Mohammed AL Sinani

Abstract

Child health programs in Oman are considered to be successful. Before 1970, the infant mortality rate was predictable to be 214 out of 1,000 live births declined to 25 by 1992. The significance of breastfeeding in the survival and health of the children was known by the health authorities and the Baby Friendly Hospitals Initiative (BFHI) was launched in the 1990's. The WHO and UNICEF embarked on a national certification of all hospitals in Oman and by 1999 all marked hospitals were thus certified. The aim of the following policy proposals is to enhance awareness of the benefits of breastfeeding for the community and to propose measures to ensure breastfeeding is supported and thus made a practical option. It seems futile to increase the awareness of the benefits of breastfeeding if the information to ensure that it is a feasible option is not available. The policies were developed with the consideration of the complex barriers that exist regarding breastfeeding as well as recognition of social and cultural barriers. The following policies would combine to be a multifaceted approach and thus increase the potential success of increasing the prevalence of breastfeeding. This policy can apply at all levels: government, private institutions, community and public

Received: 01 Aug 2008

Accepted: 20 Sept 2008

Address correspondence and reprint requests to: Mohammed Al Sinani, MSC Human Nutrition, London Metropolitan University, Al Buraimi Hospital, P.O. Box 8, Postal Code 512, Al Buraimi, Sultanate of Oman. E-mail: m_alain_04@hotmail.com

Introduction

B reastfeeding is an important public policy issue in terms of the health benefits it confers to both mother and child.¹ There is now a universal agreement that human milk is the best feed for infants, both for preterm and full term babies. Exclusive breastfeeding for six months and then the introduction of complementary foods with continued breastfeeding are global health recommendations and needs the provision of adequate social and nutritional support for lactating women.²

Despite the clear health benefits of breastfeeding, UNICEF estimates that 1.5 million babies worldwide die each year because they are not breastfed.³ The UK and the USA, to name just two developed countries, are struggling to improve breastfeeding initiation and duration rates.⁴

In the USA, the NHANES II Survey 1991-1994 (National Health and Nutrition Examination Survey) found that only 53% of infants are exclusively breastfed at birth and 22% of infants are being exclusively breastfed at six months.⁵ In 2003, the initiation rate had increased to 71% but the duration by six months had decreased to 14%.⁶

On the other side of Atlantic in UK breastfeeding rates is amongst the lowest in Europe.⁷ In England and Wales 29% of mothers do not breastfeed at all.³ The Infant Feeding Survey (IFS) revealed that in the UK 69% of babies were breastfed at birth, and once babies reached two weeks of age it dropped to 52%, at six weeks to 42%, and by six months only 21% of mothers continued to breastfeed.⁴ In many developing countries, initiation of breastfeeding is delayed by hours if not days, and about 44% of infants in the developing world are now being exclusively breastfed for their first four months.⁷

Oman is an Arab-Islamic country that lies on the eastern side of the Arabian Peninsula. It has a total population of 2 million. Oman's population has an extremely large youth base, with about 65% below the age of 20 years.⁸ At present there are 58 hospitals, 150 health centres and five polyclinics.⁹ Breastfeeding is still seen as normal practice and a great majority of Omani adults appreciate that they were breastfed by their mother.¹⁰ Oman has made tremendous achievements in the last three decades and in particular in the field of health. Among these achievements is the great success of the baby-friendly hospital programme which promotes, encourages and supports natural breastfeeding and timely appropriate complementary feeding.

On the negative side, in 2003 only 31% of infants were exclusively breastfed for the first four months,¹¹ while in 2006 the Child Health Register in Oman showed that 53.3% of children from the age of 5 months were fed with formula and other milk. The same register showed that 36.5% of children suffered from anaemia at the age of 9 months; this increased to 43.5% at 18 months. The data showed that malnutrition at 6 weeks of age amounted to 1%, 0.8% at 5 months, 5.3% at 12 months and 6% at 18 months. This clearly shows that malnutrition among children occurs mainly after weaning.¹² A survey amongst the Gulf states (1999) mentions

that the highest proportion of malnourished children in the Arab Gulf States was in Oman with 18% and then UAE and Saudi Arabia with14%, 9% in Bahrain, and the lowest recorded was 6.4% in Kuwait.¹³ In 2006, the Annual Health Report showed protein energy malnutrition (PEM) to be about 19/1000 children under five years of age in 2005.¹²

In Oman 42.7% of pregnant women suffer from anaemia,¹⁴ which affects the birth weight of the baby (7.6% had low birth weight in 2005), and 25% of children at 7 months of age in Oman suffer from vitamin A deficiency. Due to the low level of vitamin A in the milk of pregnant and lactating women,¹¹ there is a substantial probability that breastfeeding will be affected.¹²

According to the social consensus among the states in the Gulf region, the initiation and duration of breastfeeding problems are not confined to the Sultanate of Oman, but exist in all countries in the region.

Many factors such as living environment, socio-economic status, maternal education, employment, workplace pressures, knowledge, and availability of breast-milk substitutes,¹⁵ milk ejection reflex, plugged ducts, mastitis, inverted nipples, breast abscess, insufficient milk production or sore nipples also affect breastfeeding.

Lack of support and lack of knowledge base among health care providers concerning appropriate breastfeeding practice can affect the breastfeeding initiation and duration rates as the majority of the health care providers used their own breastfeeding experiences to replace evidence-based knowledge for mothers.¹⁶

There are also significant social implications such as embarrassment, inconvenience, isolation and lack of family support,¹⁷ that can overshadow the unquestionable benefits of breastfeeding. Subgroups also contribute to differences in breastfeeding rates, for instance: first time mothers, older mothers, higher educated mothers and mothers from ethnic minorities are all more likely to breastfeed initially than their subgroup counterparts.⁴

Effective policies are needed to support women in breastfeeding, to protect their right to breastfeed and to promote breastfeeding as the best source of nutrition for infants from birth to 6 months.¹ The Ministry of Health in Oman (MOH) identified the public health benefits associated with increasing the country's breastfeeding rates.¹⁸ It is hoped that this will draw attention to and further improve compliance with and implementation of the code and the promotion of infant feeding practices in the Sultanate of Oman.

1. Education

Often children as young as 11 have already formed negative attitudes towards breastfeeding, favouring bottle feeding as a

less embarrassing, more convenient and fashionable choice.¹⁹ Mothers who stay in full-time education until they are 18 years of age are three times more likely to breastfeed their babies.²⁰ It is therefore necessary to break this cycle of belief, formed through generations of women who were bottle-fed and never exposed to positive breastfeeding models in their home environment.²¹ The school environment would seem to be an ideal place to implement a health promotion programme involving students, staff and parents/carers. It is proposed here that since education is such an independent empowering tool, it be used as a channel to inform young adolescents, both male and female, about the benefits of breastfeeding and also the reality of potential difficulties, so as not to have an unrealistic expectation and thus a sense of guilt and failure if breastfeeding is not achieved.¹⁷

In the USA, several states have now integrated education on breastfeeding into a variety of disciplines. The Center for Disease Control believes that breastfeeding can be effectively and appropriately explored across the grades with age-appropriate examples and images and those effective approaches involve the incorporation of breastfeeding into larger academic disciplines such as biology, psychology, nutrition and art rather than addressing it as a stand-alone theme.²²

Recent projects in the UK as part of the Infant Feeding Initiative,²³ have highlighted the serious need to raise awareness about breastfeeding among young students. The projects faced challenges with teaching a subject which is often perceived as sexual in nature and 'out of place' in a school curriculum.²⁴ The researchers found that the favoured curriculum placing was PSHE (Personal Social & Health Education). Teaching material was developed after consultation with students, teachers and health professionals. Favourable teaching material included visual, experimental and interactive methods. Materials were displayed during Breastfeeding Awareness Week (BFAW), which is also an invaluable tool.

Education about breastfeeding should be included in the school curriculum through biology lessons in high school and as an optional module at an academic level in universities and colleges and not only in health courses. A decision would need to be made to incorporate this education within secondary schools and not just higher education to reach a higher proportion of the population. To enforce such education, strategic planning and coordination at government level between the Ministry of Health and the Ministry of Education and Skills is needed.

Education of the community on the importance of breastfeeding is strongly recommended through instructive programs in social clubs such as in the Omani Women's Association. Such education is crucial throughout the country and particularly for disadvantaged groups to facilitate cultural and breastfeeding rate changes especially in those from lower socio-economic groups who are less likely to enter further education. It is proposed that volunteer groups (Community Support Group Members) be formed by the MOH. These volunteer groups would produce a short and interactive presentation at these events this strategy would also be launched during BFAW. As the groups would only need to meet once a year, both financial and time costs would be minimal.

Breastfeeding awareness should not exclude health care providers such as obstetricians to paediatricians. Breastfeeding dyads come in contact with a wide range of healthcare providers and studies showed that there are gaps in providers' breastfeeding knowledge, counseling skills, and professional education and training. Moreover, providers' cultures and attitudes affect breastfeeding promotion and support.¹⁶

Provision of lectures and educational programs about the right breastfeeding practices to the health care providers who deal with mother and child in the MOH institutions can lead to a model medical home in fostering continuous, comprehensive, coordinated, culturally effective, and evidence-based breastfeeding promotion and support.

2. Peer counseling/support

Failure to give mothers adequate encouragement and sufficient guidance about the importance of breastfeeding and ways to overcome some problems that may be encountered can create some sort of tension and anxiety which can hinder the process of generating their milk. Mothers' inability to obtain compelling and well integrated information on the benefits of breastfeeding and lack of encouragement can be the main reasons for cessation of exclusive breastfeeding during the first six months. UNICEF believe that many of the factors influencing the premature termination of breastfeeding could be solved or avoided with better support from health services.¹

A peer support programme would recruit unpaid volunteers with experience of breastfeeding to offer support to new mothers by either telephone contact or face-to-face support via home visits. Peer supporters would need to be trained, monitored and managed by local health institutions. Funding would need to be allocated to such a venture by the MOH and offset against the reduced MOH costs of lower infant admissions due to formula feeding. The capacity of peer support to empower sub groups of the population living in socially excluded communities is of immense value. The costs of such an initiative are minuscule as the peers are unpaid. Training could be incorporated with existing training for midwives and health visitors or could also form a peer initiative where the health professionals train peers voluntarily.

The success of such projects has been seen in the UK and USA, especially when aimed at disadvantaged groups. Several peer support projects were undertaken as part of the World Breastfeeding Week and were found to have a positive influence on increasing the breastfeeding rate.²³ Mothers found peer counselors extremely helpful at a time when they were considering to stop breastfeeding. The women found this more useful than their health visitor did as they found they could connect with a peer who had been through what they had and with whom they could talk openly.

We should not neglect the fact that the activating of the role of health education departments in MOH institutions would be a positive process as it does not require high costs and would provide direct contact between the health care provider and mothers.

3. Allocated breastfeeding rooms – legislation

It is necessary to provide an allocated area for women to breastfeed their infant in comfortable, clean, accessible rooms when they are not at home. The option of private facilities is imperative under current social conditions. Many breastfeeding mothers feel more comfortable feeding their infants at home due to their perceived negative public perception of such an activity and due to the lack of places where it is possible to breastfeed or convenient to do so.²⁵ Low-income women have reported that they viewed everyday activities such as shopping to be out of bounds as they lacked the confidence to breastfeed out of the vicinity of their own home.

UNICEF acknowledges the difficulties mothers have in finding suitable places to feed their babies in public and believes that legislation is important to support breastfeeding in public. Although legislation alone will not alter attitudes to breastfeeding in public, it is an important step to remove barriers and encourage greater social acceptance.⁷

In a culture such as Oman's most women prefer to find a room where they can breastfeed in private. Hence, it can be seen that breastfeeding women can find it a socially isolating experience. An allocated comfortable room would make it a feasible option without the worry of embarrassment and reduce social exclusion by avoiding leaving the house. Both the public and private sector e.g. shopping malls and restaurants would be affected and they would have to incorporate such a room if applicable. It is proposed that industry should implement such action and that government, or perhaps a separate body, would monitor its implementation and maintenance. The CDC highlighted the importance of a nursing mothers' lounge to include comfortable seating, reading material, lighting, a few toys and that they should be distinct and detached from public rest rooms.²²

Several states in the USA have now adopted these rooms in such places as libraries, shopping malls, airports, hospitals, museums and zoos. It is important to identify a need for such rooms to exist.

4. Pricing

Not applicable as breastfeeding is free. A tax or increase in price for formula milk would be detrimental to the health of babies as young and low-income mothers may not be able to afford formula and be forced to try alternatives such as cow's milk. This would be very detrimental indeed to the health and support of feeding babies.

Conclusion

Breastfeeding offers various health advantages to children, mothers, and society. Increasing breastfeeding rates in Oman is an important public health measure. It would reduce MOH costs due to decreased infant admission for infections and a reduction in gastroenteritis associated with formula-feeding.

The proposed policies aim to promote breastfeeding by expanding awareness of the benefits of breastfeeding to include a larger sample of community throughout social clubs, high schools and at the university level. Furthermore, breastfeeding awareness needs to be supported via peer counseling at the crucial period during breastfeeding, also by allocating comfortable rooms for mothers to breastfeed in private to support breastfeeding in public and to encourage greater social acceptance to protect. Finally, a tax or increase in price of formula milk would lead to an increase in breastfeeding by ensuring it is a feasible option and ensuring maximum support.

As the continuation/duration of breastfeeding increases, the population will gain experience of breastfeeding and this should influence initiation rates.

Recommendations

- Raise awareness of breastfeeding benefits among young students.
- Organize awareness-raising activities in the community especially in disadvantaged areas.
- Activate the role of health counseling departments in MOH institutions.

- Organize action workshops and training courses on the appropriate practice and knowledge of breastfeeding to the health care provider.
- Allocation of private, comfortable rooms for breastfeeding in public areas.
- Develop a mechanism to raise prices or add a tax on formula milk products.

References

- UNICEF. (2007). Baby Friendly Initiative. Available at www.babyfriendly.org. uk. Accessed April 12, 2007.
- Kramer MS, Kakuma R. (2001). The Optimal Duration of Exclusive Breastfeeding. A systematic review. Department of Nutrition for Health and Development. World Health Organisation, Geneva; 2001.
- NHS. (2005). Breastfeeding NHS. Available at http://www.breastfeeding.nhs. uk/ab aboutthisite.asp. Accessed August 13, 2008.
- Hamlyn B, Brooker S, Oleinikova K, Wands S. Infant Feeding 2000. The Stationery Office, London; 2002.
- Li R, Ogden C, Ballew C, Gillespie C, Grummer-Strawn L. Prevalence of exclusive breastfeeding among US infants: The third National Health and Nutrition Examination Survey (Phase II, 1991-1994). Am J Public Health 2002 Jul;92(7):1107-1110.
- National Immunisation Survey 2003. Available at http://www.cdc.gov/. Accessed April 17, 2007.
- UNICEF. (2006) Health Bill: Report Stage Briefing. Available at www.unicef. org.uk. Accessed April 10, 2007.
- Sulaiman AJ, Al-Riyami A, Farid S, Ebrahim GJ. Oman Family Health Survey 1995. J Trop Pediatr 2001;47(Suppl 1):1-33.
- 9. Ministry of Health. (2008) Health Institutions. Available at http://www.moh. gov.om/main. Accessed September 3, 2008.
- Mesiger (2001). Food habits and nutritional status of the family in the Arabian Gulf. Arab Journal of Food and Nutrition. Centre for Studies and Research p40.
- 11. UNICEF (2003). Situation of children in the world.
- 12. Ministry of Health. (2006). Annual Health Report. Department of Information & Statistics, Directorate General of Planning, Ministry of Health, Oman
- 13. UNICEF. (1999). National PEM Survey. World Bank.
- Ministry of Health. (2001). Annual Health Report. Department of Information & Statistics, Directorate General of Planning, Ministry of Health, Oman
- Fleischer Michaelsen K, Weaver L, Branca F, Robertson A (2000). Feeding and nutrition of infants and young children: Guidelines for the WHO European region, with emphasis on the former Soviet countries. WHO Regional Publications, European Series, No 87.
- Kinga A. Szucs, Donna J. Miracle, Marc B. Rosenman. Breastfeeding Medicine. ahead of print. doi:10.1089/bfm.2008.0108,
- Scott JA, Mostyn T; Greater Glasgow Breastfeeding Initiative Management Team. Women's experiences of breastfeeding in a bottle-feeding culture. J Hum Lact 2003 Aug;19(3):270-277.
- Ministry of Health. (2005). Five-Year Plan 2006-2011. Department of Health Affairs, Directorate General of Planning, Ministry of Health, Oman
- Gregg JE. Attitudes of teenagers in Liverpool to breast feeding. BMJ 1989 Jul;299(6692):147-148.

- Wachs TD. Linking nutrition and education: a cross-generation model. Food Nutr Bull 2005 Jun;26(2)(Suppl 2):S159-S167.
- PeArez-Rodrigo C, Klepp K, Yngve A. SjoEstroEm M. Stockley L, Aranceta J. The school setting: an opportunity for the implementation of dietary guidelines. Public Health Nutr 2002;4:717-724.
- 22. Shealy KR, Li R, Benton-Davis S, Grummer-Strawn LM. (2005) The CDC Guide to Breastfeeding Interventions. Atlanta: US Department of Health and Human Services, Center for Disease Control and Prevention.
- 23. Dykes F. (2003) Infant Feeding Initiative: A Report Evaluating the Breastfeeding Practice Projects 1999-2002. Department of Health.
- Dyson L, Renfrew M, McFadden A, McCormick F, Herbert G, Thomas J. (2006) Effective action briefing on the initiation and duration of breastfeeding. Effective action recommendations. National Institute for Health and Clinical Excellence.
- Sheeshka J, Potter B, Norrie E, Valaitis R, Adams G, Kuczynski L. Women's experiences breastfeeding in public places. J Hum Lact 2001 Feb;17(1):31-38.