

## The health system

### Overview

- 6.1 The health system has a significant impact on the decisions of women to initiate and continue breastfeeding. From the process of giving birth, the follow-up health services available to the new mother and the advice provided, there are several critical areas where change is required. Antenatal education tends to have a focus on the birth, with breastfeeding often being a minor topic. As discussed in chapter 2, breastfeeding education can also be variable.
- 6.2 Reports such as the National Institute of Clinical Studies *Evidence Practice Gaps Report* and the National Health & Medical Research Council's *Dietary Guidelines for Children and Adolescents in Australia* present evidence of the gap between research recommendations and professional health practice regarding breastfeeding promotion and support.<sup>1</sup> A recurrent theme in submissions and oral evidence is that the inconsistency of advice from health professionals contributes greatly to the difficulties that women may experience with breastfeeding.
- 6.3 This chapter examines the effect of the health system on the breastfeeding relationship between a mother and her baby. The impact of the birth, advice given in the early days after birth, early

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1 Government of Western Australia, sub 475, p 8.

discharge from hospital and the ongoing role of health professionals are examined. The chapter also looks at the Baby Friendly Hospital Initiative.

## The birth

- 6.4 The birth process is an integral component of the journey to successful breastfeeding. For many mothers the process of birth can be where much of the focus is directed, with antenatal classes, information on birth choices and the model of care clamouring for her attention.<sup>2</sup> The period after the birth is seen to be in the distant future.

Before falling pregnant and during my pregnancy I was amazed at the avalanche of information relating to the act of birth in a technical sense and the almost 'afterthought' superficial information given about the presence of the baby in life from that point onwards, particularly in relation to breastfeeding.<sup>3</sup>

- 6.5 Most births in Australia occur in hospitals, either in conventional labour-ward settings or in hospital birth centres. In 2004 there were 246,012 women who gave birth in hospitals (97.3 per cent) and 5,079 in birth centres (2.0 per cent). Planned homebirths and other births, such as those occurring unexpectedly before arrival in hospital or in other settings, are the two categories accounting for the smallest proportion of women who gave birth (1,749 women, 0.7 per cent).<sup>4</sup>
- 6.6 Mothers are having shorter postnatal stays in hospital. This is reflected by the higher proportion of mothers who were discharged less than five days after giving birth. In 2004, 11.2 per cent of mothers were discharged less than two days after giving birth, and 60.5 per cent of mothers were discharged between two and four days after giving birth. This compares with 4.3 per cent and 30.8 per cent respectively, in 1995.<sup>5</sup>

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2 Moore E, sub 102, p 2.

3 Van Harskamp K, sub 353, p 1.

4 Laws PJ, Grayson N & Sullivan EA 2006. *Australia's mothers and babies 2004. Perinatal statistics series no. 18.* AIHW cat. no. PER 34. Sydney: AIHW National Perinatal Statistics Unit.

5 Laws PJ, Grayson N & Sullivan EA 2006. *Australia's mothers and babies 2004. Perinatal statistics series no. 18* AIHW cat. no. PER 34. Sydney: AIHW National Perinatal Statistics Unit.

- 6.7 The rate of caesarean sections continues to increase with 29.4 per cent of mothers having caesarean section deliveries in 2004, compared with 19.3 per cent in 1995. Over the same period, instrumental deliveries have remained stable at around 11 per cent. Caesarean section rates were higher among older mothers and those who gave birth in private hospitals.
- 6.8 With most babies being born in hospital, there is a clear opportunity for hospital personnel to promote the initiation of breastfeeding. The first days and weeks of a new baby's life are extremely important in the establishment of breastfeeding. Although breastfeeding is a natural process, and both mother and baby have instincts that support breastfeeding, there are many skills and adaptations that mothers and babies need to achieve in their early days together. It is known that many maternity hospital routines, including separation of mother and baby, using complementary feeds, inconsistent advice, and medical intervention during birth can lead to poor breastfeeding outcomes.<sup>6</sup> Health professionals can have a significant impact on the success of the developing breastfeeding relationship.

### Increasing medicalisation of birth

- 6.9 Pregnancy, birth and breastfeeding are natural processes. In Australia, however, childbirth and the care of the mother and newborn are almost exclusively the responsibility of hospitals and doctors.<sup>7</sup> The events and experiences in pregnancy and birth have significant effects on the mother and baby in the postnatal period, and can impact on the ability of the mother and baby to establish breastfeeding.<sup>8</sup>
- 6.10 Interventions in childbirth such as the use of drugs may result in prolonged or more painful labour, resulting in exhausted mothers and babies and potential difficulty breastfeeding.<sup>9</sup> These forms of intervention are also being widely used during the labours and births of healthy, low risk women, at rates which indicate that current models of care do not support women's ability to give birth normally.<sup>10</sup> Studies show that some of the opioids used in epidurals,

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6 The Maternity Coalition, sub 190, p 3.

7 Austin R, sub 49, p 1; Price L, sub 356, p 1.

8 The Maternity Coalition, sub 190, p 5, Field I, sub 24, p 1.

9 Asphyxia, sub 165, p 2; Jones L, sub 267, p 1.

10 Smethurst J, sub 239, p 2.

such as fentanyl, affect the new born infant and its ability to establish breastfeeding. Greater after birth support for breastfeeding is likely to be required.<sup>11</sup> Mothers may not always be made aware of the potential effect of epidurals on their baby and ability to feed after birth.<sup>12</sup>

## Baby Friendly Hospital Initiative

### History

- 6.11 The Baby Friendly Hospital Initiative (BFHI) is a program designed to protect, promote and support breastfeeding in maternity hospitals and facilities supporting breastfeeding mothers and their infants. It was launched by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) in 1991 and was intended to increase the initiation and duration of exclusive breastfeeding world-wide by promoting breastfeeding as the biological norm. At that time, many specific hospital practices were found to be harmful to the initiation and establishment of successful breastfeeding.
- 6.12 The 10 Steps to Successful Breastfeeding were developed by the WHO and UNICEF. The 10 Steps are statements and measurable standards against which a maternity hospital or facility that provides care to breastfeeding mothers and their infants can be assessed.

**Box 6.1 The 10 steps to successful breastfeeding are:**

- Have a written breastfeeding policy that is routinely communicated to all health care staff;
- Train all health care staff in skills necessary to implement this policy;
- Inform all pregnant women about the benefits and management of breastfeeding;
- Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognise when their babies are ready to breastfeed, offering help if needed;
- Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants;
- Give newborn infants no food or drink other than breast milk, unless *medically* indicated;

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11 Curtis P, sub 204, p 2.

12 Dixon G, sub 30, p 1; Middlebrook K, sub 58, p 1; Larner S, sub 117, p 3.

- Practise rooming-in: allow mothers and infants to remain together 24 hours a day;
- Encourage breastfeeding on demand;
- Give no artificial teats or dummies to breastfeeding infants; and
- Foster the establishment of breastfeeding support and refer mothers on discharge from the facility.

*Source: Australian College of Midwives, Baby Friendly Health Initiative, sub 185, p 8.*

## BFHI in Australia

6.13 The Baby Friendly Hospital Initiative was launched in Australia in 1991. During these early years the UNICEF Committee in Australia was overseeing the Initiative. In 1995 the Australian College of Midwives, a not-for-profit organisation, assumed this responsibility. The BFHI has run on a self-funding basis, with financial support from the Australian College of Midwives. The Commonwealth Government also provided financial assistance from 2002 to 2004. However, there is currently no independent funding for this initiative.

6.14 In Australia there are 59 hospitals which are accredited as being Baby Friendly out of approximately 500 hospitals providing maternity care.<sup>13</sup>

Table 6.1 Current Baby Friendly accredited hospitals in Australia

State/Territory	Number of accredited services
Australian Capital Territory	2
New South Wales	3
Northern Territory	3
Queensland	8
South Australia	11
Tasmania	7
Victoria	23
Western Australia	2

*Source: Baby Friendly Health Initiative website, viewed on 7 August 2007 at [http://www.bfhi.org.au/text/bfhi\\_hospitals.html](http://www.bfhi.org.au/text/bfhi_hospitals.html).*

6.15 The Baby Friendly Community Health Centre initiative is being developed and extended from the Baby Friendly Hospital Initiative to form the Baby Friendly Health Initiative. The aim is to continue to

13 Australian College of Midwives, Baby Friendly Health Initiative, sub 185, p 9; Australian Breastfeeding Association, sub 306, p 24; Baby Friendly Hospital Initiative, Queensland, sub 360, p 12; Vernon B, Australian College of Midwives, transcript, 7 May 2007, p 21.

increase the initiation of breastfeeding through hospital accreditation, but also to focus on extending the duration rate of breastfeeding through accrediting all relevant non-hospital services that care for mothers of infants.

- 6.16 The Baby Friendly Health Initiative aims to take up where the Baby Friendly Hospital Initiative finishes, at discharge from hospital. Again there will be written policies communicated to all staff. This, along with education of staff, will allow for education of women and their support people so informed choices can be made about duration of breastfeeding and appropriate introduction of other foods.<sup>14</sup>

Baby Friendly accreditation is a quality improvement measure. Becoming accredited demonstrates that a hospital offers the higher standard of care to all mothers and babies. Facilities that meet the required standard, can apply to be assessed and accredited as Baby Friendly. Attaining accreditation reflects the commitment of hospital staff. To achieve the standard, midwives and other carers obtain an increased knowledge of infant feeding, greater skills and commitment to facilitate breastfeeding. This engenders an environment that encourages best practice, improving the health of new generations.<sup>15</sup>

- 6.17 There is wide ranging support for the implementation of the Baby Friendly Hospital Initiative in more hospitals in Australia.<sup>16</sup>
- 6.18 There has been criticism that being accredited to be baby friendly can involve a cost to the hospital involved, both financial and in terms of availability of staff.<sup>17</sup> However, Logan Hospital in Queensland was able to implement BFHI for a relatively low overall cost of approximately \$15,000.<sup>18</sup> Additionally the terminology does not mean

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14 Australian College of Midwives, Baby Friendly Health Initiative, sub 185, p 9.

15 NSW Baby Friendly Health Initiative, sub 339, p 3.

16 For example see Hunter New England Area Health Service, sub 22, p 1; Cheers A, sub 29, p 6; Scurry S, sub 51, p 1; McIntyre E, sub 67, p 4; Thorley V, sub 97, p 2; Gaskill K, sub 119, p 2; Day S, sub 157, p 2; Tyler C, sub 173, p 1; Bravo A, sub 179, p 1; Lording R, sub 186, p 12; The Maternity Coalition, sub 190, p 4; Oddy W, Telethon Institute for Child Health Research, sub 216, pp 26-28; Australian Nursing Foundation, sub 271, p 5; South Australian Government, sub 274, p 20; Tresillan, sub 280, p 4; Dietitians, King Edward Memorial Hospital, sub 282, p 4; Moore J, sub 295, p 1; Australian Breastfeeding Association, sub 306, p 24; Queensland Health, sub 307, p 10; Wright W, sub 320, p 1; Northern Territory Department of Community Services, sub 334, pp 4-5; Thomme F, sub 430, p 1; Government of Western Australia, sub 475, p 10; NSW Health, sub 479, p 1.

17 Schmidt P, transcript, 18 April 2007, p 35.

18 Brittain H, transcript, 18 April 2007, p 25; Logan Hospital, sub 351, p 2.

that hospitals which are not accredited are not 'baby-friendly'. Hospitals which have not been accredited are still supporting and promoting breastfeeding. However, they are not required to follow the 10 steps.

- 6.19 The committee considers that the Baby Friendly Hospital Initiative is a step in the right direction towards eliminating hospital practices that might interfere with the successful initiation and promotion of breastfeeding. The BFHI creates an environment where breastfeeding is central. For this reason, the committee recognises the need to support the process of accreditation to Baby Friendly status to take place and would like to encourage all public hospitals to become baby friendly.

#### **Recommendation 14**

- 6.20 **That the Department of Health and Ageing fund the Australian College of Midwives to run the Baby Friendly Hospital Initiative in Australia, to facilitate the accreditation of all maternity hospitals.**

#### **Recommendation 15**

- 6.21 **That the Department of Health and Ageing work with the Australian Council on Healthcare Standards (and/or equivalent accreditation organisation) towards including Baby Friendly Hospital status as part of the accreditation process.**

#### **Recommendation 16**

- 6.22 **That the Commonwealth Government, when negotiating future Australian Health Care Agreements, require state and territory governments to report on the number of maternity wards in public hospitals that have been accredited under the Baby Friendly Hospital Initiative.**

## The health professional advice merry go round

...this mother was then exposed to the merry go round of health professionals all giving their advice about feeding, the weight of the baby, etc.<sup>19</sup>

- 6.23 One of the clear themes that the committee has observed is that a mother seeking support with breastfeeding is given a wide range of seemingly different advice. All health professionals have a responsibility to promote, protect and support breastfeeding, consistent with established national and international policies and guidelines.<sup>20</sup> Many mothers stressed that after the arrival of a new baby, it was very difficult to process and deal with the range of feeding advice presented.<sup>21</sup>

I left the hospital feeling very confused and rather alone in this brand new world of babies and breastfeeding.<sup>22</sup>

- 6.24 Studies report that women are more likely to begin to breastfeed and breastfeed for longer if the health professionals they come in contact with support and encourage this endeavour. Results of trials of interventions to increase breastfeeding initiation rates, or breastfeeding rates at varying times after the birth also indicate that primary health care professionals can have a positive effect on breastfeeding initiation and duration.<sup>23</sup>
- 6.25 Provision of clear, concise and consistent breastfeeding advice, intensive support, promotion of confidence in the ability to breastfeed, and positive reinforcement that there is sufficient milk for the baby to thrive in the first few weeks after birth is likely to increase duration of breastfeeding among women.<sup>24</sup>

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19 McDonald, R, sub 203, p 4.

20 Government of Western Australia, sub 475, p 1.

21 Wallis J, sub 1, p 1; McDonald R, sub 203; BellyBelly.com.au, sub 441; Gray N, sub 10; Brown R, sub 92; Brook B, sub 236; Taylor K, sub 443; Simpson C, sub 16; Grove G, sub 103; Mathewson S, sub 111; Bell C, sub 116; Hayes J, sub 177; The Maternity Coalition Inc, sub 190; Clancy C, sub 195; Fuller R, sub 228; name withheld, sub 232; Thorp W, sub 28, p 1; Vane C, sub 36, p 1; Burns N, sub 81, p 1; Kelly K, sub 89, p 1; Perris H, sub 129, pp 2-3; Cassels S, sub 131, p 2; Nicholls A, sub 161, p 2; Peirce V, sub 198, p 2; Fleetwood R, sub 201, p 2; Green C, sub 354, p 4; Janssen C, sub 378, p 1; Tonkin B, sub 404, p 1; name withheld, sub 408, p 1; name withheld, sub 412, p 1; Mercer S, sub 455, p 1; Hopkinson K, sub 458, p 1; Roberts J, sub 469, p 1.

22 Name withheld, sub 410, p 1.

23 Brodribb W, sub 312, p 3.

24 Key Centre for Women's Health, sub 294, p 11.



There has to be recognition of the pressures experienced by the mothers who are trying to cope with a multitude of views, attitudes and suggestions is important. All health professionals involved in the process must deliver as much as possible a consistent message.<sup>25</sup>

6.26 Midwives have varying amounts of education on breastfeeding. The NSW BFHI group noted that many healthcare professionals are themselves completely unaware that the health and developmental impact of breastfeeding continues for years after breastfeeding rather than months or weeks.<sup>26</sup> GPs and other health professionals need information on the existence and availability of lactation assistance services, so that women in need can be referred for specialised assistance.<sup>27</sup>

6.27 Mothers noted that some health professionals used emotive language when they were responding to a mother's feeding difficulties.<sup>28</sup> Also there were situations where they felt that the health professional's response made them feel as though they had been mistreating their baby.

When I did meet the lactation consultant she was useful but destroyed my confidence by saying 'If you keep feeding your baby like that she'll starve.'<sup>29</sup>

6.28 Health systems are recognising the need for consistent advice. The Maternal and Child Health line in Victoria has developed its own set of clinical guidelines for nurses to use so they do not give out conflicting information.<sup>30</sup> Logan Hospital on the outskirts of Brisbane noted that it was critical that all staff that provided support and advice for breastfeeding women were up to date with the latest breastfeeding evidence, which ensured that staff provided consistent evidence based breastfeeding information to women.<sup>31</sup>

6.29 There is often a lack of timely support for breastfeeding difficulties. The window of opportunity for providing assistance for mothers who are having difficulties with breastfeeding is brief and the problems

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25 Chelliah L, sub 82, p 4.

26 Harris E, sub 194, p 2; NSW Baby Friendly Health Initiative, sub 339, p 12.

27 Gill P, sub 123, p 2.

28 Christopher M, sub 402, p 1; Every M, sub 462, p 1

29 Ayre L, sub 91, p 1.

30 Community statements, transcript, 7 June 2007, p 70.

31 Logan Hospital, sub 351, p 2.

may be too complex to be solved over the phone.<sup>32</sup> Mothers experiencing problems at this level may need immediate one-on-one support from a professional. Provision of out of hours support, support during holiday times and having a clear support structure to deal with breastfeeding problems would make a significant difference to many women's breastfeeding experience.

Obtaining an appointment for breastfeeding assistance in a week's time does nothing to address the immediate problem of being unable to latch a hungry infant to an engorged and bleeding breast.<sup>33</sup>

- 6.30 The committee considers the Royal Women's Hospital's Breastfeeding Education and Support Service (BESS) to be a highly worthwhile program. It caters for breastfeeding mothers and babies up to three months without referrals and will see mothers no matter where they gave birth. It is staffed by IBCLCs and offers both a day admission and short visit service. It also offers telephone consultations with the duty worker and in the six months from September 2006 to February 2007 admitted 1006 mothers and babies to the day stay program.<sup>34</sup> The committee considers there is obviously a clear need for this service and encourages other hospitals to offer an equivalent service.

## General Practitioners

- 6.31 Many women consult a general practitioner (GP) either in the prenatal or postnatal period and it is clear that the GP can have a significant influence on a woman's decision to breastfeed. The GP can also advise and support women in the post-natal period with any problems she may be experiencing or can refer the woman on to a lactation consultant. The training of GPs in breastfeeding practice contributes to improving breastfeeding outcomes,<sup>35</sup> particularly in regional and remote areas where the GP may be the sole source of health advice.
- 6.32 The Royal Australian College of General Practice's Breastfeeding Policy recommends that GPs support and encourage exclusive breastfeeding for the first six months of life, assist new mothers to establish breastfeeding in the early postpartum period, have skills in

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32 Community statements, transcript, 7 June 2007, p 70; Bellinger J, sub 149, p 1; Proudfoot C, sub 376, p 1; Rollason E, sub 431, p 1.

33 Stevens R, sub 248, p 1.

34 The Royal Women's Hospital, sub 244, p 2.

35 Government of South Australia, sub 274, p 12.

the diagnosis and management of common breastfeeding problems and know when and where to refer more unusual difficulties.<sup>36</sup>

- 6.33 There is recognition that GPs may not be the best people to provide breastfeeding advice.<sup>37</sup> Doctors usually receive only one or two hours of breastfeeding education during their training. One doctor reported getting no breastfeeding education at all.<sup>38</sup> A recent study of the role of doctors in promoting breastfeeding found that medical schools in Australia with current graduates did include breastfeeding instruction within the curriculum. However, the method and length of instruction and subject areas covered varied considerably.<sup>39</sup>

## Infant weight and growth charts

- 6.34 Growth charts are widely used as a clinical and research tool to assess nutritional status and the general health and well-being of infants, children, and adolescents.<sup>40</sup> They are used as the definitive tool to decide if an infant is growing and developing in a suitable manner and to decide if they are feeding at an appropriate level.
- 6.35 There is a significant level of concern from breastfeeding mothers about the current growth charts being used in Australia and how accurate the charts are for tracking the growth of exclusively breastfed infants. The concern stems from the fact that often exclusively breastfed infants do not put on weight at the same rate or level as formula fed infants. When exclusively breastfed babies' weight are plotted on these growth charts, the result may indicate that the baby is 'underweight' when in fact the weight gain is perfectly healthy for an exclusively breastfed baby. A mother may be advised to complementary feed with infant formula so as to correct this perceived 'underweight' status, which can interfere with breastfeeding. The Department of Human Services in Victoria notes for the Centers for Disease Control (CDC) 2000 charts used in Victoria:

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36 Brodribb W, sub 312, p 6.

37 Dawson P, sub 98, p 2; Linkson M, sub 235, p 5; Eales S, sub 249, p 2.

38 Walsh A, sub 20, p 1.

39 Brodribb W, sub 312, p 13.

40 Kuczumski R et al, 'CDC growth charts: United States' Advance Data, no 314, 4 December 2000, viewed on 30 July 2007 at <http://www.cdc.gov/nchs/data/ad/ad314.pdf>.

The revised charts are derived from a mix of infants who were exclusively breast fed and formula fed. Exclusively breast fed babies may grow at a slightly lower rate than the reference, particularly in the first 4-6 months of age. However if the charts are used as a reference (and not as a standard that must be met) the difference is not important.<sup>41</sup>

- 6.36 There has been strong support for the new WHO growth charts to be implemented in Australia.<sup>42</sup>

## Development of Growth Charts

- 6.37 The World Health Organisation (WHO) has had an ongoing interest in the development of standardised growth charts since 1951 when the Joint Food and Agriculture Organisation (FAO)/WHO Expert Committee on Nutrition first recognised this was desirable.<sup>43</sup> In developing the reference values to be used in growth charts, data from the UK, the US, Sweden, France, the Netherlands and Mexico were considered. The final growth chart values were based exclusively on data from the US National Centre for Health Statistics (NCHS) national survey.<sup>44</sup> However, the dataset for infants (birth to 23 months) was not based on the NCHS national survey, but on other US data collected from the Fels Longitudinal Study in Yellow Springs Ohio, which surveyed infants from this middle-income American town between 1920 and 1975. The WHO considered that these growth

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41 Department of Human Services, Victoria, 'Information about the growth charts: Key questions around introduction of the new and revised growth charts for Victorian children (CDC 2000 growth charts)', viewed on 30 July 2007 at [http://www.health.vic.gov.au/childhealthrecord/growth\\_details/qanda.htm](http://www.health.vic.gov.au/childhealthrecord/growth_details/qanda.htm).

42 Phillips S, sub 7, p 2; Deagan T, sub 21, p 2; Cheers A, sub 29, p 5; Jeffery L, sub 34, p 6; Pile C, sub 38, p 6; Donovan P, sub 52, p 1; Hall T, sub 70, pp 6-8; Binns C, sub 86, p 7; Cassar S, sub 113, p 3; Batterham N, sub 118, p 1; Francisco I, sub 125, p 6; Hay L, sub 153, p 8; Buckley M, sub 160, p 6; Public Health Association of Australia Inc, sub 181, pp 7-10; Oei E, sub 191, p 1; Clancy C, sub 195, p 1; Ellis P, sub 197, p 2; Australian Breastfeeding Association (Queensland Branch), sub 207, p 4; Cox E, sub 224, p 3; Bethel S, sub 225, p 13; Eldridge S, sub 214, p 9; Australian Breastfeeding Association (NSW Branch), sub 276, p 11; Stephenson C, sub 278, p 2; Matthews K, sub 287, p 1; Alexander M, sub 289, p 6; Mitchell P, sub 311, p 2; Hogan M, sub 329, p2; Wilson M, sub 336, p 4; Courtwood L, sub 338, p 1; NSW Baby Friendly Health Initiative, sub 339, p 14; Lenne S, sub 362, p 3; Government of Tasmania, sub 364, p 4.

43 World Health Organisation (WHO), A growth chart for international use in maternal and child health care: guidelines for primary health care personnel Geneva, WHO, 1978, p 11.

44 WHO A growth chart for international use in maternal and child health care: guidelines for primary health care personnel, p. 15.

references would be an 'interim' measure and that countries 'might eventually develop local reference standards.'<sup>45</sup>

- 6.38 The model growth chart with reference values for height and weight plotted against age, for use for infants and children up to five years of age, was subsequently published by the WHO in 1978 as *A growth chart for international use in maternal and child health care*.
- 6.39 The NCHS growth reference charts were recommended for use in Australia by the National Health and Medical Research Council (NHMRC) from 1984, and have subsequently been used widely around the world.<sup>46</sup> In 2000 the CDC further updated the NCHS growth charts based on more recent datasets from the National Health and Nutrition Examination Survey (NHANES).<sup>47</sup> This revision also replaced the Fels dataset for measuring infant growth with data derived from the NHANES which included more breastfed infants.<sup>48</sup> These revised charts are sometimes referred to as the CDC 2000 growth charts.

## Development of new growth charts

- 6.40 After the adoption of the NCHS growth reference charts in the late 1970s, concerns were raised over the reliability of the charts. Most of the concerns centred on the quality of the Fels dataset which was used as the basis for the infant growth charts. The major concern was that those infants surveyed for the Fels Longitudinal Study between 1929 and 1975 were from an ethnically homogenous group where breastfeeding was not the norm and formula feeding predominated.<sup>49</sup> In addition, measurements in the Fels study were based on three month intervals that did not easily translate to monthly growth

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45 WHO, *A growth chart for international use in maternal and child health care: guidelines for primary health care personnel*, p. 15.

46 National Health & Medical Research Council, *Dietary Guidelines for Children and Adolescents in Australia* (2003), p 246.

47 Centers for Disease Control, 'CDC Growth Charts: United States', viewed on 30 July 2007 at <http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/background.htm>.

48 Kuczumarski RJ et al, 'CDC growth charts: United States' Advance Data, no 314, 4 December 2000, viewed on 30 July 2007 at <http://www.cdc.gov/nchs/data/ad/ad314.pdf>.

49 Kuczumarski RJ et al, 'CDC growth charts: United States' Advance Data, no 314, 4 December 2000, viewed on 30 July 2007 at <http://www.cdc.gov/nchs/data/ad/ad314.pdf>.

points. Other concerns included sample size, length height disjunction, and outdated curve-fitting procedures.<sup>50</sup>

- 6.41 As a result of these concerns in 1993, the WHO established a working group to develop new international standards based on the growth of infants that were breastfed, as recommended by WHO. The WHO Child Growth Standards for infants and young children were released in April 2006. The new standards are based on the breastfed child as the norm for growth and development.<sup>51</sup> The WHO expects these new standards to be adopted worldwide by 2010.

## Australian use

- 6.42 Currently the NHMRC recommends the revised CDC 2000 growth charts for use in clinical practice.<sup>52</sup> Although other growth reference charts could have been adopted (such as from the Netherlands or the UK) the NHMRC viewed these growth charts as being 'the most accessible' and noted the closer resemblance with the US in terms of levels of overweight and obesity.<sup>53</sup> However, the NHMRC also argued that Australia could consider using the international growth reference charts being developed by WHO when they become available.<sup>54</sup> It has also argued that Australia should develop its own growth charts.<sup>55</sup>
- 6.43 Versions of the NCHS/CDC 2000 charts have been used in Australia since 1984.<sup>56</sup> However, adoption of the growth charts has not been uniform across jurisdictions. According to the ABA both the original NCHS charts and the CDC 2000 revision are in use in different jurisdictions.<sup>57</sup> Victoria, the first state to implement the NHMRC

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50 National Health & Medical Research Council, *Dietary Guidelines for Children and Adolescents in Australia* (2003), p 246.

51 The WHO Child Growth Standards, viewed on 30 July 2007 at <http://www.who.int/childgrowth/en/>.

52 NHMRC, *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents*, Canberra, NHMRC, 2003, p. 15.

53 NHMRC, *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents*, p 13.

54. NHMRC, *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents*, p 15.

55. NHMRC, *Clinical Practice Guidelines for the Management of Overweight and Obesity in Children and Adolescents*, p 15.

56. National Health & Medical Research Council, *Dietary Guidelines for Children and Adolescents in Australia* (2003), p 246.

57. ABA, 'World Health Organization (WHO) International Child Growth Standards, 2006', viewed on 30 July 2007 at <http://www.breastfeeding.asn.au/bfinfo/whochart.html>.

recommendation to adopt the CDC 2000 growth charts, only adopted the updated growth charts in 2005.<sup>58</sup>

## Issues

- 6.44 The new WHO growth charts are based on a more representative cohort of infants than were used in the original 1978 charts, and include more infants that were exclusively breastfed. The new charts provide an important assessment tool for monitoring infant growth rates in a clinical setting. Women who breastfeed are sometimes concerned that their breastfed infant may be receiving insufficient nutrition if their weight falls below the optimum growth rate, and may seek to supplement breastfeeding with infant formula. By including a larger cohort of breastfed infants in the growth charts a more accurate picture of optimum growth rates for how these infants should grow can be provided. This in turn may reduce maternal concerns and encourage more women to maintain breastfeeding for longer.
- 6.45 The new growth charts differ from the previous versions in both the populations used and the methodology employed to construct the growth curves. According to a WHO background article the new standards indicate how a child *should* grow under optimum conditions rather than just describing how they grow (as the old reference charts did).<sup>59</sup> Significantly, WHO also admits that the new standards for breastfed infants will result in 'a substantial increase in rates of underweight during the first half of infancy and a decrease thereafter.'<sup>60</sup>
- 6.46 This effect was also observed by Binns and Lee in a recent letter to *The Lancet* where they expressed concern that the 'real purpose' of promoting breastfeeding in the first six months may have been 'lost' in the development of the new growth charts. They note that the new growth references for the first six months of life are 'heavier than

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58. Department of Human Services, Victoria, 'Information about the growth charts: Key questions around introduction of the new and revised growth charts for Victorian children (CDC 2000 growth charts)', viewed on 30 July 2007 at [http://www.health.vic.gov.au/childhealthrecord/growth\\_details/qanda.htm](http://www.health.vic.gov.au/childhealthrecord/growth_details/qanda.htm).

59. National Health & Medical Research Council, *Dietary Guidelines for Children and Adolescents in Australia* (2003), p 246.

60. WHO, WHO child growth standards: length/height-for-age, weight-for-age, weight-for-length, weight-for height and body mass index-for-age: methods and development, Geneva, 2006, viewed on 30 July 2007 at [http://www.who.int/childgrowth/standards/Technical\\_report.pdf](http://www.who.int/childgrowth/standards/Technical_report.pdf), p xix.

those produced by the US National Centre for Health Statistics'.<sup>61</sup> They further note that the sample population used by the WHO in the Multicentre Growth Reference Study is 'highly selected for the factors likely to promote growth in breast fed infants', and that of those initially surveyed for the MGRS, less than ten per cent were included in the final results.<sup>62</sup> The new charts thus reflect 'maximum growth rates' for breastfed infants under 'optimum conditions', rather than growth rates that can be 'realistically achieved' in the first six months.

6.47 The new WHO growth standards have not been endorsed by the NHMRC. It remains to be seen if and when the new standards are adopted in Australian jurisdictions. However, the inconsistent adoption of the NHCS and CDC 2000 growth charts in the past, may indicate that the adoption of the new WHO standards may not be uniform across jurisdictions.

6.48 The committee considers that growth charts are one area that could have a significant effect upon a breastfeeding relationship. Health professionals need to be careful to emphasise to mothers that the growth charts present a reference rather than a standard that have to be achieved.

6.49 Although the new WHO growth standards have been released, the committee considers it premature to make a recommendation towards their adoption by all states and territories without further detailed consideration by health professionals. At this point, the committee recommends that a single standard growth chart be used nationally.

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### **Recommendation 17**

6.50 **That the Minister for Health and Ageing, in consultation with state and territory health ministers, decide on a standard infant growth chart to be used in all states and territories.**

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61 Binns C, Lee M, 'Will the new WHO growth references do more harm than good?' *The Lancet*, Vol. 368, 25 November 2006, p 1869.

62 Binns C, Lee M, 'Will the new WHO growth references do more harm than good?' *The Lancet*, Vol. 368, 25 November 2006, p 1868 -1869.



## Continuity of care

- 6.51 Continuity of care describes the situation of a midwife having responsibility for the care of a caseload of women and following individual women through their pregnancy, birth and the postnatal period to six weeks. Continuity of care and of carers is now accepted in Australia as best practice for all pregnant women.<sup>63</sup>
- 6.52 Some advantages of providing continuity of care are that the woman and her partner are able to develop a relationship of trust with the midwife and the midwife is able to refer the woman to obstetric care if complications arise.<sup>64</sup> A noteworthy advantage is that childbirth free from stress sets the stage for optimal breastfeeding.<sup>65</sup>
- 6.53 This model of care has numerous health benefits, one of which is that it enables education of women throughout the childbirth continuum about the benefits of breastfeeding, and provides timely support to women in the first four to six weeks of their parenting for breastfeeding. This is likely to have an effect on the rate of successful breastfeeding. Currently in Australia less than five per cent of women have access to this model of care, mostly in capital cities.<sup>66</sup>
- 6.54 Continuity of care enables the mother to have consistent advice on breastfeeding in a supportive environment, at the time when it is needed and it also ensures there are less chances of medical intervention which may have an impact on the initiation and duration of breastfeeding.<sup>67</sup>
- 6.55 The committee is highly supportive of the continuity of care model, particularly for women who live outside urban areas. The committee would like to see more women able to access this model of care and encourage health systems to consider the benefits that are available through such a model.

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63 Ministerial Council on Drug Strategy, *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn* (2006), p 4.

64 Conroy S, sub 407, p 1.

65 Flora K, sub 256, p 1.

66 Australian College of Midwives, *Baby Friendly Health Initiative*, sub 185, p 10.

67 Newman P, sub 66, p 1; Brycesson S, sub 96, p 3; Thorp K, sub 101, p 2; Player M, sub 290, p 3.

## Lactation Consultants

- 6.56 International Board Certified Lactation Consultants (IBCLC) are specialists in the management of breastfeeding and lactation issues and are important members of the healthcare team. IBCLCs work with women and their families from pregnancy, through the birth period and beyond in the community. IBCLCs work in the public and private health system as well as in the community and are the only professional body of health professionals who specialise in breastfeeding and human lactation.<sup>68</sup> To maintain the IBCLC qualification they must show evidence of continuing education and research. Every ten years they must re-sit the international exam.<sup>69</sup>
- 6.57 Hospitals may have lactation consultants on staff. Their services may be available by appointment or through clinics. Often these are oversubscribed and women may have a wait of several days or even weeks before they can be seen.<sup>70</sup> Private lactation consultants are available; however, women who are not covered by health insurance usually cannot afford the services of a private lactation consultant and not all health funds provide coverage for private lactation consultants. There is support for lactation consultants to be more available for women who need this specialised assistance.<sup>71</sup>
- 6.58 The committee considers that this is an area of immediate need, where if a mother was able to seek the assistance of an expert such as an IBCLC, who could respond in a timely manner and with up-to-date advice, and with only a minor cost, then more women may be able to gain the expertise needed to persevere with breastfeeding.<sup>72</sup>

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### Recommendation 18

- 6.59 **That the Minister for Health and Ageing provide Medicare provider/registration numbers to International Board Certified Lactation Consultants (IBCLC) as allied health professionals.**

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68 Australian Lactation Consultants Association, sub 4, p 1.

69 NSW Baby Friendly Health Initiative, sub 339, pp13-14.

70 McCulloch M, Sub 2, p 1; Revie S, sub 26, p 2; Drew A, sub 95, p 1; name withheld, sub 399, p 1; Jackson L, sub 400, p 1.

71 Smith J, sub 132, p 1; Cooke J, sub 152, p 1; Garbin C, sub 317, p 2; Thorley V, sub 340, p 1; Mangelson J, sub 342, p 3.

72 Wilkinson D, Gippsland Women's Health Service, sub 75, p 2.