Breast Feeding Practices among Kashmiri Population

Dr. Yasmeen Majid Khan[1], Dr. Asmat Khan[2]

[1]Senior Associate Professor Govt. Degree College for women Srinagar, Kashmir
[2]Toronto,ON , Canada

ABSTRACT—*The study assessed the breast feeding practices of mothers in three distinct regions of Jammu, Kashmir and Ladakh. 1293 mothers with children aged 0-2 years were selected randomly. Sampling was done with probability proportion to size (PPS). In this way 680 mothers from Jammu, 512 from Kashmir and 101 from Ladakh were selected. Practices regarding breastfeeding were assessed using pre-tested questionnaires. Results indicated highly significant inter-regional difference in breast feeding practices. EBR Exclusive breast feeding rates at 0-6 months were as 52.0%, 52.1% and only 15.8% in Jammu, Kashmir and Ladakh. Exclusive breastfeeding got hampered in Jammu and Kashmir regions due to introduction of top milk while in Ladakh children were weaned quite early. The study shows that erratic feeding practices have made deep inroads into the psyche of the population. Despite the legislation of IMS act the commercial sector continues to find ways and means to market their products that undermine breastfeeding in all the three regions.*

Keywords— Breastfeeding, Exclusive breastfeeding, Partial breast feeding, Commercial Milk (CM)

1. INTRODUCTION

Early breastfeeding within one hour and exclusive breastfeeding for the first six months are the key interventions to achieve MDG 1 and MDG 4, which deal with reduction in child malnutrition and mortality, respectively(Bryce J2006). It is well known that breastfeeding practices can have a substantial effect on infant health and mortality in developing countries. There are at least three known mechanisms by which breastfeeding contributes to infant health and survival. First, breast milk is ideally suited to the baby's metabolic structure and contains the Optimal combination of nutrients. Second, breastfeeding allows the mother to pass on immunities that she herself has acquired to the baby. For example, diarrhea preventing immunoglobulin (IgA), which does not pass through the placental barrier in sufficient amounts during pregnancy, is passed on to infants through breastfeeding. Third, breastfeeding children receive less of other foods and liquids that could be contaminated with disease-causing agents (Briend, Wojtyniak, and Rowland 1988;Cabigon 1997; Habicht, DaVanzo, and Butz 1986; Huffman and Lamphere 1984;Jelliffe and Jelliffe 1978; Palloni and Tienda 1986; Yoon et al. 1996)..Within the past four decades there has been a worldwide decline in breastfeeding, due to the rapid expansion of milk technology in industrialized countries, the advertisement and sale of infant formulae and the introduction of the feeding bottle as a symbol of status and affluence (Okeahinalan TC1986) The age at which supplementary food should be introduced in the child's diet is another major issue. Available literature indicates that supplementary food should be introduced no earlier than 4 months and not later than six months (WHO/UNICEF 1979) Breast feeding practices are mainly influenced by customs, superstitions, beliefs, religion, cultural pattern, mother's education and socio-economic status of families. Child rearing practices differ not only in different states of India, but also among people living in different cities (Geervani P 1983). The World Health Organization (WHO) recommends a set of guidelines for infant feeding in developing countries.. First, breastfeeding should be initiated immediately after childbirth. Second, infants should receive only breast milk up to 4–6 months of age. At such young ages, no other foods or liquids are recommended. Third, starting at age 4–6 months, adequate and appropriate supplementary foods should be added to the infant's diet in order to provide sufficient nutrients for optimal growth. Fourth, it is recommended that breastfeeding

continue, in combination with supplementary foods,up to the second birthday or beyond (World Health Organization 1991).The following study was therefore planned to assess the knowledge of mothers of the three regions of J&K related to breast feeding.

2. MATERIAL AND METHODS

Random sampling was used with probability proportion to size (PPS).Estimated population for 2005 of the study groups was obtained from the census authorities and added up to get the population of the sample at each center. The number of children was computed on the basis of an estimate of four percent. Of these children, one percent formed the sample size at each center. In this way 680 children from Jammu, 512 from Kashmir and 101 from Ladakh were selected from randomly selected health institutions of districts of Jammu and Kashmir.

2.1 Tools Used

Pre-tested questionnaire cum interview schedule was used to collect relevant information. All the relevant information from initiation of breast feeding, person giving information regarding breastfeeding, pre-lacteal feeding, and reason of breastfeeding and cessation of it was obtained. The data was analyzed by considering breastfeeding practices as the dependent variable and then analyzing it against the different independent variables. Data was compiled and all the analysis was done through SPSS-10 (Statistical package for social science) software package.

2.2 Analysis of Data

For analysis of study data first dependent and independent variables were identified and then appropriate statistical analysis was done on them.

2.3 Independent and Dependent Variables

Here certain variables were conceived as the antecedent that causes a change in another variable and therefore, those first variables were used as the independent variables and the second variables as the dependent variables. In this study all independent and dependent variables were categorical variables, these variables, can't be measured along a continuum, instead different values of the variables can only be categorized or named.

2.3.1 Independent Variables

Dwelling family type, mother's age, mother's education, mother's occupation, parity, socioeconomic status, type of delivery and place of delivery were taken as the independent variables effecting infant feeding practices.

2.3.2 Dependent Variables

Infant Feeding Practices – Initiation of breast feeding. Type of first feed, Breastfeeding experience, Reason for breastfeeding initiation of top feeding, type of top feed, initiation of semisolids, type of semisolid, reason for giving top milk, Partial breastfeeding , full breastfeeding, Reason of cessation of breastfeeding, information about breastfeeding were taken to get the complete picture of infant feeding practices in these regions.

The data was analyzed by considering these dependent and independent variables in mind. All the dependent variables were analyzed against the independent

2.4 Statistical Analysis

The analytic tools that were used in the study for the presentation and interpretation of results were mostly those of time tested tabular analysis, with contingency tables and percentages, besides certain specific statistical indices and tests. Analysis was done through contingency tables and chi-square test to find the variables that come significant. Data was complied and all the analysis was done through SPSS-10 (Statistical Package for Social Science) software package.

3. RESULTS AND DISCUSSION

(25.7%) of the children received breast milk only after 1 day and in (1%) of the population breast feeding was not even initiated. However, in Ladakh (97.0%) initiated breast feeding earlier than Jammu and Kashmir. Breast feeding was initiated by (100%) of Ladakhi women. (66%) of women gave pre-lacteal feeds to the children. Pre-Lacteal feeding was more common in Jammu region (78.8%) and least in Ladakhi region as only (8.9%) was given pre lacteal feed. in Ladakh (97.0%) were fed colostrum. Exclusive breast feeding rate was (52%, 52.1% , 15.8%) in Jammu Kashmir& Ladakh regions of Kashmir . Partial breastfeeding beyond 12 months was more common in Jammu (84%) followed closely by Kashmir (82%). Overall (76.0%) of children were partially breast fed after First year. Main reason given for discontinuation of breast feeding by mothers was insufficient milk (51.0%). (16.9%) of women had bad experience about breastfeeding due to insufficient milk, inverted or cracked nipples and breast engorgement. (41.5%) of women were advised by health care mothers for breast feeding.

The term "Supplementary" milk is used to refer to milk other than human milk. There were (44.0%) infants in Jammu; (47.4%) in Kashmir and (8.8%) in Ladakh who has been started on supplementary milk in 0—3 months age. the reason for starting supplementary milk as stated by mothers were insufficient milk by (78.0%) and mothers working status by (10.0%). Taking all regions together (60.8%) infants were receiving animal milk and (39.2%) were receiving commercial milk. The animal milk, was much more widely used at Ladakh region (73.5%) followed closely by Jammu region (71.3%) unlike in the case of commercial milk which was used in much higher proportion by Kashmir region (58.1%) and least by Ladakh region (26.5%). Supplementary milk was more often fed by bottle (84.1%) in all the three regions. In Ladakh (55.9%) mothers fed top milk by spoon/ cup while in Kashmir only (14.6%) mothers were using spoon or cup. The use of feeding bottle was particularly noticeable in Jammu (90.6%) followed by Kashmir (85.4%). Sterilization (and that too not after every feed) was practiced to a significant extent only in (54.6%) Jammu and (53.1%) Kashmir; and (43.3%) Ladakh region. In most cases (43.5%) milk was diluted. More women in Kashmir (50.6%) used to give dilute milk to infants followed by (44.5%) of Jammu women. Overall (65%) of mothers had self knowledge about top feeding following by (26.9%) by health care workers.

3.1 Initiation of breast feeding

It is recommended that breast feeding should be initiated within one hour of birth and nothing should be given to the infant before beginning to breast feed. As for starting of breast feeding immediately after child birth, the message seemed not to have gone home to the masses because (27.2%) infants from Jammu and (28.1%) from Kashmir, received their breastfeeding only after 1 day. (NFHS-3) data shows initiation of breastfeeding within one hour is only 24.5% .Early initiation of breastfeeding was common in Ladakh than in Jammu & Kashmir. A national report on status of infant and young child feeding in 49 districts of India by (BPNI 2003) also shows initiation of breast feeding is higher in mothers belonging to scheduled tribes since Ladakhis are scheduled tribes our study holds conformity with it. (Ibhanesebhor SE, Muogbo DC 1995) found more of higher socioeconomic mothers delivered in hospitals to breastfeed their children early. The present study also shows that women from higher socio economic status in Kashmir and Ladakh were early initiators.

3.2 Prelacteal feeding

Around 66.0% of mothers gave pre-lacteal feeds to their babies. Breast milk as first feed was given to (21.2%) in Jammu, (39.8%) in Kashmir and (91.1%) in Ladakh. The disturbing finding was that a sizeable proportion of infants were given commercial milk as pre-lacteal feed. Wide prevalence of prelacteal feeding in rural India, irrespective to most of the familial characteristics was also reported by (Devdas RP, Purushothanman V and Paul M. 1999). Type of first feed given after birth showed significant difference between three regions. It is clear that initiation of breastfeeding immediately after delivery is unacceptably low. It is also related to giving of pre lacteal feeds which delays

initiation of "early breastfeeding" and breaks "exclusive breastfeeding". Therefore efforts to enhance initiation of breastfeeding should start with counseling during pregnancy and support and assistance at the time of birth. Incidence of giving prelacteal feeds is higher among Jammu mothers followed by Kashmiri mothers and least by Ladakhi mothers. (Kishore S and Garg BS 1999). Reported more mothers i.e. 64.10% from joint families practiced prelacteal feeding as compared to 34.7% mothers from nuclear families.

3.3 Full breast Feeding

Full Breastfeeding that is exclusive breastfeeding with or without the inclusion of water, should be practiced for 6 months, as before 6 months breast milk is self sufficient to fulfill Childs requirement. Only after 6 months the requirements of the child increases. Full breastfeeding duration seemed to depend solely on the judgment of mothers as it has been found independent to their family type, age, occupation, parity and type/ place of delivery. An equal proportion of infants were exclusively breastfed upto 6 months of age in Jammu and Kashmir, 52% and 52.1% and in Ladakh only 15.8% were exclusively fed for upto 6 months. This may be viewed as reflecting a relatively better situation in this regard as far as Jammu and Kashmir region. Exclusive breast feeding before months was 56%, 52.6% and 91.8% in Jammu Kashmir and Ladakh which reflects better situation in Ladakh before 6 months. Only 6% mothers were continuing EBF by 6 months in Ladakh and only (41.5%) in Jammu and 27% in Kashmir which reflects a relatively more unfavorable situation in this regard in Ladakh and Kashmir. analysis of age wise data of NFHS -3, also reveals that exclusive breastfeeding rapidly declines from first month to sixth month, and only about 20% children continue it by six months giving a real figure of exclusive breastfeeding.. Further analysis of age wise data also reveals that exclusive breastfeeding rapidly declines from first month to sixth month, and only about 20% children practice exclusive breastfeeding at six months, while a planning commission goal for 10th plan was 80%. According to BPNI study 2003 exclusive Breastfeeding was 54.5% at 3 months but had declined to 27.3% at 6 months. These findings suggest that education with regard to breast feeding practices has to be tailored to meet the peculiar situation at each region. Thus in all three regions almost equal efforts would be needed to promote exclusive breastfeeding of infants up to 6 months as to promote introduction of supplemental foods at least by the end of six months. Total number of children exclusively breast fed for some time at 0-6 months was 637 (49.2%) in pooled sample. The rate of Exclusive breastfeeding was (65.5%) which dropped to 34.5% by 6 months.(Hiwarkar PA, Aswar NAR, Durge PM Shendre MO1999) found a total of 81.3% infants were solely breastfed at 1 months. By 6 months this declined to 52.71% respectively. Income showed significant influence on exclusive breast feeding only in Jammu. The common trend in all the regions was that better the economic status, the lower the percentage of exclusive breast feeding before 6 months as from high socio economic status only (20%) from Jammu, (61%) from Kashmir and zero percent from Ladakh were exclusively breast feeding at 6 months. The general expectation that a higher proportion of infants in extended and joint families will be exclusively breastfed for longer durations is not borne out by our observations. There was no significant difference in the pattern of breast feeding between nuclear and joint families in any regions. No significant difference related to mothers working status was observed as for as exclusive breast feeding was concerned. The conclusion is that at least for a significant part of early infancy after birth, most women, even working mothers had stayed away from work on the other hand, in the feeding pattern of infants at 6 months mothers occupations seemed to have influence only in Kashmir and Ladakh. Although males were put to breast earlier in Jammu and Kashmir than females, our observations indicate that contrary to the general belief, there was no statistically significant sex discrimination in full breast feeding practices in any region. The influencing factors which showed inter- regional differences regarding exclusive breastfeeding were mothers age, occupation, socio-economic status and type of delivery.

3.4 Partial Breast feeding

Partial breast feeding rates were very high in all the three regions. At 0—6 months 38%, 43.3% and 71.2% were being partially breast fed in Jammu, Kashmir and Ladakh. Introduction of supplementary milk at early age leads to nipple confusion on the part of the infant by switching back and forth

between breast and bottle. In terms of lactation physiology, the breast produces milk in response to sucking, therefore mothers who add supplements have more difficulty establishing good milk supply, are more apt to wean early and give "insufficient milk" as a reason for weaning. Breastfeeding should be done up to 2 years of age or beyond with appropriate supplements only after 6 months of age. Requirement of certain nutrients can only be optimally fulfilled if breast milk is given with supplementary foods but if the food provided is of inadequate quality and quantity it will have the effect of displacing breast milk without contributing nutritional value to the child and is likely to increase morbidity.

3.5 Breast feeding experience

As lactation is a physiological process mediated by secretion of hormones, where nervous influence also plays a part, the mothers experience during breast feeding can further effect the breastfeeding practices in many ways. Highest percentage of highly educated mother showed good experience in all the three regions. Maximum number of mother's i.e.80.7% faced no problem during breastfeeding. Various problems faced by mothers were pain and burning at nipple, cracked nipple, insufficient milk, teeth bite of baby, ulcer nipple, breast engorgement and retracted nipple, these were all clubbed as bad experience in our study. There was significant difference between three regions with regard to occurrence of breast feeding problems. since mothers facing breast feeding problems are likely to avoid and ultimately stop breastfeeding if the problems are not addressed. It is mandatory to address and reduce such problems because correcting such problems is likely to make more and more women to practice exclusive breastfeeding. What is needed is to have a sufficiently skilled staff to counsel women in breastfeeding and solving problems that may arise.

3.6 Source of knowledge about Breastfeeding

Breastfeeding is very much dependant on the knowledge and attitude of the mothers and the person from whom she is receiving advice (at different times). A mother may face many difficulties while breastfeeding her child, especially the first one. So the influence of the person who is most accessible to her significantly determines the practices followed by her. Only (41.5%) of mothers received instructions from health care workers about breastfeeding while (37.1%) had self knowledge. These findings are disturbing and make a strong case for greater involvement of health care workers in educating the mothers in their reproductive period. BFHI should be implemented in all hospitals. The BFHI program was initiated in our country with great hopes and expectations, but the implementation of the program lacked a strong training component. There was no monitoring and reassessment system in place. The program at the moment is standstill and requires a revival in line with new international guideline .

3.7 Reason for cessation of breast feeding

Many a times, the closely spaced pregnancies make mothers stop breastfeeding, depriving their children of their natural birth right. In the present study the mothers in general were not clear about the importance of continuing breastfeeding for a minimum period of two years and cessation before this has been justified for one or the other reason. Commonest reason for stopping breast feeding was cessation of breast milk in (63.8%), (57.6%) and (24.4%) in Jammu Kashmir and Ladakh. Next pregnancy was the reason stated by (14.5%), (21.2%) and (12.2%) at three regions. (Chitkara AJ, Gupta S1987) found the reason for cessation of breastfeeding as insufficient milk or no milk in 70, 60 and 79 percent mothers at Bombay, Calcutta and Madras. About 30-60% mothers had given up breastfeeding due to next pregnancy.

4. CONCLUSION

Despite breastfeeding's numerous recognized advantages, early and exclusive breastfeeding rates in the state of the jammu and Kashmir are low. Reasons for suboptimal breastfeeding are primarily lack of proper information to people, inadequate health care support, inability of the health care providers to help mothers experiencing breastfeeding difficulty, aggressive promotion of baby foods by the

commercial industry and lack of proper support by the community and at work place. There are many gaps in policy and programs related to infant and young child feeding in India. The big challenge is how to mainstream IYCF counseling and support interventions to help women to succeed both in early and exclusive breastfeeding. The rationale for supporting a major program to protect, promote and support breastfeeding action, backed by a budgetary support, is compelling for our country. Child health and development policies should urgently address this major concern. Improving breastfeeding practices requires support at the family and community levels. promotion of exclusive breastfeeding through existing primary healthcare services is feasible, Further research is needed to explore the relationship between the nutrition and health of mothers and the effects of breastfeeding on infant mortality in developing countries.

5. REFERENCES

1. World Health Organization. *Sixth Report on the World health Situation, Part I* Global Analysis 1973-1977, WHO, Geneva, 1980.
2. Okeahinalan TC. Breast feeding practices among Nigerian Igbo mothers. *J. Trop Pediatric* 1986: 154-157.
3. WHO/UNICEF meeting on infant on young child feeding WHO Chronicle *1979;* 33: 435-443.
4. Geervani P. Current weaning practices, Constraints for supplementation and the scope of modifying adult diets for infant feeding. In: *Report of Workshop on weaning Foods.* 1-2 July. WHO/ ICMR Regional office for South-Central Asia. New Delhi. 1983.
5. National Family Health Survey (NFHS-3)International Institute of Population Sciences(IIPS) and Macro International. 2007.
6. BPNI 2003 => www.bpni.org
7. Ibhanesebhor SE, Muogbo DC: Impact of the Baby Friendly hospital initiative.Int Child health 1995, VI: 73-76.
8. Devdas RP, Purushothanman V and Paul M. (1999). Trends in Breastfeeding practices. *The Ind. J Nutr Diet;* 36 (1): 1-11. *(NFHS-2),* International Institute for Population Sciences (IIPS). And ORC Macro. 2000.
9. Kishore S and Garg BS. (1999) Practices of Prelacteal Feeding in a Rural Community. *Indian J of Public Health;* 43(4): 144-147.
10. Hiwarkar PA, Aswar NAR, Durge PM Shendre MO: Breastfeeding & Weaning practices in Rural Mothers; The J Obstet Gynaec India 1999, 49(6), 73-76.
11. Chitkara AJ, Gupta S: Infant feeding Practices and Morbidity; Indian Pediatrics, 1987, 24: 865-71.
12. Gopujkar PV, chaudhuri SN, Ramswami MA, gore MS and Gopalan C. (1988). Promoting Wholesome Infant Feeding Practices in India. *Indian J Pediatrics:* 55(1): 173-176.
13. Briend, Andre, B. Wojtyniak, and M. Rowland. 1988. Breastfeeding, nutritional state,and child survival in rural Bangladesh. British Medical Journal 296:879–82.
14. Cabigon, J. V. 1997. The effects of birthspacing and breastfeeding on childhood mortality in the Philippines. Journal of Population 3(1): 1–5
15. Habicht, J. P., J. DaVanzo, and W. P. Butz. 1986. Does breastfeeding really save live or are apparent benefits due to biases? American Journal of Epidemiolog 123:279–386.
16. Huffman, S. L., and B. B. Lamphere. 1984. Breastfeeding performance and child survival. In W. H. Mosley and L. C. Chen, eds. Child survival: Strategies for research. Population and Development Review 10(suppl.): 93–116.
17. Jellife, D. B., and E. F. P. Jellife. 1978. Human milk in the modern world. Oxford:Oxford University Press.
18. Palloni, A., and Tienda, M. 1986. The effects of breastfeeding and pace of childbearing on mortality at early ages. Demography 23:31–52.

19. Yoon, Paula W., R. E. Black, L. H. Moulton, and S. Becker. 1996. Effect of not breastfeeding on the risk of diarrheal and respiratory mortality in children under 2 years of age in Metro Cebu, The Philippines. American Journal of Epidemiology 143(11): 1142–8.
20. World Health Organization (WHO). 1991. Indicators for assessing breastfeeding practices. Report of an Informal Meeting, 11–12 June 1991. Geneva: WHO.
21. Bryce J, Terreri N, Victora CG, Mason E,Daelmans B, Bhutta ZA, et al. Countdown to 2015:tracking intervention coverage for child survival.Lancet 2006; 368: 1067-1076.

\

***TABLE* 1-** CHARACTERISTIC OF FAMILIES

		Jammu	**Kashmir**	**Ladakh**	**Total**
Dwelling Size	Rural	330(48.5)	228 (44.5)	82 (81.2)	640 (49.5)
	Urban	350 (51.5)	284 (55.5)	19 (18.8)	653 (50.3)
Religion	Islam	68 (10.0)	501 (97.9)	18 (17.8)	587 (45.4))
	Hindu	574 (84.4)	4 (.8)	--	578 (44.7)
	Buddhist	--	--	83 (82.2)	83 (6.4)
	Others*	38 (5.6)	7 (1.4)	--	45 (3.5)
Type of family	Nuclear	173 (25.4)	146 (28.5)	24 (23.8)	343 (26.5)
	Joint	507 (74.6)	366 (71.5)	77 (76.2)	950 (73.5)
Family Size	Small	145 (21.3)	104 (20.3)	26 (25.7)	275 (21.3)
	Large	368 (54.1)	296 (57.8)	67 (66.3)	731 (56.5)
	Extended	167 (24.6)	112 (21.9)	8(7.9)	287 (22.2)
Occupation of father	Professional	37 (5.4)	47 (9.2)	1 (1.0)	85 (6.6)
	Semi-Professional	102 (15.0)	76 (14.8)	11 (10.9)	189 (14.6)
	Clinical, Shop Owner, Farm Owner	120 (17.6)	133 (26.0)	21 (20.8)	274 (21.2)
	Skilled Worker	137 (20.1)	92 (18.0)	18 (17.8)	247 (19.1)
	Semi Skilled Worker	111 (16.3)	95 (18.6)	17 (16.8)	223 (17.2)
	Unskilled Worker	173 (25.4)	69 (13.5)	33 (32.7)	275 (21.3)
Literacy status of father	Illiterate	99 (14.6)	112 (21.9)	24 (23.8)	235 (18.2)
	Primary	65 (9.6)	21 (4.1)	8(7.9)	94 (7.3)
	Middle School	84 (12.4)	69 (13.5)	25 (24.8)	178 (13.8)
	High School	270 (39.7)	103 (20.1)	24 (23.8)	397 (30.7)
	Intermediate	28 (4.1)	40 (7.8)	11 (10.9)	79 (6.1)
	College	80 (11.8)	121 (23.6)	8 (7.9)	209 (16.2)
	Higher Education**	54 (7.9)	46 (9.0)	1 (1.0)	101 (7.8)

Socio Economic Status	Upper	50 (7.4)	67 (13.1)	3 (3.0)	120 (9.3)
	Middle	309 (45.4)	233 (45.5)	44 (43.6)	586 (45.3)
	Lower	321 (47.2)	212 (41.4)	54 (53.5)	587 (45.4)

Note: Figures in parenthesis represents percentage
** *University Technical and Professional*
* Others means Sikh, Christians and Jains

TABLE 2- CHARACTERISTICS OF MOTHER

		Jammu	Kashmir	**Ladakh**	**Total**
Age	< 25	249 (36.6)	100 (19.5)	33 (32.7)	382 (29.5)
	25 to 30	379 (55.7)	332 (64.8)	53 (52.5)	764 (59.1)
	> 30	27 (4.0)	46 (9.0)	9 (8.9)	82 (6.3)
Occupation	House wife	586 (86.2)	348 (68.0)	65 (64.4)	999 (77.3)
	Self Employed	37 (5.4)	43 (8.4)	13 (12.9)	93 (7.3)
	Salaried	57 (8.4)	121 (23.6)	23 (22.8)	201 (15.5)
Literacy Status	Illiterate	148 (21.8)	183 (35.7)	47 (46.5)	378 (29.2)
	Primarily Literate	168 (24.7)	81 (15.8)	14 (13.9)	263 (20.3)
	Secondary Literate	245 (36.0)	144 (28.1)	33 (32.7)	422 (32.6)
	Higher Education **	119 (17.5)	104(20.3)	7 (6.9)	230 (17.8)
Parity	1 to 2	551 (81.0)	393 (76.8)	89 (88.1)	1033 (79.9)
	3 to 4	124 (18.2)	107 (20.9)	10 (9.9)	241 (18.6)
	>4	5 (.7)	12 (2.3)	2 (2.0)	19 (1.5)
Place of delivery	Hospital	424 (62.4)	393 (76.8)	38 (37.6)	855(66.1)
	Home	256 (37.6)	119 (23.2)	63 (62.4)	438(33.9)
Type of Delivery	Normal	392 (57.6)	131(25.6)	78 (77.2)	601 (46.5)
	LSCS	164 (24.1)	260 (50.8)	10 (9.9)	434 (33.6)
	Instrumental	124 (18.2)	121(23.6)	13 (12.9)	258 (20.0)
Duration of intake of Galactogogues (Mother)	1 to 2	372 (78.8)	218 (81.3)	9 (27.3)	599 (77.5)
	3 to 4	66 (14.0)	46 (17.2)	24 (72.7)	136 (17.6)
	> or = 5	34 (7.2)	4 (1.5)		38 (4.9)
Access to Information	Television	408 (60.0)	250 (49.0)	35 (35.0)	694 (53.6)
	Radio	340 (50.0)	328 (64.0)	48 (48.0)	716 (55.3)
	Magazines /Newspapers	105 (17.0)	51 (10.0)	4 (3.5)	160 (12.3)
	Nil	163 (24.0)	128 (25.0)	35 (35.0)	326 (25.2)

Note: Figures in parenthesis represents percentage
Commonly taken G.G.
Jammu: Cereals, Pulses, Fruits and Milk.
Kashmir: Mutton, Fish, Dry fruit ,Garden cress and Milk
Ladakh: Barley cereal, vegetables, meat, chang, butter and salt tea

Table 3- Breast Feeding Practices

		Jammu	**Kashmir**	**Ladakh**	**Total**
Initiation of Breast feeding	Within 24 Hours	484 (71.2)	366 (71.5)	98 (97.0)	948 (73.3)
	After 24 Hours	185 (27.2)	144 (28.1)	3 (3.0)	332 (25.7)
	Not initiated	11 (1.6)	2 (0.4)	--	13 (1.0)
	31.492 (.000)**				
Type of first feed given after birth	***Pre-lacteal Feed	536 (78.8)	308 (60.2)	9 (8.9)	853 (66.0)
	Breast milk	144 (21.2)	204 (39.8)	92 (91.1)	440 (34.0)
	204.070 (.000)**				
Colostrum Fed	Yes	537 (79.0)	393 (76.8)	98 (97.0)	1028 (79.5)
	No	143 (21.0)	119 (23.2)	3 (3.0)	265 (20.5)
	21.510 (.000)**				
Full Breast Feeding (months)	< 6 Months	207 (58.5)	195 (73.0)	15 (93.8)	417 (32.2)
	> = 6 Months	147 (41.5)	72 (27.0)	1 (6.3)	220 (34.5)
	0-6 months	354 (52.0)	267 (52.1)	16 (15.8)	637 (49.2)
	20.047 (.000)**				
Partial Breast feeding	< 12 Months	216 (86.0)	160 (90.9)	79 (100.0)	455 (76.5)
	> 12 Months	121 (84.6)	79 (82.3)	29 (47.0)	229 (76.0)
	2.578 (.276)ns				

*Note: Figures in parenthesis represents percentage ** Association is found highly significant (p<0.01); * Significant (p<0.05) ns Non-significant (p>0.05) *** Sugar water 67.9% Honey 27.1% CM 2.7% Plain Water 1.7 %, Jaggery 0.6%*

Table 4- Breast Feeding Practices

		Jammu	***Kashmir***	***Ladakh***	***Total***
Reason for Breastfeeding	Nutritious	426 (63.7)	339 (66.5)	96 (95.0)	861 (67.3)
	Natural	234 (35.0)	70 (13.7)	5 (5.0)	309 (24.1)
	Don't know	9 (1.3)	101 (19.8)	--	110 (8.6)
	39.963 (.000)**				
Reason for stopping Breast feeding	Mother initiative	15 (21.7)	7 (21.2)	26 (63.4)	48 (33.6)
	Insufficient milk	44 (63.8)	19 (57.6)	10 (24.4)	73 (51.0)
	Next pregnancy	10 (14.5)	7 (21.2)	5 (12.2)	22 (15.4)
	15.539 (.000)**				
Breast Feeding Experience	Good	580 (85.3)	385 (75.2)	79 (78.2)	104 (80.7)
	Bad	77 (11.3)	120 (23.4)	22 (21.8)	219 (16.9)
	Don't Know	23 (3.4)	7 (1.4)	--	30 (2.3)
	17.060 (.000)				
Information about breast feeding	Doctor/ Nurse / TBA	237 (34.9)	278 (54.3)	21 (20.8)	536 (41.5)
	Family Member	109 (16.0)	151 (29.5)	17 (16.8)	277 (21.4)
	Self Knowledge	334 (49.1)	83 (16.2)	63 (62.4)	480 (37.1)
	129.260 (.000)**				

Note: Figures in parenthesis represents percentage
******** *Association is found highly significant (p<0.01); * Significant (p<0.05) ns Non-significant* (p>0.05)

Table 5 - Supplementary Milk Feeding Practices

Note : Figures in parenthesis represents percentage

Initiation of Top Milk	0-3 months	164 (44.0)	120 (47.4)	6 (8.8)	53.282 (.000)**
	4-6 months	67 (18.0)	32 (12.6)	2 (2.9)	
	> 6 months	142 (38.1)	101 (39.9)	60 (88.2)	
Type of Top Milk	Animal Milk	266 (71.3)	106 (41.9)	50 (73.5)	59.770 (.000)**
	Commercial Milk	107 (28.7)	147 (58.1)	18 (26.5)	
Reason for giving top milk	Insufficient Breast milk	301 (80.7)	212 (83.8)	29 (42.6)	59.333 (.000)**
	Next pregnancy	20 (5.4)	18 (7.1)	8 (11.8)	
	Working mother	35 (9.4)	14 (5.5)	22 (32.4)	
	Mother's convenience	12 (3.2)	4 (1.6)	--	
	Mother ill	5 (1.3)	5 (2.0)	9 (13.2)	
Mode of giving top milk	Spoon/ Cup Feeding	35 (9.4)	37 (14.6)	38 (55.9)	93.548 (.000)**
	Bottle feeding	338 (90.6)	216 (85.4)	30 (44.1)	
Milk Diluted	Yes	166 (44.5)	128 (50.6)	8 (11.8)	33.146 (.000)**
	No	207 (55.5)	125 (49.4)	60 (88.2)	
Method of washing bottle	Rising with water (with/ without soap)	147 (45.4)	99 (46.3)	17 (56.7)	1.407 (.495)ns
	Sterilizing	177 (54.6)	115 (53.7)	13 (43.3)	

*** Association is found highly significant (p<0.01); * Significant (p<0.05) ns Non-significant*

TABLE 6 - FACTORS INFLUENCING FULL BREAST FEEDING (IN MONTHS) (A).

Influencing Factors		***Jammu***		***Kashmir***		***Ladakh***		
		< 6 months	***> 6 months***	***< 6 months***	***> 6 months***	***< 6 months***	***> 6 months***	***Between regions***
Mothers age	< 25	81 (60.0)	54 (40.0)	49 (79.0)	13 (21.0)	6 (85.7)	1 (14.3)	12.138 (.002)*
	25 to 30	113 (58.5)	80 (41.5)	130 (74.3)	45 (25.7)	9 (100.0)	0 (0.0)	
	> 30	13 (50.0)	13 (50.0)	16 (53.3)	14 (46.7)	0 (0.0)	0 (0.0)	
		.899 (.638)ns		7.184 (.028)*		1.371 (.242)ns		
Mother's Literacy Status	Illiterate	39 (39.8)	59 (60.2)	89 (78.1)	25 (21.9)	7 (100.0)	0 (0.0)	2.638 (.267)ns
	Primarily Literate	72 (65.5)	38 (34.5)	29 (67.4)	14 (32.6)	2 (66.7)	1 (33.3)	
	Secondary Literate	83 (69.7)	36 (30.3)	55 (74.3)	19 (25.7)	5 (100.0)	0 (0.0)	
	College/ University Literate	13 (48.1)	14 (51.9)	22 (61.1)	14 (38.9)	1 (100.0)	0 (0.0)	
		23.702 (.000)**		4.812 (.186)ns		4.622 (.202)ns		
Mothers Occupation	House Wife	184 (58.8)	129 (41.2)	123 (70.7)	51 (29.3)	13 (92.9)	1 (7.1)	9.824 (.007)*
	Self Employed	18 (69.2)	8 (30.8)	23 (74.2)	8 (25.8)	1 (100.0)	0 (0.0)	
	Salaried	5 (33.3)	10 (66.7)	49 (79.0)	13 (21.0)	1 (100.0)	0 (0.0)	
		5.156 (.076)ns		1.639 (.441)ns		0.152 (.927)ns		
Socio Economic Status	Upper	2 (20.0)	8 (80.0)	16 (61.5)	10 (38.5)	0 (0.0)	0 (0.0)	9.574 (.008)*
	Middle	83 (63.8)	47 (36.2)	79 (71.8)	31 (28.2)	6 (85.7)	1 (14.3)	
	Lower	122 (57.0)	92 (43.0)	100 (76.3)	31 (23.7)	9 (100.0)	0 (0.0)	
		7.830 (.020)*		2.552 (.279)ns		1.371 (.242)ns		
Sex of child	Male	130 (61.6)	81 (38.4)	121 (73.3)	44 (26.7)	9 (100.0)	0 (0.0)	2.024 (.364)ns
	Female	77 (53.8)	66 (46.2)	74 (72.5)	28 (27.5)	6 (85.7)	1 (14.3)	
		2.117 (.146)ns		0.020 (.888)ns		1.371 (.242)ns		

Note : Figures in parenthesis represents percentage

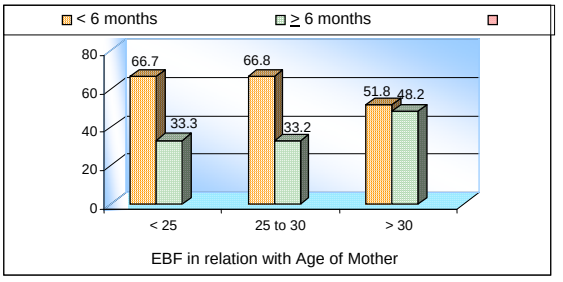
** Association is found highly significant ($p<0.01$) ; * Significant ($p<0.05$) ns Non-significant

TABLE 7 - FACTORS INFLUENCING FULL BREAST FEEDING (IN MONTHS) (B).

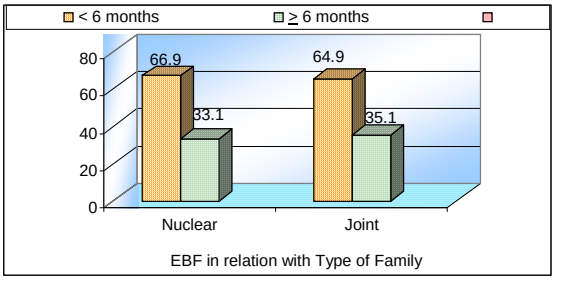
Influencing Factors		***Jammu***		***Kashmir***		***Ladakh***		
		< 6 months	***> = 6 months***	***< 6 months***	***> = 6 months***	***< 6 months***	***> = 6 months***	***Between regions***
Dwelling	Rural	115 (62.5)	69 (37.5)	85 (71.4)	34 (28.6)	10 (90.0)	1 (9.1)	1.117 (.572)ns
	Urban	92 (54.1)	78 (45.9)	110 (74.3)	38 (25.7)	5 (100.0)	0 (0.0)	
		2.557 (.110)ns		0.281 (.596)ns		0.485 (.486)ns		
Type of family	Nuclear	63 (60.0)	42 (40.0)	51 (76.1)	16 (23.9)	3 (100.0)	0 (0..0)	1.357 (.507)ns
	Joint	144 (57.8)	105 (42.2)	144 (74.0)	56 (28.0)	12 (92.3)	1 (7.7)	
		0.143 (.705)ns		0.432 (.511)ns		0.246 (.620)ns		
Parity	1 to 2	158 (59.0)	110 (41.0)	151 (75.5)	49 (24.5)	13 (92.9)	1 (7.1)	1.727 (.422)ns
	3 to 4	49 (59.0)	34 (41.0)	38 (66.7)	19 (33.3)	2 (100.0)	0 (0.0)	
	> 4	0. (0.0)	3 (100.0)	6 (60.0)	4 (40.0)	--	--	
		4.261 (.119)NS		2.654 (.265)NS		0.152 (.696)NS		
Place of delivery	Hospital	122(62.6)	73 (37.4)	144 (74.2)	50 (25.8)	7 (100.0)	0 (0.0)	8.907 (.012)*
	Home	85 (35.5)	74 (46.5)	51 (69.9)	22 (30.1)	8 (88.9)	1 (11.1)	
		2.990 (.084)ns		0.513(.474)ns		0.530).362)ns		
Type of delivery	Normal	124(55.4)	100 (44.6)	58 (71.6)	23 (28.4)	9 (90.0)	1 (10.0)	22.932 (.000)**
	LSCS	48 (60.8)	31 (39.2)	80 (69.6)	35 (30.4)	3 (100.0)	0. (0.0)	
	Instrumental	35 (68.6)	16 (31.4)	57 (80.3)	14 (19.7)	3 (100.0)	0 (0.0)	
		3.231 (.199)ns		2.680 (.262)ns		0.640 (.726)ns		

Note : Figures in parenthesis represents percentage
** Association is found highly significant ($p<0.01$) ; * Significant ($p<0.05$) ns Non-significant

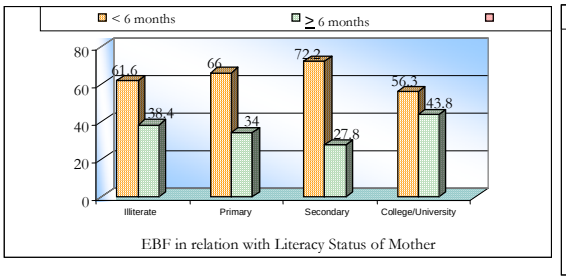
EXCLUSIVE BREAST FEEDING (EBF) ACROSS INFLUENCING FACTORS



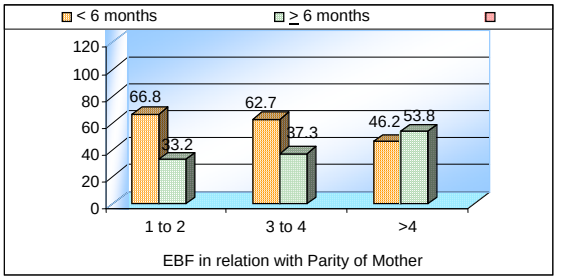
EBF in relation with Age of Mother



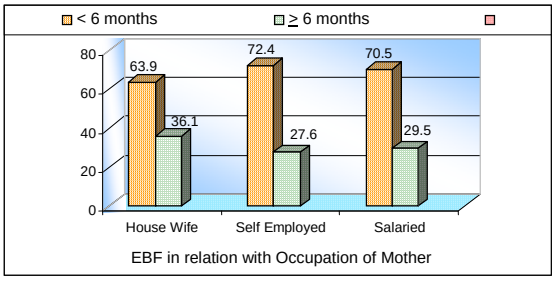
EBF in relation with Type of Family



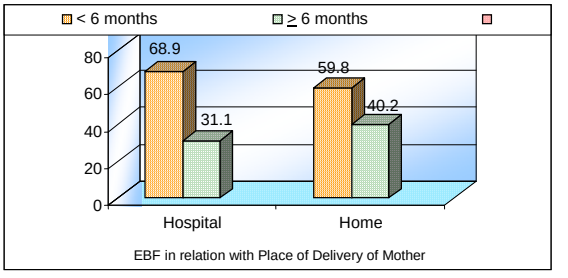
EBF in relation with Literacy Status of Mother



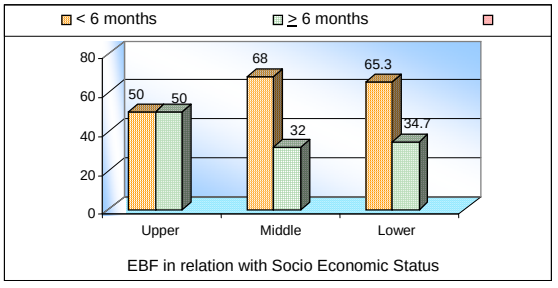
EBF in relation with Parity of Mother



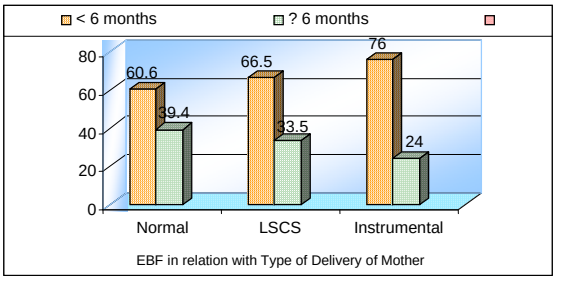
EBF in relation with Occupation of Mother



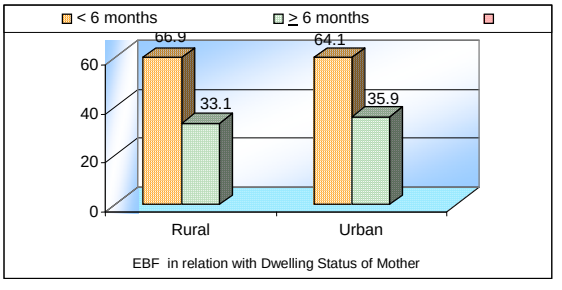
EBF in relation with Place of Delivery of Mother



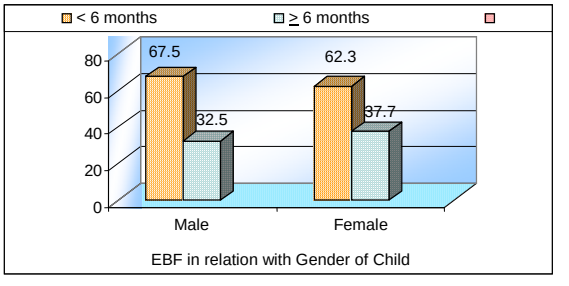
EBF in relation with Socio Economic Status



EBF in relation with Type of Delivery of Mother



EBF in relation with Dwelling Status of Mother



EBF in relation with Gender of Child