

Challenges to timely initiation of breast-feeding in rural area of district Sargodha, Pakistan

Umaira Zaib, Saleem Rana, Muhammad Ibrahim Ansari, Hafiz Azeem Akhtar, Kaleemullah Abro, Muhammad Siddique Ansari

Institute of Public Health, Lahore, University Institute of Public Health, Lahore SMBB Medical University, Larkana, UIPH Larkana and Pharmacy Department, LUMHS, Jamshoro, Pakistan

Objective: To assess and find the barriers of timely initiation of breast feeding.

Methodology: This cross sectional study was conducted in rural area (2 Union councils) of District Sargodha with 202 child's Mothers as sample size with systematic random sampling method. A questionnaire was developed for data collection. Frequencies for all the variables were recorded. Chi-square test of independence was used for identifying possible significant barriers influencing early initiation of breast feeding.

Results: Only 35.1% of the mothers started early breast feeding (within one hour after birth). 27.7% mothers had primary level education. Household income of the maximum (72%) study subjects was less than Rs. 10,000. 29.2% mothers were less than 20 years of age at marriage. Various barrier were highlighted for early initiation of breast feeding including number of children ($p=0.00$) and

extended/nuclear family ($p=0.00$). Normal deliveries ($p=0.00$), deliveries at health care center/clinic ($p=0.00$), knowledge about the ANC ($p=0.00$), knowledge through media remained effective ($p=0.00$) and supportive, ($p=0.00$). Around 37.6% of females said that they were facing problems during breast feeding including low milk supply (69%) followed by sore nipples (15%), low birth weight (12%) and breast infections (4%). Another important aspect highlighted that 40.1% females provided Ghuti as baby's first food; honey by 35.6%, green tea by 3% and Formula milk by 6.4%.

Conclusion: Low prevalence was due to lack of proper knowledge regarding the early initiation of breast feeding among the newly delivered mother are especially with cesarean delivery. (Rawal Med J 202;45:930-933).

Keywords: Nutrition, infant feeding, lactation.

INTRODUCTION

Breastfeeding (BF) is beneficial for both mothers and infants.¹ The slogan of Global Strategy for Infant and Young Child Feeding is to promote breast feeding which is authorized by WHO and UNICEF in year 2002.² In early breast feeding (recommended within 1 hour after birth) baby receives colostrum which provides immunity against different pathogens.³ Sufficient care and feed is the fundamental right of the neonates.⁴ It is mandatory to educate the mothers regarding BF i.e within 1 hour after birth and correct sucking position.⁵ Level of production of oxytocin is enhanced during early breast feeding.⁶ Breastfeeding reduces the risk of ovarian cancer, breast cancer and Type 2 diabetes.⁷ Breast feeding also helpful to prevent from obesity.⁸ It is also

called natural method of family planning.⁸ It reduces risk of gastroenteritis (major cause of infant mortality), respiratory infections, childhood leukemia, sudden infant death syndrome (SIDS), some long term chronic diseases e.g. diabetes allergy.⁹

Development of brain is very important for the infants which is only possible with the help of long chain polyunsaturated fatty acids, which is present in breast milk.¹⁰ There is limited data regarding breastfeeding and infant feeding practices in rural areas of Pakistan. Initiation of breastfeeding within the first hour after delivery seems to be delayed overall in Pakistan. According to the Pakistan demographic Health survey, timely initiation of breastfeeding is 18%, which is needed to be improved.¹¹ Hence this study was conducted to

assess the knowledge and barriers of timely initiation of BF.

METHODOLOGY

This cross sectional descriptive study was conducted in rural area (2 Union councils) of District Sargodha with sample size of 202 (calculated on prevalence rate 13% with 5% refusal rate) and systematic random sampling method was used. Mother Child pairs fewer than 6 months of age were included and mothers who have mental disability, complicated delivery and having children with congenital anomalies were excluded.

A questionnaire was developed consisting of three sections; socio demographic, antenatal, natal and postnatal information and feeding related knowledge variables. Data was collected via polio program mapping and informed consent was taken and full autonomy and research ethics were abode.

Statistical Analysis: SPSS version 16 was used for analysis. Chi-square test of independence was used for identifying possible significant barriers. $p < 0.05$ was considered significant.

RESULTS

Out of the total 202 selected subjects 35.1% of the mothers started early breast feeding within one hour after birth while 53.3% mothers started after one day by 53.3%. Some of the mothers 11.4% (23) have started breast feeding within 24 hours after birth. Among selected study population, 72.8% mothers were unemployed and among the employed women 54.5% have started early initiation of BF. 63% of the subjects have monthly household income $< 10,000$ Rs while only 9% have $> 25,000$ Rs. monthly income (Table 1).

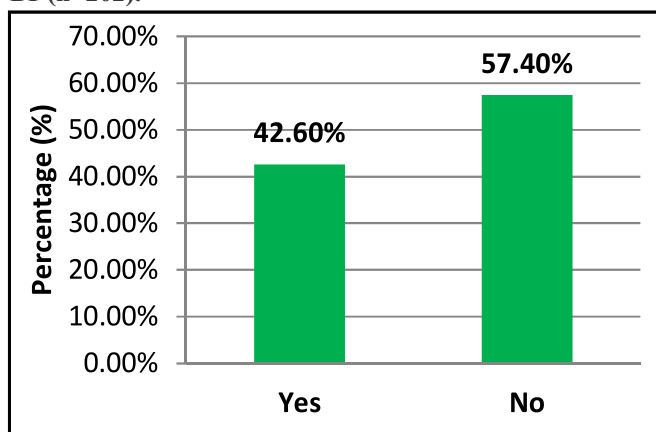
A total of 35.6% women reported normal deliveries and 15.3% females were undergone emergency caesarean. A considerable proportion of the study sample 49% adopting willingly caesarian (Table 2). Both of the factors places of delivery and delivery assisted by an expert professional found significantly associated with early initiation of BF.

Table 1. Socio-demographic of study participants.

Parental Education	Early Initiation of BF		P-value
	Yes n (%)	No n (%)	
Mother's Education			
Illiterate	6 (20%)	24 (80%)	0.00
Primary	13 (23.2%)	43 (76.8%)	
Middle	6 (27.3%)	16 (72.7%)	
Matric	14 (33.3%)	28 (66.7%)	
F.A	17 (58.6%)	12 (41.4%)	
Graduate and Above	15 (65.2%)	8 (34.8%)	
Father's Education			
Illiterate	6 (18.2%)	27 (81.8%)	0.00
Primary	11 (27.5%)	29 (72.5%)	
Middle	7 (27.3%)	32 (72.7%)	
Matric	20 (46.5%)	23 (53.5%)	
F.A	13 (56.5%)	10 (43.5%)	
Graduate and Above	14 (58.3%)	10 (41.7%)	
Monthly Income (Rs.)			
$< 10,000$	34 (26.8%)	93 (73.2%)	0.00
10,001-15,000	9 (37.5%)	15 (62.5%)	
15,001-20,000	7 (41.2%)	10 (58.8%)	
20,001-25,000	9 (56.2%)	7 (43.8%)	
$> 25,000$	12 (66.7%)	6 (33.3%)	
Mother's Occupation			
Employed	30 (54.5%)	25 (45.5%)	0.00
Unemployed	41 (27.9%)	106 (72.1%)	
Barriers for initiation of BF	Yes	No	P-value
Age of Mother			
< 20 Years	7 (29.2%)	17 (70.8%)	0.00
20 -25 Years	23 (26.1%)	65 (73.9%)	
26-30 Years	11 (22.9%)	37 (77.1%)	
31-35 Years	17 (73.9%)	6 (26.1%)	
Above 35 Years	13 (68.4%)	6 (31.6%)	
Number of Children			
Primipara	15 (18.8%)	65 (81.2%)	0.00
Multipara	56 (45.9%)	66 (54.1%)	
Type of Family			
Nuclear	24 (22%)	85 (78%)	0.00
Extended	47 (50.5%)	46 (49.5%)	
Place of delivery & Delivery assisted	Yes	No	p-value
Place of Delivery			
Home	6 (18.8%)	26 (81.2%)	0.00
Dai Home	8 (20.5%)	31 (79.5%)	
Health Facility	31 (68.9%)	14 (31.1%)	
Nurse Clinic	20 (31.2%)	44 (68.8%)	
Other	6 (27.3%)	16 (72.7%)	
Delivery Assisted By			
Doctor	11 (64.7%)	6 (35.3%)	0.00
Nurse/Midwife	39 (44.8%)	48 (52.2%)	
Dai	14 (21.2%)	52 (78.8%)	
Other	7 (21.9%)	25 (78.1%)	
Birth Interval between birth & early initiation of BF	Yes	No	P-value
Birth Interval			
No Previous Birth	26 (29.9%)	61 (70.1%)	0.03
10-15 Month	26 (32.5%)	54 (67.5%)	
16 & Above	19 (54.3%)	16 (45.7%)	

Table 2. Delivery Information and Breast feeding Statistics (n=202).

Type of Delivery	N (%)
Normal	72 (35.6%)
Elective Caesarian	99 (49%)
Emergency Caesarean	31 (15.3%)
Total	202 (100%)
Frequency of the Persons assisted Delivery	
Delivery Assisted by	N (%)
Doctor	17 (8.4%)
Nurse/Midwife	87 (43.1%)
Dai	66 (32.7%)
Other	32 (15.8%)
Total	202 (100%)
Professional consulted for Antenatal care	
ANC taken From	N (%)
Doctor	19 (9.4%)
Nurse	62 (30.7%)
TBA	28 (13.9%)
Other	50 (24.8%)
None	43 (21.3%)
Total	202 (100%)
Primary Advisor Regarding Early Breast Feeding in Family	
Primary Advisor Regarding Early Breast Feeding	N (%)
Mother in Law	113 (55.9%)
Herself	29 (14.4%)
Husband	27 (13.4%)
Other	33 (16.3%)
Total	202 (100%)
Birth Interval Practices	
Birth Interval	N (%)
No Previous Birth	87(43.1%)
10-15 Months	80(39.6%)
16 Months & Above	35 (17.3%)
Total	202(100%)

Fig. Knowledge through print/electronic media regarding BF (n=202).

Out of all mothers, 39.1% said that antenatal care was very important for the newborns while according to 30.7% mothers' it was not important. A considerable proportion 30.2% of mothers had no idea about the antenatal care and its importance for newborns. And 36.6% mothers reported that they have performed antenatal care visit during last Pregnancy. The maximum of the females consulted Nurses and doctors for antenatal care (40.1%) while a significant proportion received no antenatal care are at their own within family (46.1%). Out of the total study population 42.6% females said that they got knowledge regarding breast feeding through print and electronic media advertisement while 57.4% have never seen such advertisement anywhere (Figure).

DISCUSSION

A published study provide the similar results that 96.9% of the mothers started earlier initiation of BF and positively related to various factors including type of delivery, residential area, younger age of mother at marriage, parental education and household income.² The current study has also provided that number of children also significantly associated with early initiation of BF ($p < 0.05$). 18.8% female with primipara has started early breast feeding while 45.9% mother having more than one child started early breast feeding. Similar results have been provided by a study according to that delayed in onset of breast feeding was fond associated passively with primipara.³ Another research has highlighted the similar results that in extend type of families motivation, support and knowledge regarding early start of BF was much better as compared with the nuclear type family.⁴ Only 3% mothers initiated breast feeding within 1 hour after birth.⁵

A study showed that females with vaginal deliveries have high percentage of early start of breast feeding as compared with the other types. Only 3.3% females start early BF who visited private clinic or others.⁶ Some of the study participants know about the importance of ANC but not often put their knowledge into practice and delayed start of BF, avoidance of colostrum and prelacteal feeding remained serious problem.⁷ Mothers who got

Knowledge through advertisement and early initiation of breast feeding remained significant to each other ($p < 0.05$).

Results of a study published in America showed that health care providers had limited education regarding infant feeding. Health systems should set up a baby friendly atmosphere that supports and encourages breastfeeding through different sources including different types of media.⁸ It was recommended by the study that there should be intervention at HCP level with special focus on the barriers regarding early initiation of BF.⁹ The satisfactory management of those conditions is basic, as if not treated they frequently lead to early weaning.¹⁰ Prolactal feeds, green tea, animal milk and formula milk should be avoided.¹¹

CONCLUSION

This study showed a low prevalence of early initiation of breastfeeding in mothers. This low prevalence was due lack of proper knowledge regarding the early initiation of breast feeding among the newly delivered mother and especially with cesarean delivery and various other barriers also involved in this regard.

Author Contributions:

Conception and design: Umaira Zaib, Saleem Raza
Collection and assembly of data: Muhammad Siddique, Kaleem
Analysis and interpretation of data: Umaira Zaib, Azeem
Drafting of the article: Muhammad Ibrahim Ansari
Critical revision of article for important intellectual content: Saleem Raza

Statistical expertise: Umaira Zaib, Muhammad Ibrahim Ansari
Final approval and guarantor of the article: Umaira Zaib

Corresponding author email: Muhammad Ibrahim Ansari:
cadetcccl@yahoo.co

Conflict of Interest: None declared

Rec. Date: Feb 13, 2020 Revision Rec. Date: Jun 22, 2020 Accept
Date: Sept 30, 2020

REFERENCES

1. Baker EJ, Sane LC, Franklin N. Early initiation of and exclusive breastfeeding in large-scale community-based programmes in Bolivia and Madagascar. *J Health Popul Nutr*. 2006;24:530-9.
2. Organization WH, UNICEF. Global strategy for infant and young child feeding: World Health Organization; 2003.
3. Agampodi SB, Agampodi TC, Kankanamge U, Piyaseeli D. International Breastfeeding. *Int Breastfeed J*. 2007;2:13-7.
4. Victora CG, Smith PG, Vaughan JP, Nobre LC, Lombardic, Teixeiraamb et al. Infant feeding and deaths due to diarrhea a case-control study. *Am J Epidemiol*. 1989;129:1032-10.
5. Rasheed S, Frongillo EA, Devine CM, Alam DS, Rasmussen KM. Maternal, infant, and household factors are associated with breast-feeding trajectories during infants' first 6 months of life in Matlab, Bangladesh. *Nutr J*. 2009;139:1582-7.
6. Linnecar A. The International Baby Food Action Network: Defending Every Child's Birthright. *Int J Child. Rights*. 1997;5:473-8.
7. Scott JA, Binns CW. Factors associated with the initiation and duration of breastfeeding: a review of the literature. *Breastfeeding Rev*. 1999;7:5-6.
8. Greer FR, Sicherer SH, Burks AW. Effects of early nutritional interventions on the development of atopic disease in infants and children: the role of maternal dietary restriction, breastfeeding, timing of introduction of complementary foods, and hydrolyzed formulas. *Pediatrics*. 2008;121:183-9.
9. Hancioglu A, Arnold F. Measuring coverage in MNCH: Tracking progress in health for women and children using DHS and MICS household surveys. *PLoS Med*. 2013;10(5):e1001391.
10. 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.
11. Pakistan Demographic and Health Survey. 2012-2013.