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SUMMARY

Breastmilk is the species-specific food of human infants and other forms of infant nutrition are substitutes for it. They are unable to supply truly equivalent components and the individualized protection provided by living cells and other anti-infective components in mother's milk. Breastfeeding is the method of delivering breastmilk, in the process providing more than milk alone. The act of breastfeeding provides skin-to-skin contact that raises levels of the hormone oxytocin, associated with bonding. Providing expressed breastmilk by bottle provides most of the nutrients and a significant proportion of the anti-infective properties, but limits the mother-baby interaction.

Statistical Issues. Australian statistics pertaining to breastfeeding rates are not comparable across time and place because of different definitions of 'breastfed' and 'partially breastfed' and differing methodologies. The World Health Organization (WHO) definitions, published in 1991, are a desirable standard.

Antenatal Education. Antenatal information about breastfeeding needs to be delivered early, to portray breastfeeding as normal, and to cover issues of individual importance, such as what the particular group perceives as 'barriers' to breastfeeding. There is a need to cater better for minority groups.

Delivery and Early Postpartum Issues. Practices encountered in hospitals can impact on breastfeeding initiation and continuation. Putting the mother and her newborn in skin-to-skin contact soon after delivery is a positive intervention, as is the Baby-Friendly Hospital Initiative. Negative interventions include: separating the mother and newborn, restricting the frequency and duration of breastfeeding, supplementing infants without a sound medical reason, and conflicting advice from staff.

Post-discharge Issues. No matter how good the services are in the antenatal and perinatal periods, provision of accessible and ongoing support to breastfeeding mothers is essential if breastfeeding duration is to be extended. Compliance by manufacturers and distributors with international and national marketing codes needs to continue to be monitored. There is a need for an agreement to be formalised between the Australian Government and the bottle and teat sector, to apply the relevant sections of the *International Code of Marketing of Breast Milk Substitutes.*

RECOMMENDATIONS

- That a consistent methodology be used for all future infant feeding statistics, with clear definitions (preferably the WHO definitions) and consistency in the infant ages at which statistical information is collected.
- That antenatal education be made more readily available to parents early in the pregnancy and that it include information on breastfeeding that addresses known barriers to breastfeeding in community perceptions.
- That positive information about breastfeeding be included across the curriculum in formal education, in years P-12, including in mathematics classes.
- That hospitals be encouraged to offer mothers early skin-to-skin contact with their newborns, in the first hour.
- That interventions found to have negative impacts on breastfeeding success (such as those referred to in the Ten Steps to Successful Breastfeeding) are discouraged, through provision of adequate education of frontline staff in maternity hospitals, including on what constitutes 'medical reasons' for supplementation.
- That the Commonwealth provide funding to support the Baby-Friendly Hospital Initiative (BFHI) at a more realistic level for at least the next three years, including by supporting an increase in hours for staffing the national office.
- That the Commonwealth provide funding to support post-discharge services, such as the Australian Breastfeeding Association's telephone helpline, so that they can continue this cost-effective service.
- That the bottle and teat industry be included in a new Agreement with the Australian Government, on similar lines to the MAIF Agreement, so that the WHO Code can be implemented in Australia more fully..
- That workplaces be given tax incentives to provide on-site crèches, or cluster crèches (shared by several buildings), to facilitate the return to work by women who are still breastfeeding.

INTRODUCTION

Breastfeeding is the biological norm for human infants, and mother's milk is species-specific to the human infant and no other. Other forms of feeding human infants, though culturally acceptable and at times in recent history the dominant mode, provide less-than-optimal nutrition, different proteins, fats and carbohydrates, and a lack of living cells and other protective factors.[1] The optimal duration of exclusive breastfeeding is now considered to be 'about six months', with no deficits in growth likely.[2]

1.0 STATISTICAL ISSUES

'On-discharge' breastfeeding figures for Australian populations cannot be compared with any rigour, because of inconsistencies in methodology. These include differences in ages at which the data were collected, and inconsistent definitions. In the last 50 years the typical age for hospital discharge of healthy mothers and babies has ranged from 2 weeks down to 8 hours. Even today, 'on-discharge' breastfeeding prevalence is not a good measure, as age of discharge is commonly 2 days in the public system and 5-6 days for privately insured women, and 8 hours for women delivering in Birth Centres. Other methodological factors, such as definitions, also make comparability of Australian infant-feeding statistics problematic across time and place.[3, 4] 'Ever breastfed' is a particularly useless descriptor. Adoption of the World Health Organization's definitions of 'breastfeeding' in all Australian surveys would create consistency.[5]

2.0 ANTENATAL EDUCATION

2.1 WHEN MOTHERS MAKE THEIR INFANT-FEEDING CHOICES

Mothers tend to make their infant-feeding choice before the first pregnancy or early in that pregnancy.[6] The decision is complex but appears to be based on overt or subtle influences received during the woman's lifetime to date, and includes images of infant-feeding seen in the media.[7] Educational information on breastfeeding has been used in health promotion campaigns in Australia from the early-20th century till today and an information component on breastfeeding is usually included in antenatal classes. Knowledge, alone, is not the sole factor in decision-making, for knowledge is received in a cultural and emotional context.[8] Thus, factors of relevance to the mother, such as perceived barriers to breastfeeding, need to be addressed, both in the provision of education on breastfeeding to mothers and health professionals, and in the community in examining and reducing these barriers. In South Australia among a low-socioeconomic population,[9] and in Tasmania,[10, 11] concerns about breastfeeding away from home in public places has been identified as a barrier. This may not be a concern in other regions.

2.2 BREASTFEEDING EDUCATION, P-12

As many mothers make their infant-feeding decisions prior to the first pregnancy, and as some pregnancies occur during adolescence, it is desirable to introduce breastfeeding as a

normal part of school curricula in a number of subject areas (Prep – Year 12), so that the parents of the future are aware of it as a normal part of life. Examples of the use of breastfeeding-related information in subject areas, include in the teaching of statistics in Mathematics, in segments on Science subjects on the environment and landfill issues, and in English at all levels of ability.

2.3 'EARLY-BIRD' ANTENATAL CLASSES

'Early-bird' antenatal classes, that is, provided to women in the first trimester of pregnancy, should be more readily available, and should particularly target low-socioeconomic, Indigenous, and non-English-speaking background (NESB) women, at least in locations where these groups have low breastfeeding rates. (It is understood that some women in these target groups may not begin their antenatal care early in pregnancy.) Antenatal classes, especially 'early-bird' ones, should be time-tabled to allow for employment commitments, evenings providing more accessibility.

2.4 ANTENATAL CLASS CONTENT

Antenatal classes on breastfeeding should include information about breastfeeding as the normal way to nourish a baby, practical information on positioning and attaching the baby (preferably modeling this, using dolls), realistic expectations about infant behaviour, and a discussion of any barriers to breastfeeding that the group may perceive. Information about community resources to support breastfeeding should be included.

In nuclear families, the father may be the primary influence on whether the mother continues or abandons breastfeeding. Including fathers, or another relevant family member, in breastfeeding education may be important.

3.0 DELIVERY AND EARLY POSTNATAL ISSUES

3.1 EARLY SKIN-TO-SKIN CONTACT

Skin-to-skin contact between humans has been shown to raise oxytocin levels and enhance bonding.[12] It is believed to facilitate breastfeeding initiation and may influence the continuance of breastfeeding, possibly through raising mother's confidence. Uninterrupted skin-to-skin contact at birth constitutes Step 4 of the Ten Steps to Successful Breastfeeding (see table, below). Providing skin-to-skin contact between mothers and newborns immediately after delivery is both desirable and achievable in the Australian context.[13]

3.2 AVOIDING INTERVENTIONS THAT MAY IMPACT NEGATIVELY ON BREASTFEEDING INITIATION AND THE MOTHER'S CONFIDENCE

Inappropriate interventions include: routine separation of the mother and infant; restriction of the frequency and duration of breastfeeds; supplementation with artificial

baby milks (ABMs) commonly called 'infant formula'; use of feeding bottles and artificial nipples with newborns; lack of understanding by staff of when supplementation is genuinely 'medically necessary'; and availability of substitute milks on the wards..

A further negative factor that mothers continue to report is conflicting advice from health professionals, which they complain confused them.[14, 15] Hospitals which have implemented the Baby-Friendly Hospitals Initiative (see below) have been required to provide accurate and consistent education for staff on breastfeeding, and these institutions strive to limit incidences of conflicting advice.

3.3 THE BABY-FRIENDLY HOSPITAL INITIATIVE

The Baby-Friendly Hospital initiative (BFHI), begun in 1991 by UNICEF with pilot hospitals across a number of countries, is based on the Ten Steps to Successful Breastfeeding. These Ten Steps are:

The Ten Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care 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 half an 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 newborns 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 dummies to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them at discharge from hospital.

Research in a comparable industrialized country, Belarus, across a number of hospitals which either had implemented the BFHI or had not, has demonstrated that those sites which had implemented the Ten Steps (above) had higher breastfeeding prevalence at any age during the first 12 months, compared with the other hospitals. Those hospitals which had not implemented the Ten Steps had higher prevalances of gastroenteritis and atopic eczema in the first 12 months after delivery.[16]

The BFHI in Australia is auspiced by the Australian College of Midwives, Inc. Currently, the program struggles to provide this important service with only a part-time national manager, and assessors give their time to do hospital assessments for only a token remuneration. This is financially difficult for some individuals who are self-employed and put aside better-paid work has to be set aside to take on an assessment. An injection of funds to support the program at a more realistic level for the next three years would enable an increasing number of hospitals to be assessed for the first time, or reassessed when their three years expires.

4.0 POST-CHARGE ISSUES: CRUCIAL TO IMPROVING BREASTFEEDING DURATION.

4.1 STEP 10 OF THE TEN STEPS TO SUCCESSFUL BREASTFEEDING

If breastfeeding is so good, why do so many mothers abandon breastfeeding in the first month, even mothers who had intended to breastfeed for much longer? Reasons include: lack of a knowledgeable support person to provide reassurance at home, not understanding what is normal in a newborn and interpreting normal infant behaviour (such as feeding more frequently than expected or crying if feeds are spaced by maternal choice) as indicating a failed supply, and sore nipples [17] Appropriate social and familial support are needed by many mothers to enable breastfeeding to continue.[18]

Step 10 of the Baby-Friendly Hospital Initiative provides for post-discharge support for breastfeeding mothers and their babies, with the intention of referring her to services that are available seven days a week. In Australia, Step 10 is generally better achieved than in a number of other countries. This is because hospitals that do not themselves provide post-discharge breastfeeding clinics or telephone follow-up are able to refer mothers to community child-health facilities (formerly popularly known as 'baby clinics') and, for after-hours advice, the Australian Breastfeeding Association (ABA) in all States, the ACT and the Northern Territory. This service keeps costs as low as possible as all counsellors are volunteers. As the only Australia-wide 24/7 information and counselling service, the ABA helpline deserves financial support to enable it to continue.

However, facilities for mothers from sections of the population who are less able to reach out for the available support, or to access it effectively, are in need of improvement. These groups have regularly been shown to have lower-than-average breastfeeding rates. These include women who are:

a) Adolescent
b) Functionally illiterate
c) From Indigenous cultures
d) From non-English-speaking (NESB) backgrounds.

For these women, I recommend the following modes of delivery of information and support on breastfeeding.

a) Factual information:[19, 20]

i. Multi-media presentations of information, i.e. not just printed materials
ii. Low-literacy printed materials, set no higher than Grade 5 or 6 levels on the SMOG readability test or other tests with which SMOG correlates.
iii. Culturally-appropriate printed and audio-visual materials, e.g. for Indigenous, NESB and adolescent parents.
iv. Printed breastfeeding information in community languages.

b) One-on-one support:
i. The training of peer counsellors from target groups, such as Indigenous, adolescent, and a variety of NESB groups.
ii. Training of suitable male peer counsellors to discuss breastfeeding man-to-man with the mother's male partner, either antenatally (e.g. while the mother is attending an antenatal class), or post-discharge. I have seen this in South Africa, in Western Cape Province, where La Leche League conducts the training of peer counsellors, including a small number of males.

4.2 MARKETING CODES, AND MONITORING

Artificial feeding was developed in various times and places to save the lives of individual babies who were unable to obtain breastfeeding, but from the mid-19th century it began to develop as an industry, using manufacturing techniques. Manufactured products required a market and through much of the 20th century manufacturers were able to make claims without the restriction of a marketing code. Consequently, mass marketing and questionable marketing practices were identified as a factor in the decline of breastfeeding.[21]

Australia was a signatory to the 1981 International Code of Marketing of Breast Milk Substitutes '(WHO Code') and subsequent World Health Assembly resolutions that apply or extend the WHO Code provisions. The 1992 Marketing in Australia of Infant Formula (MAIF) has applied part of the WHO Code in Australia. One of the weaknesses of the MAIF Agreement is the lack of inclusion of the bottle and teat industry, who distribute products that are also 'within the scope' of the WHO Code. There is also a lack of specific wording covering the retail sector, such as pharmacies. These have been mentioned in APMAIF reports as areas of concern.[22] Extending the scope of the MAIF Agreement to include the retail sector, and setting up a new Agreement for the bottle and teat sector, is clearly necessary. Ideally, since they are major providers of feeding bottles, such an Agreement should include manufacturers of breast pumps.

4.4 INCENTIVES FOR THE ESTABLISHMENT OF WORKPLACE CRECHES

In the mid-1980 there was a beginning of interest in workplace crèches as a means of facilitating the return to work of valued employees after maternity leave and to enable them to continue breastfeeding their infants. This interest has subsequently dropped from sight. Simply providing facilities for pumping and storing breastmilk limits, rather than increases, mothers' choices – and it does not solve the issue of conveniently situated childcare. I recommend a tax incentive to employers who provide:

a) On-site crèches
b) A designated car parking spot for carers who are bringing a baby to the mother for breastfeeding during her break.

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