Lactation & Breastfeeding

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Dear Members, dear Colleagues,

As the annual cycle draws to a close once again, we have chosen to focus this issue on the cycle of the Ten Steps to Successful Breastfeeding, which forms the basis for the WHO/UNICEF Baby-Friendly Hospital Initiative.

Through contributions from practitioners and academics, we want to focus on the fact that the global vision of the ten steps is not an instruction manual or user guide to be followed step by step, but a cycle that we all bring to life, focusing on the relationship between mother, family and child.

It is important to perceive adversities and obstacles, to reduce them and, where difficulties remain, to bear them in a way that is appropriate to the resources available, not only to strengthen teamwork in the clinic and in society, but above all to support the mother/child dyad in being able to achieve its highest breastfeeding goal.

Let us look beyond professions and also nations to not lose sight of this global vision.

We wish you and your families a reflective Advent season, a blessed Christmas and a good transition into a new and healthy 2023 annual cycle.

Eva Bogensperger Hezel
and the entire editorial team

Michaela Nita
and the ELACTA Board of Directors

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With its articles, Lactation and Breastfeeding wants to go beyond expert information about breastfeeding and also stimulate discussion. Therefore, we welcome your views. Please send letters to the editor to the following email address: magazin@elacta.eu


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The Ten Steps to Successful Breastfeeding – A European perspective.

Authors: Andrea Hemmelmayr, Denise McGuinness

Implementation of the Ten Steps requires training and teamwork

Introduction

The Ten Steps to Successful Breastfeeding is the premise of the WHO/UNICEF initiative (since 1991) which aims to ensure that pregnant and breastfeeding women and their babies get the best possible start in life and in the breastfeeding relationship through high international standards of care. The positive effect of BFHI is recognised by numerous studies.

International Board Certified Lactation Consultants, Petra Schwaiger (Germany) and Maryse Arendt (Luxembourg) highlight that the Ten Steps to Successful Breastfeeding must be seen as a whole unit. It is a coherent system in which the steps build on each other and complement each other.

This paper describes the WHO rationale for each step. Additionally, colleagues from all over Europe share their knowledge, thoughts, experiences and concerns about one of the 10 steps. In this way, we have received a colourful and exciting potpourri of very different European contributions.

Andrea Hemmelmayr

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1a Step 1a: Comply fully with the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly (WHA) resolutions.

> WHO-Rationale: *Families are most vulnerable to the marketing of breastmilk substitutes during the entire prenatal, perinatal and postnatal period when they are making decisions about infant feeding. The WHA has called upon health workers and health-care systems to comply with the International Code of Marketing of Breastmilk Substitutes and subsequent relevant WHA resolutions (the Code), in order to protect families from commercial pressures. Additionally, health professionals themselves need protection from commercial influences that could affect their professional activities and judgement. Compliance with the Code is important for facilities providing maternity and newborn services, since the promotion of breastmilk substitutes is one of the largest undermining factors for breastfeeding. Companies marketing breastmilk substitutes, feeding bottles and teats are repeatedly found to violate the Code. It is expected that the sales of breastmilk substitutes will continue to increase globally, which is detrimental for children's survival and well-being. This situation means that ongoing concerted efforts will be required to protect, promote and support breastfeeding, including in facilities providing maternity and newborn services.*

Andrea Hemmelmayr, IBCLC
Editorial Member

Infant formula manufacturers are interested in using the credibility and trust parents place in the health system and health workers for their marketing purposes. So far, advertising via this funnel has been proven to be extremely effective, but fatal to mothers' breastfeeding success. In order to protect children, parents and health workers from these inappropriate advertising practices by the infant formula industry, the Code of Marketing of Breastmilk Substitutes was adopted in 1981 and is regularly (about every 2 years) updated and further specified by World Health Assembly resolutions and documents such as the Innocenti Declaration or the Global Strategy for Infant and Young Child Feeding.

The aim of The Code is to contribute to safe and adequate nutrition for infants and young children by protecting and promoting breastfeeding and by ensuring appropriate use of breastmilk substitutes where needed. This should be done on the basis of education and through appropriate marketing and distribution (WHO – 1981).

Women are 2.5 times more likely to breastfeed where breastfeeding is encouraged, protected and supported (The Lancet – Breastfeeding Series 2016). Consequentially, Code-compliant interactions with manufacturers and distributors of products that fall under the scope of The Code are an important underpinning of the Babyfriendly Initiative.

The scope of The Code includes:

- All milk products and all products that can be used as a substitute for breastmilk and that are marketed for infant and young child feeding up to the age of 36 months.
- This also includes follow-on milks, special foods or toddler milks, foods or beverages intended for use before 6 months of age (i.e. as complementary foods or baby tea),
- and bottles and teats.

Conflicts of interest are inevitable when manufacturers or distributors of such products provide benefits in the form of discounted product supplies, company-funded training, scholarships, study tours, research grants or even small gifts to health facilities and health workers. Company logos, even if only on pens, bed cards or other commodities, are subconsciously memorised by both parents and health workers and create the impression that the health worker or health facility recommends their product. To avoid this, BFHI facilities should strictly adhere to the WHO Code.

1b Step 1b: Have a written infant feeding policy that is routinely communicated to staff and parents

> WHO-Rationale: *Policy drives practice. Health-care providers and institutions are required to follow established policies. The clinical practices articulated in the Ten Steps need to be incorporated into facility policies, to guarantee that appropriate care is equitably provided to all mothers and babies and is not dependent on the preferences of each care provider. Written policies are the vehicle for ensuring patients receive consistent, evidence-based care, and are an essential tool for staff accountability. Policies help to sustain practices over time and communicate a standard set of expectations for all health workers.*

Maria Großauer, IBCLC

Introduction and disclosure of conflicts of interest
Registered nurse in the maternity unit of the Pyhrn-Eisenwurzen Hospital Steyr, hospital breastfeeding representative
No conflicts of interest

The path to BFHI accreditation at the Pyhrn-Eisenwurzen Hospital Steyr

In 2006, after parental leave with my three children, I started working as an IBCLC in the maternity ward. We founded the breastfeeding outpatient clinic, which we opened a year later. This is my professional place of work, alongside which I was appointed as hospital breastfeeding representative.

To be able to pass on the knowledge I had acquired through my training, the breastfeeding working group was formed. In the first few years, we met regularly (monthly at first, then bi-monthly). The group consisted of about four to six registered nurses from the maternity unit and me. I presented the ILCA guidelines, and we gradually worked out our own guidelines. I always ›

asked the group, "What can we already implement from the existing guidelines?" Right from the get-go, it was clear to me that I couldn't achieve much on my own, so I got my colleagues on board. They determined what we could already put into practice, and which points we still had to discuss before their step-by-step implementation. Thus, the guidelines were initially modified, but because of that I was well received and accepted from the start.

The developed breastfeeding guidelines were brought to the attention of all staff members at regular intervals (for example at ward meetings) and of course they were also available in writing.

The guidelines were revised and optimised every year. In the beginning, there were still some discussions about rooming-in, bottle-feeding and dummies. We gradually approached the "Ten Steps to Successful Breastfeeding".

The path to BFHI accreditation was paved and 6 years later, after we were granted an additional on-call night post (this was a great achievement), we were ready.

We became a BFHI accredited hospital in 2019 and will recertify in 2023. For us, working according to the guidelines is now a "matter of course". There are hardly any controversies anymore, BFHI has become part of everyday life.

1c Step 1c: Establish ongoing monitoring and data-management systems.

> WHO-Rationale: *Facilities providing maternity and newborn services need to integrate recording and monitoring of the clinical practices related to breastfeeding into their quality-improvement/monitoring systems (see section 2.4)*

Denise Mc Guiness, IBCLC
Editorial Member

It is important that Health Care facilities collect and provide data in relation to breastfeeding activities and outcomes. This data should be collected from breastfeeding initiation, discharge from hospital, and then at varying points along the breastfeeding dyad's journey i.e. 6 weeks, 3 months, 6 months, 1 year and after 2 years. An important aspect of the collection of breastfeeding data is consistency globally. WHO/UNICEF have suggested standardised methods of collecting infant feeding information, however it is recognised that not all countries gather data in the same way. The collection of data, the method, definition, detail, storage and consistency are required to strengthen the global evidence and policy base (Whitford et al. 2018).

The USA Centre for Disease Control and Prevention (CDC) advises that data collection enables a better understanding of behaviour's, practices, and policies related to breastfeeding and breastfeeding disparities. This in turn provides direction to strategic priorities which will improve the health of mothers and babies across their lifespan (CDC, 2022).

2 Step 2: Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding.

> WHO-Rationale: *Timely and appropriate care for breastfeeding mothers can only be accomplished if staff have the knowledge, competence and skills to carry it out. Training of health staff enables them to develop effective skills, give consistent messages, and implement policy standards. Staff cannot be expected to implement a practice or educate a patient on a topic for which they have received no training.*

Denise Mc Guiness, IBCLC
Editorial Member

The Baby Friendly Hospital Initiative requires that healthcare staff working directly with breastfeeding women and families receive breastfeeding education relevant to their role. In this respect a specialist, generalist and awareness framework will ensure that staff employed within the health and community services receive lactation education and work within their scope of practice (Gallagher et al. 2015). At a specialist level Clinical Midwife Specialists (Lactation) and IBCLCs are highly skilled, educated and competent to support women to initiate and continue to breastfeed as long as mutually desired by mother and baby. Breastfeeding challenges that arise are identified early, solutions offered, and the breastfeeding dyad are supported to reach their breastfeeding goals. The breastfeeding specialist is available to support colleagues working within the generalist and awareness categories. All specialist staff have completed the WHO Breastfeeding education programme, post graduate breastfeeding education or attained the International Board Certified Lactation Consultant qualification.

Staff working within the "generalist" category are providing regular care and support to breastfeeding mothers and may include nursing, midwifery, medical staff and dietitians; while staff working within the "awareness" category include hospital staff involved in technical duties, scientific staff, housekeeping, catering and administrative staff. In that respect all health care professionals benefit from the inclusion of breastfeeding in their respective educational programmes. The content of the programme will require information on the importance of breastfeeding and the risks of not breastfeeding for mothers, infants and the environment, with communication skills (Schmied et al. 2011) and breastfeeding attitude and perceptions training an essential aspect of the education component. It is important that all staff working with the breastfeeding dyad know when and to whom a referral can be made for breastfeeding support beyond their level of expertise (Campbell et al. 2019).

At University level BSc Midwifery students engage with the WHO breastfeeding education and training programme. The assessment of breastfeeding knowledge and skills with the Objective Structured Clinical Examination (OSCE) provides an excellent medium to ensure knowledge, skills and competence are attained. Historically, nursing, medical and allied healthcare professional students did not receive breastfeeding education within their undergraduate programmes. More recently, some programme facilitators are independently including basic formal education in relation to the importance of breastfeeding. There is room for progress to ensure that health professionals are better supported to provide high quality infant feeding care and advice (Brown and Jones, 2020). Independent study options are available in many countries within the medium of online learning with some courses offering educational units. University College Dublin has developed a Professional Certificate in Breastfeeding and Lactation on the National Framework of Qualifications at level 9 for Midwifery, Nursing, Medical, Allied Health Care Professionals, including IBCLC's, which is an important collaborative approach to breastfeeding education.

Breastfeeding education is critical to improving healthcare professional's knowledge, competence and skills. Dubik et al. (2021) in a cross-sectional study completed an evaluation of nurses and midwives' competencies, training, barriers and satisfaction of breastfeeding education experiences in Northern Ghana. The results found that while the staff were satisfied with their breastfeeding training, 80 % of the nurses and midwives reported that they need further training on breastfeeding. Interestingly 40 % of nurses and midwives reported that clinical and professional practice was the significant contributor to their breastfeeding counselling competencies. In this respect, education and training as part of the Baby Friendly Hospital Initiative preparedness programme provides a vision for evidenced based care and supportive practices as the WHO/UNICEF 10 Steps to Successful Breastfeeding are implemented. It supports a culture of collaborative education, continuous professional development, peer mentoring and reflective practice.

The revised BFHI (2018:15) state that all staff working with breastfeeding women should be assessed on their ability to complete the following:

1. "Use listening and learning skills to counsel a mother;
2. Use skills for building confidence and giving support to counsel a mother;
3. Counsel a pregnant woman about breastfeeding;
4. Assess a breastfeed;
5. Help a mother to position herself and her baby for breastfeeding;
6. Help a mother to attach her baby to the breast;
7. Explain to a mother about the optimal pattern of breastfeeding;
8. Help a mother to express her breastmilk;
9. Help a mother to cup feed her baby;
10. Help a mother to initiate breastfeeding within the first hour after birth;
11. Help a mother who thinks she does not have enough milk;
12. Help a mother with a baby who cries frequently;
13. Help a mother whose baby is refusing to breastfeed;
14. Help a mother who has flat or inverted nipples;
15. Help a mother with engorged breasts;
16. Help a mother with sore or cracked nipples;
17. Help a mother with mastitis;
18. Help a mother to breastfeed a low-birth-weight baby or sick baby;
19. Counsel a mother about her own health;
20. Implement the Code in a health facility"

The focus of Step Two has changed from that of a specific training programme to staff competency whereby the competencies are verified every two years. The BFHI Network has collaborated on the creation of a multinational task force to design the tools (Mac Enroe, 2020). I look forward to further developments on these important tools which will enable many countries to move forward internationally together as they implement the BFHI.

BFHI or BFI?

The WHO Baby-Friendly Hospital initiative was launched in 1991. The idea was to provide the birth clinics with simple building blocks to better ensure the initiation of breastfeeding. Many countries have adapted this initiative to their situation and implemented it successfully. However, families also need protection and support with breastfeeding outside the protective framework of the maternity ward. Be it in the neonatology department, in the pediatrician's practice, at the family doctor's, in the pharmacy or simply in the general public. This baby-friendly initiative (BFI) is adopted and implemented by the healthcare system in some countries, e.g. Ireland or the UK, while in other countries there are at least individual BFI initiatives outside of the clinics. If we look at BFHI and BFI internationally, we have similar goals but also very different approaches. You can also read about some of these differences in this issue.

3 Step 3: Discuss the importance and management of breastfeeding with pregnant women and their families

> WHO-Rationale: *All pregnant women must have basic information about breastfeeding, in order to make informed decisions. A review of 18 qualitative studies indicated that mothers generally feel that infant feeding is not discussed enough in the antenatal period and that there is not enough discussion of what to expect with breastfeeding. Mothers want more practical information about breastfeeding. Pregnancy is a key time to inform women about the importance of breastfeeding, support their decision- making and pave the way for their understanding of the maternity care practices that facilitate its success. Mothers also need to be informed that birth practices have a significant impact on the establishment of breastfeeding.*

Andrea Hemmelmayr, IBCLC
Editorial Member

Every mother and family have the right to shape family life according to their own beliefs. Nevertheless, infant nutrition should not exclusively adapt to a particular lifestyle, because the decision to breastfeed or not has far-reaching health implications for both mother and child. Therefore, human rights also affirm the right of parents to accurate and objective information on infant and young child feeding that is free from commercial influences.

The International Code of Marketing of Breastmilk Substitutes also indicates the information parents need. Parents should be informed about:

- The importance of breastfeeding
- The nutrition of the mother and the preparation for and maintenance of breastfeeding ›

› The negative impact of partial bottle and combination feeding on breastfeeding

› The difficulty of reversing the decision not to breastfeed

Folllowing birth, health workers are also encouraged, where necessary (only for families who rely on the use of artificial formula), to give instruction in the correct preparation and use of manufactured infant formula. The education provided should include a clear explanation of the dangers of incorrect use and the use of unsuitable products. Likewise, the social and financial implications of the use of such products should be pointed out.

There is little information in the document about the knowledge that enables parents to initiate and maintain breastfeeding optimally. Breastfeeding is the natural consequence of birth, but it is also to a large extent a learned skill for both mother and baby. Mothers will breastfeed more successfully if, in addition to understanding the importance of breastfeeding and breastmilk, they understand the basics of milk production; that is, the principle that demand determines supply and that infants need frequent breastfeeding from the beginning. It makes sense to inform parents already during pregnancy that good attachment, a comfortable position and as much breast as possible in the baby's mouth prevent breastfeeding problems such as sore nipples, engorgement and blocked ducts or breast inflammation. These key principles also support sufficient milk production. It is certainly equally interesting how skin-to-skin contact and intuitive breastfeeding support the newborn's abilities and reflexes to latch on correctly and suckle well. Breastfeeding and satiety cues, clusterfeeding, normal sleep behaviour, crying as a means of communication and not only as a hunger signal, the need for physical closeness, ...all these normal infant behaviours and needs are still unfamiliar to many parents, especially first-time parents. Therefore, they need appropriate explanation. And finally, parents should know where they can seek support if the need arises.

4 Step 4: Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.

WHO-Rationale: *Immediate skin-to-skin contact and early initiation of breastfeeding are two closely linked interventions that need to take place in tandem for optimal benefit. Immediate and uninterrupted skin- to-skin contact facilitates the newborn's natural rooting reflex that helps to imprint the behaviour of looking for the breast and suckling at the breast. Additionally, immediate skin-to-skin contact helps populate the newborn's microbiome and prevents hypothermia. Early suckling at the breast will trigger the production of breastmilk and accelerate lactogenesis. Many mothers stop breastfeeding early or believe they cannot breastfeed because of insufficient milk, so establishment of a milk supply is critically important for success with breastfeeding. In addition, early initiation of breastfeeding has been proven to reduce the risk of infant mortality.*

Serena Debonnet, IBCLC

Introduction and disclosure of conflicts of interest
Midwife (Belgian diploma) and IBCLC; Belgian BFHI Public Health Coordinator since 2005, President of the Belgian Association of Lactation Consultants, active as a guest speaker at national and international level. Serena is passionate about the diverse nature of breastmilk and its long-lasting effects. Those who know her better call the camera that she always has with her, her third arm.

Early mother-infant contact during the first hours after birth is still recommended by the BFHI initiative as: 'Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth'.

Early skin contact has beneficial effects to increase parental sensitivity to the newborn signals, mother- child bonding and a better start for breastfeeding. The pre-feeding behaviors of the newborn who experience immediately skin-to-skin contact with the mother has been described as one of the pathways to initiate breastfeeding. The longer the time of skin-to-skin contact the higher the rate of exclusive breastfeeding. There are many benefits for the baby as lower risk for hypothermia, infections, sepsis, hypoglycemia and if the baby and mother are in a safe position it reduces tachypnea, improves oxyhemoglobin saturation and reduces maternal anxiety and even early depression.

Knowing that this is important for every baby, we have to realize that some baby's may suffer of sudden unexpected postnatal collapse (SUPC). This can happen during the first 7 days while the baby is in transition from intra to extra uterine live. Apparently healthy newborns, mostly from a first time, distracted mother by using a cell phone may be at risk *(Rodriguez et al., 2018)*. In the literature there are more risk factors described.

Most of the mothers were unsupervised and alone in a hospital room. During the skin-to-skin contact, it is extremely important to observe the mother child dyad and to teach the parents about normality so that they can recognize the first signs of problems very soon.

Teaching safe breastfeeding positions to the parents is recommended during the pregnancy, using pictures and a doll to show the differences between a safe position where the mother can see the whole face of the baby, a stable position of the baby's body and the mother in a comfortable position with a pillow supporting her own shoulders.

When a spontaneously breathing baby laying skin- to- skin becomes suddenly limp, pale or cyanotic, bradycardic and unresponsive this is a serious situation where we need to react immediately.

A special attention is needed after skin-to-skin contact following cesarean section as a suboptimal maternal temperature could potentially negatively impact neonatal outcomes through physiological heat loss mechanisms that occur in newborns.

The most common cause of SUPC is a positional occlusion of the newborn's airways and frequently during the first breastfeeding moment.

So as caregivers, we promote the safe skin-to-skin contact and we need to assist the mother to put the baby in a comfortable and safe breastfeeding position to ensure the airways of the baby are open.

As baby's adapt during the first 7 days everyone should be aware of potential risks and be able to start a successful neonatal resuscitation to maximize the chances of survival.

5 Step 5: Support mothers to initiate and maintain breastfeeding and manage common difficulties.

> WHO-Rationale: *While breastfeeding is a natural human behaviour, most mothers need practical help in learning how to breastfeed. Even experienced mothers encounter new challenges with breastfeeding a newborn. Postnatal breastfeeding counselling and support has been shown to increase rates of breastfeeding up to 6 months of age. Early adjustments to position and attachment can prevent breastfeeding problems at a later time. Frequent coaching and support helps build maternal confidence.*

Niamh Vickers, IBCLC

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Globally, there is an impetus to improve breastfeeding rates. Consequently, Step 5 of the BFHI articulates the necessity to 'support mothers to initiate and maintain breastfeeding and manage common difficulties'. The initiation of breastfeeding is the crux of this articulation, which indeed, is a fundamental antecedent to sustaining breastfeeding. The initiation of breastfeeding is influenced by multidimensional factors which can be broadly compartmentalized into the domains of knowledge/education and support. From an educational perspective, there is an unequivocal correlation between higher levels of knowledge of breastfeeding in mothers and healthcare professionals and the attainment of higher breastfeeding initiation rates (Hamze, Mao, Reifsnider, 2019). Ideally, the provision of breastfeeding education should be in the antenatal period and at an absolute minimum in the early postnatal period where it has been affirmed that pre and postnatal education is an effective way of enhancing breastfeeding initiation, duration and self-efficacy (Van Dellen at al., 2019, Wong et al., 2021). Early initiation, exclusive and sustained breastfeeding necessitates the concurrent integration and amalgamation of educational interventions to families, communities and health systems (Sinha et al., 2015). In effect, this whole systems approach is requisite to attaining the utmost endeavour of the promotion, protection and support of breastfeeding with the overarching goal of improved global breastfeeding rates which, in essence, will have infinite benefits from a multi-sectoral perspective.

Support for the initiation of breastfeeding comprises a multitude of components, and amongst these is the rudimentary and efficacious practice of skin-to-skin and initiation of breastfeeding within the first hour of birth. A prominent axiom articulated as 'the golden hour' should be advocated in every instance, irrespective of mode of delivery or birth location. Inherent to this practice, is the widely confirmed verity of the numerous benefits for the dyad. Further, early initiation of breastfeeding is a precursor for exclusive breastfeeding (Nguyen et al., 2020). A primary emphasis on the optimisation of skin-to-skin contact, during the immediate postpartum period should be embraced along with the provision of ongoing, practical support to mothers to undertake this practice, delivered by healthcare professionals in their endeavour to provide advantageous care and support to mothers to initiate and maintain breastfeeding. In Ireland, the National Standards for Infant Feeding Maternity Services (2022) published by the Health Service Executive, include the provision of these practices as a priority area to improve support for breastfeeding dyads and families (HSE, 2022). Additionally, support to breastfeeding women in various fundamental proficiencies including: effective positioning and attachment, skin-to-skin contact with the infant, hand expression, management of engorgement, optimisation of milk supply, prevention of sore nipples and signs of effective feeding are prioritised within these standards.

In Ireland, the key performance indicator for the Public Health Nursing service is to visit every family with a newborn infant within 72 hours of discharge from the maternity services. As part of the National Healthy Childhood Programme (NHCP), families will have at a minimum 3 contacts with the Public Health Nurse within the first year of the child's life (HSE, 2022). In many geographical locations across Ireland, there are also a range of support services as part of the Public Health Nursing Service including: infant feeding support groups, IBCLC Public Health Nurse led individual support and peer support groups. The role of the Public Health Nurse encompasses the promotion of health and well-being across the lifespan focusing on individuals, families and communities (HSE, 2022). Therefore, it is considered that Public Health Nurses have an instrumental role in the ongoing provision of supports to maintain breastfeeding and the management of common issues that arise which are key benchmarks of Step 5 in the BFHI. Interdisciplinary breastfeeding education with key disciplines such as Public Health Nurses in the community and Midwives in the maternity setting could enable improved collaborative practices with the intention of optimising and achieving advantageous outcomes aligned with the BFHI global endeavour.

6 Step 6 Do not provide breastfed newborns any food or fluids other than breastmilk, unless medically indicated.

> WHO-Rationale: *Giving newborns any foods or fluids other than breastmilk in the first few days after birth interferes with the establishment of breastmilk production. Newborns' stomachs are very small and easily filled. Newborns who are fed other foods or fluids will suckle less vigorously at the breast and thus inefficiently stimulate milk production, creating a cycle of insufficient milk and supplementation that leads to breastfeeding failure. Babies who are supplemented prior to facility discharge have been found to be twice as likely to stop breastfeeding altogether in the first 6 weeks of life. In addition, foods and liquids may contain harmful bacteria and carry a risk of disease. Supplementation with artificial milk significantly alters the intestinal microflora.*

Teddy Roorda, IBCLC

Introduction and disclosure of conflicts of interest
Teddy Roorda is IBCLC since 2012, works in a tertiary hospital in the city of Rotterdam and privat practice in the area around Utrecht, developed an online course for mothers (and fathers) to be, which runs completely on Instagram.
No conflicts of interest

›

At the start of the Dutch National breastfeeding week I looked at my figures of the third term in 2022. In this period of three months, I saw 38 babies and their mothers. This term I also looked at supplemental feeding with formula in my data. I know that there is a lot of additional feeding, but these figures also show it clearly. More than 60 % of the babies I have seen in the third quarter of 2022 were supplemented with formula at some point during the maternity week.

And this doesn't mean that milk isn't coming in fast enough, or that mothers do not produce enough milk, but above all this means that we (caregivers and mothers) have too high expectations and too little faith in the milk-making process.

And you may think that just a single bottle of formula is not that bad, but that is unfortunately a myth. When a baby is fed other foods in addition to, or instead of breastmilk, the protective layer in the intestines will be damaged and larger protein particles can end up in the bloodstream. Milk other than breastmilk also changes the microbiome so that pathogens can thrive. Even after a single bottle of formula, the microbiome and the protective layer of the intestinal wall are already affected. When no more formula is given, this will recover, but that can sometimes take a longer time.

In addition, supplementary feeding damages the mother's confidence in her ability to make milk. And she will make less milk, because of the supplementary feeding. She becomes insecure and more likely to fail breastfeeding.

In most cases there was no medical indication for supplementary feeding and the supplementary feeding was given as a precaution. To prevent problems. But this well-intentioned precaution undermines successful breastfeeding.

Let's all be critical about starting supplementary feeding and support mothers in feeding their baby.

The sixth step stresses that a newborn baby must not be given any food or drinks other than breastmilk unless it is medically indicated. As the pregnant women are counseled in advance and the hospital staff is trained, we rarely have to give anything other than colostrum – the first breastmilk – to babies.

Acceptable medical reasons for supplementation

- Infants in Special Care
- Infants with a very low birth weight <1,500g, or infants born before 32 weeks gestational age
- Small for gestational age with potentially severe hypoglycemia, and who do not improve through increased breastfeeding or by being given breastmilk

Infants well enough to be with their mothers receiving additional supplements must have been diagnosed as:

- Infants whose mothers have severe maternal illness
- Infants with inborn errors of metabolism
- Infants with acute water loss
- Infants whose mothers are taking medication which is contraindicated when breastfeeding.

7 Step 7: Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.

> WHO-Rationale: *Rooming-in is necessary to enable mothers to practise responsive feeding, as mothers cannot learn to recognize and respond to their infants' cues for feeding if they are separated from them. When the mother and infant are together throughout the day and night, it is easy for the mother to learn to recognize feeding cues and respond to them. This, along with the close presence of the mother to her infant, will facilitate the establishment of breastfeeding.*

Maryse Arendt, IBCLC

Introduction and disclosure of conflicts of interest
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This is a step that benefits all babies and mothers in a BFHI maternity hospital as it promotes bonding. Mothers get to know their babies better and become more competent in handling them before they go home. Rooming-in makes breastfeeding on demand possible, promotes exclusive breastfeeding and avoids supplementary feeding (Hakala, 2018). This has been scientifically proven, although new reviews show no impact on breastfeeding duration (Jaafar, 2016; Ng CA2019). In the new BFHI documents of 2017 (WHO) and 2018 (WHO), minor changes were implemented to step 7. The original in 1991 stated: Practice rooming-in – allow mothers and infants to remain together 24 hours a day. The 2018 reformulation now reads: Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day. Critical people see some softening in the 2018 wording, others see it as a modernized adaptation. A new addition is the encouragement of skin-to-skin contact beyond the first few hours.

The criteria for BFHI hospitals (WHO, 2018) have remained unchanged with 80 % rooming-in in daily practice and separation not exceeding one hour, unless medically necessary. For sick, underweight or premature babies, the 80 % also applies with the nuance that mothers are encouraged to be close to their children day and night (WHO, 2020). This document also explicitly mentions kangaroo care as the preferred mode of care for premature babies.

As an assessor, one experiences how maternity hospitals improve practice from the first assessment to the recertifications: the doctor's rounds are in the mother's room, the treatment of jaundice takes place at the mother's bedside, a kangaroo band is put on before a caesarean section, so that the baby comes into skin-to skin contact immediately after the C-section and remains there safely also during transfer back to the room.

Due to the COVID-19 pandemic, some hospitals suspended rooming-in rules and reintroduced separation. In other hospitals, rooming-in was introduced to reduce possible external contamination. A recent study *(Lazzerini, 2022)* on birth during the pandemic shows that rooming-in is quite common across Europe, even outside Baby-friendly Hospitals, with a mean of 19.4 % women who did not have continuous rooming-in (from 5.5 % in Luxembourg to 40 % in Romania).

Rooming-in was already practised to promote bonding before the BFHI was introduced in 1991/1992 in individual hospitals

with pioneering status. In 1983, for example, I chose the only maternity clinic that offered rooming-in in Luxembourg. However, it needs to be emphasised that the 10 steps together under the umbrella of the BFHI certification programm generate the best added value for mothers and infants.

8 Step 8: Support mothers to recognize and respond to their infants' cues for feeding.

> WHO-Rationale: *Breastfeeding involves recognizing and responding to the infant's display of hunger and feeding cues and readiness to feed, as part of a nurturing relationship between the mother and infant. Responsive feeding (also called on-demand or baby- led feeding) puts no restrictions on the frequency or length of the infant's feeds, and mothers are advised to breastfeed whenever the infant is hungry or as often as the infant wants. Scheduled feeding, which prescribes a predetermined, and usually time- restricted, frequency and schedule of feeds is not recommended. It is important that mothers know that crying is a late cue and that it is better to feed the baby earlier, since optimal positioning and attachment are more difficult when an infant is in distress. (WHO 2018)*

Petra Schwaiger, IBCLC

Introduction and disclosure of conflicts of interest
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To be able to recognise breastfeeding or hunger cues, it is ideal for a mother to be in frequent skin contact with her newborn on the maternity or neonatal ward. Apart from the fact that we know that babies who receive a lot of skin contact suck better and more effectively, and the fact that they gain weight better and that the mother's milk production gets off to a better start, it gives the nursing staff the opportunity to draw the mother's attention directly to the often very subtle cues. "Look – now your baby is starting to root, you can look out for that in the future too."

A mother who is sensitised to these subtle signs from her baby will also be better able to read and/or understand her child in other situations. This means that early training in recognising these breastfeeding and hunger cues will enhance maternal competence. Regular skin-to-skin contact can be facilitated more easily if the baby is not wearing multiple layers of cumbersome clothing. The baby can be transferred effortlessly to and from skin-to-skin contact if placed in a simple newborn sleeping bag.

The next common challenge for mothers is to recognise whether their baby is feeding and swallowing effectively. This is indeed often difficult to sense. It is not easy to hear every swallow – especially if there is surrounding noise.

That's when it's up to us to make the parents aware of the excretions: from the 3rd or 4th day onwards until the 6th week of life, bowel movements at least 3 times a day, 5-6 heavy disposable nappies and clear or pale-yellow urine. Parents should also be informed about how much weight their child should ideally gain in the first weeks.

In addition, care providers can also draw the parents' attention to the visual signs of an effective breastfeeding session when the baby is attached (rhythmic suck- swallow movement, movement of the jaw, earlobes, etc.) and ask the mother to feel how this active sucking feels for her. The mother then will also be able to understand this during later feedings.

We need to realise that it is completely normal for a newborn to have at least 8-12 feeds in 24 hours. A strict schedule (for instance every 3-4 hours) will confuse the parents. This is because they will skip early breastfeeding signs or try to soothe the baby in a different way. We as caregivers, can help to educate parents early on about normal breastfeeding behaviour of newborns.

Infants need 8-12 or 10-12 breastfeeds in 24 hours. This may also mean that newborns require waking to meet their needs. Some infants may show no or very subtle feeding signs on the 3rd or 4th day of life because they may be affected by neonatal jaundice and are therefore tired. In that situation, it is important that parents are advised to wake their baby and that they should not let them sleep for more than 3 hours. Unless, of course, the baby has previously been cluster feeding and the weight is already clearly on the rise.

In a BFHI hospital, the emphasis lies on a certain quality of care which stresses the importance of early and frequent skin-to-skin contact – or, if necessary early colostrum administration – and develops the corresponding guidelines, i.e. on the subject of breastfeeding and hunger signals. Here, the overall concept of the 10 steps becomes clear again.

9 Step 9: Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.

> WHO-Rationale: *Proper guidance and counselling of mothers and other family members enables them to make informed decisions on the use or avoidance of pacifiers and/or feeding bottles and teats until the successful establishment of breastfeeding. While WHO guidelines do not call for absolute avoidance of feeding bottles, teats and pacifiers for term infants, there are a number of reasons for caution about their use, including hygiene, oral formation and recognition of feeding cues.*

Lana Sonsalla

Introduction and disclosure of conflicts of interest
Speech and language therapist, lactation consultant (European Institute for Breastfeeding and Lactation), in private practice in the Harz region, volunteer of the facebook group "Die Stillecke 2.0"

Bottle teats and dummies can interfere with the initiation of breastfeeding.

The influences of sucking objects such as artificial teats and dummies on breastfeeding and sucking behaviour are individual and depend on various factors. Evidence on prevalence of nipple confusion in studies should therefore be viewed extremely critically, as these only shed light on the frequency of exclusive or any breastfeeding in a short period of time. This is below the WHO recommendations of exclusive breastfeeding for the first entire 6 months. Moreover, these studies ignore important aspects, ›

such as the quality of breastfeeding. Breastfeeding difficulties, pain and further breastfeeding progression after the first 3-4 months are not reflected in the studies.

Objective evaluation of time correlations between the use of artificial teats and dummies and breastfeeding difficulties, indicate that the disruption of the establishment of abundant milk production may be a possible effect. This is why the use of sucking objects is not recommended in the first 4-6 weeks (Walker, 2011). However, negative effects are also possible during the further course of breastfeeding, for example pain during breastfeeding and soreness due to an altered sucking pattern (ABM Protocol No. 3, 2009), tendency to engorgement and mastitis, refusal to breastfeed, decrease in milk production and even premature weaning (Brettschneider, 2018). Sensitisation to possible effects should therefore be carried out by the attending professionals, if necessary, in favour of alternative feeding methods and soothing techniques. In addition, individual assessment of possible resources and limits of each family around the breastfed baby is essential.

Should a family decide to use an artificial teat or pacifier, under consideration of possible risks or due to a medical indication, advice should be given regarding the shape of the soother: light weight, narrow shaft, transverse oval sucking part and no dummy chains. The use should be carefully dosed: as often as necessary and as little as possible. Non-nutritive sucking on the breast and full-body contact should always have priority.

Requirements for a bottle teat are based on the following criteria: smallest teat hole, soft material, large lip support, symmetrical teat. A feeding method that is oriented towards the natural hunger and satiety signals can be achieved by an upright position with many pauses and only a few selected individuals who offer the bottle.

Again, it should be noted that individual steps do not stand alone. In step 1a, reference is already made to full compliance with the International Code of Marketing of Breastmilk Substitutes and the relevant World Health Assembly resolutions. This also includes that no advertising of bottles and teats takes place in health facilities.

10 Step 10: Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

> WHO-Rationale: *Mothers need sustained support to continue breastfeeding. While the time in the facility providing maternity and newborn services should provide a mother with basic breastfeeding skills, it is very possible her milk supply has not been fully established until after discharge. Breastfeeding support is especially critical in the succeeding days and weeks after discharge, to identify and address early breastfeeding challenges that occur. She will encounter several different phases in her production of breastmilk, her infant's growth and her own circumstances (e.g. going back to work or school), in which she will need to apply her skills in a different way and additional support will be needed. Receiving timely support after discharge is instrumental in maintaining breastfeeding rates. Maternity facilities must know about and refer mothers to the variety of resources that exist in the community. (WHO 2018)*

Clare Kennedy

Introduction and disclosure of conflicts of interest
Clare Kennedy is a Registered Advanced Midwife Practitioner (RAMP) and currently working in the National Women & Infants Health Programme as a Project Coordinator for HSE Baby Friendly Initiative. The purpose of the National Project Coordinator's post is to support the implementation of National Standards for Infant Feeding in Maternity Services in 19 maternity hospitals/ and units. The National Women and Infants Health Programme are providing governance for the implementation of the revised standards and BFI in Maternity Services and are working in collaboration with the National Breastfeeding Coordinators and the National Breastfeeding Implementation Group (NBFIG).

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Introduction and disclosure of conflicts of interest
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The Breastfeeding in a Healthy Ireland Action Plan (2016-2023) is the framework for progressing supports for breastfeeding parents in the Irish health services. The Health Service Executive (HSE), the publicly funded healthcare system in Ireland recently launched the National Standards for Infant Feeding in Maternity Services in May 2022. These Standards set out the priority areas to be addressed to improve supports for breastfeeding mothers and babies, to enable more mothers to breastfeed and to improve health outcomes for all mothers and babies regardless of method of feeding. Standard Seven, *'Maternity services work with communities to improve infant feeding support services'* focuses on Step 10 of WHO Ten Steps to Successful Breastfeeding, which is to coordinate discharge planning so that parents and their infants have timely access to ongoing support and care in the community setting.

In order to support the implementation of these National Standards across all 19 maternity services in Ireland, the HSE has appointed a National Project Coordinator (Baby Friendly Initiative) and has developed Self-Assessment resources to enable each maternity service:

1. To appraise its practices against the requirements of the National Standards for Infant Feeding in Maternity Services (2022).

2. To review its systems and procedures to support breastfeeding and other methods of infant feeding.

3. To benchmark its progress in order to monitor future progress.

Midwives and public health nurses are the primary front line staff to support breastfeeding commencing in the antenatal period with the delivery of breastfeeding preparation and antenatal classes and enabling mothers to establish breastfeeding in the early days and weeks. Breastfeeding mothers receive follow up support throughout the postnatal period, where needed. The HSE have also invested in additional services for parents and their infants to have timely access to ongoing support and care in the community setting, including fifteen new community midwifery early transfer services which provide outreach services from the hospital, working alongside the public health nurse services and general practice service, that will provide the woman with integrated care as close to home as possible.

Infant feeding/lactation midwives and nurses in HSE services provide a specialist support service to mothers who need extra support to breastfeed. Each hospital and community service with these post holders has a pathway of care to access lactation specialist services when required. Infant feeding /lactation midwives and nurses also play an important role in supporting pregnant women and mothers from marginalised groups or communities and who need additional support to breastfeed.

34.5 new dedicated infant feeding/lactation posts have been approved in the last two years to ensure nationwide availability and access to specialised lactation support within hospital and community services. There are currently 44.6 Whole time equivalent (WTE) dedicated Lactation Consultant posts across maternity hospitals (31.3 WTE) and units and Public Health Nursing (13.3 WTE) services to provide specialised care for mothers experiencing challenges with breastfeeding. This represents an increase of 27 WTE Lactation Consultant posts in the last 4 years in Ireland.

The HSE have also recently funded the establishment of postnatal hubs which also will strengthen the support available to women and their babies following birth and will target care in a range of areas where women may be experiencing challenges or feel that they are struggling e.g. Infant Feeding.

The HSE provide and fund voluntary breastfeeding organisations to provide community based breastfeeding support groups. There are approximately 110 groups available nationwide and more are returning each week, as suitable spaces within communities are secured and more staff and volunteers to run the groups are available. Some breastfeeding groups are adopting a hybrid approach and continuing to meet online due to mothers and service demands.

In the last 4 years, the HSE has invested in a promotional campaign for parents on mychild.ie and as one of the most popular topics, breastfeeding features strongly in this ongoing campaign. In 2022, the campaign includes digital search and social media advertising, radio 30sec and 10sec (specific to breastfeeding) and digital audio advertising, video on demand and display advertising as well as media partnerships. The website had 4.3 million visits in 2022.

The HSE also runs MyChild social media channels on Facebook and Instagram, where breastfeeding topics are regularly featured. Once a year the HSE runs an awareness week from 1 to 7 October on breastfeeding. It focuses on sharing expert interviews and parent stories through national and local media, internal communications on breastfeeding within the health service, radio advertising and social media engagement with the public.

Parents can contact the HSE's online breastfeeding support service through the 'Ask our breastfeeding expert' service on mychild.ie. The service was established in 2014 and is provided by a team of IBCLCs. It is available seven days a week with the live chat service available Monday to Friday from 10am to 3pm.

Conclusion

The Ten Steps to Successful Breastfeeding and the BFHI has important implications for mothers, babies and families nationally and internationally. There is a clear association between improved breastfeeding initiation and duration among mother infant dyads, within a baby friendly hospital and community setting. The BFHI has the potential to mitigate disparity between rural, urban and metropolitan populations across Europe (Liberty et al. 2019). This paper explored the Ten Steps to Successful Breastfeeding from the perspectives of lactation professionals across Europe. It provided a nuanced vision of the barriers and facilitators to working with the Ten Steps across Europe, opportunities for discussion and ultimately achieving better mother and child health outcomes.

Thank you to everyone who contributed to this paper.

›

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Separated with an Incision and Reconnected Right Away

A Field Report on Skin-to-Skin Contact after Caesarean Sections

Author: Eva Vogelgesang

Although the AWMF (*Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften*) clinical practice guideline[1] has stipulated since 2020 that healthy newborns be given direct skin-to-skin contact with their mothers[2,3] right after birth, this is still a future scenario for caesarean deliveries in Germany.
Until a little less than three years ago, this was the case in our hospital.

Who are we?

Our hospital is one of two maximum care hospitals in Saarland. Our Level 1 Perinatal Centre is one of 18 centres, 17 clinics, institutes and functional areas in the hospital. We have about 1200 births per year, care for about 50 to 60 premature babies weighing under 1500g each year and have 16 ventilator places in our NICU. Our perinatal centre has been BFHI-certified since 2021.

What was our motivation for introducing skin-to-skin contact after Caesarean sections?

The decision to establish skin-to-skin contact after Caesarean sections was made years before we thought of obtaining BFHI certification. We had wanted to allow skin-to-skin contact for all premature and newborn babies for a long time. From 2011 to 2012, we established **"primary bonding"** on our Level 1 ward to encourage attachment between mother, father and child. This was done in an accompanying process, at the end of which we saw a positive impact on breastfeeding and breastmilk feeding (see ***tables 1 and 2***).

Thus, skin-to-skin contact had been well established on our neonatal intensive care unit for a long time (***Figs. 1 and 2***).

The carrying concept followed in 2013–2014. Here, stable premature and newborn babies are carried in a sling with and without a monitor, sometimes while they are still in intensive care. It seemed to us to be a good programme for strengthening bonding, helping premature or newborn babies and supporting their parents. We see the following advantages:

- Carrying increases parents' sensitivity and promotes bonding.[4,5,6]
- It compensates for the lack of movement experienced due to prematurity and prevents possible negative effects on brain development and later movement patterns.[8]
- It counteracts deformation of the baby's head and hypotonia of the baby's muscular support system resulting from lying in the recommended supine position.[9]
- It enables the child to maintain an optimal posture for the development of the child's hips and torso.[10,11]
- The distance to the mother's face during carrying is the distance at which an infant can see most clearly.
- Carrying the baby in a sling or a suitable carrier allows the baby to be in a physiological position that prevents spitting up and micro-aspiration. In addition, the baby is in a physiological position for passing stools.
- Parents gain security and conserve their resources.[12,9]

Eva Vogelgesang

Introduction and disclosure of conflicts of interest
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Photo: Dirk Guldner

Table 1: Data (1) from the "primary bonding" project

	September 2011 – April 2012	
Number of children born in our perinatal centre and transferred to neonatology for primary care during this period.	89	100 %
Skin-to-skin contact	63	71 %
No skin-to-skin contact	26	29 %
Children born elsewhere and therefore excluded from the project	58	

Table 2: Data (2) from the "primary bonding" project

Questions: 1. Influence on neonatal sepsis
2. Influence on breastfeeding and lactation

Questions were answered retrospectively based on case records. 7 children could not be evaluated, 81 children were evaluated.

	Skin-to-skin contact 57 = 100 %	No skin-to-skin contact 24 = 100 %
Neonatal sepsis	5 = 8,8 %	2 = 8,1 %
Fully breastfed at discharge	21 = 36,8 %	3 = 12,5 %
Partially breastfed at discharge	12 = 21,1 %	3 = 12,5 %
Formula-fed at discharge	24 = 42,1 %	18 = 75,0 %

Fig. 1: Primary bonding with a premature baby at 23 weeks gestation

Fig. 2: On the neonatal ward: first bonding on the 3rd day of life with a premature baby born at 28 weeks gestation and a mother who requires intensive care

Fig. 3: Placing the baby on the mother

The WHO paper on establishing Kangaroo Mother Care [13,14] even calls for a carrying concept. Thus introducing **skin-to-skin contact after caesarean sections** was only logical for us. It was the missing piece in the puzzle.

What difficulties were there and how were they overcome?

When a caesarean section is performed, people from many disciplines are involved: midwives, gynaecologists, anaesthetists, paediatric nurses, paediatricians and operating theatre assistants (OTAs).

People are always reluctant to change long-established ways of working and routines. This was a fundamental difficulty that had to be overcome.

Eventually, after many discussions, we succeeded in informing all disciplines and convincing them of the benefits. Afterwards, a generally accepted and safe procedure had to be developed. This was also done in contact and / or exchange with the groups involved.

Shortly before the start and during the first months, we brought everyone up to the same level of knowledge in many short training sessions.

What is our procedure?

Paediatric nurses are present in the operating theatre during skin-to-skin contact after a caesarean. They do the 5-minute and 10-minute Apgar tests and remain in the operating theatre until mother and baby are transferred to a bed. For this reason, we can only guarantee skin-to-skin contact after registered primary caesarean sections. With non-registered primary caesareans and all secondary caesareans, it depends on whether nurses are available.

Registration occurs the day before by email via the midwives. A traffic light system is used:

There are no known risk factors. Paediatric nursing staff are informed, paediatricians not necessarily

Risk factors are present. Paediatricians are informed about all the risks and the time when the operation will take place. They stay near the operating theatre.

There are considerable risk factors. The paediatrician is available in the primary care room next to the operating theatre while the caesarean section is taking place.

When she starts work, the nurse in charge checks which caesarean sections are taking place that day. She introduces herself to the mother and the person accompanying her. Shortly before the incision, she is ready in the operating theatre (at the head end of the mother). The midwife assisting the mother wears sterile clothes, stands next to the operating table and receives the baby. She dries the baby off, and after doing the 1-minute Apgar test, either places the child directly on the mother's breast (Apgar ≥ 7) or hands the baby over for primary care (Apgar ≤ 6).

The midwife and nurse position the baby across the woman's upper body under the bonding top, his or her mouth close to the mother's nipple (***Fig. 3***). To make it easier for the baby to reach the nipple, the newborn's hands are not dried.

Ideally, the infusion needle is placed on the back of the mother's hand instead of in the crook of her arm. This allows the mother to put both arms around the child.

The nurse does the 5-minute and 10-minute Apgar tests. She stays with the baby until the mother-child dyad (***Fig. 4***) is transferred to the delivery room for further care.

If the mother has manifest diabetes or gestational diabetes, she will have collected colostrum from the 37th week of gestation onward. We take one millilitre of this with us to the operating theatre and if the baby does not show any breastfeeding signs after half an hour, breastmilk is administered drop by drop. ›

Fig. 4: Shortly before transfer

Fig. 5: Breastfeeding in the operation theatre

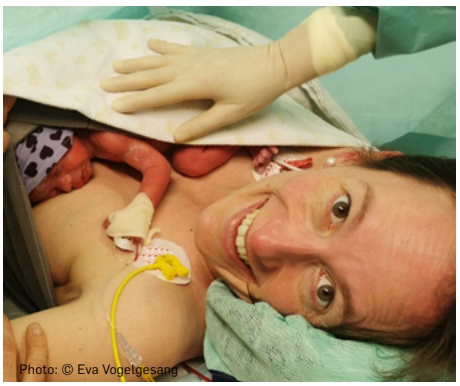

Fig. 6: Premature triplet at 31 weeks gestation

Fig. 7: Twin Caesarean section

Many babies latch on and breastfeed effectively while they are still in the operating theatre (***Fig. 5***).

Stable preterm infants and twins are also not an exclusion criterion for skin-to-skin contact after a caesarean (***Figs. 6 and 7***).

What has changed for the various professional groups? Were there reservations and did they prove to be true?

OTAs

Here the changes were rather marginal. Instead of including metal umbilical cord clamps among their surgical instruments, they now use plastic clamps.

Fig. 8: Transfer from operation table to bed

There were more concerns about transferring the child from the operating table to the bed with the child on the woman's chest (***Fig. 8***). Some colleagues felt that the safety of the child was at risk. We had to persuade them gradually by ensuring good and constant support during the transfers.

Gynaecologists

Their contact person in the operating theatre is now a paediatric nurse rather than a paediatrician. There were no problems with this change.

Midwives

Now they only do the 1-minute Apgar test. They leave the nurse with the woman and relinquish responsibility. As skin-to-skin contact after caesareans was a desired change on their part, there was little friction here.

Anaesthetists and anaesthetic nurses

This was the largest group and the most difficult to convince. Anaesthetists and anaesthetic nurses had to give up space and, in some cases, "their" patients. When the narcotic is injected into the spinal canal, the woman is already wearing a bonding top. However, this is never a problem. The ECG electrodes are placed on the woman's back. The woman's right arm is taken out of the holding loop so that she can put her arm around the baby right away. This can sometimes cause problems when measuring blood pressure. If the IV access is on the back of the mother's left hand, we allow the mother to put both arms around her baby. This can influence the speed of the infusion and thus the medication. And to be quite honest: at the head end of the mother, it's quite cramped in our operating theatre. People are often in each other's way.

Paediatricians

They are no longer automatically in the team. They argued at first that the new assistants could no longer experience the adaptation of the healthy newborn. However, in the end, the workload reduction of no longer having to be clearly tied down in terms of time for every caesarean section was actually viewed very positively. Thus, the reservations in this group dissipated quickly.

Paediatric nurses

There were legal concerns from the paediatric nurses about having to do the Apgar tests and the long period of time in which the nurse stays with the mother. The legal concerns were quite justified. The law stipulates that only doctors and midwives may to do these things. This obstacle was removed when our then head physician officially delegated the tasks to the paediatric nurses. The time investment required was and is a problem. That is correct and cannot be explained away. In the first 2–2 ½ years, however, we hardly had any problems in this respect thanks to the G-BA (*Gemeinsamer Bundesausschuss* – Federal Joint Committee) and better staffing. At the moment, things are looking less rosy. We will probably have to find other solutions for monitoring and support in the medium term.

What is the conclusion after 3 ½ years?

- If a caesarean section is unavoidable, mothers decide to come to our clinic. We have seen a significant increase in delivery rates.
- Anaesthetists report the following positive effects in mothers:
  - reduced levels of painkillers necessary
  - fewer fluctuations in blood pressure
  - less discomfort for the mothers
  - less stress
- Children adapt better: we hardly ever admit healthy newborns with difficulties in adapting. If a term infant has starting difficulties and we cannot detect anything that would require treatment, we take the infant to the neonatology department in skin-to-skin contact with the father. The infant remains in skin-to-skin contact and is closely monitored. Usually, the children go to their mothers after 1–2 hours, and have adapted well.
- Many children show breastfeeding cues while they are still in the operating theatre or even latch on. The mother-child ward reports better breastfeeding rates without the initial difficulties usually seen after caesarean sections.
- The families and staff are noticeably happier.

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Different Interpretations of the Ten Steps in German BFHI Hospitals

As I have worked in maternity and postpartum care for many years and changed employers several times among hospitals accredited as Baby-Friendly, it is a major concern of mine to reflect on my observations and experiences with respect to the different interpretations of the Baby-Friendly Hospital Initiative's Ten Steps to Successful Breastfeeding using some examples from Germany.

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Introduction and disclosure of conflicts of interest
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"Baby-Friendly" hospitals certified by the WHO's and UNICEF's Baby-Friendly Hospital Initiative support parent-child bonding from the very beginning through skin-to-skin contact between mother and child, encouraging partners to experience skin-to-skin contact by making family rooms available, skin-to-skin contact in the operating theatre after a caesarean section and use of the kangaroo method for sick and premature babies and 24-hour rooming-in (WHO & UNICEF, 2018).

Information sessions for expectant parents are offered by BFHI hospitals during pregnancy, providing evidence-based, up-to-date and objective information on feeding newborns. If parents decide against natural feeding (breastfeeding) of their child, they are shown methods of bottle feeding that promote bonding during their stay in hospital. If a child is given formula or medication for medical reasons or at the parents' request, the parents will be presented with and shown alternative feeding methods that do not interfere with breastfeeding.

BFHI hospitals also commit to the WHO Code: they do not allow advertising of breastmilk substitutes and artificial teats or giveaways from companies that manufacture or market breastmilk substitutes or artificial teats.

Furthermore, all members of the nursing staff, midwives and doctors are obliged to take part in annual training courses.

Every Baby-Friendly Hospital provides a breastfeeding hotline that is available 24/7, as well as breastfeeding cafés or breastfeeding groups run by trained breastfeeding counsellors.

Obstetric hospitals and paediatric hospitals make a conscious decision to obtain certification as Baby-Friendly Hospitals from the WHO/UNICEF initiative: they see the certificate as advertising for their hospital and as a magnet for families. If families feel comfortable in the hospital, they also come back for medical examinations and treatments in other departments. Here, the economic factor certainly plays a major role. Nevertheless, certification and retaining the certificate are major cost factors.

	Hospital A	Hospital B	Hospital C
Certified BFHI since	2010	2017	2014
Number of births per year	1400	500	600
Affiliated children's hospital	Level 2 BFHI-certified children's hospital since 2014	–	–
Number of midwives in delivery room	During the day: 2 At night: 1	1	1
Ward	only obstetric	Also includes patients with complications during pregnancy and patients from operative gynaecology	Also includes patients with complications during pregnancy and patients from operative gynaecology
Number of beds in ward	21	18	19–21
Number of registered nurses on the ward	2	Early shift: 2 Late shift: 2 during the week, 1 at weekends Night shift: 1	Early shift: 2 Late shift: 1 Night shift: 1

Table 1: Characteristics of the hospitals

In this connection, the benefits for mother and child – health, bonding and optimal nutrition –are the focus of committed BFHI members.

I will now give a few examples of different interpretations / implementations of the Ten Steps and the resulting ways of working in three different BFHI-certified hospitals in Germany, in which I worked or am currently working (Table 1).

Example 1: Skin-to-skin contact in the delivery room and in the maternity ward

> *"Allow the mothers to have uninterrupted skin-to-skin contact right after birth for at least one hour or until breastfeeding is initiated.*
> (Quotation from Guidance for Staff, WHO / UNICEF Babyfriendly Initiative, 2020).

A Hospital A

Delivery room

After a vaginal birth the mother puts her newborn baby on her belly. The umbilical cord is allowed to finish pulsating before it is cut. The delivery of the placenta and medical care of birth injuries is carried out in skin-to-skin contact. Measuring, weighing, the U1 examination (First physical newborn examination) and administration of vitamin K are not carried out until after about one hour of undisturbed skin-to-skin contact. Breastfeeding is supervised by a midwife.

No staff from the children's hospital are present at **a planned caesarean section**. The mother is given the baby in a CTG belt right after the baby is born, as soon as the umbilical cord has been cut and the baby has been briefly rubbed dry with a towel. Assistance with breastfeeding is given while the mother is still in the operating theatre. The U1 check-up takes place in the delivery room, once the mother has been brought back there from the operating theatre.

With an **unplanned caesarean section,** staff from the children's hospital are present at the birth and the child is given to them after the umbilical cord has been cut. The examining room is adjacent, and the mother can see into the room through a large window. The father goes with the child into the examining room. Immediately after the U1 check-up, the child is given to the mother in a CTG belt and assistance with breastfeeding is given.

With an **emergency caesarean section under a general anaesthetic**, the father waits in the delivery room and staff place the newborn baby on him for skin-to-skin contact immediately after the U1 check-up. Care is taken to ensure that the father has a comfortable place to sit or lie down (chair / sofa). If the mother is awake and responsive, she receives her child for skin-to-skin contact and undisturbed breastfeeding.

Transfer

After a vaginal birth, mother and child spend two hours in skin-to-skin contact and then transferred together in skin-to-skin contact to the maternity ward.

After a caesarean section, transfer to the maternity ward occurs after four hours, ideally in skin-to-skin contact.

Maternity ward

Mothers are allowed to continue skin-to-skin contact in the postnatal ward. A nurse, who takes a second look, provides initial care. Depending on the patient's wishes, the child is dressed and diapered; the patient receives a bassinet and information about the procedure for the next few days (information on how often to feed, metabolic screening, etc.).

B Hospital B

Delivery Ward

After a vaginal birth, the mother puts her newborn baby on her belly. The umbilical cord is allowed to finish pulsating before it is cut. If a midwife is there, she supervises the first breastfeeding session. The delivery of the placenta and the medical care of birth injuries are carried out in skin-to-skin contact. Afterwards, the U1 examination is carried out with the mother present. The sequence of events varies depending on the workload in the delivery room, as there is only one midwife.

After a **planned or secondary caesarean section**, the child is taken to a room that is right next to the operating theatre, but which is out of sight for the mother and the father. During the U1 check-up, the father stays with the mother, at the head end of the bed. An anaesthetist carries out the U1, and the baby is in a prepared ›

infant warmer. Later, during the observation phase, the midwife administers vitamin K in the delivery room. After the U1, the child is given a nappy and a woolly hat and is placed on the mother's breast wrapped in dry towels. If the child shows signs that he wishes to breastfeed, a breastfeeding attempt is made, but no further assistance is given until the child is in the delivery room.

Transfer

After a vaginal birth, mother and child are transferred to the maternity ward after about 1½ hours.

After a caesarean section, the child is transferred to the delivery room in an infant warmer. Skin-to-skin contact does not occur before the child is in the delivery room. After 3–4 hours, mother and child are transferred to the maternity ward. Often no direct skin-to-skin contact has taken place yet, as the child is still wrapped in towels.

If a vaginal birth is taking place at the same time in the delivery room, the midwife stays at the vaginal birth and a nurse accompanies the mother into the operating theatre for the caesarean. After the anaesthetist has carried out the U1, the child is taken in the infant warmer into the delivery room along with the father, where skin-to-skin contact with the father is facilitated. Once the mother has been transferred from the operating theatre to the delivery room, skin-to-skin contact with the mother occurs and the mother is given assistance with initiating breastfeeding.

Maternity ward

Once families have been transferred to the ward, they are given the chance to relax, get settled and get to know each other. When the mother would like to get up to go the toilet, or at the very latest, before the next shift change, the child is taken into the nursery for initial care, a second look and to be dressed. Parents are offered the chance to go with the child and the nurse into the nursery. The nurse explains how to handle infants and provides information about the time schedule for the remaining stay in hospital. The child is brought back to the mother in a bassinet.

C Hospital C:

Delivery room

After a vaginal birth, the mother puts her newborn baby on her naked belly and gives him time to find the breast. The midwife provides assistance. The umbilical cord is allowed to finish pulsating before it is cut. The delivery of the placenta and the medical care of birth injuries are carried out in skin-to-skin contact.

After a **caesarean section**, the U1 is carried out by the anaesthetist in a room adjoining the operating theatre, and the baby is brought back to the mother in a nappy for skin-to-skin contact in a CTG belt. Medical care for the mother in the operating theatre occurs while mother and baby have skin-to-skin contact. The midwife / nurse provides assistance with initiating breastfeeding in the operating theatre. Mother and child are transferred to the delivery room in skin-to-skin contact. Routine measures do not take place until after at least one hour or after the first breastfeeding.

Transfer

Mother and child are transferred to the ward in skin-to-skin contact about 1 ½ hours after a vaginal birth or 2–3 hours after a caesarean section.

Maternity ward

Initial care, second look, diapering and explanations of how to handle infants occur only in the mother's room. The child is not dressed. If the family wishes to dress the child, they are informed about the advantages of extensive skin-to-skin contact. The family is given a side-car bassinet and a sleeping bag (a gift from the hospital) so that they can put the baby down in a safe place if they need to get up for a short time. If skin-to-skin contact is to be interrupted for longer, or if the parents want the child to sleep in the side-car bassinet, dressing the child is recommended. I myself have so far only experienced three children who were dressed (in a period of 6 months, in which my working hours were 85 % of a full-time job). The families celebrate dressing the child for the first time when the child goes home.

Discussion of the different approaches to skin-to-skin contact

So far, we have been able to establish that the approach to skin-to-skin contact in the hospitals highlighted here varies slightly and that in some points, there are even serious differences.

First, I would like to take a closer look at the staffing structure. The staffing ratio is determined by the minimum staffing ratio set by the Federal Ministry of Health, and this is calculated very tightly (obstetrics / postpartum care are not explicitly listed, and healthy newborns are not considered patients). On top of this, we also have to consider the general shortage of nursing staff and the fact that two of three wards described here have to organise additional nursing care for surgical gynaecological patients of all ages. All this makes it difficult to implement the Ten Steps and respond to the needs of families.

In hospital A, the amount of time for skin-to-skin contact recommended by WHO/UNICEF is respected and skin-to-skin contact is supported and later recommended in the maternity ward, but it is interrupted early due to the workload/lack of time for intensive counselling.

In hospital B, the amount of time for skin-to-skin contact recommended by WHO/UNICEF is respected after vaginal births, but skin-to-skin contact is interrupted after surgical births and not resumed until after transfer to the delivery room. After transfer to the maternity ward, skin-to-skin contact is terminated quite early.

In hospital C, the amount of time for skin-to-skin contact recommended by WHO/UNICEF is respected and supported. After transfer to the maternity ward, skin-to-skin contact is maintained until discharge.

My personal impression from the experience in hospital A indicates that colleagues are very keen to communicate their convictions to parents based on a large body of evidence and to advise accordingly. However, the strict work routine and the heavy workload hardly allow for a relaxed atmosphere with individual counselling.

In hospital B, I was only able to gain this impression while on the early shift. In the early shift, colleagues take on tasks for which other clinics have a day hospital. This requires a lot of time, and the organisational effort is enormous. Having to care for patients who are to have operations and provide outpatient preparation and follow-up care means that colleagues have less time for the families. A request for a higher staffing ratio was dismissed in a conversation with nursing

management at the hospital with the sentence *"You are complaining on a high level"*. A threat to submit a formal complaint about the excessive workload was also ineffective. Instead, a ward assistant was transferred to another ward, thus reducing the staffing ratio even more. Various proposals to restructure work assignments to benefit the families were also unsuccessful. In the late shift, the work was much more relaxed, as admission and care of the preoperative patients was usually completed by 2 pm. Some patients who had undergone outpatient surgery had also been discharged or merely needed to be discharged. Colleagues were able to devote the time gained by not having to care for these patients to the families and their newborn babies. Moreover, the medical check-ups carried out by external paediatricians usually did not take place until late afternoon.

In addition, disapproval of naked children on the ward by individual colleagues (anaesthesiology, nursing, midwives) had a negative effect on skin-to-skin contact. Attempts to convince sceptical colleagues of the importance of extensive skin-to-skin contact by checking newborns' temperature regularly, providing specialist articles and further training unfortunately failed. Some midwives (hospitals A and B) said in the reflective discussion that parents complained to them during aftercare that children who had experienced extensive skin-to-skin contact could not be put down and that they only wanted to be carried, and claimed that the parents felt overwhelmed by this.

Interestingly, I have not yet heard this complaint from the midwives offering aftercare in hospital C. On the contrary, the midwives here advocate prolonged skin-to-skin contact, as they are convinced that parents gain more confidence in handling their babies and they are able to recognise and respond to their signals quickly.

Example 2: How hospitals comply with the International Code of Marketing of Breastmilk Substitutes, Bottles and Teats

> *"Baby-Friendly hospitals work independently of manufacturers of artificial baby food, bottles and teats. They do not display or distribute any advertising for these companies and their products… All training courses and other events take place without contributions from such companies. Personal gifts from the companies are not permitted… If supplementary feeding is necessary, breastfeeding-friendly feeding methods are applied. Mothers who bottle-feed their babies are given individual advice on bottle-feeding and bonding."*
> (Extracts from the Guidance for Staff: Step 1.2 and 9 (WHO/UNICEF Baby-friendly Initiative, 2020).

A **Hospital A**

Representatives promoting breastmilk substitutes are not allowed in for discussions. Nevertheless, they regularly send advertising gifts, such as nursing pads, calendars, pens, sticky note pads, writing pads etc., especially at Christmas.

Arrangements are made with the hospital's purchasing department to buy bottles without advertising for pumping. The breast pumps come from a company that does not comply with the Code and have a visible brand name.

Families are given a sleeping bag at discharge and receive information about breastfeeding hotlines, breastfeeding groups and family groups.

B **Hospital B**

Advertisements for training courses run by companies producing breastmilk substitutes are on the staff notice board. Logos from such companies can be found on pens and wall clocks in staff rooms.

Bottles and breast pumps are WHO Code-compliant. Clear bottles without a brand name are used. The manufacturer of the breast pumps used does not produce bottles, nipples or dummies.

Families receive the following gifts at discharge: knitted hats/socks, a sleeping bag, a cherry pit cushion, a bag from the church congregation with a rattle, a neutral gift box (which does, however, contain wet wipes, a book on breastfeeding and various vouchers from a well-known manufacturer of breastmilk substitutes) and disinfectant wipes from a disinfectant manufacturer. They are also given the telephone number of the hospital's breastfeeding hotline and information about breastfeeding groups and family groups.

C **Hospital C**

Representatives promoting breastmilk substitutes are not allowed in for discussions. Training events are organised exclusively by Code-compliant providers. Logos cannot be found anywhere.

The breastmilk pumps are from a non-Code-compliant manufacturer and have a visible brand name; the bottles for collecting breastmilk are without logos.

The families receive a sleeping bag as a gift at the time of birth or at the latest at the time of discharge, as well as flyers about the hospital's breastfeeding hotline, maternity and family counselling services, and breastfeeding groups in the area.

Discussion on the different ways of dealing with the WHO Code

We thus observe that all three hospitals are making intensive efforts to implement the WHO Code, but that implementation is not seamless in any of them. The types of Code violations differ. In hospital C, the Code has been implemented in all areas with the exception of the breast pumps from a non-compliant manufacturer. The other two hospitals have not managed to resist gifts and advertising from Code-violating companies effectively enough.

As you can see, it takes great assertiveness, a keen eye and firm conviction to prevail against aggressive advertising. The more people work together here, the more effectively a hospital can defend itself against such influencing. Sometimes negotiations within the hospital are necessary, especially if material with logos is cheaper to buy than material with no logos.

Parents, by the way, do not expect gifts: they take their greatest gift home, ideally healthy. Communicating this message and empowering parents should be our goal when we care for them.

Example 3: Dealing with routine interventions performed on babies

> *"In neonatology, various non-pharmacological measures may be used* ›

> *to relieve procedural pain.... In Baby-Friendly maternity hospitals and children's hospitals, the WHO and UNICEF criteria for promoting breastfeeding and parent-child bonding must be observed when these measures are employed."* (WHO/ UNICEF Babyfriendly Initiative: pain relief for routine interventions in babyfriendly maternity and children's hospitals, 2015)

Here I will discuss only routine blood collection for the metabolic test. The information sheet mentioned above states several times that skin-to-skin contact does not have to be interrupted for blood collection and that breastfeeding also has a pain-relieving effect. Even non-nutritive sucking and the smell of breastmilk have been shown to relieve pain.

Fears that infants might associate "breastfeeding"/"skin-to-skin contact" with "pain" have not been confirmed so far (Carbajal et al., 2003).

A Hospital A

Blood is taken while the mother is breastfeeding. Infants who are not breastfed are given a bottle while blood is taken, although feeding is interrupted briefly while the needle is inserted, to prevent choking in the child.

B Hospital B

The parents are asked to come into the nursery to the changing table, and blood is taken on the changing table without any contact between parents and child.

C Hospital C

Blood is taken while the mother is breastfeeding. Infants who are not breastfed are given a bottle while blood is taken and remain ideally in skin-to-skin contact, although feeding is interrupted briefly while the needle is inserted, to prevent choking in the child.

Discussion on how routine interventions are handled

I did not notice any breast refusal after blood collection during breastfeeding. It is impressive that the children often do not even feel disturbed by having their blood taken if they have been nursing for at least 10 minutes. The mothers are much more relaxed and very often surprised that their child just continues to drink with pleasure.

Many (nearly all) children who have blood taken while they are on the changing table bleed less well (adrenaline). They therefore have to be pricked several times and scream and squirm or crawl to the top of the changing table. The procedure lasts longer than when blood is taken during breastfeeding, and afterwards the children are tired and can no longer be calmed at the breast. Parents find this difficult to bear and often refuse to go with their child if they have had this experience with their first child.

In discussions with colleagues who prefer the "changing table method", the fears mentioned above were mentioned. However, personal reasons were also given, such as the better, more back-friendly posture at the changing table.

Conclusion

The few examples given make it clear how differently Baby-Friendly Hospitals may work and what effect slight differences can have. As counsellors, we are dependent on the environment in which we work, on our attitude and on our own physical and mental states. In summary, we are human. However, what if we decide to open up, for example by asking a colleague to take blood while a mother is breastfeeding because we have back pain?

My wish is that we encourage each other because we are doing a good job. Because we are strengthening the most important thing in the lives of numerous newborns, namely the parent-child bond! That we make it clear to each other that we are counselling mothers and children, and even fathers, in a forward-looking and health-promoting way.

What if small maternity hospitals were to visit each other regularly, for example to exchange ideas or to visit the wards with an alert eye, to discover and eliminate any advertising that sometimes creeps in during the daily routine and high workload, simply because the purchasing staff thought that this would be good for us or the hospital?

The situation continues to be challenging, and political developments give me an inkling of where our journey is heading. However, I will never tire of standing up for Baby-Friendly work and doing the best for families. My wish is that my colleagues will follow suit and that we will stay strong together.

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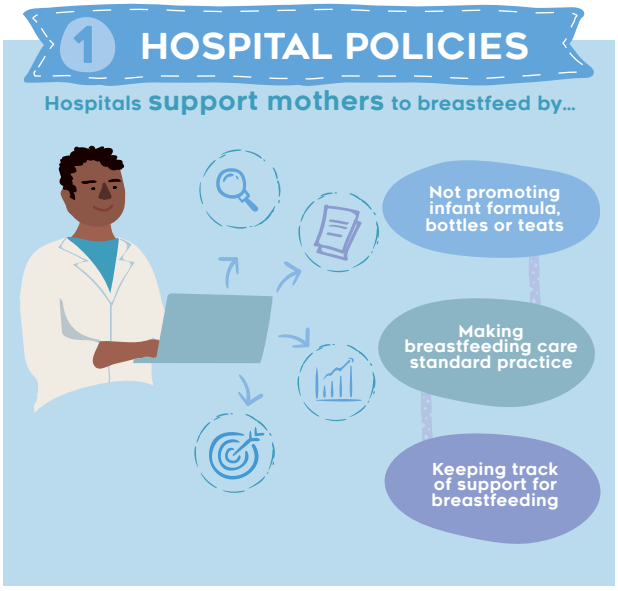
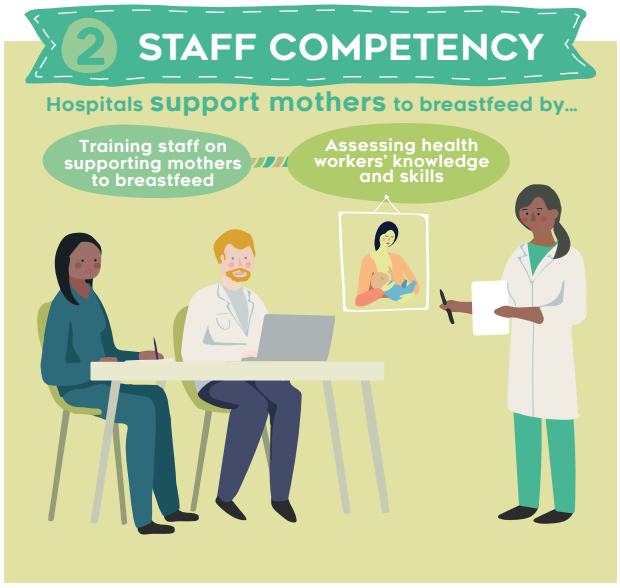
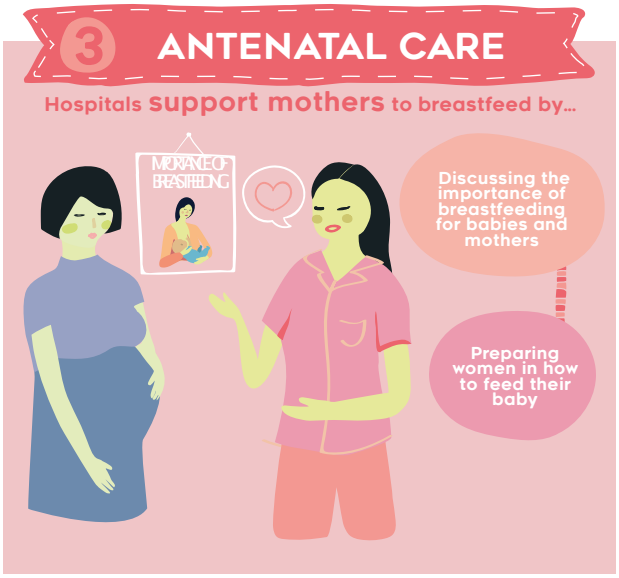
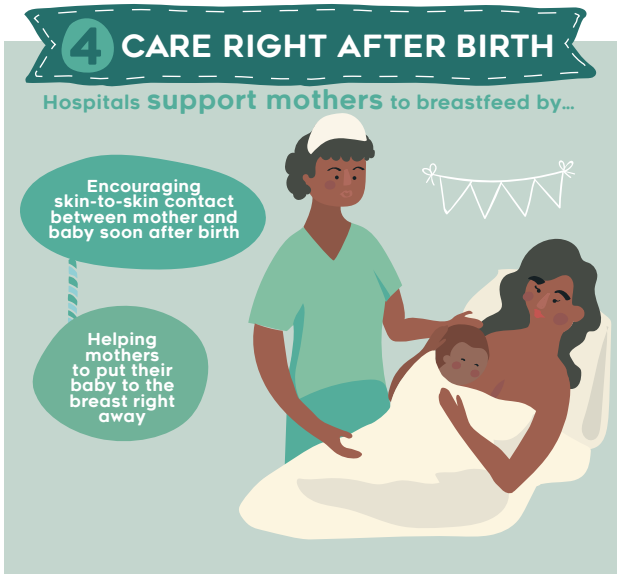
The TEN STEPS to Successful Breastfeeding









5 SUPPORT MOTHERS WITH BREASTFEEDING

Hospitals **support mothers** to breastfeed by...

- Checking positioning, attachment and suckling
- Giving practical breastfeeding support
- Helping mothers with common breastfeeding problems

6 SUPPLEMENTING

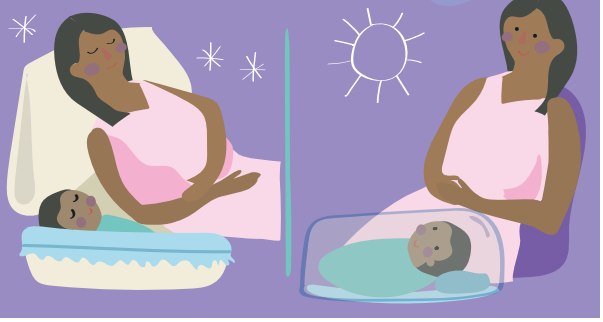
Hospitals **support mothers** to breastfeed by...

- Giving only breast milk unless there are medical reasons
- Prioritizing donor human milk when a supplement is needed
- Helping mothers who want to formula feed to do so safely

7 ROOMING-IN

Hospitals **support mothers** to breastfeed by...

- Letting mothers and babies stay together day and night
- Making sure that mothers of sick babies can stay near their baby



8 RESPONSIVE FEEDING

Hospitals **support mothers** to breastfeed by...

- Helping mothers know when their baby is hungry
- Not limiting breastfeeding times

9 BOTTLES, TEATS AND PACIFIERS

Hospitals **support mothers** to breastfeed by...

- Counsel mothers on the use and risks of feeding bottles, teats, and pacifiers

10 DISCHARGE

Hospitals **support mothers** to breastfeed by...

- Referring mothers to community resources for breastfeeding support
- Working with communities to improve breastfeeding support services

World Health Organization

unicef

Twelve years of breastfeeding in the Massa-Carrara area in Tuscany, Italy

A brief history of the certification and recertification process of the Baby-Friendly Community Initiative in the Massa-Carrara area in the Azienda Toscana Nord Ovest*.

Authors: Bruschi Elisa, Luzi Cinzia, Fantoni Giulia, Lunardi Sara

First recertification "Community and Hospital Together for Breastfeeding" 2015

The Baby-Friendly Community Initiative (BFCI) is a social and health structure of a territorial nature that has developed by adapting the Baby-Friendly Hospital Initiative to local and social health services. The BFCI aims to create a breastfeeding culture in the local community, as every child has the right to receive the best possible nutrition for their age. The BFCI promotes a support network and ongoing assistance for parents and children thanks to collaboration between health operators and local services and between support groups and the local community. In 2004, the regional health authority signed a memorandum of understanding with UNICEF to promote breastfeeding support policies and actions across the region. These principles were implemented in the ASL1 Massa Carrara**, with the hospital of Massa obtaining certification as a Baby-Friendly Hospital in 2010 and the province of Massa-Carrara obtaining certification as a Baby Friendly Community in 2015; thus the first Baby-Friendly local health care service "Together for Breastfeeding" was born in Italy. Involving the local community in the BFCI was necessary to complete the path toward achieving protection, promotion, and support of breastfeeding, as there was already a culture of breastfeeding in the hospital but once the mother-child dyad and the family returned home, breastfeeding was not always effectively guaranteed in the community. At the beginning of the BFCI certification process two project representatives with distinct professional profiles (a pediatrician and a midwife) were selected. They were defined by the company management as representatives of a multi-professional, multidisciplinary group consisting of health professionals not working in the hospital and provincial services, including a representative of family pediatricians, the head of the social-health districts, the head of the counselling services, representatives from mothers' peer groups and IBCLCs (International Board-Certified Lactation Consultants). The group promoted the creation of a support network for families, via the development of procedures ›

Elisa Bruschi

Introduction and disclosure of conflicts of interest
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Training coordinator for the midwifery profession and the Maternal and Child Department.

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From 2015 to 2019 Company Manager "Together for Breastfeeding"
2017 Advanced Level Training Course "Clinical Risk Manager"
Lecturer at the University of Pisa since 2005.

Giulia Fantoni

Introduction and disclosure of conflicts of interest
Giulia Fantoni is a midwife with 20 years of work experience in hospitals and local services assisting expectant parents in labour and delivery and in the postpartum period.
For the last 4 years, she has been responsible for the obstetric, gynaecological and neonatal pathways of Azienda Toscana Nord Ovest.
She is the breastfeeding representative in Azienda Toscana Nord Ovest.

Sara Lunardi

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Baby-Friendly Hospital Initiative contact person for San Luca Hospital, Lucca.
Lactation Company Contact Usl Toscana Nordovest.

Photo 1: Baby pit stop Consultorio di Pontremoli

that make the qualitative and quantitative standards of care defined in the 7 UNICEF steps possible, including support for women who are not breastfeeding (for clinical or personal reasons).

The network has fostered major cultural change in an area associated with a tradition of scheduled breastfeeding and supplementation. Including a representative of the family pediatricians in the working group has proved to be a point of strength because it has helped create a common language. Also beneficial were shared meetings on breastfeeding issues and sharing all available local services. This winning methodology has also been adopted by General Practitioners, school managers and representatives of the municipalities in the area and has led to the active involvement of the tertiary sector (municipalities, schools, and commercial activities). This new approach has ensured, for example, that children can be breastfed in public and private nurseries and that the mothers can be welcomed into the centers of community services while breastfeeding (see ***photo 1***).

Two accredited "Baby Friendly" structures, hospital and community, and the presence of a network in the community has led to an increase in breastfeeding rates at 1/3/6/12 months. The continuous training of all healthcare professionals and non-healthcare professionals contributed significantly to cultural change: meetings, audits, and themed meetings were organized with the involvement of dedicated and involved operators. Informative meetings were organized and specific informative material was produced to support active breastfeeding services. A campaign of information, education, and communication targeting citizens of the local community was implemented with the aim of helping them to choose the best nutritional strategies for babies and children in the first 1000 days of life. To implement the project, it was also necessary to create welcoming environments for families and nursing mothers both within health facilities (see ***photo 1***) and in community places (shopping centers, bathing establishments, municipalities, commercial activities, libraries, museums). This is a fundamental message because mothers have the right to breastfeed in public: the idea of creating environments in which mothers feel welcome to breastfeed was the main motivation for figures not related to the maternal and infantile areas. In the community, there was already a mothers' self-help group that became an essential part of the group meetings during pregnancy and postpartum. To ensure the maintenance of the support group (turnover, huge area...) it was necessary to increase the number of mothers (the groups included mothers with experience of exclusive breastfeeding for at least 6 months and who had undergone a specific training course held by midwives specializing in breastfeeding counselling).

The support for breastfeeding has also crossed the doors of the female juvenile prison in the area: the midwives held informational and educational meetings on the prevention of sexually transmitted diseases, contraception, and on breastfeeding; many of the inmates were pregnant or mothers with babies. The hospital managed to maintain its support for breastfeeding, and passed its first reassessment in 2015 and was recertified (see ***photo 3***). In 2016, ASL 1 Massa Carrara became part of the Azienda Toscana Nord Ovest, which incorporated five local authorities of Tuscany.

Reassessment of the hospital and the Massa Carrara community is currently taking place.

Photo 3. First recertification "Community and hospital Together for breastfeeding" 2015

During the COVID-19 pandemic, operators managed to maintain the standards thanks to the consolidated culture, the dedication and motivation demonstrated by the launch of initiatives aimed at maintaining what they had gained with difficulty. The first goal of operators was to reach women and families in their homes using innovative methods such as teleconsultation, online video meetings, and phone/video calls with pregnant women and new mothers and, in difficult cases, home visits with strict hygiene precautions. Other interventions involved updating websites and social networks and recording podcasts on issues and topics of interest for pregnant and breastfeeding mothers (these podcasts were transmitted as well on social networks on a recurring basis).

The hospital and the community have maintained their standards and have received positive feedback from families and recognition from the community in the form of donations of consumables and equipment. Training has also been adapted to the restrictions of the pandemic, with the course for dedicated operators being converted from a face-to-face modality to a blended modality (online and in the field) with the collaboration of IBCLCs working in the birth units.

Azienda Toscana Nord Ovest is investing in this project and involving other structures (hospitals and communities) in the BFHI/BFCI and supporting the maintenance of pre-existing standards of care (San Luca Hospital in Lucca was first certified as

a Baby-Friendly Hospital in 2008 and recently recertified in 2022).

Consolidation of the breastfeeding culture is achieved via dedicated events for citizens, women, and families that take place every year (e.g. during breastfeeding week). There is still a long way to go and the revision of the new 10 joint hospital-community steps encourages the creation of new care methods that protect, promote, and support breastfeeding in our community.

* Azienda USL Toscana Nord Ovest, established by regional law no. 84 of 28 December 2015, incorporates five local health authorities of Massa Carrara, Lucca, Pisa, Livorno, and Viareggio.

** ASL 1 Massa Carrara: local health authority until 2016, the year when the Azienda Toscana Nord Ovest was established.

ELACTA-News

The ELACTA Board met in Brussels, Belgium from 28th–30th October. As the next ELACTA conference will take place in this vibrant European capital, the board decided to meet in person in order to work for both the conference task group and to do board work, as the previous board meeting was several months ago.

The conference task group met on 27th October. ELACTA task group members and BVL members, together with the Visit Belgium representative, had a very fruitful meeting, visited possible locations for the next conference, discussed the social program, possibilities to apply for grants, and where to host the Reception and Scientific Dinner. We already have a "Save the date" for the conference and we hope that in the near future we will decide on the location. (***photo 1***)

The next two days were dedicated to board work. The mixture of experienced board members and new board members gives good energy to the group. The meeting involved explaining, questioning, brainstorming about what ELACTA stands for, setting priorities, strategic planning and efficient work. A lot of new ideas were discussed and we will follow on with a more in-depth understanding in these directions. One of the ideas discussed was appointing a technical secretary to help the board with part of the administrative work that is already taking a lot of our time leaving us with less time for strategic planning. We had an in-depth talk about ELACTA's budget and how to use it in the best possible way to support ELACTA task groups, projects and priorities. With legal questions in mind, we checked the ELACTA archive. We would like to ensure better use of the archive and decisions that were made in the past. Another ambitious project is the revision of the statutes. We are happy that several volunteers have shown interest in working with different task groups. We thank them and we encourage you, as readers of the magazine, to reach out to the ELACTA Board if you think that you can also help. (***photo 2***)

We launch the ELACTA online conference!

Were you unable to attend the ELACTA conference in Bremen in May 2022? No problem, as we are bringing the conference to you in an online format that you shouldn't miss. Very interesting topics, at your own pace, with special prices and discounts for ELACTA members are reasons for you to participate. The conference will be available online until the end of April.

Did you attend the ELACTA conference in Bremen, but would like to see the presentations again? You will receive an email from us with the details on how to register for the online event for FREE.

You can find more information here: https://learning.ELACTA.eu

We also discussed events planned for next year.

We have decided that the next CERPs International event will take place in Malta from 21st–23rd April 2023. As a place with a unique mixture of history, we think it is a great location for an event that is meant to bring together science, practice, networking and a vibrant social program. We are in ›

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contact with local members about organising this memorable event. Please check your calendar and consider taking part.

ELACTA Board members are also looking forward to representing ELACTA at your national events. So, if you are planning events in the future, contact us. We can announce the events on ELACTA's website and social media platforms and one of our board colleagues may participate in the event.

One event that may be of interest to you is the 4th World Breastfeeding Conference that will take place in Cairo, Egypt on 12th–14th March 2023. ELACTA will be represented at this important event and we will keep you updated on decisions and news that arise in the field of breastfeeding and lactation worldwide. You can find more information here: https://ibfanarabworld.org

Visits by board members to events run by national associations

Daiva Snuikaite's visit to ALCI's 2022 conference

ALCI's 2022 conference started on 24th September in Limerick, Ireland. It reunited over 250 participants in the hall and 140 online. After several years, Irish mothers and child care professionals, lactation consultants and breastfeeding counsellors were able to listen to presentations and have live discussions again – a unique gift from ALCI to its members.

ELACTA was represented at this event by Board Member and Vice President Daiva Sniukaite. On behalf of ELACTA, she invited more ALCI members to join the ELACTA community and attend the 2024 ELACTA conference "Breastfeeding – the power of connection" in Brussels. (***photos 3, 4***)

VSLÖ conference in Graz Austria, 21st-22nd October 2022

The VSLÖ board invited ELACTA Board Member Anne Christine Manawa Nougho to their German-language breastfeeding conference in Graz, which was attended by a total of about 200 visitors, and had the title "Has my baby had enough?". ELACTA encourages member associations to take into account compliance with the Code when considering sponsors and exhibitors. ELACTA received a free stand together with VSLÖ, where the ELACTA representative was actively involved in explaining some education materials and encouraging participants to use them in a clinical setting.

At the beginning of the conference on 21st October, VSLÖ President Anita Schoberlechner welcomed the participants and the representative of the mayor of Graz. There were interesting lectures in German on biological nurturing, the thyroid gland in

5 Photo: © ELACTA

6 Photo: © ELACTA

7 Photo: © ELACTA

pregnancy and in the postpartum period, galactogogues, ethics in breastfeeding counselling, breastfeeding in the case of rare malformations such as oesophageal atresia and other topics. The next day, workshops took place in 6 rooms with topics such as Kinesio Taping during lactation, infant and child emergency assistance, emotional first aid for crying babies and desperate parents.

One of the most important aims of this conference was to draw participants' attention to infant nutrition in crisis situations via SUS-Baby, an initiative of professional organisations and professionals for infant feeding in emergencies, which provides breastfeeding information for parents in different languages. ELACTA Board Member Anne Christine Manawa Noougho and the president of SUS-Baby, Andrea Hemmelmayr, informed participants about the new initiative for breastfeeding promotion.

The general assembly took place without any challenges and Elisa Steiner was elected as the new president of VSLÖ. She announced future events and invited the ELACTA Board Member to these events. The ELACTA Board representative was invited to dinner by the friendly VSLÖ Board, where they then exchanged views on the role of IBCLCs and recertification. (***photos 5, 6***)

CALC Symposium

The 10th anniversary symposium of the Croatian Association of Lactation Consultants IBCLC was held on September 30th 2022.

The title of the symposium was "Let's take a stand for breastfeeding: Education and support". About a hundred participants from all over Croatia attended, including midwives, nurses and doctors.

Guest lecturer was the distinguished paediatrician Dr. José María Paricio Talayero from Spain, the founder of the website e-lactancia.org, where you can find a lot of useful information related to the use of drugs and breastfeeding.

A number of distinguished local lecturers gave lectures on different topics, which were followed by interesting discussions, and two workshops were held, which were well attended and met with great interest from participants.

Dinka Barić, a member of the ELACTA Board of Directors and CALC, gave a presentation on the work of ELACTA and news from the congress in Bremen.

This symposium marked the beginning of numerous activities connected with the celebration of National Breastfeeding Week in Croatia from October 1st–7th, 2022.

Thank you very much to everyone who supports and promotes breastfeeding! (***photos 7, 8***)


8 Photo: © ELACTA

Survey – BFHI and BFI implementation in different countries

Land	Is the BFHI initiative implemented?	How many BFHI friendly maternity wards?	How many mothers give birth in BFHI hospitals?	Are there any other BFI initiatives?
Austria	Yes	12 BFHI Maternity wards / 15%	14,70 %	No
Croatia	Yes	31 BFHI Maternity wards / 97%	Nearly all	No
Denmark	No – not anymore	0	0	
Estonia	Yes	12 BFHI Maternity wards / 25%	60 %	No
Hong Kong Special Administrative Region of the People's Republic of China (HKSAR)	Yes	7 BFHI Maternity wards / 37%	57 %	HKSAR have a programme of Baby-friendly Maternal and Child Health Centres.
Ireland	Yes	0 BFHI Maternity wards, BFHI has been revised in Ireland and the new BFHI pathway starts in late 2022.	0 %	
Kuwait	Yes	2 BFHI Maternity wards / 13.3%	13 %	1 BFHI Neonatal Unit
Luxembourg	Yes	1 BFHI Maternity ward /25 %	14 %	No
New Zealand	Yes	75 BFHI Maternity wards / 100 %	100 %	No
Netherlands	Not at the moment	No current certifications, maybe there are still some hospitals with an old certification.	No numbers known	No
Taiwan	Yes	163 BFHI Maternity wards / 39%	73,60 %	No
Ukraine	Yes	292 BFHI Maternity wards and other departments / 55 %	81 %	Yes [3]

[1–5] The explanations of the footnotes can be found on page 34

	Promoter or organizer of the initiative	Is the initiative supported by the state?	Is there a cost to the hospital certification process?	Training measures
	Austrian Network of Health Promoting Hospitals and Health Services	No	Yes	Yes, there are training programs, which are not directly associated with BFHI Austria.
	Ministry of Health			
	Estonian Committee for the Promotion of Breastfeeding who is under the Ministry of Social Affairs.	Yes financially through the Estonian Committee for the Promotion of the Breastfeeding Budget.	No	Training measures are completed by every hospital individually.
	Baby Friendly Hospital Initiative Hong Kong Association established by and partly financially supported by Hong Kong Committee for UNICEF	partly [1]	Yes	[2]
	The Health Service Executive (HSE) is the publicly funded healthcare system in Ireland. The National Women and Infants Health Programme (NWIHP) was established in January 2017, to lead the management, organisation and delivery of maternity, gynaecology and neonatal services in Ireland.	Yes, the Health Service Executive in Ireland supports the initiative.	No	The HSE has established a National Infant Feeding Education Programme, which is available for midwives, nurses and hospital doctors.
	Government (Kuwait Public Authority for Food and Nutrition)	Yes as part of the Childhood Obesity Prevention Program.	Minimal cost	Hospitals arrange inhouse BFHI training with guidance by the country BFHI coordinator. There are central training programmes for training of trainers, training breastfeeding counsellors and preparation for IBLCE exam candidates.
	UNICEF	Yes, for the assessment	The remaining costs not covered by the state	Training can be in house or from trainings organized by competent providers
	NZBA	Government supports BFHI development	Yes	A number of platforms provide education and some services do it themselves
	Was organised by UNICEF	No	Cost was the reason Dutch hospitals abandoned certification.	
	Government	Yes	No	Trainprograms by government, two breastfeeding NGO and indoor training
	Ministry of Health of Ukraine, national EBFHI Coordinating Council of the MoH of Ukraine , UNICEF, E-BFHI National Methodological and Monitoring Center under the NCH „OHMATDET“ coordinate the activity of BFHI in Ukraine and the public organization „National Movement in Support of Breast Education «Молочні ріки України» /“Milk Years of Ukraine“	Yes [4]	No [5]	

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Instructing Trainees in Kangaroo Mother Care and Breastfeeding

Author: Lydia Holz

This article introduces the concept of "Kangaroo Mother Care" (KMC) and its positive aspects, especially in relation to breastfeeding, and how I communicate this concept to trainees in the context of practical training. The practical instruction I provide in my clinic is for a group of up to five trainees who are doing a placement in the premature baby unit. They are in the third year of generalist training and are specialising in paediatric nursing. In this article, I will present examples of learning methods that I use as a practice instructor to guide the trainees based on a didactic concept. The instruction takes place on set days during their placement, and trainees are given time off from the daily tasks on the ward, so that they can concentrate on their assignments. As a practice instructor, my work has a separate budget from that of the other nursing staff and I do not have to care for patients when I am providing instruction. The instructions are agreed on with the people involved (e.g. mentors, ward managers, patients' relatives, doctors, learners and patient managers). After each tutorial, there is a reflection so that the students can reflect on how they did and I can get feedback on the tutorial.

Lydia Holz

Introduction and disclosure of conflicts of interest
Registered paediatric nurse since 2013, work in a premature baby unit for the last 9 years, Entwicklungsfördernde Neonatalbegleiterin ® (facilitator for neonatal development) since 2020, nursing practice instructor since 2021, Stillspezialistin ® (breastfeeding specialist) since 2022, freelance breastfeeding counsellor in Pforzheim since 2022

www.stillbewusst.de

MY PERSONAL Connection with KMC

In 2020, I completed my professional training as a nursing practice instructor. I noticed that the topics of breastfeeding, skin-to-skin contact and KMC were only briefly touched upon in class. In the daily ward routine in the premature baby unit where I have been working, giving the infant a bath is the first priority for the trainees and they often choose this as a learning objective during their assignment. The focus for the students is on many aspects of nursing, such as inserting a feeding tube, special care, care of several premature babies, handling, etc.

I find the topic of KMC fascinating because this method is very well researched and the positive aspects have been proven. It is evidence-based care that is easy to apply and does not require any medical equipment. The psychological component of the method is extremely wide-ranging and, most importantly, it facilitates the initiation of an intact breastfeeding relationship between mother and child.

I would like to show the learners not only the physical changes and the special psychosocial situation of the families of premature babies, but also to make them aware of the positive effects of the method on breastfeeding initiation and breastfeeding.

I experience the direct physical contact between child and parents as a very emotional time. It is one of the most beautiful moments that I experience in my daily work.

I would like to share this positive, highly motivating experience with the trainees and pass it on to them as they embark on their career path.

ADDENDUMS

Special Administrative Region Hongkong of the People's Republic of China (HKSAR)

› [1] Hospitals and Maternal Child Health Centres (MCHCs) are charged a fee for the designation programme. Those hospitals run by public funds (public hospitals) and all MCHCs pay the fees from the overall funding for their services provided by the government of the HKSAR.

› [2] For public hospitals and Maternal and Child Health Centres the basic training on breastfeeding counselling is conducted centrally. For refresher courses, they are done in-house. For more specialised training, public hospital staff are encouraged to acquire the status of IBCLC with the training partially subsidised by the hospitals.

› [3] According to The Order of the MoH of Ukraine of 28.10.11 №715 "On further implementation of Expanded Baby-friendly Hospital Initiative in Ukraine the implementation of BFHI is compulsory for all mother and child health care institutions (in maternity hospitals, children's hospitals, children's outpatients' departments, antenatal clinics).

› [4] The Ministry of Health of Ukraine is the national responsible authority of the implementation of IBFH in medical institutions of Ukraine. Department of Health at the regional state administrations BFHI is fully integrated into the health care system (mothers and child health care institutions). In every region of Ukraine there are Regional Methodological and Monitoring Centres, responsible for planning, monitoring and evaluation of BFHI activities in their region. There are 3 to 5 certified regional BFHI-assessors in all regions. At least one of the assessors is a national assessor (Lead Assessor).

› [5] Training of medical personnel according to the 18-hour program takes place once every 2-3 years. Training is conducted by regional or national trainers, persons responsible for the implementation of the initiative in the institution. Training in the basics of breastfeeding is carried out systematically at the training courses of doctors in medical universities of Ukraine according to their own developed programme.

Kangaroo Mother Care

Origin and significance of the KMC method

Paediatricians Dr Rey and Dr Martinez developed the KMC method in Colombia in 1973 because of a shortage of incubators. The method was specially developed for premature babies, whose only needs were to gain weight and grow. However, it has been recognized that not only is KMC an alternative to incubators, but KMC has several positive effects. To date, there have been numerous studies and research on this method *(WHO, 2006)*.

KMC is caring for premature babies who are carried in direct skin-to-skin contact with their parents. It is a very effective way of promoting the health and well-being of premature infants and mature, sick and healthy babies and it is easy to implement.

The KMC method has three components *(Bergman, 2012–2018)*:

1. **Skin-to-skin contact:**
   There should be skin-to-skin contact between the baby's front and the parent's chest.

2. **Exclusive breastfeeding:**
   Pumping breastmilk and adding some essential nutrients may be necessary with very premature babies.

3. **Strengthening the relationship between parents and child:**
   Medical, emotional, psychological and physical care of parents and child without separating them from each other.

Effects of KMC on breastfeeding

I explain the importance of KMC and its impact on breastfeeding to the trainees using the mind map in Figure 1. I assume that the learners are aware of the positive properties of breastmilk, as they are in their 3rd year of training and have covered this topic in class. Despite this, I spend a little time revising the topic and checking the learners' level of knowledge with quiz questions.

I deliberately chose a mind map because the visual representation is clearer for the learners. I worked with colours and symbols to make the topic easier to understand and comprehend. My goal is to anchor the topic in the students' long-term memory.

Description of mind map "Effects of KMC"

I then explain the mind map (***Fig. 1***), and refer to the numbers in the picture.

Kangarooing involves skin-to-skin contact between the child and the mother/father/partner. It takes place directly after birth as "bonding" or/and can be continued during everyday life on the ward and at home. Kangarooing may be done with term newborns as well as with premature babies.

1 During kangarooing, there is increased secretion of oxytocin, which is known as the "cuddle hormone".

a. This hormone reinforces sensitivity, thus strengthening the bond between mother/father/partner and child. The mother is psychologically more stable, and this helps to prevent postpartum depression (Badr & Zauszniewski, 2017; Blaffer Hrdy 2010; Uvnäs-Moberg und Eriksson, 1996).
b. Fathers/partners who live with their families have increased levels of oxytocin and prolactin towards the end of their partner's pregnancy. With increased contact with the infant, the hormones cause the father/partner to become more involved in caring for the baby. They develop the "protector instinct" (Gordon 2010, Hashemian 2016).
c. During skin-to-skin contact, not only the woman giving birth secretes oxytocin, but also the baby, and this has a positive effect on the immune system, wound healing and stress management. *(Vittner et al., 2018; Carter et al., 2018)*.
d. Intensive skin-to-skin contact / KMC increases breastfeeding success (Boo & Jamli, 2007). Breastfeeding cuts the SIDS risk by half. Breastfeeding mothers respond differently to their babies' signals, and this influences sleep and arousal* functions (Ball, 2016; Blair, 2020). The bioactive factors in breastmilk have a positive influence on the child's immune system. Breastmilk stabilises blood sugar levels, preventing hypoglycaemia in the child (Wight et al., 2021). Breastfeeding is prophylaxis for mothers; among other things, it reduces the risk of breast cancer, ovarian cancer and type 2 diabetes (Bartick et al., 2016).
   In addition, a longer duration of breastfeeding reinforces healthy eating behaviour in the child.
   Breastmilk also has a positive influence on brain development *(Horta et al., 2015 und 2018)*.
e. Oxytocin reduces stress for both mother and child. The level of cortisol in the mother's blood decreases. The positive effects are a calm pulse and reduced anxiety. The child's stress processing system develops positively *(Vittner et al., 2018; Rinamann, 2011)*.
f. KMC may be used as pain prophylaxis. Blood sugar checks or interventions that are painful for premature babies, such as taking blood samples, removing plasters, inserting peripheral venous cannulas, etc., may take place during skin contact with the mother or father to reduce pain. This works because oxytocin also reduces sensitivity to pain. ›

* Arousal function: General degree of activation of the central nervous system associated with increased sympathetic tone. This state is characterised by alertness, wakefulness, increased readiness to react and attentiveness.

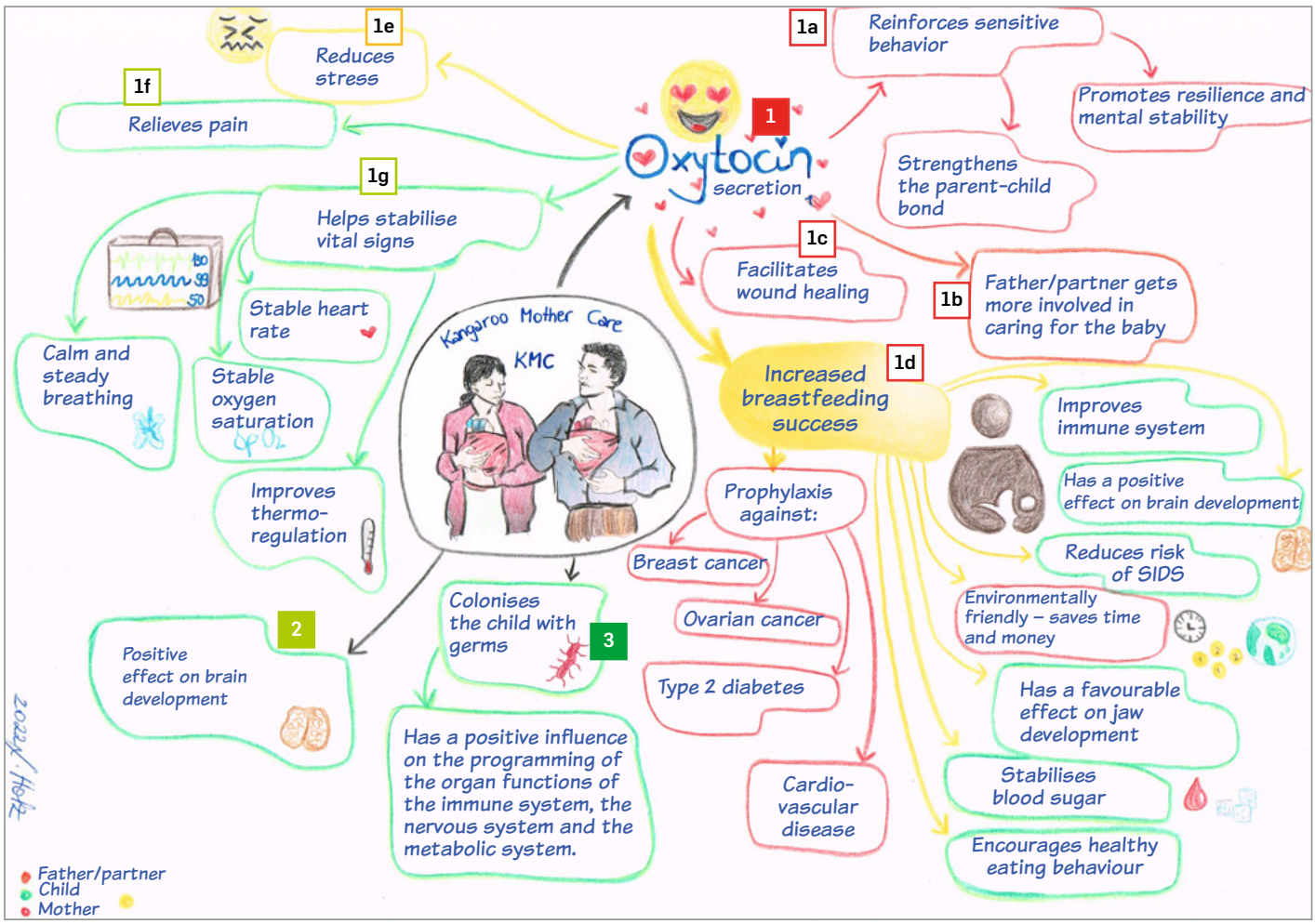

Fig. 1: Effects of KMC (Author's own presentation based on information from the WHO)

› g. Due to the release of oxytocin, KMC promotes stable vital signs in the child. Oxygen saturation, heart rate, respiration and thermoregulation are improved through skin contact with the mother and/or father or partner. *(WHO, 2006).*

2 **KMC influences the child's brain development.**
In the first 1000 days, 80 % of an adult's brain mass is reached. Very early experiences shape the structures of the child's brain *(Bergman et al., 2019; Wang Y, et al., 2021)*

3 **During skin-to-skin contact, the child is colonised by germs from the parents.**
This has a positive influence on the programming of the organ functions of the immune system, the nervous system and the metabolic system. *(Castanys-Muñoz E et al. 2016)*

Learning method

Assignment for the week

On the fourth working day, learners are given an assignment for the week, in which they reflect on the topic of KMC and the connection between KMC and breastfeeding.

Role-play

After the assignment for the week, I use role-play to teach the kangaroo method to five learners.

The room I am in with the learners has kangarooing chairs, breastfeeding pillows, an incubator, a bassinet or infant warmer, bonding tops, cloth nappies, gloves, scrubs, hand mirrors, water bottles and a premature baby doll.

Two learners should play the roles of a parent and a nurse giving instructions. The other learners should observe the situation. The learners should share their experiences and knowledge from the assignment for the week and the daily routine on the ward with each other.

Their task will be to apply the kangaroo method and to inform the parents about the positive effects. Questions from the learners are always welcome.

Scenario 1

The instructor shows the kangaroo method to an anxious 42-year-old mother. The mother has had a traumatic birth that ended with an emergency caesarean. Skin-to-skin contact could not be carried out after birth. The premature baby was very much planned and wanted, was conceived through IVF treatment and is the first child. The instructor takes the baby out of the incubator and puts the baby on the breastfeeding mother's naked skin. Both parents are present in this scenario.

Scenario 2

The instructor shows a Muslim mother how to do kangarooing. The baby is in an infant warmer or bassinet. The mother had a spontaneous delivery was able to have skin-to-skin contact after the birth. Since the birth,

TRAINEE TASKS DURING THE STUDY WEEK

Day 1

a. Look at your own skin and the skin of a premature baby (< 32 weeks gestation).
b. In the nursing book *"Gesundheits- und Kinderkrankenpflege"* by Mechthild Hoehl and Petra Kullick, read about skin on pages 359–363, *"Frühgeborene – Haut" (premature babies – skin)*. There is also specialist literature on the ward that you can use to help you.
c. After you have looked at the literature, describe the skin of an adult and the skin of a premature baby (< 32 weeks gestation).
d. Which hormone plays a major role during skin-to-skin contact?

Day 2

e. Observe a nurse as she places a premature baby on a parent's chest for skin-to-skin contact.
   - How do the parent and the child react to skin contact?
   - Describe the situation using continuous text.

f. Afterwards, read the standard *"Känguruen in der Kinderklinik"* (Kangarooing in the children's hospital) on the hospital intranet and the chapter "Kangaroo-Mother Care/Känguruen" (Kangaroo-Mother Care/Kangarooing) in the student folder.
   - What is KMC? Write a short description of the method in your own words.

Day 3

Answer the following questions:

› What is the connection between KMC and breastfeeding?
› List at least seven positive effects of KMC.
› What nursing measures can be taken to increase a mother's milk supply?
› List at least four possible negative consequences of separating parents and child.

Day 4

a. Choose a premature baby and take the baby's case history.
b. Create a care plan focussing on parent-child bonding and breastfeeding.

Day 5

a. Evaluation: Present your results to your nursing practice instructor and your fellow students.
b. Reflect on what you have learned and gained from this assignment.

Have fun working on the tasks! ☺

however, kangarooing has only occurred once on the ward. The parents ask the instructor about the kangaroo method. The mother expresses the wish to breastfeed her child. Instruction and counselling follow.

In both scenarios, the naked skin is imagined. The learners are wearing scrubs and put the bonding top on over them

At the end of the role-play, the learners should reflect on what they have learned. The group that observed the scene should comment on the role-play.

Then the groups change roles. At the end, learners have more time to ask questions about KMC and breastfeeding.

I allow about 1½ hours for the role-plays and subsequent discussion.

Summary

With the methods I use to provide instruction on KMC and breastfeeding, I highlight a different perspective of our work as paediatric nurses. In addition, I ensure variety, fun and motivation during instruction.

Unfortunately, these topics do not feature in generalist nursing training. Psychosocial care for parents is an important component in achieving the goals that neonatology strives for – a better outcome for premature and sick newborns and a strengthened family bond.

Therapeutic skin-to-skin contact should be firmly established in the daily routine of the ward. This is the first step towards successful breastfeeding. It is important for me to pass this on to the trainees on their professional journey, to ensure that all staff in neonatology are on a successful path with regard to KMC and exclusive breastfeeding. This includes the trainees first. They are the future of our nursing generation. ›

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Measuring and Valuing Women's Lactation Work: The Mothers' Milk Tool

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Disclosure of conflicts of interest
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Breastfeeding and mothers' milk is presently not accounted for in our food systems or the economy.[1]

Why is breastfeeding not counted, and what are the consequences? How can we make this productivity more visible and valued?

The Mothers' Milk Tool was launched in May 2022, and will be of value to a variety of users including lactation consultants and individual mother/baby dyads.

Most countries ignore unpaid household production in measuring the economy

When a farmer feeds her children milk from a cow, the value of the milk counts in Gross Domestic Product (GDP), but when she breastfeeds, it counts for nothing.[2] This is despite the ample evidence that breastfeeding provides a uniquely valuable food, and holds down health costs. It also underpins a productive economy, because early nutrition is important for health, cognition and later life earnings.[3, 4]

Our existing statistical systems still give low priority to collecting data on un-remunerated work, including housework, childcare and breastfeeding. Economic statistics are built on a system established by the Organisation for Economic Co-operation and Development (OECD) in the 1950s. It became an international rule, and led to the fact that many countries do not count the unpaid work done within households or women's food production as crucial to the local and family economy.

This means that if a someone pays a housekeeper or a nanny, this counts in GDP, but if the same work is done by a spouse, it is not measured. Only economic activities done for others – **and for monetary reward** – count in this statistical system.

Problems and progress

Since the 1970s, there have been severe critiques of GDP, and the System of National Accounts (SNA). SNA is a set of concepts, definitions, classifications and accounting rules that comprise the internationally agreed standard for measuring such items as GDP. Criticisms have focused mainly on its lack of attention to the depletion or degradation of the environment. However, excluding unpaid household production from measurement has been strongly criticized by feminist advocates. Marilyn Waring, a New Zealand parliamentarian who was shocked at the gender bias in how GDP was measured, wrote a book called *Counting for Nothing*,[5] in which she scathingly critiqued the foundations of the SNA. A best seller, the book was later republished as *If women counted*. In her book, Dame Marilyn Waring describes the SNA as 'applied patriarchy'.[6, 7]

Since then, estimates have shown that, if given a monetary value, unpaid household work is equal to over 40 % of the value of GDP.[8]

Ignoring unpaid work misleads policymakers

There have been strong critiques of the delay in reforming the SNA.[9, 10]

OECD economists have recently shown that GDP overstates the true growth rate of economically valuable production. This is because there is now more use of paid childcare services instead of unpaid care.[11] The growth of GDP is misleading because it fails to account for the shift away from the unpaid childcare that was provided – mostly by women – in the household sector, to the monetized economy, and misleadingly measures this shift as boosting economic growth rates.

Over a decade ago, breastfeeding and human milk was used as an example of the same problem in a review of the SNA commissioned by the French President.[12] The Nobel Prize winning economists Joseph Stiglitz and Amartya Sen who led the review wrote:

> *"There is a serious omission in the valuation of home-produced goods—the value of breastmilk. This is clearly within the System of National Accounts production* ›

boundary, is quantitatively non-trivial and also has important implications for public policy and child and maternal health."

Human milk production should be counted in GDP and food statistics

In 1973, a pioneer nutrition economist, Alan Berg, drew attention to the milk lost due to the shift from breastfeeding to commercial baby formula during previous decades.[13]

> *"An unusual depletion in the crude oil reserves of an oil-producing country of Asia or Latin America would be termed a crisis. Its economic and social implications would be so apparent that actions to reverse the trend would be awarded high priority. Yet a comparable crisis, involving a valuable natural resource and losses in the hundreds of millions of dollars, is going virtually unnoticed in many of the poor countries of the world. The resource is human breastmilk, and the loss is caused by the dramatic and steady decline of maternal nursing in recent decades..."*

From the early 1990s, the rules of the SNA were slightly changed so that production of goods can be counted in GDP if there is a suitable market price that can be used to impute value to it. So for example, the Australian Bureau of Statistics makes a rough count of backyard vegetable garden production, and on-farm consumption of milk and eggs, and counts the monetary value of these in GDP figures using market-based pricing.

However, unpaid 'services' such as childcare or breastfeeding remain outside the core measure of GDP, which is commonly used to describe countries' economic growth and progress.[14, 15] Research has shown that the monetary value of unpaid childcare in Australia, for example, is several times the size of the childcare industry.[8, 15, 16] Other studies in Korea and China show similar results.[17, 18]

Making breastfeeding protection, promotion and support, a policy priority

Money is the language of policymakers, and what is not visible is often not valued. This can reduce the priority given to the needs of new mothers in government policy and budgets.[19]

To advance women's human rights and improve budget transparency, gender responsive budgeting (GRB) has been introduced in a number of countries in recent decades, and encourages better collection of relevant data, and greater representation of women in policy decision-making. Gender budgeting helps to address hidden biases in public policies and programs, and in budget funding.[20] The Victorian parliament is moving to introduce GRB.

Breastfeeding as the first food system – healthy and sustainable

In countries with a large subsistence sector, the SNA changes in 1993 were an important recognition of women's important economic role as food producers. The change meant that human milk can be counted in GDP. However, in most countries it still isn't, though in Norway it has been counted as part of the country's food supply for decades.[21, 22]

GDP rules exclude **breastfeeding** because it is classified as a 'service', not a 'good'. GDP rules do provide for **human milk** to be counted in economic statistics where it is feasible to count its production volume and to find a price for a comparable product so it can be given a monetary value.[2]

Breastfeeding is the first food, and there are risks of ignoring this healthy and sustainable first-food system in economic statistics and policymaking.[23]

Making mothers' milk count in economic statistics

Several studies have estimated how much milk breastfeeding mothers produce each year.[24] This data can provide better scientific information for public policy and budgeting decisions and reduces the invisibility of women's productivity including breastfeeding. The studies draw attention to the need for measures to prevent or address declines in breastfeeding, such as maternity protection, Baby Friendly Hospitals, and control of baby food marketing.

The new 'Mothers' Milk Tool' will help to make the value of breastfeeding more visible. The Mothers' Milk Tool quantifies the volume of breastmilk and value of breastfeeding at national and global levels, as well as how much is lost if country environments and policies, or healthcare, work and community settings do not enable women's and children's rights to breastfeeding.

The Australian National University and Alive & Thrive Southeast Asia have partnered to develop this easy-to-use, open source and downloadable tool that quantifies the economic value contributed to society by women's unpaid care work through breastfeeding of infants and young children. (See image at the article's beginning).

Figure 2 – User feedback

„The tool is very interesting, especially in a country like Nepal, where the policymakers and the development partners have never considered the economic value of women's unpaid care for breastfeeding. The tool can be used for advocacy toward more investment in breastfeeding."

MANISHA LAXML SHRESTHA
Nutrition Specialist Suaahara II Program, FHI 360, Nepal

„Love this tool ! 1 think it is a very wonderful tool, making visible how much economic value is found in breastfeeding and human milk. It can be used for policy making and I am sure 1 will show this in the COUNTRY National Breastfeeding Committee."

ELIEN ROUW
Medical Doctor, Fellow and President-Elect of the Academy of Breastfeeding Medicine, Germany

„I feel this tool will bring such a huge lift to the global advocacy movement for the protection of infant feeding by seeing the value of the work in a new, tangible, and compelling way."

MALVINA WALSH
Advocate for IYCF protection and support, Baby Feeding Law Group, Ireland

The Mothers' Milk Tool conservatively estimates that globally, around 35.6 billion litres of milk a year is produced by breastfeeding mothers of children aged 0-3 years. Each year, the world loses around a third of the biologically feasible potential, a loss of value of more than US$2.2 trillion. In Germany, for example, human milk production amounts to over 98 million litres a year. There are various ways a monetary value can be attributed to this,[25] but at the cost of fresh donor milk of around $100 a litre, this has a value of around 8.5 billion euros a year.

The World Health Organization recommends breastfeeding exclusively for 6 months and continuing with safe and adequate complementary foods to 2 years and beyond. Due to poor country data on exclusive breastfeeding, the Tool only measures 'any breastfeeding'.

The Tool also allows individual mothers to calculate how much milk they have produced for their child and its value, depending on how many months the child is breastfed for during the first 36 months of life. For example, a mother who breastfeeds to 6 months and then continues breastfeeding her child to 3 years will provide around 431 litres for her child. A child breastfed to 12 months will benefit from 211 litres of this uniquely valuable milk, and if it were paid for, would be akin to a gift of at least 18,128 euros.

Of course, every drop counts!

Measuring the value of mothers' milk in monetary terms may be said to devalue it, and the value of breastfeeding and human milk is indeed far beyond its money value. However, counting human milk production in food and economic statistics will assist in better policy decision-making and investments in women's unpaid care work.

The Mothers' Milk Tool will be of value to a variety of users, including policymakers, advocates, researchers, national accountants and statisticians, and individual mother/baby dyads. It can support tracking of progress on breastfeeding targets, by assisting food and health policymakers and public officials in how to include breastfeeding in food balance sheets and economic statistics.

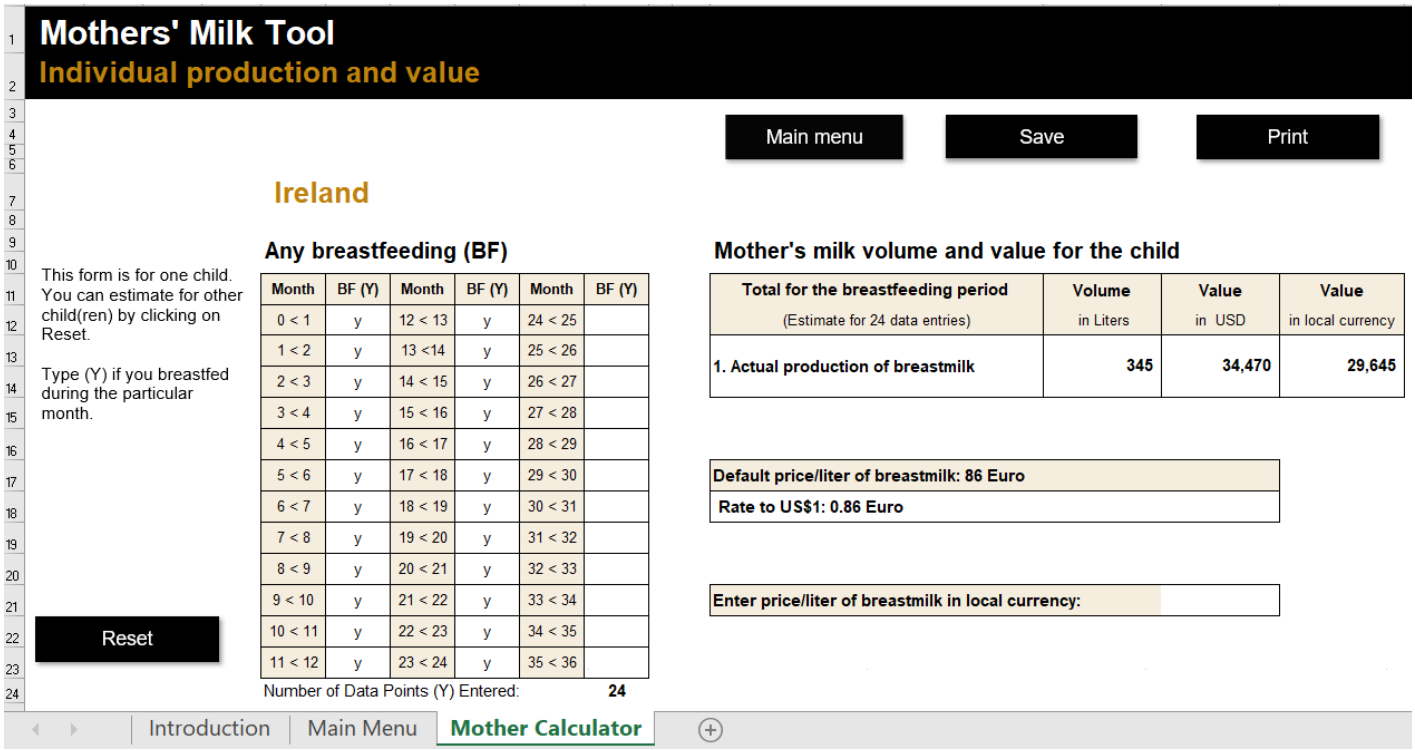
Feedback from users around the world has been very positive.

The Mothers Milk Tool was launched in May 2022, when most countries celebrate Mothers' Day, to acknowledge the role, health and economic contribution of mothers to society through women's unpaid care work, including breastfeeding. A recording of the launch can be seen at https://nceph.anu.edu.au/news-events/events/measuring-and-valuing-womens-productivity-mothers-milk-tool

To try out the downloadable Tool for yourself, go to the website at the Australian National University.

An online version will be available soon on the Alive & Thrive website with multiple language options. ›

Figure 3 – A calculation for breastfeeding to 2 years for an Irish mother



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Giving Voice to Mothers

Mothers' Experience of Expressing Breast Milk for their Preterm Infants in an Irish Neonatal Intensive Care Unit – Research into Clinical Practice

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Photo: © Chacko

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Lisa Conboy RGM

Introduction & Conflict of interest
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Background

Breastmilk can make a huge difference to preterm infants' survival and their long-term health. Despite documented benefits of breastmilk for preterm infants, the prevalence and duration of its supply are lower in preterm infants than that in term infants (Vohr et al., 2007). There is a huge amount of research on the area of breastfeeding preterm infants. Translating research evidence to clinical practice is essential to safe, effective & quality healthcare provision. Nurse-led research is increasingly acknowledged as an important pathway to improving patient outcomes. This article illustrates qualitative research and how the neonatal centre achieved high breastmilk feeding rates by bringing that research into clinical practice.

Qualitative research:

Ireland, a country with the highest birth rate in Europe, has one of the lowest breastfeeding rates in the world. Only 56 % of mothers in Ireland initiated breastfeeding, in comparison with rates of other countries like UK (81 %), Denmark, Norway, and Sweden (98 %) (ESRI 2012). By international comparison, early breast-feeding discontinuation rate is also a huge concern in Ireland (*Tarrant et al. 2011*). Moreover, in Ireland among 71,705 live births 234 were born less than 28 weeks and 469 were born between 28–31 weeks, 3564 between 32–36 weeks of gestation in 2012. Thus preterm infants constituted 6.4 % of total live births in Ireland in 2012 (NPS 2012).

To improve the availability of mothers' own expressed milk for their preterm infants, efforts need to be made to support mothers for breastmilk expression (Sisk et al., 2006). Understanding their experience is the first step to plan care for these vulnerable mothers. A review of the literature revealed that very few studies have been done on the mothers' perspective and therefore a knowledge gap exists as there is a lack of research in the Irish context (Alves et al., 2013; Boucher et al., 2011; Berens, 2001; Davanzo et al., 2013; Dowling et al., 2012).Thus, as part of studying Masters in science, Iby Chacko conducted a qualitative research, aiming to gain an insight into mothers' challenges and their specific needs related to breastmilk expression for their preterm infants in Neonatal intensive care unit (NICU) in the Coombe Hospital.

Methodology

Study setting: Coombe Hospital Neonatal Centre is a 45 bedded tertiary referral centre for neonatal intensive care in Dublin, Ireland where sick and premature infants (from 23 weeks gestation) receive Intensive care treatment. The centre is divided into 3 areas; Intensive care unit, a High dependency unit, and a Special care baby unit. The hospital also provides a regional and national neonatal service for premature infants born in other hospitals and those with complex conditions. From delivery room, preterm babies born <35 weeks and babies who need extra medical care are transferred to the neonatal centre. Mothers are transferred to the postnatal ward located on a different floor of the hospital. Mothers in the neonatal centre are encouraged to hand express the first 24 hours and then they have a facility for bedside pumping in the postnatal ward. Pumping rooms are available in the neonatal centre also. A whiteboard is attached outside the pumping room and every mother can prebook their pumping slot if they wish to pump in the pumping room. During the pandemic, there was no restriction for mothers to visit their infants in the neonatal centre. ›

ELIGIBILITY CRITERIA FOR THE RESEARCH AS FOLLOWS

1. Mothers of preterm infants born less than 30 weeks of gestation
2. Or weight of the infant less than 1500 grams
3. Infant should be in the neonatal unit at least for 4 weeks
4. Mothers initiated expressing breastmilk in NICU
5. Mothers who can read and write English
6. Infants clinically stable and ready for home in 1-4 weeks

› Social distancing is maintained all the time to protect the infants & staff. But to facilitate Covid isolation beds, stable mothers were discharged home before establishing their milk supply.

After ethical approval, purposive sample of eight mothers of preterm infants (born <30 weeks of gestation) who initiated breastmilk expression in the Coombe Hospital were interviewed. Transcribed data was analysed using Colaizzi's framework (1978). Analysis revealed three major themes.

Data Analysis –
Major themes and Theme clusters

First theme 'Getting Started' reflected on mothers' physical and emotional challenges, as well as the need for initial support. Single motivational words like 'golden drops' or 'medicine' have been identified as such important influences for the participants for getting started with breastmilk expression.

Eimer said: *"I was a little bit tired but wasn't exhausted. You know, I think a little bit of adrenaline maybe, remained, so I wasn't thinking about my tiredness, I was just doing it because it was good for the baby"*

Christina said: *"They gave me the pump when I went back to ward. I can't remember when it all happened because of all the emotional stage"*

Carina said: *"They explained the machine very quickly but I would have actually liked to have a leaflet so that I could go back to it because the first day after delivery I was very emotional, I was very upset and it was hard to take in"*

Carina said: *"They also told me that it is more important because the breastmilk was like golden drops, it is like a golden drop that's all I remember. It stuck in my head"*

The second theme 'Continuation' identified the challenges and enablers to continue electric pumping to establish and maintain breastmilk supply. The theme is explained under "emerging themes" such as influence of hospital environment, time management, perceived maternal needs and mother's attitude towards continuing breast pumping.

Paula said: *"There was problem getting the machine, especially in the ward. In the night, when we get up, somebody else will be there using the pump and we have to stay awake for the turn"*

Christina said: *"It is very stressful if we can't express every 3 hours. Then they told us that never be stuck, there was always a couple of machines, so that was really good to know."*

Julie said: *"Sometimes if I am expressing, I will miss my meal. Even I can't bring any food from home because no space to eat. It was very difficult to keep up the time for expressing, and taking care of myself and being with my babies"*

Catherine said: *"It is difficult, when you are travelling in and out because, if you get caught in traffic or if you arrive in and there is no slot on the board, it could be maybe four and five hours before you get next opportunity to express, that is difficult and also time management perspective it is difficult"*

The third theme 'Adaptation Strategies' reflected on their strategies to cope with maintaining long-term pumping, to increase their milk production and to control emotion. It explored the need of support classes and the importance of developing social structure to support mothers to achieve their breastfeeding goals. Mothers shared that balancing frequent milk expression, being involved in their baby's care, and looking after their own needs is possible only with the support of nurses and midwives.

Aileen speaks of her love/hate relationship with expressing: *"If I am honest, you know, truly I hate doing it, I hate it, but it is the only thing I can do, so I have always done it and I have always done it right but I haven't enjoyed doing it."*

Paula said: *"Yeah, I had the strong feeling that I had to do it because it's a medicine for my daughter. So I forgot all other difficulties."*

Catherine said: *"Dad's family would have been very encouraging and telling us how well we were doing and guys you were amazing, you are doing so well. You know, it's nice to be told you're great, you're doing a really good job."*

Major themes	Theme clusters/Emerging themes
Getting Started with BM Expression	• Physical challenges • Emotional status • Initial support • Early Motivational Influences • First drop of milk
Continuation of BM Expression	• Hospital environment • Time management • Perceived maternal needs • Attitude
Adaptation Strategies	• Controlling Emotion • Support classes • Strategies to increase milk supply • Developing social structure


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Research implications for healthcare practice

- Balancing frequent milk expression, being involved in baby's care, and looking after their own needs is possible only with the support of nurses and midwives.
- Research reflected on delay in obtaining information and initial support, difficulty in comprehending pumping instructions, worries and happiness about the first drop of milk.
- Single message about importance of breastmilk motivated mothers.
- Perceived maternal needs include specific written information on expressing breastmilk.
- Research also reflected on their adaptation strategies to cope with frequent breastmilk expression and their milk supply.

Recommendations of the research to clinical practice

Facilities of NICU needs to be more supportive:

- Information and support for breastmilk expression should be given as early as possible after delivery.
- Written leaflet should be available and hand expression to be taught to all mothers.
- Bed side pumps at each bed space with pumping log is important. Include single messages (It's like a MEDICINE, GOLDEN DROP) to motivate mothers.
- Acknowledging the importance of first drop of milk is crucial.
- Always reinforce mothers' positive attitude towards breastmilk to overcome their negative attitude towards the act of electric pumping.
- Individualised lactation support in NICU.
- Fathers to be included in infant feeding plans.

After disseminating qualitative research study findings, the researcher conducted a basic audit in 2016 within the unit for quantitative data to identify the gap in the clinical practice. Neonatal unit nutritional guideline recommends early exposure to oral colostrum within 2 hours post birth for all babies. A retrospective chart review of 16 preterm babies demonstrated no documentation of the time mothers received lactation support. 82 % received maternal breastmilk only after 12 hours which is not compliant with the unit guideline. Best practice for improving provision of mothers' breastmilk for their preterm infants in NICU was developed incorporating research recommendations.

Implementation of NICU-dedicated Lactation specialist services (2019)

Mothers of preterm infants are 3 times more at risk for not producing an adequate milk supply and require additional lactation support measures to achieve successful breastfeeding (Gharib et al., 2018). Traditionally, lactation consultants are shared between postnatal wards and the neonatal unit, potentially increasing lactation consultant workload and less time spent with high-risk mothers (Kathryn et al., 2019). It is often the expectation that bedside neonatal nurses and postnatal nurses/midwives provide breastfeeding support to mothers. However patient workload can often ›

ACTION PLANS (2014–2016).

- Formulated Neonatal feeding committee to lead an ongoing Quality Improvement Initiative (QII) to facilitate early availability of Colostrum for Very Low Birth Weight Infants in NICU.
- Disseminated research & QII to all staff.
- Developed an "Expressing breastmilk check list". It is to help communication between maternity and neonatal team to ensure expressing has started. Urgent transfer of colostrum to baby and early exposure of oral colostrum is ensured.
- Free hand expressing kit to start collecting colostrum drops are delivered to all mothers.
- Developed parent information leaflet "Liquid gold leaflet ".
- Liquid gold – colostrum poster is designed and displayed at the hospital walls to raise awareness about value of colostrum among parents and health care professionals.
- Facilitated active multidisciplinary team involvement.

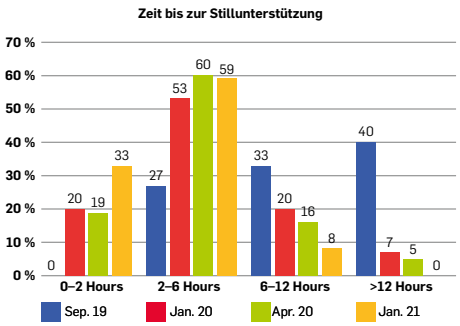

Figure1: Time to mothers of very low birthweight (VLBW) infants receiving lactation support for breastmilk expression decreased following introduction of NICU dedicated Lactation specialist

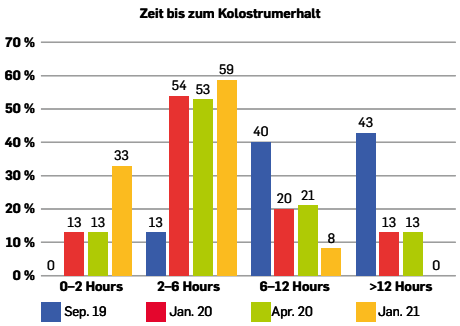

Figure2: Time to VLBW infants receiving oral colostrum decreased following introduction of NICU dedicated lactation specialist.

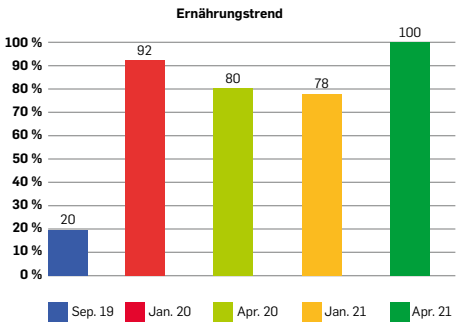

Figure3: Trends in feeding substrate at discharge from hospital over 3 years

supersede detailed lactation support and education. In our neonatal unit, only a few neonatal nurses are certified as IBCLCs which explains the need for specialist lactation service provision to mothers with most lactation challenges.

A NICU dedicated lactation specialist was introduced in the Coombe hospital in October 2019. One whole-time equivalent post is shared between two lactation consultants (IBCLCs) who are also neonatal nurses. The Coombe Hospital is the first hospital in Ireland which introduced a full-time equivalent NICU dedicated lactation specialist post.

Audit to evaluate the Impact of NICU-Dedicated Lactation Specialist on breastfeeding outcomes of extreme preterm infants

An Audit is conducted to identify the Impact of NICU dedicated lactation specialist services on breastfeeding outcomes of extreme preterm Infants. Aim was to measure breastmilk intake in preterm infants <32/40 pre & post initiation of specialist lactation support within NICU and to measure compliance with unit nutrition guideline. Retrospective chart review of 104 infants were carried out (between September 2019 and June 2021) before and after the introduction of NICU lactation specialist.

NICU LACTATION SPECIALIST SERVICES:

- Prepare high risk in-patient antenatal mothers with prematurity related lactation education & counselling.
- Offer lactation specialist support throughout NICU breastfeeding journey to initiate, establish & maintain lactation and also continue support for a smooth & successful transitioning to exclusive breastfeeding.
- Support maternal mental health.
- Provide preceptorship and also onsite in-service breastfeeding education and training for students, neonatal nurses and midwives and neonatal doctors.
- Routine follow-ups for early identification of mothers with complex lactation challenges for timely trouble shooting.
- Track expressing breastmilk check list for ensuring timely support and documentation.
- Early access to free breast pump rental for home use for all mothers whose infants are born less than 32 weeks of gestation.
- Timely evidence-based guidelines are developed to protect, promote & support breastfeeding during pandemic.
- Resources were sort to meet the needs for additional lactation support in the NICU during the Covid-19 pandemic and other stressors impacting the mother and infant dyad.
- As the unit is a tertiary referring neonatal unit, Blood Biker's services are ensured to transport breastmilk from the mothers who deliver in regional hospital to the baby.(Blood bikers are volunteers who support to transport breastmilk between hospitals all over Ireland)
- Support with lactation suppression in case of infant loss.
- Guidance with breastmilk donation if needed.
- Regular audit.

Audit outcome

Quality improvement initiative & implementation of NICU dedicated lactation specialist services led to earlier availability of maternal breastmilk and improved breastmilk feeding rates in preterm infants. The audit demonstrated improvements in the timing of specialist lactation support and early availability of colostrum among preterm infants.

Before the introduction of lactation specialist services in 2019, 27 % of mothers received support with hand expression within 6 hours post birth which has increased to 92 % during the intervention period (***Figure 1***). Availability of colostrum within 2 hours improved over the study period to 33 % compared to none in the pre-intervention cohort (***Figure 2***). 92 % of infants received colostrum within 6 hours of life in January 2021, compared to 13 % in September 2019 (***Figure 2***). Findings also demonstrated improved discharge breastfeeding rates of preterm infants. Pre-intervention, a 20 % discharge any breastmilk feeding rate was calculated, this rose significantly to 78–100 % during the intervention period (***Figure 3***). The next steps include improving direct feeding at the breast as opposed to feeding breastmilk by the bottle in this high-risk cohort.


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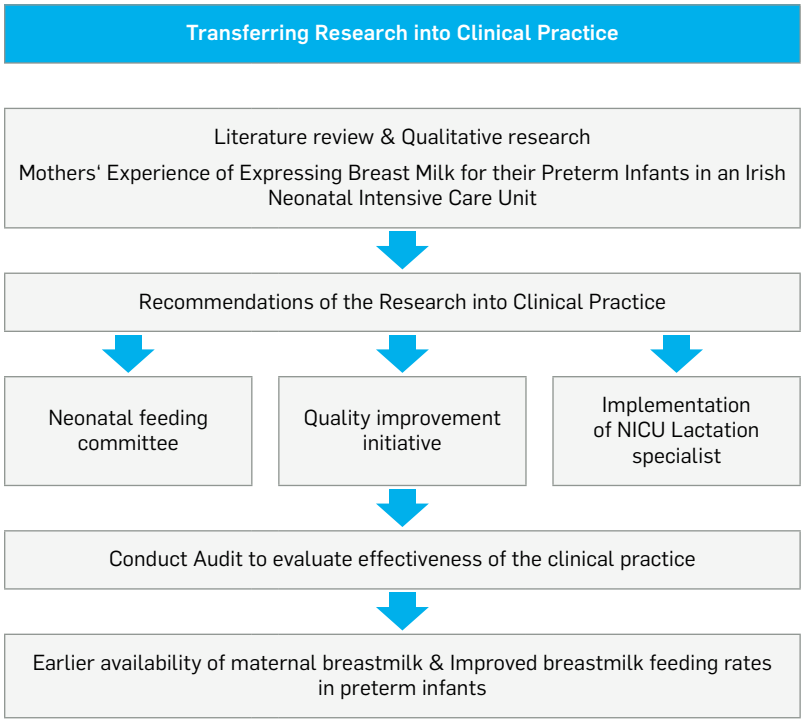

Conclusion

Translating research evidence to clinical practice is essential to safe, effective & quality healthcare provision. This article illustrated qualitative research and how the neonatal centre achieved high breastmilk feeding rates by transferring that research into clinical practice. We recommend each neonatal unit explore its challenges in supporting mothers with expressing breastmilk and develop recommendations for improving breastfeeding outcomes of preterm infants. It is recommended that NICU-dedicated lactation specialist services to be extended to other neonatal units as well.

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