

## THE STUDY OF SOCIOECONOMIC FACTOR AFFECTING BREAST FEEDING PRACTICE AMONG FAMILY OF RURAL AREA OF JAIPUR

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### Abstract:

**Objectives:** To study the socio-economic factors influencing initiation and duration of breast feeding. **Material and methods:** A cross-sectional prevalence based study was conducted on 400 mothers and their infants residing in the rural area of Jaipur within six months (Jan13 to June-13). Information was collected and analyzed on occupation, socio-economic status, literacy status and type of work, type of family, residential environment, life-style. Information regarding infant's anthropometric measurements, feeding practices, weaning and immunization status are also obtained. **Results:** According to socioeconomic classification, maximum mothers belongs to class III 155(38.75%), followed by 81(20.25%) mothers from socio-economic class V, 73(18.25%) mothers were from socio-economic class IV, 49(12.25%) were from socio-economic class II and 42(10.5%) mothers were from socio-economic class VI. Literacy wise, 148(37%) mothers were illiterate, 95(23.75%) mothers were educated up to primary level followed by 74(18.5%) educated up to middle, 45(11.25%) educated up to secondary level, 16 (4%) mothers educated up to higher secondary and rest 22(5.5%) mothers were graduate and above.

**Conclusion:** Multiple health problems was encountered in the survey area dominated by twin problems of malnutrition along with infective diseases which are associated with socioeconomic factors like mothers illiteracy, mother working conditions, family income and socio-economic status. Looking forth on these matters socioeconomic status is an important factor affecting the care of infants in terms breast feeding, weaning and personal hygiene.

**Keywords:** socio-economic factors, breast feeding practice, occupation, literacy status

### INTRODUCTION:

Age, sex and inheritance are non modifiable factors that affect human health. The views of family members is also an important

factor for affecting health of new born and his mother , but these views are influenced

by socioeconomic determinants of health, cultures and experiences.

Socioeconomic determinants of health such as income, education and working environment have an immediate pertaining to health. (1,2) Those with very low socioeconomic status as an example, often having limited resources and deficiency of good foodstuff, inadequate housing condition (Kchha Ghar) and safe drinking water, which can cause negative effect on their health.(3) On the another side , those who have enough earnings and good occupation are less vulnerable for health issues. The care and health of newborn and lactating mother is also affected by such socioeconomic factors.

Human breast milk, nature great gift is best for newborn compare to anything made by human being with advanced technology. Human breast milk is a complete food which is available at the no cost and an effective way to provide protection with a caring environment. (4)

The American academy of paediatrics (AAP) and WHO strongly advocate breastfeeding has the preferred feeding for all infants. The success of breastfeeding initiation and continuation depend on multiple factor such as education about breastfeeding, hospital breastfeeding practices and policies, routine and timely follow up care, family and social support.(5)

In India, breastfeeding is a universal practice. Most mothers in India continue breastfeeding up to 2 years or even beyond it which is highly beneficial for child survival

and adequate growth. (5) UNICEF and WHO launched, Baby friendly hospital Initiative (BFHI) in 1992 and subsequently world health assembly (WHA54: 2; 18) in May, 2001 adopted the resolution to approve exclusive breastfeeding for first 6 month. (6, 7) Baby friendly hospital initiative (BFHI), recommends that infant should be only breastfed for first 6 month.

Early breastfeeding postpartum establish proper feeding and a close mother-child relationship known as “bonding”. Under normal condition, a mother secretes about 450 to 600 ml of milk daily with 1.1gm of protein per 100ml. The energy value of human milk is 70kcal per 100ml which is sufficient to meet all the nutritional needs of newborn. (8)

The report furthermore said over 12 percent of Indian mothers nourished their newborns with bottled milk which affect bonding between Mather and their child and their wellbeing. The report recommends to make a policy for child feeding practices with main emphasis on awareness for nutrition for lactating mother and counselling to improve this situation.(9)

Inspite of vigorous promotional activities large number of newborn, infants are still deprived of Colostrums and exclusive breast milk. The present study was undertaken with a view to assess socioeconomic factors affecting breast feeding practices among the mothers of rural area of Jaipur and to determine impact of feeding on growth and development.

#### **MATERIAL AND METHODS:**

A cross-sectional prevalence based study was conducted on 400 mothers and their infants residing in the rural area (Vatika village) in Jaipur district which is a rural health training Centre (R.H.T.C) of the Department of Community Medicine, Mahatma Gandhi medical college and attached group of hospitals within six months (Jan13 to June-13). Permission to conduct study was under taken prior to commencement from the organization ethical committee of the college. Information was collected and analyzed on occupation, socio-economic status, literacy status and type of work. Information regarding infant's anthropometric measurements, feeding practices, weaning and immunization status are also obtained.

Pretested structured Performa questionnaire was used. Door to door survey was undertaken. Each respondent was explained, the purpose of the study prior to the administration of tools of data collection and informed consent was obtained prior to interview. Respondent were assured of the confidentiality of the information. A structured pretested Proforma containing two schedules were used. Instrument used were infantometer, Salter hanging weighing machine, steel non –stretchable tape.

**Literacy:** Criteria as defined in GOI, registrar general census scale were used.

- **Illiterate:** Those mothers who cannot read and write in any language. Those who can only read not write were also considered illiterate.

- **Literate:** Those who can read and write in any language. Formal education up to Primary, Middle, Secondary, Higher secondary, Graduate and Post Graduate

**Occupation:** Occupation was classified as-

- Housewife- those who are working in house only.
- Labourer- those who are working on daily wages.
- Farmer- working on farms or owning agriculture land and dependent on its produce.
- Service- those who were working in public and private sector part time or full time both.
- Business- running her own business.
- Gainful employment- employment of her own from which the woman is earning

**Socio-economic Status:** Socio-economic status was determined as per the classification devised by B.G. Prasad on the per capita income of the family. The modified classification for the year 2008 was used for determining the socio-economic status of mothers under survey. (10)

## RESULTS

Maximum mothers belongs to class III 155(38.75%), followed by 81(20.25%) mothers from socio-economic class V, 73(18.25%) mothers were from socio-

Economic class IV, 49(12.25%) were from socio-economic class II and 42(10.5%) mothers were from socio-economic class VI. No mother belong to class I .

**Table 1. Distribution of study population according to their socio-economic status**

Socio-Economic Status	Total	Percentage (%)
I	0	0
II	49	12.25
III	155	38.75
IV	73	18.25
V	81	20.25
VI	42	10.5
<b>Total</b>	<b>400</b>	<b>100</b>

**Table 2. Distribution of Study Population According to Literacy Status of Mothers and their breast feeding in relation with literacy status of mother**

Literacy Status	No	%	On Demand	Schedule	EBF	%	BF+S	%
<b>Illiterate</b>	148	37	136 (91.82%)	12 (8.11%)	98	46.23	50	26.60
<b>Primary</b>	95	23.75	82 (86.32%)	13 (13.68)	46	21.70	49	26.06
<b>Middle</b>	74	18.5	69 (93.24%)	5 (6.76%)	36	16.98	38	20.21
<b>Secondary</b>	45	11.25	44 (97.78%)	1 (2.22%)	17	8.02	28	14.89
<b>Higher Secondary</b>	16	4	14 (87.50%)	2 (12.50%)	7	3.30	9	4.79
<b>Graduate and Above</b>	22	5.5	20 (90.91%)	2 (9.09%)	8	3.77	14	7.45
<b>Total</b>	<b>400</b>	<b>100</b>	<b>365</b>	<b>35</b>	<b>212</b>	<b>100</b>	<b>188</b>	<b>100</b>

The above table no. 2 shows that 148(37%) mothers were illiterate, 95(23.75%) mothers were educated up to primary level followed 74(18.5%) educated up to middle, 45(11.25%) educated up to secondary level, 16 (4%) mothers educated up to higher secondary and rest 22(5.5%) mothers were graduate and above.

Out of 400 infants 365 were on demand out of which 136(91.82%) were illiterate followed by 82(86.32%) are primary school, 69(93.24%) were middle school, 44

(97.78%) were secondary, 20 (90.91%) were graduate and above and rest 14(87.50%) are higher secondary. Out of 400 mothers 212(53%) mothers Exclusive breast feed their infants and rest 188(47%) mothers have given Supplementary food along with the breast feed. Out of 400 infants 212 were on EBF of which, mothers of 98(46.23%) were illiterate followed by 46(21.70%) are primary school, 36(16.98%) were middle school, 17(8.02%) are secondary, 8(3.77%) mothers are graduate and above and rest 7(3.30%) are higher secondary.

**Table 3. Distribution of Study Population of Infant by feeding pattern according to the working status of mothers**

Occupation		EBF	%	BF+S	%
House Wife	227	160	75.47	67	35.64
Working	173	52	24.53	121	64.36
<b>Total</b>	<b>400</b>	<b>212</b>	<b>100.00</b>	<b>188</b>	<b>100</b>

$\chi^2$  64.413      df 1      p 0.0001

Among 400 infants 212 were EBF of which mothers of 160(75.47%) infants were house wife and 52(24.53%) were working, the relation is being statistically significant.

## DISCUSSION

In the present study breastfeeding practices, feeding pattern, health status and immunization of infants was assessed in rural area of Vatika (rural health training centre of MGMCH). Study was completed in six months (January 2013-june2013). A total of 400 infants were included in the study. In our study 37% mother were illiterate, 23.75% mothers were educated up to primary, 18.5% up to middle, 11.25% educated up to secondary level and <10% were educated up to higher secondary and above. Uttekar BP et al also observed in their study in Rajasthan that majority of Janany Surksha Yojana beneficiaries were illiterate (68%) or had studied only up to primary and middle level (22%), <10% had studied above secondary level.(11)

In our study there is an inverse relationship between literacy level of mothers and practice of giving prelacteal. There were

none of mother who was graduate or above given prelacteal feed, but more than 90% illiterate mothers were given prelacteal feed this association proved statistically significant. Devang Raval et al reported in his study Illiterate mother (85.2%) practices more prelacteal feeding than literate mother (50.9%), majority of literate mother (49.1%) compare to illiterate mothers (14.8%) had started breastfeeding within one hours. (12) Dinesh Kumar et al reported illiterate just literate mothers who delivered at home were found at significantly higher risk of delay in initiation of breastfeeding analysis. (13)

Yadvenankar et al reported that only 25% mothers who have studied up to the college level have practiced breastfeeding.(14) Wadde et al observed that out of 306 mothers enrolled in the study 66.01% were illiterate, very less no of illiterate mothers followed exclusive breast feeding as compared to literate mothers.(15)

Bhardwaj et al reported that all of them (100%) were illiterate. (16) Roy et al observed in his study 81.6% were literate (17) D.K. Taneja et al in their study 59.4%

had primary and higher level of educations. (18) Syed E. Mahmood et al observed in his study that 69.9% were illiterate.(19) Neeraj Mohan Srivastava concluded in their study neonates born to mothers with no formal education, fathers with no formal education.(20)

Malireddy Radhika et al in his study shows that out of 214 mothers who were questioned about their education status 27 mothers were illiterates, 39 mothers had primary schooling, 105 mothers had high school education, 23 mothers had secondary education, and 20 mothers were graduates. (21)

In the developing world, now improving health systems and resources by making new strategy, maternal education level is very important for using and understanding government policies which further affects health status of mothers and their infants and children. It is very essential for India to achieve the ultimate target of education that is the universal primary education to upgrading education to higher levels. The Socioeconomic factors associated with health of mother such as environmental hygiene and sanitation, household food security, poverty and illiteracy, all together are impinging on aetiology of low birth weight and Intra uterine growth retardation(IUGR).(22)

The maximum mothers (38.75%) were from socio-economic class III followed by 20.25% of socio-economic class V. Singh A, Arora AK (2007) observed in their study of changing profile of pregnant women in rural

north India that most of their study population was from lower middle or middle class. (23)Gogoi G and Ahmed FU showed that majority (57%) of their study population belonged to upper- lower socio-economic class. (24)

Wadde et al (2012) Exclusive breast feeding was less prevalent in mothers of lower socioeconomic status than the upper one. (15) Syed E. Mahmood et al 97.5% belong to lower socioeconomic class. (19)

A study was conducted in Kolkata by Roy et al showed that maximum ( 41.67%) of the children belonged to families whose below poverty line which is per capita income per month was less than Rs 500.(17) Maximum mothers belonging to socio economic class VI (97.62%) are giving prelacteal feed followed by mothers belongs to socioeconomic class II (77.55%),followed by class III(64.52%).Prelacteal feed given to 93% infants in case of Muslims family, while it is 58.49% in case of Hindu families.

In present study 56.75% mothers were house wives, and rest were working. 61.81% of total mothers were doing moderate level of daily physical activity followed by 34.67% heavy worker and 3.52% mother had light work Similar observation are found in study of Sima Roy et al where 69.15% mothers were housewives.(17) But in other study of Syed E. Mahmood et al there were 99.1% were housewife, also Venkatesh RR observed in their study in urban slums of Devangare city, Karnataka that 88% women were house wives and only 12 % were working in the unorganized sectors.(19,25)

There was significant association between occupation and feeding pattern of infant in developing countries like India, women are responsible for a wide range of household work and child care duties as well as work outside the home. These women are also the women at high risk for poor birth outcome. Bhardwaj et al showed around seven percent (7.77%) mothers were working. (16) Roy et al revealed 69.15% were housewives. (17)

In present study, breast feeding mainly practiced was on demand 365(91.25%), as compare to on schedule in 35 (8.75%) cases. Similar finding were observed by Wadde et al in his study that shows 90.52% mothers followed demand feeding. (15) In study of Bhardwaj et al, Demand breast feeding was practiced by all mothers. (16) Nitin Joseph et al Demand feeding was practiced by 87.1% mothers. (26) In the present study out of 148 illiterate mothers, 136(91.82%) were given on demand breast feeding, as compare to mothers educated up to primary level who were given on demand breast feeding in 86.32%.

In present study there are significant association between literacy level of mother and practice of exclusive breastfeeding also there is significant association between occupation of mother and practice of exclusive breastfeeding but there is no any significant association between socio economic status and religion of mothers.

## CONCLUSION

Multiple health problems was encountered in the survey area dominated by twin

problems of malnutrition along with infective diseases which are associated with mothers illiteracy, mother working conditions, wrong feeding practices, delayed weaning practices, poor personal hygiene of children and socio- economic status.

Our study revealed that the recommendation of six months exclusive breastfeeding is not properly implemented in the rural area of Jaipur. This is showing that the policy implementation at field level still require some changes to combat its failure. Looking forth on these matters following suggestions are recommended, so as to improve health of infants to some extent. Health and nutrition programmes, as well other programmes dealing with women and children should mainstream breastfeeding counselling and support interventions, to help women to succeed both in early (within an hour) and exclusive breastfeeding (for the first six months of life). But these programmes will become more successful when more focus on to improve socioeconomic determinant of health. This will not only reduce the burden on the health systems to treat sick newborn babies, but also has the potential to make our children grow well and have sound development.

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