



CONGRATULATIONS

We have two more maternity units who meet the criteria to be designated as Baby-friendly (National Award):

The Rotunda Hospital, Dublin

University College Hospital, Galway

Well done on all their hard work to get to this stage.

We now have five maternity units with Baby-friendly status. Approximately 30% of births are in these hospitals.

The awards will be presented in a few weeks. The maternity units who are Baby-friendly also include Portiuncula Hospital, Ballinasloe, Waterford Regional Hospital, and St Munchin's Regional Maternity Hospital, Limerick. This variety of units indicates that Baby-friendly practices can be implemented in hospitals that are large or small, rural or urban, teaching or non-teaching, part of a general hospital or stand-only maternity hospitals.

If these hospitals can do it-what about the rest?

The criteria used for assessment are laid down by UNICEF/WHO and are the same criteria all over the world and relate to the Ten Steps and Code of Marketing implementation. The term National Award indicates that the breastfeeding rate in the hospital is less than the 75% required for the Global Award, though all other global criteria are met.

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January 2006 there are:

- 5 maternity units with Baby-friendly (National) Award
- 6 maternity units with Certificates of Commitment
- 9 maternity units with Certificates of Membership
- 10 paediatric units participating in the Breastfeeding Supportive Paediatric Unit Project
- 10 hospitals with a Bronze Award as a Breastfeeding Supportive Workplace

The plans for 2007 include piloting criteria for external assessment for the Breastfeeding Supportive Paediatric Unit Project, encouraging more hospitals to participate in the Breastfeeding Supportive Workplace project and that some hospitals achieve a Silver Award as a Breastfeeding Supportive Workplace. Action Plans for 2006 are due in February so make sure your plan involves ACTION !

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**Focus in this issue:
Expression of breastmilk**

Step 5: Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.

This step has two sections and in this issue of *BFHI Link* we are discussing the second part about maintaining lactation by milk expression. The assessment criteria for this section states:

- Out of 15* randomly selected postpartum mothers (including caesarean), at least 80% report that they were shown how to express their milk or given written information on expression and/or advised where they could get help, should they need it.
- Out of 5* randomly selected mothers with babies in special care, at least 80% report that they have been helped to initiate and maintain lactation by frequent expression of breastmilk.
- Out of 10* randomly selected health care staff providing clinical care for mothers or infants, 80% can describe an acceptable technique for expressing milk manually that they teach to mothers.

*Sample size may be larger in a large hospital.



Why express breastmilk?

Expressed milk is needed for babies who are not able to feed at the breast due to illness or abnormalities, premature birth, or separation from their mother.

Mothers may express their milk

- for their own **comfort**, to relieve engorgement, to clear a blocked duct, or to rub-in hind milk to soothe a tender nipple;
- to **encourage a baby to breastfeed** by expressing a few drops so that the baby can smell and taste the milk, to soften an areola so the baby can attach, or expressing directly into the baby's mouth if the baby has a weak suck;
- to **keep up the milk production** when the baby is not suckling or to increase milk production;
- to **obtain milk** if the baby is unable to breastfeed, if the baby is small and tires quickly, when mother and baby are separated, or to provide milk for a milk bank.

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NOT EASY
FOR EITHER
OF US!



In addition:

Expressing and heat-treating the milk is an infant feeding option for

mothers who are HIV-positive (Newell 2004).

Expression and storage of colostrum in the last few weeks of pregnancy can provide an immediately available supply when the baby is likely to be at high risk of hypoglycaemia (Oscroft 2001).

Newell, M.-L. (2004). *HIV transmission through breastfeeding: a review of available evidence*. Geneva, WHO/UNICEF/UNAIDS.

Oscroft, R. (2001). "Antenatal expression of colostrum." *Practising Midwife* 4(4): 32-35.

Do many mothers express milk?

It is not known how many women in Ireland express their milk. Even if asked, many women might not consider it as "expressing their milk" if it was for their own breast comfort or to encourage their baby to suck. In a retrospective US study, 77% of the human milk feeding mothers reported pumping or expressing to provide feeds at least once during the first 6 months postpartum. This study did not distinguish between hand expression and mechanical pumping. (Geraghty, 2005)

Some mothers may choose to solely use expressed milk without ever putting their baby to the breast or may use expressed milk when breastfeeding did not work out. There are publications, web sites and discussion boards for women who are exclusively pumping, e.g. www.exclusivelypumping.com

Geraghty SR, Khoury JC, Kalkwarf HJ, Human milk pumping rates of mothers of singletons and mothers of multiples. (2005) *Journal of Human Lactation* 21(4) 413-420.

How much milk to express?

This depends on why the mother is expressing. Expressing a large quantity of milk may not always be the purpose, and therefore this should not be the indicator of "success". For example, if a mother expresses to rub in hind milk, she does not need a large quantity of milk.

If a mother is solely pumping, she may need to pump 6-8 times in twenty-four hours, including at least once between 1 am and 5 am when prolactin levels are highest, in order to establish her milk supply if the baby is not breastfeeding. Frequency is most important at this stage. (Hill et al 2001).

There appears to be no published research on hand expression.

Hill PD, Aldag JC, Chatterton RT. Initiation and frequency of pumping and milk production in mothers of non-nursing preterm infants. (2001) *Journal of Human Lactation* ;17(1):9-13.

Hand Expression or Mechanical Pumping of Breastmilk— is there a difference?

Reasons for the recommendation to learn the skill of expressing by hand include:

- *It is free* – there is nothing to purchase or replace and there is no economic barrier for any mother to providing expressed milk (Philipp, Brown et al. 2000).
- *It is always accessible* – no parts to sterilise, to lose, or break.
- *It can be very effective and quick* when the mother is experienced.
- *There is no time, water, energy needed to clean pump parts.*
- *It is natural and can empower women* to be producers and self-sufficient rather than consumers of manufactured products.
- *The skin contact may stimulate oxytocin release* thus assisting milk flow.
- *The skin contact may be preferable* to the feel of plastic and sound of a pump.
- *It is usually gentler* than a pump, particularly if the mother's nipple is sore.
- *The risk of bacterial contamination may be lower* with hand expression than pumps (Asquith, Pedrotti et al. 1984; Blenkharn 1989; Thompson, Pickler et al. 1997).
- *Quality of milk constituents may vary* depending on method of expression with fat and sodium higher in hand expressed milk (Spencer and Hull 1981; Garza, Johnson et al. 1982; Lang, Lawrence et al. 1994).
- *There may be adverse effects from using a pump* including injury to the mother (Williams, Auerbach et al. 1989; Brown, Bright et al. 2005).



Asquith MT, Pedrotti PW, Harrod JR, Stevenson DK, Sunshine P. The bacterial content of breast milk after the early initiation of expression using a standard technique. *Journal of Pediatric Gastroenterology & Nutrition*. 1984;3(1):104-7.

Blenkharn JI. Infection risks from electrically operated breast pumps. *Journal of Hospital Infection*. 1989;13(1):27-31.

Brown SL, Bright RA, Dwyer DE, Foxman B. Breast pump adverse events: reports to the Food and Drug Administration. *J Hum Lact* 2005;21(2):169-174.

Garza C, Nichols BL. Studies of human milk relevant to milk banking. *Journal of the American College of Nutrition*. 1984;3(2):123-9.

Lang S, Lawrence CJ, Orme RL. Sodium in hand and pump expressed human breast milk. *Early Human Development*. 1994;38(2):131-8

Thompson N, Pickler RH, Munro C, Shotwell J. Contamination in expressed breast milk following breast cleansing. *Journal of Human Lactation* 1997;13(2):127-30.

Philipp BL, Brown E, Merewood A. Pumps for peanuts: leveling the field in the NICU. *J Perinatol*. 2000;4:249-250.

Spencer SA, Hull D. Fat content of expressed breast milk: a case for quality control. *British Medical Journal Clinical Research Ed*. 1981;282(6258):99-100.

Williams J, Auerbach KG, Jacobi A. Lateral epicondylitis (tennis elbow) in breastfeeding mothers. *Clin Pediatr* 1989;28:42-43.

Assisting a mother to learn how to hand express

There is no distinct set of techniques for hand expressing that can be "taught" to mothers. However there are overall principles that can be used as the basis for individualised assistance.

The principles of hand expression are:

- ◇ Encourage the milk to flow.
- ◇ Find the milk ducts.
- ◇ Compress the breast over the ducts.
- ◇ Repeat in all parts of the breast.

When assisting a mother to learn a new skill it can help to:

- ◇ *Explain why this skill is relevant* to her, e.g. to get drops of milk on the nipple to encourage her baby, or to provide milk if her baby is not able to suckle.
- ◇ *Link to existing knowledge*, for example, that there are milk ducts throughout the breast.
- ◇ *Show visually as well as by words*, e.g. using a breast model and pictures.
- ◇ *Check the mother understands*, for example by asking her to try expressing.



- ◇ Offer follow-up such as coming back later or giving contact details of someone else to further assist if needed.

Remember:

Focus on assisting learning rather than telling the mother what she should do.

It is easier to learn to hand express when the breast is soft rather than engorged and tender.

The health worker does not need to touch the mother's breast when teaching hand expression.

Encourage the mother not to give up if she gets little milk or no milk at the first try. The amount of milk obtained increases with practice.

If a mother is both expressing and breastfeeding (for example, if she is working away from the baby), suggest that she express first and then breastfeed her baby. The baby is able to get the fat rich hind milk from deep in the breast more efficiently than by expressing.

Expressing should not hurt. If it does hurt, check the techniques listed above with the mother and observe her expressing.

See the mother's handout in this issue. Add contact details to the handout.

NEWS UPDATE

The UNICEF/WHO Breastfeeding Support and Promotion in a Baby-friendly Hospital: an 20-hour course for maternity staff has been updated from the original 1993 version. This update includes the new aspects of the assessment tools such as birth practices and focuses on providing the health worker with practical skills. The new course includes clinical practice sessions. The course will be on the UNICEF web site soon www.unicef.org/nutrition/index_breastfeeding.html

Longer breastfeeding linked to lower coeliac disease risk

A systematic review and meta-analysis has concluded that longer breastfeeding is associated with a reduced risk of developing coeliac disease. Breastfeeding during the introduction of dietary gluten is also linked to lower risk (pooled odds ratio 0.48, 95% CI 0.40 to 0.59) compared with infants who were not breast-feeding during this period. The authors remark that it is not clear from the primary studies whether breastfeeding delays the onset of symptoms or provides a permanent protection against the disease.

Akobeng AK et al (2005). Effect of breast-feeding on risk of coeliac disease: A systematic review and meta-analysis of observational studies. *Arch Dis Child*. Published Online: 15 November 2005.

Baby Friendly Hospital Initiative increases breastfeeding rates in Switzerland

A Swiss study has provided more evidence for the effectiveness of Baby Friendly implementation as a mechanism to improve breastfeeding rates. The proportion of babies exclusively breastfed for their first 5 months of life was 42% for those born in Baby Friendly hospitals, compared with 34% for infants born elsewhere. Data was analysed for 2861 infants born in 145 different health facilities. Breastfeeding data was compared with both the progress towards Baby Friendly status of each hospital and the degree to which accredited hospitals were successfully maintaining the Baby Friendly standards. The authors conclude that the general increase in breastfeeding in Switzerland since 1994 can be interpreted in part as a consequence of the growing implementation of the Baby Friendly Initiative.

Merten S et al (2005). Do Baby-Friendly Hospitals Influence Breastfeeding Duration on a National Level? *Pediatrics* 116: e702-e708

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The Food Safety Authority of Ireland (FSAI) has issued a leaflet about the legislation on the marketing of infant formulae and follow-on formulae. This would be useful to remind staff of their responsibilities as well as to provide information in general. Printed copies are available from Food Safety Authority of Ireland, Abbey Court, Lower Abbey St, Dublin 1 Tel: 1890 33 66 77 Fax: 01 - 8171301 Email: info@fsai.ie The leaflet can be downloaded at www.fsai.ie/publications/leaflets/Infant_formula_leaflet.pdf To achieve the Baby-friendly award, hospitals are required to conform with the International Code of Marketing of Breastmilk Substitutes and its subsequent resolutions. However abiding by the legislation will go a long way towards implementing the International Code.

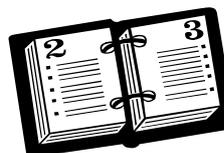
BFHI Link is written by Genevieve Becker, National Co-ordinator of BFHI, and reviewed by members of the BFHI Advisory Committee.

We welcome your news and suggestions.

Contact the BFHI Co-ordinator, c/o Health Promoting Hospitals Network, James Connolly Memorial Hospital, Blanchardstown, Dublin 15, email: bfhi@iol.ie Web site: www.hphallireland.org then go to Links



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Diary Dates

March 11-12th **La Leche League of Ireland Annual Conference**, Bundoran
Contact: 0404-41773
siobhanward@eircom.net

March 30th **Association of Lactation Consultants in Ireland, Trainers Workshop**, Cork
Contact: alci@iol.ie

April 1st **Association of Lactation Consultants in Ireland, Spring Study Day**, Cork.
Contact: alci@iol.ie

May 14th-20th **National Breastfeeding Week UK** for events in Northern Ireland see www.healthpromotionagency.org.uk

Milk Expression

Your milk is very important to your baby. It is useful to express your milk if:

- your baby cannot feed at the breast
- you are away from your baby
- you want drops of milk to encourage your baby to suck,
- your breasts are overfull or you have a blocked duct,
- you want some hind milk to rub on sore nipples, and other reasons.

You can help your milk to flow by:

- sitting comfortably, relaxed and thinking about your baby,
- warming your breast,
- massaging or stroking your breast, and rolling your nipple between your fingers
- having your back massaged.

Feel back from your nipple to find a place where your breast feels different. This may feel like knots on a string or like peas in a pod. This is usually a good place to put pressure when expressing. Put your thumb on one side of the breast and 2-3 fingers opposite.



Compress the breast over the ducts. Try pressing your thumb and fingers back towards your chest, and then press your thumb and fingers towards each other, moving the milk towards the nipple. Release and repeat the pressure until the milk starts to come.



Repeat in all parts of the breast. Move your fingers around the breast to compress different ducts. Move to the other breast when the milk slows. Massage your breast occasionally as you move your hand around. If you are expressing to clear a blocked duct, you only need to express in the area that is blocked.

It takes practice to get large volumes of milk. First milk (colostrum) may only come in drops. These are precious to your baby.

How often to express depends on the reason for expressing. If your baby is very young and not feeding at the breast, you will need to express every 2-3 hours.

It is important to have clean hands and clean containers for the milk. Discuss milk storage if needed.

These points are suggestions not rules.

- Find what works best for you.
- Expressing should not hurt and to ask for help if it does.
- Ask if you have any questions.

You can get information or help from: