(d) Initiatives…Continued

(ii) THE BABY FRIENDLY HOSPITAL INITIATIVE: A CASE STUDY FROM NSW

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Joy Heads, *Royal Hospital for Women, South Eastern Sydney/Illawarra Area Health Service*

An important determinant of the initiation of breastfeeding and of its continuation in the first year of an infant's life is the mother's experience in hospital (see 'Factors affecting breastfeeding practices: applying a conceptual framework' by Hector et al in this issue).

In recognition of the importance of the hospital experience in determining future breastfeeding behaviour, the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) developed in 1991 the Baby Friendly Hospital Initiative.

This article introduces the Baby Friendly Hospital Initiative and its introduction to Australia and describes the case study of the Royal Hospital for Women in Sydney, which is accredited as a Baby Friendly hospital.

THE BABY FRIENDLY HOSPITAL INITIATIVE

The Baby Friendly Hospital Initiative aims to give every baby the best start in life by ensuring a health care environment where breastfeeding is endorsed as the norm. Baby Friendly status is accredited to maternity units that pass a rigorous inspection and meet the 'Ten steps to successful breastfeeding' (**Table 1**).

The evidence base for each of these steps was confirmed by a review in 1998 and by more recent, systematic reviews, meta-analyses and other studies.[1-6] A number of recent studies endorse the findings that the Baby Friendly Hospital Initiative increases the rates of initiation and duration of breastfeeding. This evidence originates from diverse countries such as Scotland, the United Kingdom, Republic of Belarus, the United States, Switzerland, and Brazil.[7-16] Paediatric hospitals and community health services are also included in the Baby Friendly Initiative and are required to meet best practice guidelines that are tailored to their functions (**Table 2** and **Table 3**).

In order to be accredited, hospitals are required to have written evidence-based breastfeeding policies and staff training programs and to provide comprehensive information to all women booked to deliver their infants at the hospital.[17]A Baby Friendly accredited hospital ensures that practices such as unnecessary separation of mother and baby and inappropriate supplementation with formula do not occur and that, on discharge, information about community support for breastfeeding is given to all mothers.

International experience indicates that Baby Friendly accreditation is a quality tool that enables health authorities, in both developed and developing countries, to monitor and evaluate their efforts to support improved breastfeeding practices through their health facilities.[18-20]

THE BABY FRIENDLY HOSPITAL INITIATIVE IN AUSTRALIA

Since 1995, the Australian College of Midwives Incorporated has facilitated the initiative in Australia. The college holds corporate governance over the body, Baby Friendly Hospital Initiative in Australia, which is, in turn, supported by state and territory committees and a project officer. In 2002 the college received a two-year grant from the Australian Commonwealth Department of Health and Ageing to support the initiative in Australia.

It is desirable that all hospitals in Australia become Baby Friendly for optimal support of breastfeeding. The most recent data indicates that there are currently 51 hospitals or facilities that are Baby Friendly accredited in Australia, representing approximately 18 per cent of all maternity units (**Table 4**).

BABY FRIENDLY HOSPITAL INITIATIVE IN NSW

In NSW, there are two maternity units that are currently Baby Friendly accredited (the Royal Hospital for Women and Queanbeyan Hospital). The Royal Hospital for Women was the first tertiary referral teaching hospital in NSW to achieve Baby Friendly status (which occurred in 1999) and is due for its second three-yearly re-accreditation in 2005.

A CASE STUDY

For the Royal Hospital for Women, achieving and maintaining Baby Friendly status is inextricably linked to building a strong breastfeeding culture at the hospital and the regular monitoring of prevailing practices and breastfeeding outcomes. The principles of the Baby Friendly Hospital Initiative place the mother and baby, as an inseparable unit, at the centre of all care. This underpins the hospital's philosophy and mission statement, which is 'Providing care in partnership with women'.

In 1995 the Executive Director and clinicians decided to work towards Baby Friendly accreditation, prior to the hospital's move to the new Randwick site in 1997. Therefore, achieving future Baby Friendly status was considered in the planning and layout of the new postnatal wards. **Visitors are still surprised when they do not find a nursery full of babies to 'view' but instead an empty 'arrivals lounge' and babies rooming-in. Wall clocks are no longer in all rooms (to support 'demand feeding') and breastfeeding pictures from many cultures adorn the walls in all areas of the hospital**.

The Baby Friendly Hospital Initiative's tenth step encourages maternity facilities to 'foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital'. The hospital has done this by having a small unit on the postnatal ward where women can be seen post-discharge for complex breastfeeding issues. Results of a 2002 sample of 50 women found that 72 per cent of women were breastfeeding at six months.[21] This is considerably higher than the proportion breastfeeding at six months for the NSW population (42.5 per cent). Considering that these women were referred for complex breastfeeding issues, this suggests that this service is an effective model of postnatal care for maintaining breastfeeding rates.

Attitudinal change among staff continues to prove the greatest challenge to those wishing to seek Baby Friendly accreditation. Much of the educational focus at the Royal Hospital for Women during the preparatory time was to reassure the staff that there would not be a dramatic change in practices. Changes in practice had gradually occurred over the previous decade with the introduction of evidence-based care.

Working in a Baby Friendly hospital means many things. For example, new staff know in advance the policies, practices and routines that are expected. It means that **staff are supported in their on-going breastfeeding education by regular in-service training**. It also means financial support for external education from the Royal Hospital for Women's Nursing and Midwifery Education Fund.

At the Royal Hospital for Women, practices affecting breastfeeding outcomes are monitored by random sampling twice a year. These practices include:

- post-birth uninterrupted skin-to-skin contact and timely initiation of first feed
- dummy use
- formula supplementation of breastfeeding babies and assessment of the stated medical reasons
- maternal consent for formula supplementation and dummy use
- early assistance for mothers of pre-term babies with expressing their breast milk.
- The Royal Hospital for Women found that implementing the initiative was helped by:
- support from hospital administrators and first line managers
- the hospital Executive's support for the overall initiative
- building and maintaining a breastfeeding culture in the hospital
- training staff to ensure that they understand the initiative and understand that it does not involve a substantial additional workload
- ongoing review of the evidence base for the hospital's routine practices
- development of the Breastfeeding Support Unit, again with the support of hospital administrators and staff
- regular monitoring of current practices and outcomes

The Royal Hospital for Women has a tradition of striving for the best in health care and consequently Baby Friendly accreditation is viewed as an integral part of our hospital. Comments in support of the Baby Friendly Hospital Initiative are numerous. For example, feedback in the Baby Friendly Hospital Initiative's Assessors report (2002) included 'All mothers interviewed were also very articulate and confident in their breastfeeding knowledge. **A number of women commented that they were surprised that they had not received any conflicting advice**, as their friends had warned them that this may happen'.[22] Such positive comments inspire staff to protect and maintain Royal Hospital for Women's Baby Friendly status.

WHERE TO FROM HERE IN NSW AND AUSTRALIA?

Despite 10 years of experience with the Baby Friendly Hospital Initiative in Australia, its uptake by hospitals remains limited. The reasons for this are complex. Breastfeeding and postnatal care are often not the main focus for many midwives and maternity units, whose central philosophy is quality prenatal care and birthing options. Therefore, **the Baby Friendly Initiative remains largely driven by very motivated individuals.** Shorter length of hospital stay for newly delivered women mean that women are often discharged before they have learnt the basic skills of newborn feeding and sleeping norms.

The Baby Friendly Hospital Initiative is not a high priority activity for area health services and as a result few resources are directed to devising and implementing strategies to improve breastfeeding behaviour. Greater support from policy makers and managers at the state, area health service and institutional levels would help the widespread implementation of the initiative and, ultimately, improve breastfeeding outcomes.

Why are there such large differences in uptake of the initiative across Australia? Differences can be explained by differences in the priorities of local branches of the Australian College of Midwives Incorporated in each state and territory. **For hospitals to be appropriately supported to achieve and maintain Baby Friendly Hospital Initiative accreditation their state branch of the Australian College of Midwives Incorporated must see the initiative as part of their core business, in equal concert with antenatal care and birthing options**, and must commit resources to the initiative. Endorsement of the initiative is integral to the upcoming NSW breastfeeding policy (as described by Macoun in 'The NSW Health breastfeeding project' in this issue of the *Bulletin*).

Achieving Baby Friendly status in a facility requires a commitment from all staff to ensure that the hospital's culture sees breastfeeding as the normal way of feeding babies and takes into consideration interventions that support or undermine that basic concept.

To increase the number of maternity units achieving Baby Friendly Hospital Initiative accreditation in Australia, we require:

- policy and financial support from national and state health authorities to encourage routine implementation of this evidence-based strategy to increase breastfeeding rates
- the use of 'breastfeeding at discharge' and 'breastfeeding duration' rates, plus the application of the 'ten steps' as benchmarks for achievement by national and state health authorities
- state branches of the Australian College of Midwives Incorporated to see Baby Friendly hospital accreditation as their core business and to commit further resources to the initiative
- support for services progressing to Baby Friendly hospital to help them identify their specific barriers and to overcome these barriers, and
- dissemination of successful models of Baby Friendly hospitals.

More information can be found at the Australian Baby Friendly Hospital Initiative website: www.bfhi.org.au.

TABLE 1

THE TEN STEPS TO SUCCESSFUL BREASTFEEDING

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless *medically* indicated.
7. Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Source: The Baby Friendly Hospital Initiative (Australia). Available at www.bfhi.org.au/text/bfhi_ten_steps.html. Accessed 15 June 2005.

TABLE 2

BREASTFEEDING IN PAEDIATRIC UNITS GUIDANCE FOR GOOD PRACTICE

Breastfeeding is the healthiest way that a woman can feed her baby, because it provides important health benefits to both her and her child. This is why all health care professionals working in the paediatric environment should actively encourage women to breastfeed their babies. The following is a list of measures which paediatric units could adopt to help achieve this aim.

1. Have a written breastfeeding policy that is routinely communicated to all health care staff and provide people with training to acquire the skills necessary to implement this policy.
2. Provide mothers with an environment and facilities which meet their needs for privacy, information and appropriate nutrition.
3. Support mothers in their choice of feeding method – and assist in the establishment and maintenance of breastfeeding.
4. Provide parents with written and verbal information about the benefits of breastfeeding and breastmilk.
5. Use alternative techniques conducive to breastfeeding if a baby is unable to feed at the breast.
6. Give no bottles or dummies to breastfeeding babies unless medically indicated and with parents' permission.
7. Provide facilities that allow mothers and babies to be together 24 hours a day in order to promote breastfeeding on demand.
8. Plan all nursing and medical care to minimise disturbance to the breastfeeding relationship.
9. Provide mothers with a dedicated facility that is appropriately furnished with well-maintained and sterilised equipment for the safe expression and storage of breastmilk.
10. Provide parents with information about breastfeeding support groups during admission and on discharge from hospital.

Source: The UNICEF UK Baby Friendly Initiative. *Breastfeeding in paediatric units—guidance for good practice.* London, Royal College of Nursing.

TABLE 3

THE SEVEN POINT PLAN FOR THE PROTECTION, PROMOTION AND SUPPORT OF BREASTFEEDING IN COMMUNITY HEALTH CARE SETTINGS

All providers of community health care should:

1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff
2. Train all staff involved in the care of mothers and babies in the skills necessary to implement the policy
3. Inform all pregnant women about the benefits and management of breastfeeding
4. Support mothers to initiate and maintain breastfeeding
5. Encourage exclusive and continued breastfeeding, with appropriately-timed introduction of complementary foods
6. Provide a welcoming atmosphere for breastfeeding families
7. Promote co-operation between healthcare staff, breastfeeding support groups and the local community

Source: The UNICEF UK Baby Friendly Intitiative.

TABLE 4

BABY FRIENDLY HOSPITAL INITIATIVE ACCREDITED HOSPITALS IN AUSTRALIA, BY STATE, 21/2/05

State/ Territory	No. of hospitals	% of maternity units
ACT	2	66.7
NSW	2	4.0
NT	3	50.0
Qld	6	12.7
SA	8	19.5
Tas	4	50.0
Vic	23	20.5
WA	2	3.0
Total	51	17.5

Source: *Baby Friendly Hospital Initiative Australia* e-bulletin. Feb 2005 (4) At www.bfhi.org.au/text/bulletins/21_2_05.htm

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(iii)
WORLD ALLIANCE FOR BREASTFEEDING ACTION (WABA)

The World Alliance for Breastfeeding Action (WABA) is a global alliance of individuals, networks and organisations that protect, promote and support breastfeeding based on the Innocenti Declaration and the WHO/UNICEF Global Strategy on Infant and Young Child Feeding. For more information contact WABA, P.O. Box 1200, 10850 Penang, Malaysia. Tel. (60-4) 658 4816 Fax: (60-4) 657 2655E-mail: waba@streamyx.com Website: www.waba.org.my

- **Global Initiative for Father Support**

  www.waba.org.my/fathers/index.html

- **Global Initiative for Mother Support**
  www.waba.org.my/gims/index.html
- **The YOUth Initiative** is a global programme initiated in 2006. The main objective is to get youths interested in breastfeeding and to develop and sustain young advocates to promote and protect breastfeeding through the perspectives of human rights, reproductive health and gender equality.

  www.waba.org.my/youth/index.html

➢ Ten Links for Nurturing the Future

1. HUMAN RIGHTS AND RESPONSIBILITIES
Ensure that the human rights to and the responsibility for food security, for good health and a safe environment, particularly for women and children, are fully observed in order to protect, promote and support breastfeeding, and sound infant and young child nutrition.

2. FOOD SECURITY
Enable all women to practise exclusive breastfeeding from birth to about six months of age. Enable continued breastfeeding and appropriate complementary foods for up to two years of age or beyond, contributing to household food security. Strengthen government and citizens' actions that ensure adequate maternal nutrition and food security for all. Encourage production and use of appropriate indigenous complementary foods.

3. WOMEN'S EMPOWERMENT
Develop innovative social support systems for all mothers, including adequate maternity legislation. Strengthen women's role in decision-making at all levels and provide accurate information about infant and young child feeding.

4. COMMUNITY PARTICIPATION
Encourage the development of community support groups, including mother-to-mother support groups. Involve fully the community, including citizen groups, religious leaders and policy makers in educational partnership processes that empower all people to improve infant and young child nutrition, and thereby their own lives.

5. BABY-FRIENDLY CULTURES
Ensure that the practices recommended in the 'Ten Steps to Successful Breastfeeding', as elaborated in the Baby Friendly Hospital Initiative (BFHI), are implemented throughout the health care system and by traditional birth attendants. Expand the "baby-friendly" concept to antenatal clinics, primary health care services, work places and communities, creating an environment where every mother can naturally and easily breastfeed.

6. INTEGRITY
Refuse any gifts, sponsorship or support from manufacturers of infant feeding products and accessories. Condemn advertising that exploits women's bodies and the use of products that cause waste and harm the environment.

7. INTERNATIONAL CODE
Push for the implementation of the International Code of Marketing of Breastmilk Substitutes and subsequent relevant World Health Assembly Resolutions through the adoption and enforcement of strong national legislation or regulations. Protect consumers and health workers from misleading commercial promotion, free trade excesses and misinformation about **Codex Alimentarius** provisions.

8. CAPACITY BUILDING
Develop the capacity of health and childcare workers, nutritionists, government officials, social workers, citizen groups and the community in general to understand breastfeeding and sound infant and young child nutrition needs. Ensure that primary health care staff, nurses, midwives, doctors, specialists and other health workers have adequate training in breastfeeding and sound infant and young child nutrition and support the International Code of Marketing of Breastmilk Substitutes related resolutions and other appropriate international instruments.

9. ADVOCACY
Advocate for the implementation of sound national infant and young child feeding policies which include the promotion, protection and support of breastfeeding and the timely use of appropriate complementary foods. Involve the media and citizens groups in creating social pressure for behavioural change towards supporting breastfeeding and sound infant and young child nutrition. Influence policies and an economic, social, political and physical environment that nurtures sustainable human development.

10. NETWORKING
Contribute to the creation of local and national networks of organisations, individuals and government agencies working for sound infant and young child feeding, and broader issues of child-are. Link and integrate these networks with regional and international movements from all sectors of civil society that seek to nurture a sustainable future.

(iv) Others:

Breastfeeding Promotion in Physicians' Office Practices (BPPOP III) Program

While overall incidence and duration of breastfeeding have increased in recent years, significant progress is required to meet the Healthy People 2010 national health objectives, especially among racially and ethnically diverse populations.

The Healthy People 2010 national health objectives recognizes breastfeeding as a major public health concern and advocates collaborative efforts to increase rates and close the wide racial and ethnic gaps. The US Breastfeeding Committee strategic plan, Breastfeeding in the United States: A National Agenda, sets goals, objectives, and activities to make breastfeeding the cultural norm.

The US Preventive Services Task Force recommends structured breastfeeding education, behavioural counselling, and ongoing support outside the clinical setting as the most effective means to encourage mothers to initiate and continue breastfeeding.

Data collected in the 2001-2004 Breastfeeding Promotion in Physicians' Office Practices program shows that while 97% of physicians agree that cultural beliefs are important influences in a mother's decision to initiate and continue breastfeeding, 40% never consider cultural beliefs when advising about feeding. In response to these evidence-based directives, the American Academy of Pediatrics (AAP) proposes to work in partnership with the Maternal and Child Health Bureau (MCHB), maternal and pediatric health professionals and residency programs, public health representatives, and breastfeeding support personnel who work with underserved families to strengthen and expand the successful AAP/MCHB Breastfeeding Promotion in Physicians' Office Practices (BPPOP III) program toward Healthy People 2010 goals.

Program Goals

- Educate and support pediatric, obstetric, and family medicine residents; practicing physicians; and other health care professionals in effective breastfeeding promotion and management in racially and ethnically diverse populations
- Develop strategies to bring together health professional, public health, and breastfeeding support organizations to increase the incidence and duration of breastfeeding and decrease racial and ethnic disparities
- Collect and disseminate information about structured behavioural interventions and model practices that promote and sustain breastfeeding

Program Objectives

- Deliver focused, culturally effective training in breastfeeding promotion and effective maternal support to 30 practices or 100 individuals in the BPPOP III program through Web cast/teleconferencing technology
- Develop model obstetric, pediatric, and family medicine residency program curricula in conjunction with the multidisciplinary project advisory committee
- Provide technical assistance and resources to physicians, residents, public health representatives, and families
- Strengthen and expand established nationwide collaborative networks and local, state, and regional action groups to implement effective breastfeeding strategies and initiatives in underserved populations
- Assess changes in breastfeeding rates in participating medical practices after implementing effective breastfeeding education, counselling interventions, and ongoing support for mothers

Methodology

Using the pre-existing AAP infrastructure and multidisciplinary partnerships to train physicians in promoting and managing breastfeeding, the BPPOP program will sustain the momentum generated by the 2 previous BPPOP programs by continuing to provide culturally effective breastfeeding education and resources, and encouraging nationwide collaboration and networking opportunities among BPPOP III participants and interested others.
Ten Steps to Support Parents' Choice to Breastfeed Their Baby, a cornerstone publication of previous BPPOP programs, provides strategies to implement in office settings ranging from staff training and creating a breastfeeding friendly office environment, to demonstrating breastfeeding techniques and encouraging the use of community resources.

These strategies will provide a basis for a series of Web casts/teleconferences to train program members. Another major development will be an adaptable model residency education program to prepare future office practitioners to better manage breastfeeding, thus effectively institutionalizing the BPPOP program. A comprehensive Web site will be created as a clearinghouse for resources, materials, and information about promising practices in primary care and community support. Technical assistance will be provided by staff and health professional experts. An article will be developed on lessons learned and effective strategies for breastfeeding promotion in special populations.

Evaluation

Key measures of the effectiveness of the BPPOP III program, developed with Institutional Review Board approval, include:

1) modifying the Parent Survey Tool to track changes in intention to breastfeed, and breastfeeding initiation and duration rates after providing structured education, counselling, and ongoing support to mothers, and
2) assessing knowledge and skill levels of health professionals with the Physician Self-assessment Questionnaire before and after targeted training and implementation of lessons learned at 3 months post training. All aspects of the program, including technical assistance efforts, will be monitored, tracked, and analyzed, and an overall program evaluation will be conducted at the conclusion of the grant.

Residency Curriculum

The AAP's Breastfeeding Promotion in Physicians' Office Practices Program Phase III (BPPOP III) is pilot-testing a Breastfeeding Residency Curriculum. It is designed to be multidisciplinary, culturally effective, and compatible with any residency program. After the receipt of over 70 applications, 7 intervention and 7 comparison sites were chosen to participate in this project. These sites will begin pilot-testing the curriculum in July, 2006. The final curriculum will be available to all resident hospitals and clinics in the Summer/Fall of 2007.

The Humane Neonatal Care Initiative

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JH Kennell, MD, Rainbow Babies and Children's Hospital, Division of Developmental and Behavioral Paediatrics, Case Western Reserve University, School of Medicine, Cleveland, Ohio, USA

The report about the "Human Neonatal Care Initiative" by **Professor Adik Levin** from Estonia reminds us that medical care innovation did not disappear during the years of Soviet rule. More importantly, the ideas and programs developed by Professor Levin parallel humanizing efforts by family-focused neonatologists around the world. Hopefully, these ideas will stimulate all neonatologists to review critically their policies for parents and siblings, and consider how to make the 11 step changes Dr Levin recommends to keep all mothers with their newborns and involved in their care.

In 1979 a special facility with 35 beds for **preterm infants (<37 wk gestation)** and 35 beds for sick and malformed full-term infants was started in Tallinn. Because of a shortage of nurses, **mothers were called upon to provide all of the care for their infants** and to stay in the hospital until the infant's discharge. The nurses gave medications and injections and acted as consultants by assisting mothers with breastfeeding, guiding feeding plans and teaching them to care for the infant. Most of the premature infants coming to this nursery weighed more than 1500g at birth. The dominant features of this special department were the 24-h care by mothers with assistance from the hospital staff, **minimizing exposure to infection by restricting contact between the baby and hospital staff members, promoting breastfeeding and using technology as little as possible**.

In the new facility Levin and his staff noticed a decrease in the number of infections in infants and in the need for antibiotics and intravenous fluids. Weight gain was faster, breastfeeding increased, and social and psychological development was advanced. The mothers also benefited; recovery from childbirth was faster, confidence about caring for the infant was increased and mother-infant attachment was enhanced.

In the last 100years, the improvement in survival of preterm infants as a result of advances in medical knowledge and technology has been remarkable. The focus on technology may not be without cost, however. **In his book The Nursling in 1907, Dr Budin wrote with great insight that "a certain number of mothers abandon the babies whose needs they have not had to meet, and in whom they have lost all interest. The life of the little one has been saved, it is true, but at the cost of the mother"**

This cautionary advice was pushed aside by concern about the extremely high death rate in hospitalized infants and parturient mothers due to infection. A disciple of Budin, **Martin Cooney, provided a damaging role model, as he exhibited premature infants in fairs and expositions in England and the USA from 1902 to 1940.** The mothers of these infants were not permitted to take care of their infants. Pediatricians copied the practice of separating mothers and premature infants as they set the policies for hospital premature nurseries. In the period from 1930 to 1960 parental visiting to hospitalized pediatric patients was strictly limited to 1 or 2 h per week in most pediatric hospitals, and the unit for the care of premature infants was a fortress allowing no entry by family members.

When antibiotic therapy became available and research reports showed the benefits of admitting parents into the neonatal intensive care unit (NICU) with no increase in infections, neonatologists responded swiftly, starting in the late 1960s, by opening the NICU doors to parents and providing them with opportunities to touch and hold their infants. This shift contrasted with the much slower process in maternity hospitals of bringing mothers and babies together in the first 2 h after birth and providing rooming-in. Only parental pressure on obstetricians and hospitals brought about this change.

The restrictions that separated mothers and full-term babies arose from the suspicion that parents brought infection into the hospital. Up to the present time in North America, the reflex response of some physicians and nurses has been to separate mothers and babies unless they are sure that the baby is well; most US hospitals still operate a central nursery. In contrast, separation is rarely required in the Tallinn and a number of other hospitals where both the early and long-term benefits of keeping mother and baby together are stressed.

Key steps in the WHO-UNICEF Baby Friendly Hospital Initiative (BFHI) in maternity hospitals world-wide include early mother-infant contact, rooming-in, and early and frequent breastfeeding. These steps have not only resulted in more mothers breastfeeding their infants longer, but also significantly decreased the abandonment of infants in the hospital in Thailand, the Philippines, Costa Rica and Russia.

Professor Levin argues that the benefits of the BFHI should be extended to sick and premature newborns in pediatric hospitals.

Increased breastfeeding success and decreased abandonment could be particularly advantageous for preterm, malformed and sick newborns for whom abandonment and other tragic parenting disorders are more frequent

Levin wisely stresses the importance of maintaining the integrity of the biological and psychological umbilical cords between the mother and infant. Whether labelled as umbilical cords or as mother-infant bonding and infant-mother attachment, the pediatric goal should be the enhancement of infant growth, nutrition, development and secure attachment, as well as mother-infant and parent-infant bonding and the prevention of parenting disorders such as abuse, abandonment, failure to thrive and neglect.

In his 1907 text on premature infant care Pierre Budin stated that "the food for infants is human milk" The role of breast milk in the care of premature infants has been studied and debated repeatedly throughout the twentieth century.

The discovery that preterm milk has a different composition to term milk in the first month has provided support for Dr Levin's strong emphasis on mothers breastfeeding their infants in his unit. Preterm milk in general has more protein, nitrogen, chloride, sodium and less lactose than term milk.

However, there is considerable variation between mothers and a definite diurnal variability in milk content. The information about preterm milk composition, the evidence that it supports satisfactory growth for infants over 1500g and the recently reported advantages of breastmilk for premature infants has tilted the support in favor of preterm mother's milk for infants between 1500 and 2500 g, the choice at Tallinn Children's Hospital since 1979.

For infants weighing less than 1500g, debate continues about the use of modified or unmodified preterm milk. Further research is needed to clarify this issue, but for infants of at least 1500 g, the benefits of breastmilk cannot be overstated. The ever-increasing list of bacteriostatic and bacteriocidal factors in mother's milk, including lactoferrin, lysozyme, complement, lymphocytes producing immunoglobulins A, G and M, and colonization with nonpathogenic flora in the milk, is the basis for fewer infections in breastfed premature infants and probably contributes to the reduced incidence and decreased severity of necrotizing enterocolitis in breastfed premature infants.

The very long-chain fatty acids present in human milk are suspected to be responsible for the reduced incidence and severity of retinopathy of prematurity. Lucas et al. reported a mean verbal IQ 8 points higher at 8 y in infants fed human milk, whether by gavage or at the breast. Preterm infants tend to have a lower oxygen level during feeding but oxygenation is better maintained during breastfeeding than bottle-feeding. For infants weighing less than 1500g, there is considerable debate and the need for further study about the use of modified or unmodified preterm milk.

Babies respond preferentially to their mother's voice shortly after birth, select the breast for the first suckling that has not been washed and appear to recognize the mother with other sensory systems. When mothers are with their babies in the early period a cascade of interactions takes place between mother and infant, locking them together and ensuring the further development of attachment. When the infant suckles from the breast 19 different gastrointestinal hormones are released in both the mother and the infant, including cholecystokinin and gastrin, which stimulate the growth of the baby's and mother's intestinal villi and increase the absorption of calories with each feeding. Touch on the mother's nipple and the inside of the infant's mouth are the stimuli that lead to this release.

Oxytocin may have been a factor in the improved weight gain of infants in the Levin study who received care from their mothers. Dilatation of the cervix during birth in sheep releases oxytocin within the brain, which attaches to brain oxytocin receptors which initiate maternal behavior and bonding of the mother to her newborn lamb. Although a blood-brain barrier for oxytocin exists in the human, oxytocin produced in the brain attaches to multiple oxytocin receptors within the brain.

Elevated levels of brain oxytocin result in feelings of great love for the baby, slight drowsiness, euphoria and a raised pain threshold. During breastfeeding increased maternal blood levels of oxytocin are associated with increased brain levels. The bursts of oxytocin released with breastfeeding may enhance the bonding of the mother to her preterm or sick newborn, just as it does with healthy full-term infants. This experience repeated several times a day could lead to more affectionate and responsive mother-infant interactions. Breastfeeding has a central role in the bonding process, and is even more important when the newborn is sick or premature.

Guidelines for care include pacing of caregiving based on the infant's cues, individually appropriate positioning, individualized feeding support, opportunities for skin-to-skin holding [i.e. kangaroo care which enhances breastmilk production], and collaborative care for all special procedures so that the parent can oversee the infant's comfort and well-being. The emphasis is on a quiet, soothing environment, which supports the family's comfort and provides opportunities to feel close to and affectionate with their infant. Several randomized studies have been conducted to evaluate the impact of the NIDCAP.

Randomized clinical trials and other research data to document the specific effects of such programs, both positive and negative, can be the basis for a re-evaluation of how best to blend and balance high-technology care with humane neonatal care.

Thirty years ago the walls of the premature nursery fortress began to crumble. Mothers, fathers and siblings are now welcomed into most NICUs to observe, touch, hold and feed small and sick infants. **Surely it is time for all neonatologists to consider the next step, i.e. mothers staying with their babies for 24 h a day with maximum skin-to-skin contact (kangaroo care) providing breastmilk and much of the direct care for the infant under supervision, and participating in an individualized appraisal and care program for their infant.** Dr Pierre Budin, in France at the beginning of the twentieth century, extolled the advantages of premature infant care by the mother, writing, "it is better by far to put the little one in an incubator by its mother's bedside; the supervision which she exercises is not to be lightly estimated."

Careful attention to the needs of the mother for rest, support, breaks, encouragement, group meetings with other mothers, attentive listening, and visits from her partner and family will enhance her ability to meet the needs of her infant.

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Dads It's About You Too Campaign (Australian Breastfeeding Association – ABA)

www.breastfeeding.asn.au/news/index.html

Dads really do matter. Research shows that Mums are 10 TIMES more likely to breastfeed if their partner supports their baby feeding this way. With this in mind, it is essential for Dads to receive up to date, correct information and that they are well educated and supported in their new role.

ABA is launching its new 'Dads - It's about you too' campaign to celebrate the coming together of families this festive season. All money raised will go towards our 'Dads - It's about you too' campaign.

We would like your support to produce the following:

- A new ABA booklet aimed at fathers
- A DVD aimed at fathers that can be used by health professionals or ABA groups to inform more fathers about their role with their baby and partner
- On line materials aimed at fathers
- An advertising campaign encouraging the wider community of fathers to support breastfeeding

Dads as breastfeeding advocates: results from a randomized controlled trial of an educational intervention

Am J Obstet Gynecol. 2004 Sep: 1(3): 08-12, Wolfberg AJ, Michels KB, Shields W, O'Campo P, Bronner Y, Bienstock J, Department of Obstetrics and Gynecology, Brigham and Women's Hospital, Harvard Medical School, Boston, Mass USA.

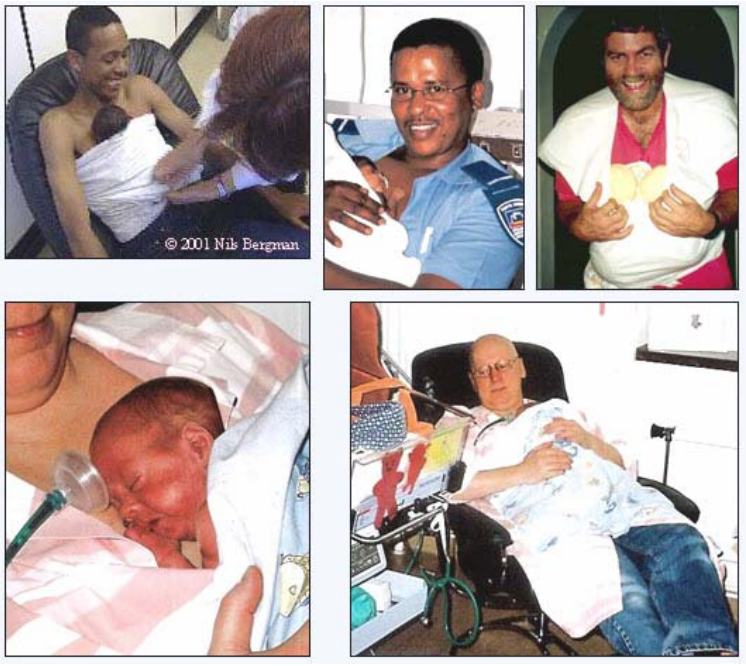
OBJECTIVE: Recognizing that an expectant father may influence a mother's decision to breast- or formula-feed, we tested the effectiveness of a simple, educational intervention that was designed to encourage fathers to advocate for breastfeeding and to assist his partner if she chooses to breastfeed.

STUDY DESIGN: We conducted a randomized controlled trial in which expectant fathers (n = 59) were assigned randomly to attend either a 2-hour intervention class on infant care and breastfeeding promotion (intervention) or a class on infant care only (control group).

The classes, which were led by a peer-educator, were interactive and informal and utilized different media to create an accessible environment for participants. Couples were recruited during the second trimester from a university obstetrics practice.

RESULTS: Overall, breastfeeding was initiated by 74% of women whose partners attended the intervention class, as compared with 41% of women whose partners attended the control class (P = .02).

CONCLUSION: Expectant fathers can be influential advocates for breastfeeding, playing a critical role in encouraging a woman to breastfeed her newborn infant.



Fathers Supporting Breastfeeding is an FNS project targeted to African American fathers so that they may positively impact a mother's decision to breastfeed. The project is part of a continual effort to increase breastfeeding initiation and duration rates among African American women by involving fathers in breastfeeding promotion efforts.

. **Target Audience:** African American fathers. Also appropriate for other male groups www.fns.usda.gov/wic/Fathers/SupportingBreastfeeding.HTM

The Academy of Breastfeeding Medicine (ABM) is a worldwide organization of physicians dedicated to the promotion, protection and support of breastfeeding and human lactation. Their mission is to unite into one association members of the various medical specialties with this common purpose. It strives to promote physician education, expand knowledge in both breastfeeding science and human lactation, facilitate optimal breastfeeding practices and encourage the exchange of information among organizations.

The ABM fully supports the WHO International Code of Marketing of Breastmilk Substitutes and thus refuses support or endorsement of companies which are not Code-compliant.

To widen the Academy's presence in the international community of physicians, the Chair of its International Committee invites communications from all physicians interested in supporting its mission.
Contact: José J. Gorrín-Peralta, MD, MPH, FACOG, Professor and Director, Maternal and Child Health Program, UPR Graduate School of Public Health, San Juan, Email: jgorrin@rcm.upr.edu

The Newborn Individualized Developmental Care and Assessment Program (NIDCAP) Federation International

Vision:
The vision of the NIDCAP Federation International (NFI) is that all newborn infants in intensive and special care nurseries receive individualized, developmentally supportive, family centred care so that they may realize optimal health and developmental outcome.
Purpose: The purpose of the NFI is to serve as the authoritative leader for research, development, and dissemination of the (NIDCAP) and for the certification of trainers, health care professionals, and nurseries in the NIDCAP approach.
Mission:
The mission of the NFI is to develop and support a worldwide collaborative community of trainers, health care systems, professionals, families, and other partners to assure that the highest quality of individualized, developmentally supportive, family centred care is available to all newborns in intensive and special care nurseries.
Activities:
1. To ensure the quality of the NIDCAP model of individualized, developmentally supportive, family centred care education, training, and implementation.

2. To support and disseminate conceptually and methodologically sound research regarding individualized, developmentally supportive, family-centred care.

3. To determine the criteria for and quality of the NIDCAP training process and certification and ensure the quality of performance of NIDCAP certified staff in good standing.

4. To determine the criteria for the process of training of trainers and maintain the qualifications of trainers in good standing.

5. To determine the criteria for the establishment of new training centres and maintain the qualifications of training centres in good standing.

6. To determine the criteria for and quality of certified NIDCAP nurseries, establish the certification process and uphold certification of those nurseries in good standing.

7. To protect and uphold the integrity of the NIDCAP trademark.

8. To maintain a sufficient revenue stream and encourage contributions so that the NFI may carry out its mission and purpose.