

**Creating a Breastfeeding Culture: A Comparison of Breastfeeding  
Practices in Australia and Iran**

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## **Abstract**

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants and has a unique biological and emotional influence on the health of both mother and child. However, despite the well documented health benefits of breastfeeding most Australian women discontinue breastfeeding before the recommended time. This study attempts to identify variables influencing breastfeeding practices in Australia by comparing Australia with Iran, which enjoys a comparatively high breastfeeding rate. The study found a range of variables which appeared to negatively influence breastfeeding practices in Australia including: a comparatively inadequate national program for the promotion of breastfeeding, less uptake of the Baby Friendly Hospital Initiative, more rapid return to paid work and cultural issues.

**Key words:** breastfeeding initiation, breastfeeding duration, Baby Friendly Hospital Initiative, culture, working mother

## **Introduction**

It is widely known that breastfeeding is the healthiest method of infant feeding, and that it has significant advantages for mothers, infants and society (NHMRC 2003). Breastfeeding is a basis for the promotion of infant health status because it contains the nutrient elements representing the best nutritional balance for infants for at least the first six months of life (Parsa 1998). If breastfeeding is continued for up to two years, the main source of protein and calories required for physical growth and development will be provided and promotion of the emotional and psychological status of infants will also be achieved (Escamilla 2005; UNICEF 1997).

However despite a relatively high breastfeeding initiation rate, the duration of breastfeeding and the exclusive breastfeeding (WHO 1991) rate in Australia remains low (Hegney et al 2003). Results from Australia's 2001 National Health Survey show that on discharge from hospital 87 percent of babies were breastfed; however only 54 percent of all infants three months or less in age were fully breastfed, and no infants were fully breastfed at age six months (ABS 2001). Therefore, there is a need to determine why so many Australian mothers cease breastfeeding before the optimal time.

Comparing Australia with a country such as Iran, a Middle East country with a comparatively high breastfeeding rate at six and 12 months may help reveal the factors influencing improved breastfeeding practice. Research indicates that exclusive breastfeeding rates in Iran differ across the Iranian provinces (e.g., UNICEF 2005), similar to the differing rates observed among Australian communities. However, both partial (Hajian-Tilaki 2005) and exclusive (CBI 2003) breastfeeding rates appear to be consistently above those observed in Australia. UNICEF statistics in 2001, and the Centre for Breastfeeding Information (CBI) statistics in 2003 revealed that 98 percent of mothers in Iran initiated breastfeeding, and the exclusive breastfeeding rates at three and six months of age were 67.1 percent and 56 percent respectively (CBI 2003; UNICEF 2001).

## **Method**

A search of the extant literature relevant to breastfeeding in Australia and Iran from 1980-2006 was conducted, and comparisons between breastfeeding practices in the two countries made. Those variables which appear to be associated with longer breastfeeding duration in Iran were identified.

## **Results**

Factors which may result in higher breastfeeding rates in Iran can be classified into four categories as follows:

- **National program for the promotion of breastfeeding**

Iran was the first among East Mediterranean countries to approve the World Health Organisation's (WHO) International Code of Marketing of Breastmilk Substitutes, adopt it as a national law and implement all aspects of the Code (WHO 2006). In Australia, only those aspects of the WHO Code relating to the marketing of infant formula have been implemented through the Marketing in Australia of Infant Formula agreement (MAIF). The MAIF is adopted by manufacturers on a voluntary basis, and is narrow in scope and membership (ABA 1999). Nevertheless numerous breaches of this Agreement are reported every week (Williams 2000). Additionally, in Australia the Code does not apply to the retailing or marketing of other products within the scope of the WHO code such as baby foods, baby juices and bottles and

teats. Further, there is growing evidence that manufactures continue to utilise marketing strategies including offering gifts to health professionals, providing free samples and supplies of artificial milks to health professionals, hospitals and child care centres, and the direct marketing of artificial milks, bottles and teats to mothers (ABA 2004). These practices do not comply with the Marketing in Australia of Infant Formula (MAIF) agreement in Australia, and breach both the spirit and letter of the WHO code (NHMRC 1985; Brodribb 1997).

- **Baby Friendly Hospital Initiative (BFHI)**

One hundred percent of hospitals in Iran are Baby Friendly (Mothering Magazine 1 Jan 1999), compared to only approximately 4.5% of public and private hospitals in Australia (BFHI Australia 2006; AIHW 2004). As a consequence, the BFHI mandated ten steps to successful breastfeeding are carefully followed in Iran, whereas in Australia there are apparent differences in relation to at least seven of the 10 BFHI steps:

Step 2. *Provide training in the skills necessary to implement this policy to all health care staff* (WHO 1989)

Iran began promoting breastfeeding in the 1980s, and provided workplace-based training to over 30,000 health professionals each year between 1991 and 1996. This national support has been associated with a leap in the exclusive breastfeeding rate from 10 to 53 percent (WHO 2006). In Australia there is no consistent education for health professionals in the area of lactation and many professional bodies don't consider breastfeeding to be an important area for ongoing education or accreditation (ABA 1999).

Step 3. *Inform all pregnant women about the benefits and management of breastfeeding* (WHO 1989)

Interactive breastfeeding education classes have been shown to increase breastfeeding confidence and to be associated with longer breastfeeding duration (Cox & Turnball 1998). Research in Australia has shown that mothers who attended antenatal classes were two and a half times more likely to be breastfeeding at 13 weeks (James 2004). In Iran, the majority of pregnant women participate in free antenatal classes where they are informed about the benefits and management of breastfeeding (BPC 1998). In comparison, research conducted in Australia revealed that only one third of hospitals interviewed did not charge for antenatal classes. The cost of antenatal classes varied between hospitals from \$12.50 per class to \$120 for a one-day workshop (Lowe 1998). Additionally, an inquiry conducted by the Australian Parliament (Senate Community Affairs Committee 1999) showed that changes in state government funding for antenatal education meant that many classes which were formally provided cost-free to mothers currently attract a fee (e.g., approximately \$200 for eight classes in Victoria, and \$170 for seven classes in south east Sydney). Financial cost may therefore be a determining factor of attendance at antenatal classes for some Australian women, and this could negatively affect the level of breastfeeding education provided to expectant mothers in Australia (Lowe 1998).

Step 4. *Promote the initiation of breastfeeding within a half an hour of birth* (WHO 1989)

The first 60-90 minutes after birth is described as a sensitive period and the early initiation of breastfeeding and skin-to-skin contact between the mother and her infant is associated with longer duration of breastfeeding (Lowe 1998; Widstorm et al 1990). Much attention is given to early initiation of breastfeeding and mother-infant skin-to-skin contact in Iran, while routine skin-to-skin contact has proven difficult to

achieve in many other countries, including Australia (Anderson et al 2006; UNICEF 2006).

Step 5. *Show mothers how to breastfeed and how to maintain lactation even if they should separate from their infants* (WHO 1989)

A free breastfeeding information booklet and education are given to all women in Iran in the post-partum ward. This standardised education includes information on how to position the infant on the breast in order to prevent breastfeeding and nipple problems, the benefits of rooming-in with the baby and of breastfeeding on demand, the importance of exclusive breastfeeding for both the baby and the mother, and instructions for working mothers on how best to express and preserve their breastmilk. While it is thought that the majority of Australian mothers are also provided with some form of breastfeeding information in Australian hospitals, the practice and content of information provided is not uniform. Also, Iranian mothers are specifically educated on the adverse effects of artificial feeding, a practice actively avoided in Australia, where this information is generally couched in terms of the benefits of breastfeeding (e.g., NHMRC 2003; ABA 2004b).

Step 6. *Give newborn infants no food or drink other than breastmilk unless medically indicated* (WHO 1989)

Most hospitals don't supply facilities for supplemental feeding in well newborns in Iran (Marandi et al 1993), while in Australia many hospitals are thought to continue the practice of providing artificial milks to babies on request (Doolan 2006, pers comm 22 Dec).

Step 7. *Practice rooming-in (i.e., allowing mothers and infants to remain together 24 hours a day)* (WHO 1989)

Twenty-four hour rooming-in is practiced in all Iranian hospitals (BPC 1998). In contrast, in Australia one research team found that while rooming-in was encouraged in the participating hospitals, only 37% of women chose to keep their baby with them for 24 hours a day (Scott et al 2001).

Step 10. *Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic* (WHO 1989)

Access to breastfeeding support post hospital discharge is coordinated and freely available in Iran. Free and routine follow-up visits are conducted on the tenth day, thirtieth day and at monthly intervals until the end of the twelfth month, and then every other month until the end of 24 months. Measurements of the infant's weight, length and head circumference are made during each follow-up, after which the health professional is encouraged (where appropriate) to reassure the mother that her baby has maintained adequate growth, and therefore that her breastmilk remains sufficient. Given that the most commonly provided reason for stopping breastfeeding both in Iran and Australia is the mother's often mistaken perception that her breastmilk is insufficient for the baby (Marandi et al 1993; McCarter-Spalding & Kearney 2001; Shiva & Nasiri 2003; Stamp & Casanova 2006), this routine confirmation may be important in maintaining the mother's confidence in breastfeeding.

In Australia, some hospitals provide in-house breastfeeding support and/or mothers' groups for new mothers, however this practice is not universal. Postnatal women in Australia are also encouraged to attend the Maternal, Child, Youth and Family Health Service, which is available without cost to all families with children under six years of age. However, only a minority of women attend these services regularly, and many women choose to visit a pharmacy nurse or general practitioner for health checks and breastfeeding problems instead. While there are many exceptions, these services are often staffed by health professionals whose knowledge

and skills in breastfeeding maintenance are inadequate (Hegney et al 2003). Others may wait for up to six weeks before being seen in a day-stay program (James 2004). For many women who are experiencing significant problems, this is simply too long. While there are some lactation consultants in private practice, their services are scant, costly, and rarely rebate-able by health insurance funds, removing them as an option for many women (James 2004).

- **Return to paid work**

In Iran, four months of paid maternity leave is provided to all working women, and this period is soon to be extended to six months, plus one hour daily paid maternity leave for two years, and two hours for twins (Council of Iran Government Authorization 2005). Australia currently has no legislation that guarantees a mother paid maternity leave. This may mean that mothers who return to work quickly after the birth of a baby may see working and breastfeeding as mutually exclusive (McIntyre, Hiller & Turnbull 1999). In Australia only 23 percent of workplaces offer paid maternity leave to working mothers and the average period of leave is eight weeks (OECD 2002).

### **Cultural differences**

There are also cultural differences between Iran and Australia which may affect breastfeeding practices. In contrast to Australia, breastfeeding is the norm for infant feeding in Iran, thereby assuring that breastfeeding mothers have greater access to practical breastfeeding knowledge and peer support (Hunt 2006). There is also religious motivation for breastfeeding in Iran, where the vast majority of the population are of the Islamic faith. The Holy Quran specifies that mothers should breastfeed their offspring for two complete years, and also mentions that every newborn infant has the right to be breastfed. While breastfeeding is clearly encouraged however, no blame is placed on the mother should she decide to wean.

Mass media also plays an important role in promoting breastfeeding in Iran. Television programs and articles in newspapers and popular magazines commonly discuss the benefits of breastfeeding and the adverse effects of formulas and other breastmilk substitutes. In addition to providing motivation to breastfeed and access to support, this greater visibility and prevalence of breastfeeding in Iran may have a positive affect on the woman's confidence in her ability to breastfeed successfully, a factor which has been repeatedly shown to increase breastfeeding duration (O'Brien & Fallon 2005).

Finally, cigarette smoking is less common among Iranian women. There is a consistent negative association between maternal smoking and breastfeeding duration and mothers who smoke cigarettes are consistently found to be more likely to wean prematurely than non-smokers (Jakobsen et al 1996; Janke 1993; Scott & Binns 1999). The cigarette smoking rate among Iranian women is approximately two percent, compared to approximately 21 percent among Australian women (Bahrami et al 2006; ABS 2004).

### **Discussion**

Iranian women appear to breastfeed for longer durations than Australian women, among whom early weaning is common. While it is probable that there are many complex factors behind this difference in breastfeeding rates, the evidence suggests that these include Iran's Government-sponsored national breastfeeding promotion program, a culture of breastfeeding in Iran, differences in Health Services delivery, including the uptake of the Baby Friendly Hospital Initiative, more rapid return to paid work, and religious and cultural issues.

Strategies successfully employed by Iran to increase breastfeeding duration may also be of benefit in Australia. While many of these strategies involve financial cost, research suggests that increasing the length of breastfeeding in Australia has the potential not only to improve the health status of Australia's population, but also to make significant savings in Government health expenditure. The attributable hospital-only costs of weaning prematurely is around \$60-\$120 million annually in Australia for just five of the common childhood illness breastfeeding is known to protect against (Smith, Thompson & Ellwood 2002). A relatively small portion of this money may make a difference to breastfeeding duration in Australia if diverted into breastfeeding support and education.

Strategies utilized in Iran which may also assist in increasing breastfeeding duration in Australia include:

- Establishing national policies supportive of breastfeeding;
- Valuing breastfeeding as an important public health measure;
- Encouraging and supporting hospitals to gain BFHI accreditation;
- Educating and motivating hospital personnel to strictly following the ten steps to successful breastfeeding;
- Providing ongoing education to health professionals to ensure that consistent and up-to-date information and support is given to breastfeeding mothers;
- Providing free antenatal classes to all pregnant women, including comprehensive information on the value of breastfeeding and its management;
- Making accurate information readily available to mothers about the risks associated with breastmilk substitutes and the early introduction of solid foods;
- Providing paediatric follow-up which is well timed, cost free, readily accessible and provided by suitably educated breastfeeding professionals;
- Instigating widespread and serious public health education efforts through mass media such as radio and television;
- Providing adequate, mandated maternity leave provisions which reflect the importance of breastfeeding to the mother, infant and society; and
- The introduction of work place provisions supporting breastfeeding which may allow women to return to paid work and maintain breastfeeding.

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