



Breast Feeding Behavior of Improvident and Non-Improvident Mothers: Whether Health Education has any Role?

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ABSTRACT

Background: There is a need for promotion and protection of optimal infant feeding practices for improving nutritional status of children. It is not well established whether breast feeding behavior of improvident is influenced by maternity or not? Also Improvident and Non-Improvident Mothers do not necessarily respond to health education imparted to them. Objectives:1) To investigate breastfeeding behaviour of lactating mothers in relation to their maternity status. 2) To evaluate the impact of health education on Breast Feeding Behaviour. Methods: Results: only 2.2% in baseline survey and 7.7% in post interventional survey. There were 30.8% mothers in baseline survey and 40.4% mothers in the post interventional survey who initiated breast feeding even after 24 hours. Proportions of mothers giving pre-lacteal feed were found to be 18.7% and 21.2% in the two surveys respectively. Conclusions and Suggestions: Improvident mothers were more likely to adopt optimal breast feeding practices in terms of not to give pre-lacteal feeds, giving colostrums and timely start of complimentary feeding etc. There is a need for promotion and protection of optimal infant feeding practices of mothers irrespective of maternity status.

KEYWORDS

Complimentary feeding; Colostrums Feeding; Improvident Maternity Initiation of feeding; Prelacteal Feeding,

Introduction:

WHO and UNICEF recognize well the importance of breast feeding on maternal and child health. Thus, there is a need for promotion and protection of optimal infant feeding practices for improving nutritional status of children. In India, the practice of breastfeeding is almost universal, but initiation of breastfeeding is generally quite late and colostrums is discarded (Khan, 1990)¹. Dongra et al (2010)² mentioned that In India the practice of breastfeeding is almost universal, but initiation of breastfeeding is generally quite late and colostrums is discarded. The study by Kumar et al (2006)³ observed that in urban slums of Allahabad, initiation of breastfeeding within six hours and proper complementary feeding to be only 30.6% and 38.7% respectively and 54.8% mothers discarded colostrums. Prelacteal feeding was found to be 40% in Slum of Chandigarh by Kumar et al (2006)⁴. This study also found only 159 (58.9%) mothers initiating breast feeding within six hours of birth and colostrums was discarded only by 43 (15.9%) respondents. Prelacteal feeds were given by 40.0% mothers. This study suggested that there is need of imparting health education to mothers for promoting institutional deliveries and protecting optimal breast feeding practices.

Medical and public health experts advocate breast-feeding as the best method of feeding young infants for a wide variety of reasons. Majority of infant deaths can be averted promoting proper breast-feeding practices. Breast -feeding improves growth and development of children. It has also been found to protect against delays in young children’s language and motor skill development (Dee et al, 2007)⁵. According to the recently developed child growth standards of World Health Organization (WHO) Standards, 39% of the children below six months of age are underweight (Dongra et al , 2010)⁶. There is a great inconsistency in findings regarding prevalence and correlates of breast-feeding behavior of mothers in different parts of the country as found in several studies. However,

none of available studies studied breast feeding behavior of mothers in relation with maternity status.

It is not well established whether breast feeding behavior of improvident is influenced by maternity or not? Also Improvident and Non-Improvident Mothers do not necessarily respond to health education imparted to them. Improvident maternity is defined as women who had already given birth to three children of whom at least one is alive. It implies occurrence of pregnancy which is not desired for the married couple. The concept of improvident maternity to indicate all birth of order 4 and above as accidental and not really wanted by the parents themselves was proposed by Mr. RA Gopal Swami, ICS, who was the first Registrar General (RG) of Independent India (1951 Census) and this term is used subsequently also⁷⁻¹⁰. Present study has been conducted with the following objectives:

1. To investigate breastfeeding behaviour of lactating mothers in relation to their maternity status.
2. To evaluate the impact of health education on Breast Feeding Behaviour of Improvident and Non-Improvident Mothers

Material and Methods:

The present study is a part of an intervention study under ICMR sponsored project “Correlates of Improvident Maternity in Urban Slums of Chandigarh”. Chandigarh is the most economically advanced Union Territory (UT) of India and also capital of two states: Punjab and Haryana, known for its high literacy and good environmental conditions.

Study-Design:

Community-based longitudinal study was conducted in four randomly selected urban slum areas (colonies) of Chandigarh.

Sample Design:

A systematic two-stage random sample design was adopted. At the first stage, from the sampling frame available a sample of four slum areas (colonies), called primary stage units (PSU), was selected systematically with probability proportion to size (PPS). At the second stage, a sample of households as second stage units was selected within each selected PSU of an optimum size with proportional allocation.

Out of four randomly selected clusters, two clusters were randomly assigned to study group and remaining two clusters were assigned to control group. At the end of six months of interventions in the form of health education, changes in their breast feeding related behaviour (awareness as well as attitude) of mothers in the intervention and control groups were evaluated in terms of some selected key parameters of optimal Infant and young child feeding (IYCF) likely to be influenced during period of intervention.

Study Units:

Lactating mothers willing to participate in the study throughout the study period served as study units or respondents.

Sample Size: Power analysis was done to calculate optimum sample size for the detailed study. On the basis of pilot survey, percentage of households with improvident maternity is found to be 35% and percentage of couples in the reproductive age was about 25% of total population. Assuming 90% confidence coefficient and 10% (of 35%) relative precision and not an absolute precision, the optimum sample size comes out to be 503 households. Design effect due to selection of couples within selected households comes out to be 1.26 and hence optimum sample will require minimum of 634 couples having wife in reproductive age as study subjects.

Sample size calculated on the basis of other critical parameters of fertility behaviour came out to be comparatively less and hence sample of an optimum size of 634 couples (highest of all calculated / sample sizes) having wife in the reproductive age (15-49 years) was to be attained. Optimum sample size was further elevated by 20% in order to adjust drop-outs and accordingly it was initially planned to cover 760 couples. Subsequently respondents who were lost to follow-up were excluded from analysis and ultimate sample included results of 667 couples only. Among those 667 couples surveyed in the detailed survey a subgroup of 91 lactating mothers in pre-intervention group and 52 mothers in post intervention group were part of study in this survey.

Study tool:

Information was collected using a pre-designed and pre-tested semi-structured interview schedule conducting house-to-house survey. Respondents were interviewed in privacy at the respondent's home at flexible time points keeping in view of their working hours. All possible efforts were made to reduce non-responses including frequent visits.

Ethical Issues:

Approval by Institutional Research Committee and Institutional Ethics Committee (IEC) was granted to undertake the project and confidentiality of responses was also ensured.

Results:

Breast feeding behaviour of lactating mothers observed during the two surveys is present in Table-1 in relation to their improvident maternity status. Proportions of mothers initiating breast feeding within one hour were found to be very low, only 2.2% in baseline survey and 7.7% in post interventional survey. There were 30.8% mothers in baseline survey and 40.4% mothers in the post interventional survey who initiated breast feeding even after 24 hours. These percentages were higher for improvident mothers. Proportions of mothers giving pre-lacteal feed were found to be 18.7% and 21.2% in the two surveys respectively. Improvident mothers were more likely not to give pre-lacteal feeds. Proportions of mothers feeding colostrums didn't show differentials with respect to materni-

ty status and 93.4% mothers in baseline survey and 94.2% mothers in post interventional survey reported to feed colostrums. Proportions of mothers adopting complementary feeding were found to be very low, only 16.5% in baseline survey and 17.3% in post interventional survey. Complimentary feeding at optional time was more likely in case of improvident mothers. Proportions of institutional deliveries were found to be only 56.0% in baseline survey and 53.8% in post interventional survey. Suboptimal infant feed practices may be attributed to large proportions of home deliveries.

Discussion:

Improvident mothers were more likely not to give pre-lacteal feeds. Complimentary feeding at optional time was more likely in case of improvident mothers. Proportions of mothers feeding colostrums didn't show differentials with respect to maternity status and 93.4% mothers in baseline survey and 94.2% mothers in post interventional survey reported to feed colostrums. Findings on colostrums feeding and other aspects of breast feeding behavior are in agreement with most of earlier studies. However, no definite differentials in breast feeding behavior in relation to maternity status could be established in the present study.

Conclusions and Suggestions:

Breast feeding behavior of mothers is largely influenced by their maternity status. Improvident mothers were more likely to adopt optimal breast feeding practices in terms of not to give pre-lacteal feeds, giving colostrums and timely start of complimentary feeding etc. There is a need for promotion and protection of optimal infant feeding practices of mothers irrespective of maternity status for improving nutritional status of children.

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Table -1: Breast Feeding Behavior of Lactating Mothers by Maternity Status and Effect of Interventions

Behaviour	Pre –Intervention Survey			Post –Intervention Survey		
	Non-Improvident N=65 No (%)	Improvident N=26 No (%)	Total (N=91) No. (%)	Non Improvident N=43 No (%)	Improvident N=9 No (%)	Total N=52 No (%)
Initiation of Breast Feeding						
Within 1 Hour	1(1.54)	1(3.85)	2(2.2)	4(9.3)	0(0.0)	4(7.7)
2-6	6(9.23)	0(0.0)	6(6.6)	4(9.3)	0(0.0)	4(7.7)
7-12	21(32.31)	7(26.92)	28(30.8)	10(29.4)	4(44.4)	14(26.9)
13-24	19(29.23)	8(30.77)	27(29.7)	9(20.9)	0(0.0)	9(17.3)
Above 24	18(27.69)	10(38.46)	28(30.8)	16(37.2)	5(55.5)	21(40.4)
Prelacteal Feed						
Given	12(18.46)	5(19.23)	17(18.7)	8(18.6)	3(33.3)	11(21.2)
Not Given	53(81.54)	21(80.77)	74(81.3)	35(81.4)	6(66.7)	41(78.8)
Colostrum Feeding						
Given	61(93.85)	24(92.30)	85(93.4)	41(95.3)	8(88.9)	49(94.2)
Not Given	4(6.15)	2(7.69)	6(6.6)	2(4.7)	1(11.1)	3(5.8)
Age at Start of Complementary Feeding						
Prior to 6	51(78.5)	11(42.3)	62(68.1)	27(62.8)	5(55.6)	32(61.5)
7-8	8(12.3)	7(26.9)	15(16.5)	7(16.3)	2(22.2)	9(17.3)
9-12	2(3.1)	4(15.4)	6(6.6)	2(4.7)	1(11.1)	3(5.8)
Above 12	4(6.1)	5(19.2)	9(9.9)	7(16.3)	1(11.1)	8(15.4)
Total	65(100.0)	26(100.0)	91(100.0)	43(100.0)	9(100.0)	52(100.0)
Continuation of Breast Feeding						
Continued	20(30.8)	6(23.1)	26(28.6)	14(32.6)	5(55.5)	19(36.5)
Discontinued	45 (96.2)	20(76.9)	65(71.4)	29(67.4)	4(45.5)	33(63.5)
If Discontinued, Duration Of Breast Feeding						
Up to 6 Months	23(51.1)	10(50.0)	33(50.8)	12(41.4)	2(50.0)	14(42.4)
7-12 Months	17(37.8)	9(45.0)	26(40.0)	11(37.9)	1(25.0)	12(36.3)
Above 12 Months	5(11.1)	1(5.0)	6(9.2)	6(20.7)	1(25.0)	7(21.1)
Total	45(100.0)	20(100.0)	65(100.0)	29(100.0)	4(100.0)	33(100.0)
Place of Last Delivery						
Home	24(36.9)	16 (61.5)	40(44.0)	18(41.9)	6(66.7)	24(46.2)
Institution	41(63.1)	10(38.5)	51(56.0)	25(58.1)	3(33.3)	28(53.8)
Overall	65(100.0)	26(100.0)	91(100.0)	43(100.0)	9(100.0)	52(100.0)