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GUEST EDITORIAL: BREASTFEEDING AND THE PUBLIC'S HEALTH

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International recommendations advise that women exclusively breastfeed for the first six months and continue to breastfeed until their infants are at least 12 months of age. These recommendations have been endorsed by the Australian National Health and Medical Research Council and included in the *Infant feeding guidelines for health workers* (see page 41), which have been incorporated in their *Dietary guidelines for children and adolescents in Australia*. The good news is that over 80 per cent of Australian women start breastfeeding. However, most stop before their infants reach six months of age.¹ In addition, most women who do breastfeed for six months add other foods and/or breastmilk substitutes to their infant's diet early in life, despite recommendations to the contrary.

This special issue of the *NSW Public Health Bulletin* brings together a number of experts in public health and nutrition and in infant and child feeding. It summarises some of the recent research, policies and programs relating to the public health challenge of promoting and supporting breastfeeding of infants. Articles report on reviews of scientific evidence about the health benefits of breastfeeding for infants in developed countries such as Australia; summarise recent data about breastfeeding practices in the NSW population; organise the fragmented research on determinants of breastfeeding into a coherent conceptual framework; and examine current evidence in systematic reviews concerning the effectiveness of interventions to promote breastfeeding. This issue also describes contemporary interventions in Australian hospitals and in

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public policy that could be expanded to achieve even better results with breastfeeding. Several of the articles summarise, or refer to, recently published reports. The CD included with this issue holds the full pdf versions of these reports to allow easy access by health practitioners.

The term 'breastfeeding' can be used to describe many different patterns of infant feeding. The lack of agreed definitions and consistent use of terms contributes to confusion in interpreting research results, measuring trends in breastfeeding behaviour and tailoring interventions. Internationally and in Australia, steps have been taken to standardise the terminology used by health professionals. In 1991, the World Health Organization proposed a set of definitions of breastfeeding terms to guide their data collection for the Global Data Bank on breastfeeding.² In 2001, these definitions were reviewed and recommended

for use in monitoring breastfeeding in Australia.³ These definitions are presented below. As they are used throughout this special issue, for easy reference the definitions are also presented in Box 1 along with the national indicators for monitoring breastfeeding. The rationale for these definitions, and how they evolved, is described more fully in *Towards a national system for monitoring breastfeeding in Australia: recommendations for population indicators, definitions and next steps* by Webb et al which is included on the attached CD.

An **exclusively breastfed** infant has received only breastmilk from his/her mother or wet nurse, or expressed breastmilk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

BOX 1

RECOMMENDED INDICATORS AND DEFINITIONS FOR MONITORING BREASTFEEDING IN AUSTRALIA

The following indicators and definitions, derived from those developed by the World Health Organization, have been recommended for monitoring breastfeeding in Australia. For more details see the reference below.

Indicators based on mothers' recalled practice among children under four years

1. Percentage ever breastfed
2. Percentage breastfed at each completed month of age to 12 months
3. Median duration of breastfeeding among 'ever breastfed' children

Indicators based on mothers' reported current practice (during previous 24 hours) among infants up to six completed months of age*

4. Percentage exclusively breastfed in the previous 24 hours among infants at each completed month of age up to six completed months
5. Percentage fully breastfed in the previous 24 hours among infants at each completed month of age up to six completed months**
6. Percentage receiving solid foods in the previous 24 hours among infants at each completed month of age up to six completed months
7. Percentage receiving breastmilk substitutes in the previous 24 hours among infants at each completed month of age up to six completed months

Definitions

An **exclusively breastfed** infant has received only breastmilk from his/her mother or wet nurse, or expressed breastmilk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

An **ever breastfed** infant has been put to the breast, if only once, or has received expressed breastmilk, even if he or she has never been put to the breast.

A **fully breastfed** infant receives breastmilk as the main source of nourishment. That is, the infant is exclusively breastfed and receives only breastmilk with no other liquids or solids (except vitamins, mineral supplements, or medicines) OR is **predominantly breastfed** and receives breastmilk and water, water-based drinks, fruit juice, or oral rehydration salts but not breastmilk substitutes or solids. The fully breastfed rate is thus the combined rate of exclusively breastfed and predominantly breastfed.

* up to but not including seven months of age

** *Full breastfeeding* is retained as an indicator to maintain consistency with measurements made in previous National Health Surveys and state computer-assisted telephone interview surveys.

Source: Webb K, Marks G, Lund-Adams M, Rutishauser IHE, Abraham B. *Towards a national system for monitoring breastfeeding in Australia: recommendations for population indicators, definitions and next steps*. Canberra: Australian Food and Nutrition Monitoring Unit, Commonwealth Department of Health and Aged Care; 2001. Available on the CD included with this issue of the *NSW Public Health Bulletin*.

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As stated in the article 'Describing breastfeeding practices in NSW using data from the NSW Child Health Survey 2001' by Hector and Webb in this issue, most women (90 per cent) in NSW start breastfeeding their infants. Although we lack information about the long-term trends in breastfeeding for NSW, we know that in Australia rates of breastfeeding initiation are high, and have remained so in the past decade.¹ However, the duration of breastfeeding is considerably shorter than recommended, and has stayed the same since 1995.¹ We may even have gone backwards with regard to exclusive breastfeeding, because solid foods appear to be added earlier than they were a decade ago.¹ These trends are occurring despite the accumulating scientific evidence that exclusive breastfeeding and breastfeeding for longer periods have many health advantages for women and children (see Allen and Hector, 'Benefits of breastfeeding', in this issue).

Why is it that despite endorsement by the country's highest health council and the promotion efforts of health authorities and non-government organisations, most women who start breastfeeding give up very early? The answer to this question lies in a better understanding of the barriers to breastfeeding. The conceptual framework described by Hector et al in 'Factors affecting breastfeeding practices' in this issue pulls together the many potential determinants of what is a very complex behaviour—a behaviour which is influenced by not only the knowledge, attitudes and skills of the individual mother but also by the extent to which she is supported by a range of institutions, community groups and structures which vary from hospitals and community services, to home and family, the workplace, the community, economic structures and policies, as well as underlying societal norms.

Research is required in a number of areas. We need to find out how long infants should ideally be breastfed on the basis of health outcomes observed in longitudinal studies. This would assure us that the Australian National Health and Medical Research Council recommendations are valid. We also need to clarify the objectives and anticipated benefits of breastfeeding interventions. In order to inform future policy and intervention planning, we need a methodical and consistent approach to research on the broad range

of factors that affect breastfeeding and on the effects of interventions to modify these factors.

Current approaches to the promotion of breastfeeding in Australia have two important characteristics. First, most concentrate on the individual mother, based on the implicit assumption that she operates as an individual decision-maker relatively isolated from the rest of the community (see Hector and King, 'Interventions to encourage and support breastfeeding', in this issue). On this basis, efforts are directed to mothers-to-be and new mothers, with limited acknowledgment that there are many other wider influences on their breastfeeding decisions.

Other interventions address some of the group-level (environmental) determinants of breastfeeding behaviours, but are limited in their scope and coverage in Australia. Thus, many hospitals now encourage rooming-in, do not give discharge packs of supplementary feeding formula (breastmilk substitutes) and encourage early mother–infant contact. So far, three hospitals in NSW have formalised their activities to support breastfeeding by receiving accreditation as Baby Friendly Hospitals (see Heads, 'The Baby Friendly Hospital Initiative: a case study from NSW', in this issue). Australia is a signatory to the World Health Organization Code of Marketing of Breastmilk Substitutes, yet the Code has no authority here and monitoring of compliance is limited (see McVeagh, 'The WHO code of marketing of breastmilk substitutes and subsequent resolutions', in this issue). Non-government organisations such as the Australian Breastfeeding Association, traditionally known for their provision of telephone counselling services and peer support for new mothers, are beginning to move into environmental support strategies such as breastfeeding-friendly facilities in public places and workplace provisions for breastfeeding mothers. The Australian Government Department of Health and Ageing has produced and disseminated resources which support 'balancing breastfeeding and work'.⁴ Systematic implementation and evaluation of workplace strategies has yet to be done in Australia. Edgar, in his recently published book, *The war over work*, describes the emerging family-friendly workplace movement in Australia among large private sector corporations.⁵ Despite the savings to businesses in reduced staff turnover and higher productivity, Edgar believes that the challenges of bringing smaller businesses as well as government and non-government sectors on board with these initiatives are not to be underestimated, given the widespread view that the costs of these initiatives are high, and that family 'issues' are private responsibilities rather than employers' problems.

A second characteristic of current breastfeeding interventions is the lack of coordination of activities. Between 1996 and 2001 the National Breastfeeding Strategy provided a focus for breastfeeding promotion and support at the national level, but there has been no follow-up coordination of the components of this initiative.⁶ The WHO *Global*

strategy for infant and young child feeding recommends the appointment of 'a national breastfeeding coordinator with appropriate authority', and establishment of a 'multisectoral national breastfeeding committee composed of representatives from relevant government departments, nongovernmental organizations, and health professional associations'.⁷ More than a hundred countries have established these coordination mechanisms to ensure a strategic approach to breastfeeding promotion and research. Australia has yet to do so.

Coordination is an issue at the service provision level as well. While the value of breastfeeding support from health professionals is well documented (see Hector and King, 'Interventions to encourage and support breastfeeding', in this issue) and is well established in Australian health care services, there is little coordination between the various providers of this support. For example, prenatal and postnatal counselling and education, hospital policies and procedures, and follow-up support given by child and family health nurses, lactation consultants, general practitioners and other groups are often developed in isolation and with little cross-discipline consultation. Some area health services have established breastfeeding coalitions to address this issue. The NSW Health Breastfeeding Project (described by Macoun in 'The NSW Health Breastfeeding Project' in this issue) is one approach taken by a broad group of service providers and other stakeholders to work out how best to coordinate their activities.

Evaluations of the effects of some of these interventions are described in the article by Hector and King, 'Interventions to encourage and support breastfeeding'. Whilst we now have information about the effectiveness of some of these approaches, the overall evidence base is small and suffers from the same two main characteristics described above; ie, studies are limited mostly to interventions that target individual level influences on breastfeeding, and the evaluations are not conducted in a coordinated way, preventing the identification of independent and cumulative effects of various types and levels of interventions.

In our view the next steps to improve breastfeeding practices in Australia, in addition to the research outlined above, should include the use of the information available about intervention effectiveness to improve mother-directed services; the design, implementation and evaluation of group and societal level interventions; and greater coordination of activities within and across these levels. Such coordination will be necessary at the regional/area level but will also involve efforts at the state and federal level to influence the broader community norms and expectations around breastfeeding and parenting.

Of course, once such efforts are underway it will be important to know whether they are improving breastfeeding practices at the population level. We now have agreed indicators for monitoring breastfeeding in Australia (see Box 1) and it is critical that agencies that collect health-related data for local areas, states and the Australian Government adopt and report on these indicators. This will enable us to assess whether our efforts are leading to a closer alignment of population breastfeeding practices with recommended infant feeding practices.

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