

Knowledge about the breast feeding practices and its relationship to the health of infant

Shankar Lal, Dileejan Mugheri, Ahmed Bux Shaikh, Chetandas, Shanti Lal

Departments of Pediatrics, Shaheed Mohtarma Benazir Bhutto Medical University, Larkana and Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan

Objective: To assess the knowledge about the breast feeding practices and its relationship to the health of infant in general practitioners in Larkana city, Pakistan.

Methodology: This descriptive cross-sectional study was conducted in general practitioners of Larkana city and included all general practitioners, graduate and post graduate, trained and untrained trainees. All were administered a structured questionnaire to collect their response. All the quacks (non-qualified) and Doctors who were not willing to be interviewed were not included.

Results: Out of 161 medical practitioners, 154

(95.7%) were males and 7 (4.3%) were female. Majority, 140 (87%) were graduates, most of GPs (87%) did their graduation from Chandka Medical College, Larkana. The overall percentage of correct answers was 54.0%.

Conclusion: Knowledge of general practitioners regarding breast feeding practices and their relationship with health of infant was inadequate to counsel women, which is a significant barrier to the protection, promotion, and support of breastfeeding practice. (Rawal Med J 201;43:332-336).

Keywords: Exclusive breastfeeding, general practitioners, colostrum.

INTRODUCTION

Breast milk is a natural, unique and species specific food for infants.¹ WHO Guidelines recommended exclusive breast feeding for the first six months of a baby's life with the gradual introduction of appropriate, complimentary foods and continuing to breastfeed for two more years. Pregnant and breast feeding women seek support from a variety of sources, and in particular general practitioner (GP) is commonly the first health professional women encounter during pregnancy.²

In Pakistan, 53% of children under five years are malnourished, with 13% severely malnourished and 25% of newborn are low birth weight.³ Due to our trends and traditions, approximately all pregnant women have made their own taboos, how to feed their newborn and some have made their decision even before conception. Locally practicing GPs have strong influence on initiation and continuation of breast feeding in local community.⁴ They can increase duration of breast feeding by providing anticipatory adequate knowledge and training of mothers for breast feeding and how to deal problems such as cracked and sore nipples, engorgement and

inadequate milk.^{1,4}

Nowadays, due to trends towards urbanization bottle feeding is preferred even in hospitals, as well as easy availability, display of newborns formula and formula advertising in hospitals, seminars and directly to community, which do not have good impact on breast feeding.^{5,6} WHO stated that the methods to enhance breast feeding is stepwise educational process while lowering in reducing formula advertising in hospital to the health providers and need for environmental, occupational support and system that will encourage more women to breast feed.^{6,7}

According to a study from United States, Health professionals who do not have sufficient knowledge of breast feeding, are not effective for promoting breast feeding practices in community.¹ In Pakistan, the breast feeding initiation rate is about 95%, however prevalence of exclusive breast feeding is alarmingly low; only 16% of mother exclusively breast feed their children up to 4 months compared to other developing countries where the ratio is higher like Bangladesh (46%), India (37%) and Sri Lanka (84%).⁵ Studies from other Muslim countries

have shown that although health professionals had a positive attitude towards breast feeding, their knowledge was inadequate.^{7,8} Breast feeding not only protects the baby against infections and allergies but also protects the mother from breast cancer, excessive bleeding after delivery and helps in child spacing if mother exclusively breast feeds.^{9,10} Therefore, this study was conducted to assess the knowledge of the general practitioners about breast feeding practices and relationship to the infant health.

METHODOLOGY

In this cross sectional descriptive study, 161 general practitioners were included from Larkana city from December 1, 2015 to May 31, 2015. Those doctors were included in the study who were graduate (MBBS) and were keen to participate in the study. All the quacks (non-qualified) and doctors who were not willing to be interviewed were not included. Informed verbal consent was taken before interview.

Data were collected by the investigator himself by pretested structured questionnaire which consisted

of 27 open ended and close ended questions about breast feeding practices, infant health in relation to breast feeding and mother's health in relation to breast feeding was constructed. The questionnaire consisted of 15 questions and 12 were open ended questions which were constructed on a scale rating the response of GPs answers as poor, fair, good and excellent. Data were analyzed using SPSS version 13.0.

RESULTS

Out of total 161 medical practitioners, 154(95.7%) were males and 7(4.3%) were females. Majority of the GPs, 140 (87%) were graduate and 21 (13%) were postgraduate. Most of GPs did their graduation from Chandka Medical College 140 (87%) and others from Sindh Medical College 14 (8.7%) and Dow Medical College 7 (4.3%).

Out of 16 questions, only two were responded 100% correct, out of 16 questions only three were responded 60% correct and out of 16 questions only 11 were responded 72% to 95% correct (Table 1).

Table 1. Knowledge status about breast feeding practices.

Questions	Correct		Incorrect	
	Frequency	Percent	Frequency	Percent
1. When mother should start Breast feeding her baby after birth?	126	78.3	35	21.7
2. Should mother feed the colostrum (First milk) to the baby?	161	100.0	-	-
3. Should mother give prelacteal feeds to the baby?	119	73.9	42	26.1
4. How many times in a day mother should Breast Feed the baby?	147	91.3	14	8.7
5. What should be the duration of breast feeding at each feed?	154	95.7	7	4.3
6. Whether mother should feed the baby from one side or from both sides?	161	100.0	-	-
7. For how long breast feeding should be continued?	147	91.3	14	8.7
8. Do you know what is exclusive breast feeding?	70	43.5	91	56.5
9. How long should breast feeding be exclusive?	98	60.9	63	39.1
10. When would you advise the supplementary foods to the baby?	140	87.0	21	13.0
11. Why do you advise supplementary foods?	126	78.3	35	21.7
12. Whether water should be given to the baby during 1st four months?	133	82.6	28	17.4
13. Whether breast feeding is sufficient for growth and development up to six months of age?	119	73.9	42	26.1
14. In what position C-section mother can breast feed?	91	56.5	70	43.5

Table 2. Knowledge status about infant health in relation to breast feeding.

Questions	Poor		Fair		Good		Excellent	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
What are the benefits of colostrum?	56	34.8	56	34.8	14	8.7	35	21.7
What are the advantages of breast feeding to the baby?	7	4.3	56	34.8	14	8.7	84	52.2
What are the disadvantages of bottle feed?	28	17.4	49	30.4	14	8.7	70	43.5
If the breast feeding infant develops diarrhea what you will advise?	91	56.5	21	13.0	28	17.4	21	13.0
If the mother has true lactation failure what should be done?	133	82.6	7	4.3	7	4.3	14	8.7
What are the most common causes of sore nipple in breast feeding mother?	98	60.9	35	21.7	21	13.0	7	4.3

Six open ended questions on Infant health in relation to breast feeding were administered; only 52.2% GPs reply was rated excellent on the scale for 1 question. Six open ended questions were administered; only 21.7% to 43.5% Gps reply was rated excellent on the scale for 2 questions and six open ended questions were administered; 4.3% to 13% GPs reply was rated excellent on the scale for remaining three (Table 2).

DISCUSSION

The overall knowledge of GPs was inadequate; 54% of the GPs have responded correctly to all knowledge based questions and 46% responded incorrect answers. These results are comparable to many studies done abroad as well as in Pakistan like a study from Australia showed 40% knowledge items were answered incorrectly by practitioners.¹¹ When our study participants were asked the questions when mother should start breast feeding to her baby after birth, 87.3% gave correct response. This is comparable to a study on medical students of Ziauddin Medical University Karachi which showed 76% correct responses.¹² A study by Svendby et al showed that GPs were short of knowledge about breast feeding and its related issues, answering only 49% of the questions correctly.¹³

Although majority of respondents knew the general benefits of breast feeding and dangers of bottle feeding, there are various misconceptions about breast feeding knowledge which can have deleterious effects on promotion of breast feeding.^{14,15} Breast fed infants have a lower

incidence of acute diarrheal diseases, urinary tract infections, otitis media, lower respiratory tract infections as well as decreased incidence of necrotizing enterocolitis, in pre-term infants.^{15,16} According to our study, significant number of the GPs did not know about exclusive breastfeeding and optimum duration of exclusive breast feeding which was 56.5% and 39.1%, respectively. This is in comparison with study of Utoo et al who found correct response by 17% of pediatricians.^{15,16}

Many women want to breast feed but experience problems. A common reason given for discontinuation of breast feeding is milk is not enough to meet infant's requirement.¹⁷ This could be due to lack of confidence by the mother in her ability to produce enough milk rather than physiological deficiency of milk. When asked about common cause of insufficient breast feeding by the mothers, nearly 91% of GPs did not know that the reason for low milk supply is infrequent and inadequate sucking by the infant at breasts. Thus, they will not give correct advice to mother when confronted with this situation.¹⁷

Our study found significant deficit in knowledge; especially 82.6% of GPs did not appreciate that the successful breast feeding depend upon allowing the baby to feed whenever wants. However, 78% knew the importance of starting breast feeding within one hour after birth. Hanif et al observed that 90.4% doctors and 88.9% of paramedics recommended to initiate the breast feeding within half an hour of the birth.¹⁵ In our study, when participants were asked whether mother should feed the colostrum, 100% knew that colostrum is a powerful protective agent

against infections in breast fed infants. This is similar to other studies.^{12,15,16}

The extent of practicing GPs knowledge deficits regarding breast feeding poses a real threat to successful breast feeding initiation and duration. In any discussion of this topic, question inevitably arises regarding the need for GPs to take active role in breast feeding promotion or the urgency of improving GPs breast feeding training.

There were several limitations in our study; one is that it is a cross-sectional study, conducted with convenient sampling; therefore its results cannot be generalized, second limitation is that other health professionals were not included in study. Multiple health education programs for optimum breastfeeding are ongoing but because of declining rates of breastfeeding we recommend that the focus should be shifted towards other health professionals like lady health workers, lady health visitors, trained birth attendant and dais (local birth attendants) that are present in villages at the time of deliveries, so can utilize the opportunity to initiate early breastfeeding and avoid the use of bottle feed as well as prelacteal feeds.

CONCLUSION

Our study revealed that beliefs of GPs favoring breast feeding practices but they were inadequate in knowledge to counsel women. There were gaps in the knowledge especially to recognize common breast feeding problems and their management. There is also need for reorientation of doctors and other health professionals in this important aspect if the nutritional status of infants and young children is to be improved.

Author Contributions:

Conception and design: Shankar Lal, Dileejan Mugheri, Chetandas, Chetandas
 Collection and assembly of data: Dileejan Mugheri
 Analysis and interpretation of the data: Shankar Lal
 Drafting of the article: Shankar Lal, Chetandas
 Critical revision of the article for important intellectual content: Shankar Lal, Ahmed Bux Shaikh, Chetandas
 Statistical expertise: Shankar Lal
 Final approval and guarantor of the article: Shankar Lal, Ahmed Bux Shaikh

Corresponding author email:

Shankarlal_sangat@yahoo.com

Conflict of Interest:

None declared
 Rec. Date: Mar 30, 2017 Revision Rec. Date: Oct 7, 2017 Accept Date: Jan 10, 2018

REFERENCES

- U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Support Breastfeeding. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General; 2011.
- World Health Organization. The optimal duration of exclusive breastfeeding report of an expert consultation, 2001, WHO: Geneva.
- National Nutrition Survey 2011. Planning and Development Division Government of Pakistan.
- Bhutta, Z, Shekar M, Ahmed T. Mainstreaming interventions in the health sector to address maternal and child under-nutrition. *Matern Child Nutr* 2008;4 Suppl 1:1-4.
- Unicef, The State Of The World's Children 2016
- Bora R. Breast Feeding in Developing Countries: Is There a Scope for Improvement. *J Neonatal Biol* 2016;5:1-5.
- Hanif HM. Trends in breastfeeding and complementary feeding practices in Pakistan, 1990-2007. *Int Breastfeeding J* 2011;6:1-7.
- Payghan BS, Kadam SS. Knowledge and Attitude of College Students about Breastfeeding. *Int J Health Sci Res* 2012;2:47-56.
- Centers for Disease Control and Prevention. Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies. Atlanta: U.S. Department of Health and Human Services; 2013.
- Ali S, Ali SF, Imam AM, Ayub S, Bilal AG. Perception and practices of breastfeeding of infants 0-6 months in an urban and a semi-urban community in Pakistan: a cross-sectional study. *J Pak Med Assoc* 2011;61:99-104.
- Brodrrib W, Fallon A, Jackson C, Hegney D. Breastfeeding and Australian GP Registrars their knowledge and attitudes. *J Hum Lact* 2008;24:422-30.
- Anjum Q, Ashfaq T, Siddiqui H. Knowledge regarding Breastfeeding practices among medical students of Ziauddin University Karachi. *J Pak Med Assoc* 2007;57:480-3.
- Svendby HR, Løland BF, Omtvedt M, Holmsen ST, Lagerlöv P. Norwegian general practitioners' knowledge and beliefs about breastfeeding and their self-rated ability as breastfeeding counsellor. *Scand J Prim Health Care* 2016;34:122-9.
- Hasnain S, Majrooh A. Knowledge and practices of resident doctors and nurses in breast feeding in obstetric and paediatrics departments of Jinnah hospital, Lahore. *Biomedica* 2012;28:156-62.
- Hanif R, Khalil E, Sheikh A, Harji A, Haris S, Rasheed MW, et al. Knowledge about breastfeeding in accordance

- with the national policy among doctors, paramedics and mothers in baby-friendly hospitals. *J Pak Med Assoc* 2010;60:881-6.
16. Utoo BT, Ochejele S, Obulu MA, Utoo PM. Breastfeeding Knowledge and Attitudes amongst Health Workers in a Health Care Facility in South-South Nigeria: the Need for Middle Level Health Manpower Development. *Clin Mother Child Health* 2012; 9:1-5.
17. Taneja DK, Misra A, Mathur NB. Infant feeding - an evaluation of text and taught. *Indian J Pediatr* 2005;72:127-9.