determine where possible if the difficulty is due to *low milk intake*, or *perceived insufficiency*

Management of perceived insufficiency and low breast milk production

Nurses should:

- Decide the reason
- Explain the difficulty, and what might help
- Discuss and demonstrate how breastfeeding technique and pattern can be improved
- Build confidence about mothers milk supply

Management of insufficiency and low breast milk production

Nurses should:

- Identify the reason for the low milk intake
- Treat or refer the infant, if there is any illness or abnormality
- Help mothers with any of the less common causes, e.g. more frequent feeding, medication affecting milk supply
- Referral may be necessary
- Discuss how mothers can improve their breastfeeding technique and pattern and improve infants attachment
- Build confidence about mothers milk supply
- See **Section 21.0** above.

25.6 Refusal to latch/ Difficulty to latch infant on


Symptoms

Infants may refuse to breastfeed, and may cry, arch their back, and turn away when put to the breast. Mother may feel rejected and frustrated, and be in great distress.

Causes

There may be a physical problem such as:

- illness, an infection, or a sore mouth, e.g. thrush (see **Session 25.7**)
- pain, e.g. gastro-oesophageal reflux or thrush (see **Session 25.7**)

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Infants may have difficulty or frustration breastfeeding due to:

- sucking on a bottle or soother
- difficulty attaching to the breast
- pressure applied to the back of their head while attaching to breastfeed
- mother shaking their breast when trying to attach the infant

Infants may be upset by a change in the environment including:

- a changed routine
- a change in the mother's smell e.g. using a different soap or perfume

Management

If a cause is identified, it should be treated or removed, if possible.

- Avoid the use of bottles and soothers
- Correct positioning and attachment
- 'On demand' feeding when infants shows signs of interest in suckling;
- Express milk into the infants mouth;
- Avoid shaking the breast or holding infants head to force them onto the breast;
- Use alternative feeding methods until they are willing to take the breast again.

25.7 Infant Tongue Tie

The lingual frenulum is a string like membrane that attaches the tongue to the base of the mouth. It affects the movement of the tongue. The presence of a frenulum does not indicate tongue tie, but where there is a short, tight or thick frenulum, this is called a tongue tie. A tongue tie can restrict tongue mobility and may cause feeding challenges. The incidence of tongue tie is approximately 5-10% of babies (Todd and Hogan, 2015) and it is more common in boys than girls. (See Appendix 8)

Challenges for the infant include

- Difficulties in achieving and maintaining deep attachment to the breast
- Weight loss or challenges to gain weight
- Restless, tiring and unsettled feeds
- Noisy or clicking sounds during the feed


Challenges for the mother

- Distorted nipple shape after a breastfeed
- Bleeding, damaged or ulcerated nipples resulting in nipple pain
- Incomplete milk transfer by the baby resulting in engorgement and /or mastitis

Symptoms

In the mother:

- Nipple/Breast pain:
 - Can be described as burning, itching, stinging, stabbing, shooting pain, a deep ache or a burning sensation radiating through the breast
 - may be mild to severe

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- Usually ongoing
- continuing between feeds,
- not resolved with improved infants positioning and attachment
- Nipples/breast may be tender to touch
- Red or flaky rash on the areola, with itching and pigmentation changes
- It may be present in one or both breasts

In the infant:

- White spots inside the cheeks or over the tongue, like 'milk curds', and cannot be removed easily
- Altered feeding patterns, breastfeeding refusal, distressed when attaching and feeding, indicating a sore mouth
- Red rash over the nappy area ('napkin dermatitis' or 'nappy rash')

Management

- If the mother has symptoms, both mother and infant should be treated.
- Keep nipples dry
- Change breast pads regularly
- If only the infant has symptoms, it is not necessary to treat the mother with anti-fungal medication
- To prevent the spread of thrush, hand washing after nappy changes, and before and after applying any creams / lotions
- Treat all other sites of fungal infections

(Martinelli et al 2012, HSE 2015b)

25.8 Breast and Nipple Thrush


Symptoms

In the mother:

- Nipple/Breast pain:
 - Can be described as burning, itching, stinging, stabbing, shooting pain, a deep ache or a burning sensation radiating through the breast
 - may be mild to severe
 - Usually ongoing
 - continuing between feeds,
 - not resolved with improved infants positioning and attachment
- Nipples/breast may be tender to touch
- Red or flaky rash on the areola, with itching and pigmentation changes
- It may be present in one or both breasts

In the infant:

- White spots inside the cheeks or over the tongue, like 'milk curds', and cannot be removed easily
- Altered feeding patterns, breastfeeding refusal, distressed when attaching and feeding, indicating a sore mouth
- Red rash over the nappy area ('napkin dermatitis' or 'nappy rash')

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Cause


A fungal infection caused by *Candida albicans*.

Management

- If the mother has symptoms, both mother and infant should be treated.
- Keep nipples dry
- Change breast pads regularly
- If only the infant has symptoms, it is not necessary to treat the mother with anti-fungal medication
- To prevent the spread of thrush, hand washing after nappy changes, and before and after applying any creams/lotions
- Treat all other sites of fungal infections

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27.0 Appendices

Appendix 1 – WHO Definitions

WHO (1996) definitions	
Breastfeeding	The child has received breast milk direct from the breast or expressed.
Exclusive breastfeeding	The infant has received only breast milk from the mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements, or medicines.
Predominant breastfeeding	The infant's predominant source of nourishment has been breast milk. However, the infant may also have received water and water-based drinks (sweetened and flavoured water, teas, infusions, etc.), fruit juice; oral rehydration salts solution (ORS), drop and syrup forms of vitamins, minerals and medicines, and ritual fluids (in limited quantities). With the exception of fruit juice and sugar water, no food-based fluid is allowed under this definition.
Full breastfeeding	Exclusive breastfeeding and predominant breastfeeding together constitute full breastfeeding.
Complementary feeding	The child has received both breast milk and solid or semi-solid food.
Bottle-feeding	The child has received liquid or semi-solid food from a bottle with a nipple/teat

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Appendix 2: Conditions for Mothers Breastfeeding in *Our Lady's Children's Hospital, Crumlin*



Our Lady's Children's Hospital, Crumlin, Dublin 12
.....where children's health comes first

Full Name:
Address: Addressograph
HCR:

CONDITIONS FOR MOTHERS BREASTFEEDING

in Our Lady's Children's Hospital, Crumlin (OLCHC)

OLCHC believe that breastfeeding is the healthiest way for a woman to feed her baby. OLCHC supports mothers who choose to do so subject to the following conditions and asks that you accept these conditions by signing your name to this form. Should you have any queries whatsoever in relation to the form please contact a staff member.

1. The hospital accepts no responsibility for the condition and subsequent use of any expressed milk taken by me on my departure from the hospital;
2. Any expressed milk left by me on departure from the hospital shall be disposed of by the hospital at its sole discretion;
3. The health and safety of breastfed siblings shall be my sole responsibility during my time of residence in the hospital.
4. There are risks associated with breastfeeding by resident mothers of the siblings of patients in the hospital. These are mainly of infection. The hospital takes every precaution to minimise such risks. However, resident mothers choosing to breastfeed siblings of patients do so of their own choice and awareness of the risks. I understand the risks of (insert child's name) being resident in the hospital, which have been fully explained to me.

I acknowledge and agree to the above conditions for breastfeeding in OLCHC.

Note:

This completed form will be filed in your child's healthcare records

Mother's Name:..... (Block Capitals)

Mother's Signature:.....

Nursing Staff (Name/Title):..... (Block Capitals)

Nursing Staff (Signature):.....

Date:

COPY GIVEN TO PARENTS

Our Lady's Children's Hospital, Crumlin, Dublin 12

Appendix 3: Breastfeeding Assessment Tool (for nurses)

Addressograph Label

Breastfeeding Assessment Tool (BAT)

This assessment is performed on admission (when the infants mother arrives on the ward/unit) and once per 24 hours when an infant is feeding directly at the breast. The infants medical/surgical condition should be taken into consideration. Document the assessment outcome in the Breastfeeding Care Plan/Nursing Notes. If any responses in the pink column are ticked: watch a FULL breastfeed, update the Breastfeeding Care Plan/Nursing Notes including revisiting positioning and attachment and/or refer to Breastfeeding Champion is required. Any additional concerns should be followed up as needed.

24hour period	Wet Nappies	Stools	Day5	Wet Nappies	Stools
Day 1-2	At least 1-2	At least 1-2 (meconium) black/dark green	Day5	At least 5-8 (heavy)	At least 2 (large), soft, yellow and seedy
Day3-4	At least 3 (heavier)	At least 2, green changing to yellow	Day 7+	At least 6 (heavy) (pale yellow/clear)	At least 2 (large), soft, yellow and seedy

		Indication of effective feed (Green Indicators)	Answer suggests a problem (Pink Indicators)
1	Infants Urinary/Stool Output	As per table above	Not within the tables limits above
2	Infant Colour	Centrally and peripherally pink / Normal for infants condition	Jaundice worsening or not improving
3	Infant Alertness	Alert when awake, wakes to feed, engages in the feeding process	Lethargic to feed, not waking to feed
4	Infants Tone	Good	Poor
5	Weight (post initial birth loss)	No more than 7-10% of birth weight loss, regained birthweight by 2 weeks, otherwise gaining weight 30 – 40 g per day	Weight loss greater than 10%, gaining less than 30g per day
6	Number of Feeds	At least:- 10-12 feeds in 24hours (1 st Week) 8-10 feeds in 24hours (2 nd -3 rd Week)	Fewer than 8 feeds in last 24 hour
7	Infants behaviour during feeds	Generally calm and relaxed	Infant comes on & off breast frequently during the feed or refuses to breastfeed
8	Infants Latch	Correct - full cheeks, lips flanged out, if any areola visible, more visible on top than bottom	Incorrect - sunken cheeks, lips flanged in, minimal amounts of areolar in mouth
9	Infant Position	Head, neck and body in alignment, 'tummy to mummy'	Gap between mother & infant, head, neck and body not in alignment
10	Sucking/Swallowing Pattern during feeds	Starts with short sucks then longer sucks, pausing now and again (by Day 5) Strongly, slowly, steadily and swallowing often (audible)	No change in sucking pattern or noisy feeding (eg: clicking)
11	Length of feeds	5-40 minutes at most feeds	Feeds for less than 5 minutes or longer than 40 minutes
12	End of feeds	Infants let go spontaneously, or when breast is gently lifted	Infant not releasing breast spontaneously, mother removing infant
13	Offered 2 nd Breast	Offered 2 nd breast but may or may not feed depending on appetite	Mother restricts infant to one breast per feed or insists on two breasts per feed
14	Infants behaviour after feeds	Content after most feeds	Unsettled after feeds
15	Shape of nipples at the end of the feed	Same shape when feed began or slightly elongated	Misshapen or pinched at the end of feeds
16	Mothers report of her breasts & nipples	Breast and nipple comfortable	Nipples sore or damaged; engorgement or mastitis
17	Use of soother/nipple shield/formula	None used	Yes - explore why: attachment difficulty? Infant not growing? Infant unsettled?

Adapted from UNICEF UK Baby Friendly Initiative 2010 and Guidelines for mothers HSE 2015

Date assessed	Time	Pink Indicators Nos.	Signature/ NMBI No	Date assessed	Time	Pink Indicators Nos.	Signature/ NMBI No	Date assessed	Time	Pink Indicators Nos.	Signature/ NMBI No

Developed by Quality Improvement Breastfeeding Team.

Date issued: April 2018

Date of review: April 2018

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Appendix 4: Breastfeeding Assessment Tool (Mothers Version)



Breastfeeding Assessment Tool (BAT) (Mothers Version)

Full Name:
 Address:
 HCRN:
 DOB: ___ / ___ / ___

This is a breastfeeding assessment tool to guide you while your baby is breastfeeding in OLCCHC. Your nurse will perform this assessment daily. The 'Green Indicators' mean that breastfeeding is 'going well'. The 'Pink indicators' may suggest a breastfeeding problem. If any 'pink indicators' are present: ask your baby's nurse to watch a FULL breastfeed, and get their advice about how to resolve the breastfeeding problem. Your baby's medical/surgical condition should be considered.

24 HOUR PERIOD	WET NAPPIES	DIRTY NAPPIES		WET NAPPIES	DIRTY NAPPIES
Day 1-2	At least 1-2	At least 1-2 (meconium) black/dark green	Day5	At least 5-6 (heavy)	At least 2, soft, yellow and seedy
Dazy3-4	At least 3 (heavier)	At least 2, green changing to yellow	Day 7+	At least 6 (heavy) (pale yellow/clear)	At least 2 (large), soft, yellow and seedy

Yes = ✓ No = X	Indication of effective feed (Green Indicators)	Answer suggests a problem (Pink Indicators)
Baby's Wet/Dirty Nappies	As per table above	Not within the tables limits above
Baby's Colour	Lips, arms and legs are pink / Normal for your baby's condition	Jaundice (Tan, Yellow skin colour) worsening or not improving
Baby's Alertness	Alert when awake, wakes to feed, engages in the feeding process	Too tired or sleepy to feed, not waking to feed
Baby's Tone	Good	Poor
Weight (after initial birth loss)	Babies may lose about 7% of birth weight in first 3 days after birth. From Day 4 onward your baby will start to gain weight, regained birth weight by 2 weeks, otherwise gaining weight 30-40g per day	Weight loss greater than 10%, gaining less than 30g per day
Number of Feeds	At least:- 10-12 feeds in 24hours (1 st Week) 8-10 feeds in 24hours (2 nd -3 rd Week)	Fewer than 8 feeds in last 24 hour
Baby's behaviour during feeds	Generally calm and relaxed	Baby comes on & off breast frequently during the feed or refuses to breastfeed
Baby's Latch	Correct - full cheeks, lips flanged out, if any areola visible, more visible on top than bottom	Incorrect - sunken cheeks, lips flanged in, minimal amounts of areolar in mouth
Baby's Position	Head, neck and body in alignment, 'tummy to mummy'	Gap between mother & baby, head, neck and body not in alignment
Sucking/Swallowing Pattern during feeds	Starts with short sucks then longer sucks, pausing now and again (by Day 5) Strongly, slowly, steadily and swallowing often (audible)	No change in sucking pattern or noisy feeding (eg: clicking)
Length of feeds	5-40 minutes at most feeds	Feeds for less than 5 minutes or longer than 40 minutes
End of feeds	Baby let go spontaneously, or when breast is gently lifted	Baby not releasing breast spontaneously, mother removing infant
Offered 2 nd Breast	Offered 2 nd breast but may or may not feed depending on appetite	Mother restricts baby to one breast per feed or insists on two breasts per feed
Baby's behaviour after feeds	Content after most feeds	Unsettled after feeds
Shape of nipples at the end of the feed	Same shape when feed began or slightly elongated	Misshapen or pinched at the end of feeds
Mothers breasts & nipples	Breast and nipple comfortable	Nipples sore or damaged; engorgement or mastitis
Use of soother/nipple shield/formula	None used	Yes - explore why; attachment difficulty? Baby not growing? Infant unsettled?

Adapted from UNICEF UK Baby Friendly Initiative 2010 and Guidelines for mothers HSE 2015


Every breastfeed makes a difference. Your breast milk gives your baby all the nutrients they need for around the first 6 months of life. Your breast milk continues to be an important part of their diet, as other foods are given for up to 2 years of age and beyond.

Developed by Quality Improvement Breastfeeding Team.


Date issued: Dec 2017

Date of review: Dec 2021

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Our Lady's Children's Hospital, Crumlin		
Document Name: Mothers breastfeeding their sick infants in OLCHC Guideline		
Reference Number: GOLCHCCMBSIOLCHC-06-2018-EH-V3	Version Number: 2	
Date of Issue: June 2018	Page 43 of 46	

Appendix 5: Transition from Tube feeding to Breastfeeding Programme




Our Lady's Children's Hospital, Crumlin, Dublin 12
.....where children's health comes first

Transition from Tube Feeding to Breastfeeding' Guide

Assessment criteria for infants readiness to start/continue this guide		Maternal Education	
Need to achieve all the indicators to start / continue the guide:		Date:	
1	Medical Team has approved the infants readiness to start this guide	'Is your baby getting enough milk' Video <input type="checkbox"/> OLCHC website	Mother observed Videos Yes <input type="checkbox"/>
2	The infant had no PEWS Triggers in the last 24 hours	'Attaching your baby to the breast' Video <input type="checkbox"/> OLCHC website	Mother given Information Yes <input type="checkbox"/>
3	The infant is demonstrating feeding cues	Guidelines for Mothers () <input type="checkbox"/> HSE website	
		Breastfeeding Assessment Tool 'Mothers Version' <input type="checkbox"/> OLCHC website	
Perform the following DAILY:			
1	Ensure the infant meets the criteria listed above to continue the programme		
2	Continue to use Breastfeeding Assessment Tool (BAT) +/- Expressing Assessment Tool (EAT)		
3	Infant Weight: (Expect positive weight gain)		
Score	OBSERVED	Infant:	Mother:
A	Offered the breast, not interested, remained sleepy	<ul style="list-style-type: none"> Full top up (preferably Expressed Breast Milk (EBM)) 	<ul style="list-style-type: none"> Offers Non-Nutritive Sucking at her breast Continues Skin to Skin Contact at her breast during the tube feed Advised to express at this time to maintain her full milk supply
B	Interested in breastfeeding (licking / mouth opening / nuzzling / head turning however does not latch)	<ul style="list-style-type: none"> Full top up (preferably EBM) 	<ul style="list-style-type: none"> Offers Non-Nutritive Sucking at her breast Continues Skin to Skin Contact at her breast during the tube feed Advised to express at this time to maintain her full milk supply
C	Latched onto the breast, had a few sucks however: <ul style="list-style-type: none"> On and off or falls off the breast. Repeated this pattern for several minutes or Fell asleep within just a few minutes of latching on 	<ul style="list-style-type: none"> Full top up (preferably EBM) 	<ul style="list-style-type: none"> Offers Non-Nutritive Sucking at her breast Continues Skin to Skin Contact at her breast during the tube feed Advised to express at this time to maintain her full milk supply
D	Latched and started to suck and swallow, however: <ul style="list-style-type: none"> Shallow sucking for most of the feed (more than 2 sucks/second) Short sucking bursts Pauses for long periods between suck / swallow bursts Uncoordinated with breathing and swallowing 	<ul style="list-style-type: none"> Half top up (preferably EBM): 	<ul style="list-style-type: none"> Offers Non-Nutritive Sucking at her breast Continues Skin to Skin Contact at her breast during the tube feed May need to express for comfort
E	Latched well with: <ul style="list-style-type: none"> Regular burst of long slow rhythmical sucking and swallowing (1 suck / second) interspersed with: <ul style="list-style-type: none"> short pauses / short feed less than 10mins 	<ul style="list-style-type: none"> Half top up (preferably EBM): Consider not topping up if mother is available for the next feed. If the infant has 2 consecutive 'E' scores, give a half top up 	<ul style="list-style-type: none"> Offers Non-Nutritive Sucking at her breast Continues Skin to Skin Contact at her breast during the tube feed May need to express for comfort
F	Latched well with: <ul style="list-style-type: none"> Long slow rhythmical sucking and swallowing Long feed more than 10mins 	<ul style="list-style-type: none"> No top up is required 	<ul style="list-style-type: none"> Offers the 2nd breast

Adapted from: Nystrom KH et al (1996) Development of the Preterm Infant Breastfeeding Behaviour Scale (PIBBS): A study of nurse-mother agreement. Journal of Human Lactation, 13(5): 207-19. Date issued: Feb 2016. Date of review: Feb 2020.
Developed by Breastfeeding Committee.
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Appendix 6: Breastfeeding Care Plan


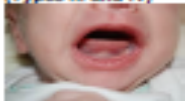
 <div style="text-align: center; border: 1px solid black; padding: 5px; background-color: #d9ead3;"> NURSING CARE PLAN No 4 BREASTFEEDING </div> <div style="float: right; border: 1px solid black; padding: 5px; margin-top: 5px;"> Full Name: _____ Address: Addressograph _____ HCR _____ </div>			
2C	USE OF ARTIFICIAL BOTTLES, TEATS OR SOOTHERS		
	<ul style="list-style-type: none"> Avoid the use of artificial bottles, teats or soothers, unless clinically indicated Inform parents of the impact of soothers on breastfeeding -Yes <input type="checkbox"/> - No <input type="checkbox"/> Document if parents wish their infant to use a soother in the nursing assessment sheet Avoid giving infants food or drink other than breast milk, unless medically indicated. Document if alternative feeding methods are clinically indicated: Cup <input type="checkbox"/>, Bottle <input type="checkbox"/>, Enteral feeding tube <input type="checkbox"/>, ...Document Type.... Syringe <input type="checkbox"/>, Dropper <input type="checkbox"/>, Other: 		
2D	FREQUENCY		
	Mothers should breastfeed: * If newborn: 10-12 times in 24hrs, including at night and 'On demand' <input type="checkbox"/> * If 2-3 weeks: 8-10 times in 24hrs, including at night and 'On demand' <input type="checkbox"/> * If not a newborn: at usual breastfeeding times, and 'On demand' <input type="checkbox"/> * If (re)establishing breastfeed: continue expressing until breastfeeding established <input type="checkbox"/> 'Rooming-in' should be facilitated where possible		
3	TRANSITION FROM EXPRESSING TO BREASTFEEDING DIRECTLY		
	Use the 'Transition from tube feeding to Breastfeeding Guide' to facilitate the transition <input type="checkbox"/> Commence the following to stimulate rooting, latching and sucking: -Kangaroo Care <input type="checkbox"/> -Mouth Care with EBM <input type="checkbox"/> -Rub EBM on infant's lips <input type="checkbox"/> -Offer EBM drops PO - direct from breast <input type="checkbox"/> - indirect <input type="checkbox"/> Offer Non-Nutritive Suck (NNS): Gloved Finger <input type="checkbox"/> Offer empty breast <input type="checkbox"/> Soother <input type="checkbox"/> .. <u>Clinical indication for soother...</u> Parent informed of NNS impact with soother -Yes <input type="checkbox"/> - No <input type="checkbox"/>		
4	INTRODUCING COMPLEMENTARY / SOLID FOODS		
	Commence the introduction of complementary /solid food from 6 months onwards while continuing to breastfeed. Mothers can continue to breastfeed until infants are at least 2 years of age.		
5	DISCHARGE SUPPORTS		
	Inform the Public Health Nurse of all breastfeeding infants on discharge. Inform mothers of : <ul style="list-style-type: none"> Voluntary Breastfeeding Support Networks at: www.breastfeeding.ie/ <input type="checkbox"/> Private Lactation Consultant Supports at: www.alcireland.ie/ <input type="checkbox"/> OLCHC Breastfeeding Information at: www.olchc.ie <input type="checkbox"/> 		

Created by Elaine Harris CPC, NDPU Jan 2016. 2nd Edition: March 2018

Appendix 8: Management of Tongue Tie in Early Infancy



Management of Tongue Tie in Early Infancy

<p>Types of Tie</p> <p>Anterior Tie (Types I and II)</p>  <p>Posterior (submucosal) Tie (Types III and IV)</p>  <p>Frenotomy could be considered in healthy infants with a tongue tie who present with a problem feeding.</p> <p>All professionals agree that tongue-tie on its own without feeding problems does not necessarily require frenotomy.</p> <p>Good lactation/feeding assessment is crucial to support babies with a tongue tie.</p>	<p>It is uncertain whether ankyloglossia (tongue tie) is a congenital oral anomaly or whether it is a normal variant.</p> <p>A small number of mothers may experience breastfeeding difficulties. This has been attributed to apparent tongue tie in the infant, however many mothers experience no difficulty feeding infants with apparent tongue tie, and infants with apparent tongue tie generally have no difficulty bottle feeding.</p> <p>Presenting problems attributed to tongue tie are nipple pain, poor latch, poor feeding, slow weight gain, unsettled infant. However these symptoms are also common in first time breast feeding mothers.</p> <p>There are many assessment tools (e.g. Hazelbaker), many are very time consuming and of uncertain value. Assessment can be done using the right sidebar:</p> <p>What to do if tongue tie is suspected:</p> <ul style="list-style-type: none"> • Confirm that tongue-tie is present; this should include a full examination of the palate. • Obtain a lactation consultant assessment prior to any referral for possible tongue tie release procedure. ~Breastfeeding may be attributable to non tongue tie issues • Undertake an oral & systemic examination of the baby to exclude local causes such as cleft palate and systemic causes such as UTI, airway difficulties or cardiac problems. • If the feeding problem persists, intervention at 2-3 weeks of age may be appropriate before feeding problems make breastfeeding so difficult that the mother stops feeding. If the tongue tie is very obvious and the feeding difficulties are severe intervention may be considered before this. • Advice should be given on feeding in the interim by Lactation Consultant. • Ascertain that the baby has been given Vitamin K, and there is no family history of blood dyscrasias. • Referral by medical practitioner to an appropriately trained professional to assess severity of tongue tie and possible frenotomy. <p>(See attached 'Tongue Tie Assessment Referral Form')</p> <p>Follow the baby and mother up after the frenotomy. If feeding does not improve there is another cause for the difficulties. Some babies who undergo frenotomy continue to have feeding problems despite releasing the tongue tie.</p> <p>Skilled breastfeeding advice and support is essential post procedure.</p> <p>For healthcare providers performing frenotomy: see attached 'Frenotomy Proforma'</p>	<p>Assessment:</p> <p>1.Mothers Symptoms:</p> <p>Nipple pain; persistent over one week's duration.</p> <p>Breast pain, mastitis, engorgement beyond normal initial feeding issues.</p> <p>Distorted nipple shape after feed, bleeding or ulcerated nipples.</p> <p>2.Feeding history:</p> <p>Failure or likely failure to regain birth weight by 2-3 weeks of age.</p> <p>3.Look at Latch:</p> <p>Is the infants latch correct?</p> <p>Is latch being maintained?</p> <p>Check position of baby at breast.</p> <p>4.Listen and look:</p> <p>Clicking sounds while feeding.</p> <p>Pooling milk around mouth during feeds.</p> <p>Gasping, struggling on the breast.</p> <p>Bobbing around, latch slips</p> <p>5.Look and palpate :</p> <p>Extension (sticking out tongue), elevation (lift of the body of the tongue in the mouth, not just the tip - should reach at least halfway up to the palate) and lateralisation (side to side movement of the tongue - often better to one side with tongue tie).</p> <p>Frenulum extends anteriorly to tip of tongue or lower gum line (abnormal).</p> <p>No visible frenulum, but tight band palpable under the tongue, query posterior tie.</p>
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