

Original Research Paper

Community Medicine

A COMMUNITY BASED STUDY TO ASSESS THE BREASTFEEDING WEANING PRACTICE AMONG PEOPLE LIVING IN URBAN SLUM OF PRATAPNAGAR, JAIPUR

| Dr Dharmendra Mandarwal | Associate Professor, Department of Community Medicine, NIMS & R, Jaipur | | | |
|----------------------------|---|--|--|--|
| Dr Sumit Ahluwalia | Associate Professor, Department of Community Medicine, NIMS & R, Jaipur | | | |
| Dr Bibhash Datta* | Senior Resident, Department of Community Medicine, NIMS & R, Jaipur *Corresponding Author | | | |
| Dr Bhawna Chopra Datta | Assistant Professor, NIMS College of Occupational Therapy and Physiotherapy | | | |

ABSTRACT

Background: Educating mothers on Exclusive breastfeeding is important and at the same time educating mothers of breastfeeding weaning is also important, to ensure the childs nutritional status. Aim: To study breast feeding and weaning practices in the study group. To study socio-cultural factors related to feeding practices.

Methodology: A Cross-Sectional Community based study was done in Pratapnagar, Jaipur with a semi-structured questionnaire on 300 participants during May2019-december2019 with sampling technique: cluster sampling Result: Majority of the participants were from nuclear families in the age group of 20-30years and it has been seen that maximum weaning practice started after 6 months of life but it was also noted that many mothers continued breastfeeding beyond 2years of age due to lack of knowledge on weaning practices. Conclusion: Breastfeeding weaning practice education should be more frequently done so that no nutritional deficiency is noted.

KEYWORDS: Breastfeeding, Weaning, Mother, Infant

INTRODUCTION:

According to United Nation's Declaration of Rights of the child—"CHILDREN'S ARE NATION'S SUPREMELY IMPORTANT ASSET".

The teaching of Ayurveda also stresses much on child's health and its preservation. "KASHYAP TANTRA" has a Chapter on "KUMARA BHRITYA" which means "services to children". DE HASS (1958) stated that there is no creature at mercy of his environment than human child. (1) Children are human resources for future. Their development is in the interest of total national development therefore they need special attention.

Preschool age is crucial and transitional phase in the development of child and this age is vulnerable to social and health hazards. The child is struggling to strike a balance with ecological forces that are trying to impinge upon their health and future development, so they deserve special attention by their family, community and the Government Since antiquity the life of children is conditioned by standard of living, education of family, economic levels in the community and harmony within the family, which constitute the essentials of their daily life and that determines the health and disease state of children. The nutritional status of under five children is one of the indicators of household well-being and the determinant of child survival.

Globally, the infant mortality rate has decreased from an estimated rate of 65 deaths per 1000 live births in 1990 to 29 deaths per 1000 live births in 2018. Annual infant deaths have declined from 8.7 million in 1990 to 4.0 million in 2018(WHO 2018)⁽³⁾ Deaths in age group of 0-1 year account for 17.9 percent of total deaths in the country. About 64.6 percent of infant death occur within first month (neonatal period) of life, of these 49 percent die during first week of birth. The risk of death is the greatest during first twenty four to forty eight hours. In India still infant mortality rate (IMR) is 30/1000 and in Rajasthan it is 38/1000 in rural and 25/1000 urban area. (4) IMR in developing countries are five to ten times higher among children who have been bottle fed or who have been breast fed for less than six months. (5)

In our country children under three years constitute 7.8 percent of population. Infants (0-1) year , although chances of survival of these newborns has improved by fifty percent in last twenty years, the first few hours, days and months of their lives are crucial. $^{(4)}$

"Breastfeeding saves lives" and "Breast is best!" are well-known slogans for physicians and women. Putting the newborn to the breast to nurse is now considered "normative" in the United States with 75% of women doing so (5).

Unfortunately, breastfeeding as a way to continue to feed infants is not yet normative. Women do not choose to breastfeed as long as recommended by health experts (a) and the government (7), which may result in a missed opportunity for improving infant health and, at the same time, maternal health.

AIM AND OBJECTIVES:

- (1) To study breast feeding and weaning practices in the study group.
- (2) To study socio-cultural factors related to feeding practices.

MATERIAL AND METHODS:

Study Design - A Cross - Sectional Community based study,

Study Population: Children under three years of age and the information was obtained from child's mother,

Study Area: Pratapnagar a urban area of Jaipur,

Sample Size:

Based on reported prevalence of morbidity in 11.2 percent of children under three SRS (2019), A sample size of 273 was arrived at by standardized sample technique. To cater for non-response a sample of 300 children under three years each in urban area would form the study group. Thus a total of 300 children were studied.

 $N=1.96 \times 1.96 \text{ Pq/L2}^{(8)}$ 3.8416 \times 0.23\times 0.77 / 0.0025 = 272.13

Sampling Technique:

Thirty Cluster Sampling Technique For Selecting Sample Was used. All wards, which were listed with their 2011 census population. On the basis of thirty clusters to be selected, a sampling interval (by dividing summation of population by thirty) was found. In this case it was found to be 5043/30=168.1. A random number between 001—168 was generated with the help of currency note (Rs. 5 note no. 443148) in the present sample random number ward was 148, for selection of second cluster, sampling interval was added and ward with cummulative population, corresponding to random no+sampling interval was second cluster selected, third cluster was the number which identified the second cluster plus the sampling interval. (9) Thirty cluster were selected from various sectors namely 3,6,8,35 of pratap nagar.

Study Duration – From May 2019 to December 2019.

Tool-Semi structured Questionnaire

OBSERVATIONS AND RESULTS:

Table-1: Distribution of families according to Religion, Socioeconomic status, Maternal age and Occupation of Mother

| Nature of Family | Hindu | | Muslim | Total | | |
|------------------|--------------------------|------------|-----------|-------|--|--|
| Joint | 28(35.44) | | 51(64.55) | 79 | | |
| Nuclear | 54(56.8) | | 41(43.14) | 95 | | |
| Total | 82(47.1) | | 92(52.8) | 174 | | |
| Socio-Economic(| Socio-Economic(SE) Class | | No. | | | |
| SE 2 | | 20(0.6) | | | | |
| SE 3 | | 11 | (3.66) | | | |
| SE 4 | | 88(29.33) | | | | |
| SE 5 | | 191(63.66) | | | | |
| SE 6 | | 8(2.66) | | | | |
| Age(years) | | No(%) | | | | |
| 15-19 | | 7(2.32) | | | | |
| 20-24 | | 97(32.37) | | | | |
| 25-29 | | 122(40.66) | | | | |
| 30-34 | | 47(15.56) | | | | |
| 35-40 | | 27(9.0) | | | | |
| Occupation | | No(%) | | | | |
| Housewives | | 250(83.33) | | | | |
| Working | | 50(16.66) | | | | |
| Total | | | 0(100) | | | |

79 (45.40%) families are joint and rest 95 (54.59%) are nuclear families. Out of 174 families, majority 92 (52.87%) were Muslims and 82 (47.12%) were Hindus. Majority 191 (63.66%) belong to SE class -5, there were only 8 (2.66%) of families in SE Class 6. Thus both constituted 66.32% of total children. 11 (3.66%) and 88 (29.33%) belonged to SE Class 3 and 4 respectively and only 2 (0.6%) belonged to SE class 2. Proportion of SE2 and SE3 is more in rural area (7.6%) as compared to slum where it is (4.3%). Majority 122 (40.66%) of mothers were in age group of 25-29 years. extremes we have 7 (2.32%) and 27 (9.00%) respectively, rest 97 (32.33%) of mothers belong to 20-24 years of age and 47 (15.56%) are in age group of 30-34 years. 9% mothers in age group of 35-40 year in urban slum show that Muslim ladies are married at early age and bear children for longer duration and are in habit of not using family planning methods which reflects old cultural beliefs of Muslims. Majority 250 (83.33%) were housewives and rest 50 (16.66%) were working. This working status is of (16.66%)

Table-2: Distribution of study population according to starting time of first feed

| Starting time after birth | No.(%) |
|---------------------------|------------|
| Less than hour | 103(34.33) |

| 1-2hour | 187(62.33) |
|---------|------------|
| 2-3hour | 9(3.0) |
| >3hour | 1(0.33) |
| Total | 300(100) |

Majority 187 (62.33%) started feeding within 1-2 hours of birth, 103 (34.33%) fed before one hour.,9 (3.00%) fed within 2-3 hours and 1 (0.33%) fed after three hours of birth.

Table – 3: Distribution of children according to type of first feed

| Type of first feed | No.(%) |
|--------------------|------------|
| Clostrum | 208(69.33) |
| Sugar water | 52(17.33) |
| Cow milk | 11(3.66) |
| Powdered milk | 25(8.33) |
| Zeera + Gud water | 4(1.33) |
| Total | 300(100) |

Majority 208 (69.33%) gave colostrum to their babies, 52 (17.33%) gave sugar water. 11 (3.66%) gave tea/cow's milk. . Other than this 25 (8.33%) gave powdered milk and rest 4 (1.33%) gave zeera water with gud to their babies. Out of 25 (8.33%) who gave powdered milk to their babies 9 (36%) were exclusively bottle fed and out of 11 (3.66%) who gave tea/cow's milk 1 (9.0%) was exclusively bottle fed

Table -4: Literacy Status of mother with type of first feed

| - | **** | | . | | ~ | | | | _ | _ | |
|----------|--------|-------|----------|-------|---------|-------|---------|-------|-------|-----|-------|
| 1 4 4 | Illite | erate | Primary | | Seconda | | Higher | | Gradu | | Total |
| of first | | | | | ry | | seconda | | ate | | |
| feed | | | | | | | | ry | | | |
| | No. | % | No. | % | No. | % | No. | % | No. | % | |
| Colost | 108 | 51.9 | 22 | 10.57 | 37 | 17.78 | 30 | 14.42 | 11 | 5.2 | 208 |
| rum | | 2 | | | | | | | | 8 | |
| Sugar | 50 | 96.1 | 0 | 0 | 1 | 1.92 | 1 | 1.92 | 0 | 0 | 52 |
| water | | 5 | | | | | | | | | |
| Tea/c | 4 | 36.3 | 1 | 9 | 1 | 9 | 4 | 36.36 | 1 | 9 | 11 |
| ow | | 6 | | | | | | | | | |
| milk | | | | | | | | | | | |
| Powde | 14 | 40 | 3 | 12 | 4 | 16 | 2 | 8 | 2 | 8 | 25 |
| red | | | | | | | | | | | |
| milk | | | | | | | | | | | |
| Zeera | 4 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| water | | | | | | | | | | | |
| with | | | | | | | | | | | |
| gud | | | | | | | | | | | |
| Total | 180 | | 26 | ! | 43 | | 37 | | 14 | | 300 |

Majority women 108 (51.92%) who gave colostrum, 50 (96.15%) who gave sugar water, 4 (36.36%) who gave tea/cow's milk, 14 (40.0%) who gave powdered milk and 4 (100.0%) who gave zeera water were illiterate showing that similar pattern of cultural beliefs regarding colostrum and type of first feed.

Out of 120 literate mothers, majority 100 (83.33%) gave colostrum so, Pratapnagar is showing highly significant association of literacy status and giving colostrum as first feed (P<0.001), depicting urgent need for Educational strategy regarding benefits of colostrum as first feed.

Table-5 : Distribution of study population according to starting time of weaning

| Starting time(month) | No.(%) |
|----------------------|-----------|
| 4-6 | 7(2.33) |
| 6-8 | 72(26.56) |
| 8-10 | 64(23.61) |
| 10-12 | 89(32.84) |
| >lyear | 11(4.05) |
| >2year | 2(0.73) |
| Weaning not started | 26(9.59) |
| Total | 271(100) |

29 (9.66%) were below 6 months and have not yet started weaning, Majority 72 (23.56%) started weaning between 6-8 months of age. 64 (23.61%) started between 8-10 months, 11 (4.05%) started beyond 1 year of age and figure is just double as in rural area. 7 (2.33%) started between 4-6 months and 2 (0.73%) started at 2 years so, the range on both sides is more in urban slum

DISCUSSION

In our study 79 (45.40%) families are joint and rest 95 (54.59%) are nuclear families. Out of 174 families, majority 92 (52.87%) were Muslims and 82 (47.12%) were Hindus, similar to findings of Sandeep Sachdeva (2010) (9) where 51.46 percent children were Muslims. But different finding was noted by S.Malik(2000) (11) where 66percent children were Hindus and 34 percent were Muslims. Majority 191 (63.66%) belong to SE class -5, there were only 8 (2.66%) of families in SE Class 6. Thus both constituted 66.32% of total children. 11 (3.66%) and 88 (29.33%) belonged to SE Class 3 and 4 respectively and only 2 (0.6%) belonged to SE class 2. Proportion of SE2 and SE3 is more in rural area (7.6%) as compared to slum where it is (4.3%), quite similar findings were observed by A.L. Soni (1980) $^{\scriptscriptstyle{(12)}}$ where 72.8 percent belonged to SE Class 4 and 5, Kamruzzaman $MK(2009)^{(13)}$ where all respondents were low to lower middle class, Sandeep sachdeva (2010) (9) where 76.5 percent were lower socio-economic group, Tamoghna Biswas (2011)⁽¹⁴⁾ found 52.7 percent belonged to SE class 4, while contrast findings were seen by Jayant Despande D (2009) $^{\scriptscriptstyle{(15)}}$ where majority were SE Class 3 and 4, 28 percent and 31 percent respectively.

Majority 122 (40.66%) of mothers were in age group of 25-29 years. extremes we have 7 (2.32%) and 27 (9.00%) respectively, rest 97 (32.33%) of mothers belong to 20-24 years of age and 47 (15.56%) are in age group of 30-34 years. 9% mothers in age group of 35-40 year. urban slum show that Muslim ladies are married at early age and bear children for longer duration and are in habit of not using family planning methods which reflects old cultural beliefs of Muslims. Majority 250 (83.33%) were housewives and rest 50 (16.66%) were working.

This working status is of (16.66%)Similar findings were shown by S, Malik (2000) (10) where 90 percent mothers are house wives, Pragati chabra (2007) (15) 95.4 percent mothers are house wives, Kammruzzaman (2009) (13) found 96.2 percent housewives different findings were shown by Jayant Despande D (2009) $^{\scriptscriptstyle{(15)}}$ where 67.7 percent were housewives but age group was found similar to our study i.e. majority are in 20-24 years group, followed by 25-29 years (45percent) while 3 percent belonged to 30 years and above, Kammurzaman MK (2009) (13) showed majority 66.7 percent were in age group 18-25 years, 22.9 percent in 26-36 years Majority 208 (69.33%) gave colostrum to their babies, 52 (17.33%) gave sugar water. 11 (3.66%) gave tea/cow's milk. Other than this 25 (8.33%) gave powdered milk and rest 4 (1.33%) gave zeera water with gud to their babies. Out of 25 (8.33%) who gave powdered milk to their babies 9 (36%) were exclusively bottle fed and out of 11 (3.66%) who gave tea/cow's milk 1 (9.0%) was exclusively bottle fed similarly K.Indira Bai (1981) (197) found breast feeding was common in rural area, G. Bagenholmin (1987) (18) found that prevalence of breast feeding of infants below three months was significantly higher in rural than in urban and slum area (P<0.05) Jayant, Despande D (2009) (15) found 91.7 percent mothers gave colostrum, 8.3 percent do not breast fed as concept of "WITCH MILK" prevails in rural India, contrast findings were shown by Anoop I (1993) (19) where 57.7 percent mothers exclusively breast fed, S.B. Bavdekar (1993) (20) found 64 percent were exclusively breast fed, NFHS5(2019-21)⁽²¹⁾ revealed exclusive breast feeding in only 37percent, V.G. Roa (2005) $^{\scriptscriptstyle(22)}$ found this for 23.4percent children, Kamruzzaman MK (2009) $^{\text{(13)}}$ found only 48.1percent gave breast feeding as first feed, Sandeep Sachdeva (2010) $^{\text{(15)}}$ found only 59.18

percent did appropriate breast feeding, Apurbha Sinhababu (2010)⁽²³⁾ showed 57.1 percent exclusively breast fed, Tamoghna Biswas (2011) ⁽¹⁴⁾ reported only 18.1 percent exclusively breast fed, which is less as compared to our findings.

18.66 percent discarded colostrum in urban slum, similar findings were noted by Dinesh Kumar (2006)⁽²⁴⁾ 15.9 percent discarded colostrum, while contrast findings were seen by Priti Verma Taneja (1998)⁽¹⁷⁾ found 77.3 percent didn't gave colostrum, V.G. Roa (2005) ⁽²²⁾found that, colostrum was not given in 86.4 percent children Majority women 108 (51.92%) who gave colostrum, 50 (96.15%) who gave sugar water, 4 (36.36%) who gave tea/cow's milk, 14 (40.0%) who gave powdered milk and 4 (100.0%) who gave zeera water were illiterate showing that similar pattern of cultural beliefs regarding colostrum and type of first feed. Out of 120 literate mothers, majority 100 (83.33%) gave colostrum so, This shows highly significant association of literacy status and giving colostrum as first feed (P<0.001), depicting urgent need for Educational strategy regarding benefits of colostrum as first feed.

In this study 29 (9.66%) were below 6 months and have not yet started weaning, Majority 72 (23.56%) started weaning between 6-8 months of age. 64 (23.61%) started between 8-10 months, 11 (4.05%) started beyond 1 year of age and figure is just double as in rural area. 7 (2.33%) started between 4-6 months and 2 (0.73%) started at 2 years so, the range on both sides is more in urban slum

CONCLUSION

In India mothers are educated about exclusive breastfeeding & techniques but not educated much on breastfeeding weaning. It is noted that the breastfeeding and breast feeding weaning practices are influenced by mothers age and educational status. More intervention on educating mothers on weaning practices should be done.

Sponsership: Declared None

Competing Interests: The Author declares no competing interests

REFERENCES

- Bildhaiya G.S. and Bose Mrs C, A Comparative study of the health status of in and preschool children in rural and urban area, Jabalpur, Indian journal of Paediatrics, September 1997: 44: (9); 257-271.
- Thomas D, Strauss J, Henriques MH: Child survival, height for age and house hold characteristics in Brazil: Journal of Development Economics 1990,33:197-234).
- $(3) \quad https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/infant-mortality$
- (4) https://censusindia.gov.in/census.website/data/SRSSTAT
- (5) Centers for Disease Control and Prevention. Breastfeeding Report Card United States 2011. Atlanta, GA: 2011. [cited Aug 8, 2012]; Available from: www.cdc.gov/breastfeeding/pdf/2011breastfeedingreportcard.pdf. [Google Scholar]
- (6) Eidelman AI, Schanler RJ, Johnston M, et al. Breastfeeding and the use of human milk. Pediatrics. 2012;129(3):e827-e41. [PubMed] [Google Scholar]
- human milk. Pediatrics. 2012;129(3):e827–e41. [PubMed] [Google Scholar]

 (7) US Department of Health and Human Services. Healthy People 2020.
 Washington D.C: [cited Aug 8, 2012];Availablefrom: www.healthypeople.gov/
 2020/topicsobjectives2020/objectiveslist.aspx?topicid=26. [Google Scholar]
- (8) Park K: Park's Text Book of Preventive and Social Medicine; Jabalpur: M/S Banarsidas Bhanot: 2021.
- (9) Lawanga S.K., Cho Yook Tye, O. Ayeni. Teaching health statistics Lesson and Seminar outlines: second edition WHO, Geneva 1999.
- (10) National Immunization Programme, Evaluate Vaccine Coverage, Ministry of Health and Family Welfare, New Delhi 1989.
- (11) Malik S, Mitra S.P, Roy A, Basu S.S., Saha A., Munsi A.K., Malnutrition –A Missed opportunity to treat at Tertiary Care, Indian Journal of Community Medicine, Sep,2006: 31 (3): 196-197
- (12) Soni A.L., Singh R.N. and Gupta B.D., Nutritional Disorders in rural Rajasthan, Indian Journal of Pediatrics, 1980, 47(3): 199-202.
- (13) Kamruzzaman MK, Kamrun N, Hamudur R, Salam MA, ASM Mortoza, Jannatal, Feeding Pattern of Children under two years in some selected villages, Bangladesh Journal of Medical Sciences, oct. 2009: 8(4): 110-116.
- (14) Biswas Tamoghna, Dr. Kumar Mandal Pankaj, Dr Biswas Samarendra, Assessment of Health, Nutrition and Immunization status amongst under five children in migratory brick kiln population of periurban Kolkata, India, 2011, Sudanese Journal of Public Health: 6(11).

VOLUME - 11, ISSUE - 07, JULY - 2022 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

- (15) Jayant, Deshpande D socio-cultural practices in relation to breast feeding, weaning and in child rearing among Indian mothers and assessment of nutritional status of children under five in rural India, Australasian Medical Journal, July 28,2010
- (16) Chabra Pragati, Nair Parvathy, Gupta Anita, Sandhir Meenakshi and Kanan A.T., Immunization in urbanized Villages of Delhi, Indian Journal of Pediatrics, feb 2007:74(2):131-134.
- Taneja Priti Verma, Gupta Nidhi Vaidya, Feeding practices in infants of Bhil Tribe in Jhabua District of Madhya Pradesh, Indian Journal of Pediatrics, June 1998: 35 (6): 568.
- Bagenholm G, MD Kristansson B, MD and Nasha A.A.A. MD Child Feeding (18)Habits in the people of Democratic Republic of Yemen 1, Breast and Bottle feeding, Journal of Tropical Pediatric, 1987, 33 (4); 208-212.
- (19) Anoop-1, Benjamin and Tachariah Prema, A study on nutritional status and feeding practices in under three children in rural community in Ludhiana, Punjab, Health and Population Perspective and Issues, 1993, 16 (1 and 2);
- (20) Bavdekar SB, Bavdekar MS, Kasla RR, Raghuandana KJ, Joshi SY, Hathi GS, Infant feeding practices in Bombay Slums, Indian Journal of Pediatrics, sep 1994,31(9):1083-7.
- (21) https://www.pib.gov.in/PressReleasePage.aspx?PRID=1774533
 (22) V.G.Rao, Rajeev Yadav, C.K. Dolla, Surendra Kumar, M.K. Bhondeley and Mahendra Ükey, Under nutrition and Childhood Morbidities among Tribal
- Preschool Children, Indian Journal of Medicinal Research, July 2005: 43-47.

 (23) Sinhababu Apurba, Dipta K. Mukhopadhyar, Tanmay K. Panja, Asit B. Saren, Nirmal K. Mandal and Akil B. Biswas., Infant and young Child-feeding Practices in Bankura District, West Bengal, India, June 2010, 28(3): 294-299
- (24) Kumar Dinesh, Neeraj Agarwal, HM Swami, Socio-demographic Correlates of breast-feeding in urban slums of Chandigarh, Indian Journal of Medical Sciences, 2006, 60 (11): 461-466.