

Knowledge, Attitude and Practices of Early Initiation of Breastfeeding in Behraich District of Uttar Pradesh, India

Smita Srivastava¹, Neelam Chaturvedi²

¹Research Scholar and Research Assistant, ²Associate Professor,
Department of Home Science (Food and Nutrition), Banasthali Vidyapith, Rajasthan - 304022

Corresponding Author: Smita Srivastava

ABSTRACT

Background: Adequate nutrition and health care of children is significant for proper growth and development and it is well acknowledged that the period from birth to two years of age is a critical “window period” for promotion of optimal growth and development. Optimal Infant and Young Child Feeding Practices are fundamental for survival, health, growth and development of children. Breast milk provides nutritive and immunological protection in infants to ensure health and survival of children. The objective of the study was to analyze and ascertain knowledge and compliance of early initiation of breastfeeding practice of mothers and to find the association with socio-demographic variables.

Methodology: The cross-sectional analytic design was adopted to investigate knowledge and compliance of early initiation of breastfeeding among mothers of children 0-24 months in Behraich districts of Uttar Pradesh. Lactating mothers with the children in the age group 0-24 months were included in the study.

Results and Conclusion: It is found that mother’s knowledge level is average about infant and young child feeding components; about 68.3 % mothers have knowledge on initiation of breast-feeding within an hour of birth while 23.3 % of mothers had initiated the breastfeeding within 6 hours after the birth of child. Majority of the mothers had the knowledge of colostrums and early initiation of breastfeeding but there was a noticeable deficit in the implementation of the knowledge in the frequency of breastfeeding practices. Further, it was found that majority of mother feed their child as per their demand. None of them was feeding their child in every two hours. Therefore, there is urgent need to address the existing gaps, socio-cultural barriers and misconceptions prevailing in the community and it are essential to take necessary steps taken in helping mothers to fully carry out the responsibilities of nurturing and nourishing the child.

Key Words: Colostrums Feeding, Early Initiation of breastfeeding, Infant mortality rate, Pre-lacteal feeds etc.

INTRODUCTION

The World Health Organization (WHO) recommends that all neonates should be breastfed within one hour of birth. Early initiation of breastfeeding is the easiest, cost effective and life-saving interventions for the health of the newborn (WHO,2007)¹. Breastfeeding in the first hour of life is associated with prolonged duration of breastfeeding and reduction of

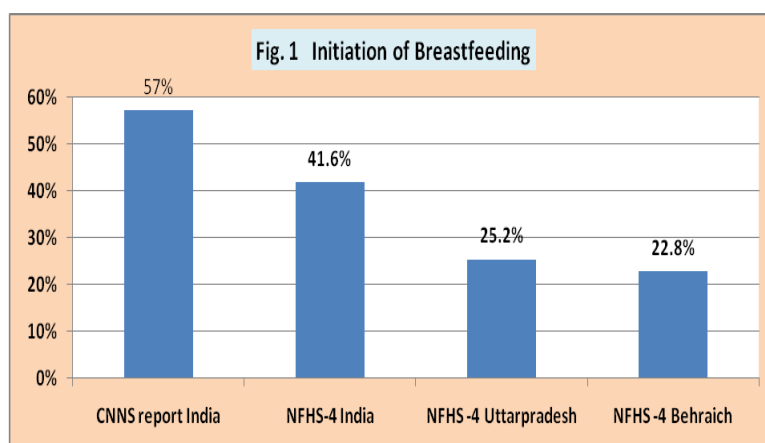
infant mortality. An epidemiological evidence of a causal association between early breastfeeding and infection specific mortality in the new-born infants has also been documented (Edmond et al,2007)². The milk on its first days contains the epidermal growth factor, which accelerates the development of the intestinal mucus as well as the immunological bioactive factors that provide immunological protection to the

new-borns, preventing intestinal colonization by pathogenic microorganisms (Chirico et al,2008)³. The suction of the nipple right after birth stimulates the secretion of prolactin and oxytocin, hormones that induce the production and ejection of milk (Mercer et al,2007).⁴ Adequate nutrition during infancy and early childhood is essential to ensure the growth health and development of children to their full potential. Worldwide, under nutrition causes 45% of all deaths of children younger than five years, representing more than 3 million deaths each year (WHO, 2020)⁵. To reduce neonatal mortality, various strategies have been employed globally, one of which is early initiation of breastfeeding. Early Initiation of breastfeeding within one hour of delivery is an evidence-based high-impact intervention for improving neonatal survival (Mazumder S et al, 2016)⁶. Appropriate feeding and correct method of feeding is beneficial for the proper development of child. The physical growth and development of child are determined by genetically acquired characteristics, the prenatal quality of nutrition and the nutritional adequacy of postnatal diet significantly impact on child growth. Satisfying relationships developed between mother and infant from earliest days influence not only the establishment of desirable food behavior but are important also for their social and psychological value. Considering the above facts present study entitled " Knowledge, Attitude, Practices on Infant and Young Child Feeding among Mothers in Central Regions of Uttar

Pradesh" was undertaken so that the findings of the study will be useful for improving feeding practices of children and knowledge and attitude of mothers. A Knowledge, Attitude and Practices (KAP) survey is basically a method that provides access to both qualitative and quantitative information. This survey helps in revealing any kind of misconception that the respondent may have regarding the change that we would want to implement, it takes an opinion of the individual. It reveals what the person has knowledge of and what he is practicing instead but is willing to adapt something new. A KAP Survey can:

1. Enhance an individual's knowledge on certain areas, and change their concept on feeding practices related issues.
2. It can measure the situation that has existed in the family and society and can provide new background on the existing reality.
3. Establish the baseline (reference value) for use in future assessments and help measure the effectiveness of nutrition education activities ability to change feeding practices behaviors related to child.

Optimal infant and young child feeding (IYCF) practices which is initiation of breastfeeding within 1 hour of birth , exclusive breastfeeding for the first six months and starting of appropriate complementary feeding after six months along with and continued breastfeeding till 2 years beyond - are key practices to reducing malnutrition and mortality of children under 5 years.(UNICEF,2015)⁷



However, infant feeding practices in India are dismally low and are not showing significant improvement over years. WHO recommends that breastfeeding should be initiated in all newborns within one hour of life. As per National Family Health Survey (NFHS-4 2015-16)⁸, revealed that only 41.6% of newborns in India were breastfed within one hour of birth, which is an improvement from its last round (NFHS-3 2005-06; 23.4%)⁹. Recently, Comprehensive National Nutrition Survey 2016-18¹⁰ reported that only 57% of new born receive breast milk within one hour and about 58 % children sustain exclusive breastfeeding till 6months. Uttar Pradesh having a load of population about 199.5 million and it is the most populous state in India accounting for 16.2 per cent of India's total population (Census, 2011)¹¹. Infant mortality rate in Uttar Pradesh contributes to 41 per 1000 live births. Prevalence of diarrhoeal diseases 15.0% and 4.7% upper respiratory tract infection in infants. As per NFHS-4(2015-16)⁸Uttar Pradesh is the largest contributor to child mortality in India and breastfeeding practices are among the lowest in the country with only 41.6% babies being breastfed exclusively for 6 months and 25 % mothers initiating breastfeeding in 1 hour.

Behraich is one of the Aspirational districts chosen by Niti Aayog¹² to bring about a positive change on the socio-economic ground. With a population of nearly 35 Lakh, it is ranked 96 out of 117 on 6 different parameters from health, nutrition, education and water and others. SRS bulletin,2019¹³ indicated that the nutrition and health indicators are not satisfactory. The total infant mortality rate 66 is per 1000 live births and less than five mortality rate is 105 per 1000 live births. Beside that infant and Young Child feeding practices is also a concerning i.e. the breast feeding practices within one hour of birth is only 22.8 % (NFHS-4,2015-16)⁸. Thus, the current study aimed at understanding the Knowledge, Attitude and Practices followed by mothers about early initiation of

breastfeeding and the various socio-demographic factors associated with it.

Mother's breast milk to infants within one hour of birth is referred to as "early initiation of breastfeeding" and ensures that the infant receives the colostrums, or "first milk", which is rich in protective factors. Early initiation of breastfeeding in the first hour after birth confers benefits to child and the mother. (Atul, et al, 2017)¹⁴ carried out a study on early initiation of breast feeding practice among institutional delivered women in district Bareilly. In this study it was observed that 64.4% mothers had started the breast feeding within 1 hour after delivery. More than half (59.1%) women were aware about the duration of exclusive breast feeding while only 101 (34.9%) women aware about the correct positioning for proper breastfeeding. The optimal feeding practices during infancy are critical significance for the growth and development of children (Rahman, et al, 2018)¹⁵. Conducted a cross sectional study to determine infant feeding practices and nutritional status of under-2 year's children. It was found that 67% respondent have the knowledge on colostrums but just 30 respondents begun breastfeeding within one hour after birth. Only 40% respondent gave exclusive breastfeeding for six months or above and 20% mother start additional food from one month. Using the indicator weight for age (W/A-Z score) and height for age (H/A-Z score) the growth performance of the children was estimated. About 21.0%, 10.5% and 20.0% of the children were severely (-3 SD), moderately and mildly underweighted respectively. The prevalence of severe stunting (<-3 SD) were found to be 39.0%, while the prevalence of moderate, mild stunting and well-nourished were 22.0%, 15.0% and 24.0% respectively. About 81% colostrums feeding and 80% exclusively breast feeder babies were well nourished. Another investigation led by (Gupta A et al, 2011)¹⁶ found that "breast feeding has been acknowledged as the most urgent perspective for lessening infant

mortality and morbidity that guarantees ideal growth and development of infants". Further, (Vyas et al, 2018)¹⁷ also stated that breast feeding is the most secure, least allergic and best newborn child feeding method. It has nutritional, immunological, behavioral and economic advantages and furthermore give desirable mother newborn child bonding. Moreover, their study findings also revealed that most of the children were breastfed (93.6%). Initiation of breastfeeding within an hour was practiced by just a couple of mothers (21.37%). Only 5.13% infants were exclusively breastfed till six months. Pre-lacteal feeds and colostrums were given to a large portion of them i.e. 66.03 % and 87.18 %. This shows that undesirable cultural practices, for example, giving pre-lacteals, late initiation of breast feeding are as yet common among the community and these ought to be discouraged by appropriate BCC activities. For successful feeding, mothers need active support, care and privacy during pregnancy and following birth, of their families and communities as well as of the entire health system.

The initiation of breastfeeding within one hour and continuation of only breast milk up to six months ensure maximum benefits. (Nandeeta S, 2017)¹⁸ examined the pattern of delivery and early initiation of breastfeeding in selected slums of Dhaka city among selected 354 infant (0-12months)-mother pairs. The study showed that 44% infant started breastfeeding within one hour and 56% started more than one hour. Early initiation of breast feeding was greater among the infants whose pattern of delivery were normal than their cesarean counterpart which was highly significant. Besides percentage of early initiation of breast feeding was greater among the normal term birth babies than that of preterm birth and it was statistically significant. So, high rate of early initiation of breast feeding was seen in case of normal delivery and term baby though more than half of the baby started initiation of breast feeding after one hour of birth.

The above researches have shown that most of the mothers have breastfed their child but the early initiation of breast feeding is not found up to the mark. Further, mothers give pre-lacteal fed to their new born child due to their cultural and social practices. Moreover, early initiation of breast feeding develops the suckling reflexes in an infant and helps in mother's milk production which furthers promotes exclusive breast feeding practices.

MATERIAL AND METHODS

A cross-sectional analytic design was adopted to investigate knowledge, attitude and practice among mothers of children 0-24 months in Behraich districts of Uttar Pradesh. This design facilitated collection of qualitative and quantitative data and enabled identification of associations between the dependent and independent variables. In present research study data have been collected, analyzed and arrived at conclusion under the following hypothesis:

H01: There exists no significant relationship between KAP of respondents regarding Feeding Practices.

H02: There shall be significant impact of demographic factors on knowledge attitude and practices on IYCF among mothers.

H03: There shall be no significant effect of socio-cultural practices on knowledge attitude and practices on IYCF among mothers.

Tools for Data Collection

Selection and development of tools to achieve the objectives of the research is an important step in any research. Keeping in mind the purpose of the study and its inherent research variables the investigator used major research tools for data collection which were:

Background Information Proforma

Background information proforma was developed and used to procure the necessary details regarding the subjects, their children and families. The information

included the name of the respondent, age, sex, education, composition of family, type of family, age at marriage, pregnancy details, type of delivery etc. To know the family income of subjects B.G Prasad Scale, 2014¹⁹ was used in the present study. Besides these, information related to child included name of the child, sex, type of birth, weight at the time of birth, health card and birth registration card etc was also collected. The background Information proforma used is given in Part-I of Interview Schedule.

Interview Schedule for Mothers (0-2 years Children)

Interview schedule used in the present study focused on the knowledge, attitude and practices on Infant Young Child Feeding Practices among mothers having children in the age of 0-2 years. The interview schedule contains items regarding initiation of breast feeding, colostrums feeding, exclusive breast feeding, age appropriate complementary feeding, hygiene and sanitation practices and growth monitoring. There were mixed type of questions included in the schedule i.e. close ended, open ended and multiple choice questions. IYCF training module prepared by UNICEF in collaboration with World alliance for Breastfeeding Action (WABA), Breastfeeding Promotion Network of India (BPNI) and International Baby Food Action Network (IBFAN), Asia is used for developing the Interview schedule for study.

Procedure for Data Collection

The initial list of mothers having children in the age group of 0-2 years which was received from block level officers of concerned district was screened. Envisioning the possibility of dropout of subjects twice the number of required sample i.e. 120 (60 from rural area and 60 from urban area) under each selected district were randomly identified and personally contacted by the investigator. During visit, the mothers were briefed about the purpose of the study and assured for confidentiality

of their responses. Further, mothers who have given their consent and willingness to participate in the study were randomly selected for the purpose of data collection.

The subjects selected for the study were contacted personally by the investigator according to their convenience for data collection. Initially rapport was established with the subjects and requested to give accurate information. It took about 40-45 minutes for each subject to respond the background information and interview schedule. So the total time taken for the completion of data collection approximately four months. Ethical approval was obtained from the mothers. A verbal consent was obtained from the subjects before commencement of any data collection (interview). The data were not accessed by a third person, except investigators, and was kept confidentially.

Analysis of Data

The collected data were converted into score on the basis of the responses and transferred on working tables and data spread sheets. Data were then processed tabulated, classified and analyzed for statistical treatment in the light of objectives of the study. Considering the purpose of the study frequency, percentages were figured out in data analysis. To find out association, Chi Square was calculated to test the association of knowledge, attitude and practices with socio-economic status of mothers. The statistical significance level was accepted as $p < .001$ in the study.

Study Variables

Dependent Variables: The dependent variables for the study were; infant and young child feeding practices, initiation of breast feeding, colostrums feeding, introduction of age appropriate complementary food (liquid, semi-solid / soft foods & solid food), dietary diversity, meal frequency and minimum acceptable diet.

Independent variables: The independent variables for the study were; maternal age,

maternal knowledge, socio economic, educational qualification, religion, caste, etc.

RESULT AND DISCUSSION

The present research paper was intended to explore “Knowledge, Attitude and Practices of Early Initiation of breastfeeding among Mothers in Behraich district of Uttar Pradesh. Results obtained during the course of investigation have been systematically presented and discussed.

- a) **Statistical Analysis:-**The collected data were converted into score on the basis of the responses and transferred on working tables and data spread sheets. Data were then processed, tabulated, classified and analyzed for statistical treatment in the light of objectives of the study. The following statistical measures were used for interpretation of data. To find out association, Chi Square was calculated to test independence of attribute hypothesis with different demographic variables. The statistical significance level was accepted as p value at 5% in the study.
- b) **Frequency and Percentages:** - Information about socio demographic profile, knowledge and practice regarding IYCF and obstacles and factors in regard to promoting IYCF practices of the subjects were interpreted on the basis of frequency, percentage, mean, and standard deviation.
- c) **Chi-square Test:** - It was used to study whether two variables were associated with or independent of each other. It was applied to check the association of knowledge and practice with age, education, family size, age at pregnancy, family income etc. of the respondents.

$$x^2 = \sum \frac{(O - E)^2}{E}$$

O = the frequencies observed

E = the frequencies expected

\sum = the sum of

RESULTS

On the basis of the findings of the study recommendations were formulated to strengthen the existing mechanism for IYCF practices. The suggestions were focused at policy level, programmatic level & implementation at grassroots level. Further, the study has developed innovative solutions and come up with the innovative practices to eliminate the limitations experienced by mother pertaining to IYCF Practices.

(i) Socio- Demographic Characteristics

Breast milk is considered the best source of nutrition for the healthy growth and development of an infant. The World Health Organization (WHO) recommends early initiation of breastfeeding (EIBF) as it stimulates breast milk production, fosters bonding between the mother and newborn, reduces neonatal mortality, and increases the duration of breastfeeding (UNICEF, 2002)²⁰. Further, maternal colostrums produced during the first few days after delivery is rich in nutrients and antibodies that protect the newborn from infection and illness (Victoria, 2016)²¹. **Table -1** describes the socio demographic characteristics of the respondents. A total of 60 mothers were included in the study and their aged ranged from 21 to 40 years. Religion wise 78.3% were Hindus, and 21.3% were Muslims. Majority of the respondents were lived in nuclear family 58.3% and 41.6% lived in joint family pattern. With regard to the total member in family, majority of the respondents 40.0% had family member five to seven, followed by up to four 38.3%, 11.6% have eight to ten and 10.0% have eight to ten family members. Most of them belong to other backward class category 36.6% followed by 20.0% scheduled caste, 21.6% minority and 20% belongs to general category.

Table-1 also elicited the socio-economic condition of respondents. Socio-economic scales are being used for determining the socio-economic status of study subjects which in turn is important

indicator of health and nutritional status. Among mothers included in the study 38.3% were illiterate, followed by 15.0% studied Class VI to VIII and Intermediate, 11.6 % were graduate and 6.6 percent mothers were postgraduate. The occupation of the mother shows that all the mothers included in the study were home makers. Father's occupation and education level play a major role in child feeding practices

and nutritional status (Nankumbi and Muliira, 2015)²². In present study, majority of them 28.3 % had done only primary schooling and they were engaged only in agricultural activities. B.G Prasad scale (2019)²³ was used to determine the socio economic condition of family and it was found that majority of them belongs to Lower middle class family.

Table-1: Socio-Demographic and Socio-Economic Characteristics of Respondents N=60

S.No.	Characteristics	Category	Area		
			Rural Frequency (%)	Urban Frequency (%)	Total Frequency (%)
1.	Religion	Hindu	28(93.3)	19(63.3)	47(78.3)
		Muslim	2(6.6)	11(36.6)	13(21.6)
2.	Type of Family	Nuclear	18(60.0)	17(56.7)	35(58.3)
		Joint	12(40.0)	13(43.3)	25(41.6)
3.	Total No. of Family Member	Up to Four	11(36.6)	12(40.0)	23(38.3)
		Five to Seven	9(30.0)	15(50.0)	24(40.0)
		Eight to Ten	5(16.6)	2(6.6)	7 (11.6)
		More than Ten	5(16.6)	1(3.3)	6 (10.0)
4.	Caste Category	General	2(6.6)	10(33.3)	12(20.0)
		SC	8(26.6)	6(20.0)	14(23.3)
		ST	-	-	-
		Minority	2(6.6)	11(36.6)	13(21.6)
		OBC	18(60.0)	3(36.6)	22(36.6)
5.	Educational Qualification of Mother	Illiterate	17(56.6)	6(20.0)	23(38.3)
		Know to read and Write	-	-	-
		Up to Class V	2(6.6)	1(3.3)	3(5.0)
		Class VI to VIII	2(6.6)	7(23.3)	9(15.0)
		High School	1(3.3)	-	1(1.6)
		Intermediate	1(3.3)	8(26.6)	9(15.0)
		Graduation	2(6.6)	5(16.6)	7(11.6)
		Above Graduation	1(3.3)	3(10.0)	4(6.6)
6.	Occupation of Mother	Home maker	30(100)	30(100)	60(100)
		Labour	-	-	-
		Government Service	-	-	-
		Private Service	-	-	-
		Own Business	-	-	-
7.	Educational Qualification of Father	Illiterate	6(20.0)	7(23.3)	13(21.6)
		Know to read and Write	-	2(6.6)	2(3.3)
		Up to Class V	1(3.3)	6(20.0)	7(11.6)
		Class VI to VIII	7(23.3)	10(33.3)	17(28.3)
		High School	-	3(10.0)	3(5.0)
		Intermediate	8(26.6)	-	8(13.3)
		Graduation	5(16.6)	2(6.6)	7(11.6)
		Above Graduation	3(10.0)	-	3(5.0)
8.	Occupation of Father	Agriculture Activities	29(96.6)	29(96.6)	58(96.6)
		Labor	-	1(3.3)	1(1.6)
		Government Service	-	-	-
		Private Service	-	-	-
		Own Business	1(3.3)	-	1(1.6)
9.	Family Income per Month	Any other	-	-	-
		Less than Rs. 866	4(13.3)	4(13.3)	8(13.3)
		Rs. 866 to 1732	3(10.0)	3(10.0)	6(10.0)
		Rs. 1732 to 2886	20(66.6)	4(13.3)	24(40.0)
		Rs. 2886 to 5774	1(3.3)	11(36.6)	12(20.0)
		Rs. 5774 and above	2(6.6)	8(26.6)	10(16.6)

(ii) Obstetric History of Mothers

Maternal health is the health of women during pregnancy, childbirths and the post partum period. It encompasses the health care dimensions of family planning, preconception, prenatal and postnatal care. In order to reduce maternal, child morbidity and mortality it is essential to understand the obstetrics history of mothers such as age at pregnancy, place of delivery, type of institution, types of delivery, antenatal counseling and postnatal counseling which have long term impact on maternal and child health and nutrition care. Table-2 clearly shows that majority 61.3% of respondents got married above 18 years of

age which indicates their awareness about correct age of marriage among families and maximum 91.6% respondents conceived at above 18 years of age. Majority had institutional delivery and 78.3% were delivered through normal vaginal delivery. Further, it was found that almost all the mothers received the antenatal and postnatal counseling which significantly impact the nutritional and health status of child. Moreover, they have enrolled themselves in the different government schemes such as Anganwadi Services Scheme, National Health Mission, Janani Surksha Yojna etc.

S.No.	Characteristics	Category	Area		
			Rural Frequency (%)	Urban Frequency (%)	Total
1.	Age at Time of Marriage	Below 18 Years	18(60.0)	5(16.6)	23(38.3)
		Above 18 years	12(40.0)	25(83.3)	37(61.6)
2.	Age at time of Pregnancy	Below 18 Years	5(16.6)	-	5(8.3)
		Above 18 years	25(83.3)	30(100.0)	55(91.6)
3.	Place of Delivery	Home	5(16.6)	3(10.0)	8(13.3)
		Institution	25(83.3)	27(90.0)	52(86.6)
4.	Type of Institution	Government	20(80.0)	19(70.3)	39(65.0)
		Private	5(20.0)	8(29.6)	13(21.6)
5.	Type of Delivery	Normal	26(86.6)	21(70.0)	47(78.3)
		Caesarian	4(13.3)	9(30.0)	13 (21.6)
		Any other (instrumental)	-	-	-
6.	Antenatal counseling	Yes	28(93.3)	30(100.0)	58 (96.6)
		No	2(6.6)	-	2 (3.3)
7.	Postnatal Counseling	Yes	30(100.0)	30(100.0)	60(100.0)
		No	-	-	-
8.	Enrollment in Government Scheme	Yes	26(86.6)	18(60.0)	44(73.3)
		No	4(13.3)	12(40.0)	16 (26.6)

(iii) Knowledge, Attitude and Practices of Colostrums Feeding

S.No.	Variables	Category	Rural Frequency (%)	Urban Frequency (%)	Total Frequency(%)
1.	Colostrums feeding is essential for child	Yes	17 (56.6)	22(73.3)	39(65.0)
		No	13 (43.3)	8 (26.6)	21(35.0)
2	Attitude of mothers about colostrums feeding	Strongly Agree	17 (56.6)	22 (73.3)	39(65.0)
		Agree	-	-	-
		Disagree	3 (10.0)	6 (20.6)	9(15.0)
		Strongly Disagree	10 (30.0)	2 (6.6)	12(20.0)
		Don't Know	-	-	-
	Practice of colostrums feeding (correct data with chi square table)	Colostrums	17(56.6)	26 (86.6)	43(71.6)
		Plain water	5(16.6)	3 (10.0)	8 (13.3)
		Honey	5(16.6)	1(3.3)	6(10.0)
		Sweetened water	3(10.0)	-	3(5.0)
		Ghutti	-	-	-
		Any other, specify	-	-	-

Mothers are the foremost providers of primary care of children their understanding of basis nutrition and health measures strongly influence the care they

provided. The use of colostrums and avoidance of pre lacteal food is the cornerstone in early infant's nutrition and prerequisite for the establishment of future

of breastfeeding (Doaa A and Marwa M,2019)²⁴. In **Table 3**. it is found that the prevalence of pre-lacteal feed was much lower (5-13%) in present study and majority of Mothers had more positive attitudes colostrums feeding and 71.6% had gave the first milk to their child. Very few mothers cited the reasons for giving pre-lacteal feed such as non acceptance of breast milk, non production of milk, prejudice of bad milk etc.

WHO Universally recommends colostrums, a mother's first milk or the 'very first food', as the perfect food for every newborn. The sticky, yellowish substance produced by the mother soon after birth is ideal for the newborn both in composition and in quantity, and is rich in antibodies. Colostrums not only nourishes, it also protects as it is rich in white cells and

antibodies, especially sIgA, and it contains a larger percentage of protein, minerals and fat-soluble vitamins (A, E and K) than later milk. (Polineni V et al, 2016)²⁵. Keeping this view an effort has made to assess the colostrums feeding practice and data in Table-4 clearly reveals that maximum mothers from nuclear families fed colostrums to their new born child compared to mothers from joint families. In many previous studies it was found that family pattern significantly influences the colostrums feeding practices. However, the findings of the study is contradictory to the results reported by (Gopujgar PV et al,2015)²⁶ where maximum mothers in joint families received information regarding breastfeeding as compared to those staying in nuclear families.

Table -4: Association of Type of Family with Colostrums Feeding

Type of Family	N	Colostrums	Plain water	Honey	Sweetened water	χ^2
Nuclear	5	30	3	1	1	10.2*
Joint	5	13	3	7	2	
Total	0	43	6	8	3	

Table-5: Attributes Related to Early Initiation of Breastfeeding. N=60

S.No.	Variables	Category	Rural Frequency(%)	Urban Frequency(%)	Total Frequency(%)
1	When mother should initiate breastfeeding after Birth of child	With in 1 hour after birth	20 (66.7)	21 (46.7)	41(68.3)
		Within 6 hour	7 (23.3)	5 (13.3)	12(20.0)
		Within 1 to 2 days	3 (10.0)	4(3.3)	7(11.6)
2	Mothers should initiate breastfeeding with in 1 hour after birth of child	Strongly Agree	20 (66.7)	21 (46.7)	42(70.0)
		Agree	-	-	-
		Disagree	3 (10.0)	4(13.3)	7(11.6)
		Strongly Disagree	7 (23.3)	5 (16.6)	12(20.0)
		Don't Know	-	-	-
3	When you initiated the breastfeeding to your child	With in 1 hour after birth	19 (63.3)	22 (90.0)	41(68.3)
		Within 6 hour	9 (30.0)	5 (20.0)	15(23.3)
		Within 1 to 2 days	2 (6.7)	3 (10.0)	4(8.3)
4	Frequency of breastfeeding	On demand	24(3.3)	24 (46.7)	48(80.0)
		As per fixed timings	-	-	-
		By intuition	-	2 (6.7)	2(3.3)
		In every 2 hours	2 (6.7)	2(6.7)	4(6.6)
		Don't Know	4(13.3)	2(6.7)	6(10.0)
5.	Practice of breastfeeding of child	On demand	22 (3.3)	26 (46.7)	46(76.6)
		As per fixed timings	-	2 (6.7)	2 (3.3)
		By intuition	8 (26.7)	-	10(6.0)
		In every 2 hours	-	2 (6.7)	-

*Significant at 5 % Level

(iv) Knowledge, Attitude and Practice of Early Initiation of Breastfeeding

Appropriate knowledge regarding breastfeeding is a Prerequisite for the proper practicing habits. Advice On breastfeeding should be initiated for all mothers During antenatal visits as mother is more receptive

During pregnancy.The frequency of breastfeeding is one of the factors indicative of the likely success and adequacy of breastfeeding as well as the effectiveness of lactation amenorrhea as birth control in early life. The international recommendation for breastfeeding frequency is that

breastfeeding should be on demand and as often as the child expresses need. On-demand feeding is important to ensure that newborns regain their birth weight. Infants should be breastfed 8 to 10 times every 24 hours and even more frequently during that the mean number of daytime feeds and mean number of night time feeds stay about the same through 1-11 months. The mean number of night time feeds was slightly lower than that of daytime feeds. In contrast to the night time feeds, the number of daytime feeds was constant across the different categories of each of the characteristics of children who were either currently exclusively breastfeeding or receiving breastfeeding with plain water only and breast milk and food supplements and for the ages 1-4 months, 4-6, 6-9 and 9-12 months, at between 5 and 6 feeds. Knowledge and frequency regarding early initiation of breastfeeding shown in Table-5, described that there was a discrepancy between the knowledge and practice (20.0%) mother had late initiation of breastfeeding most common reason was lack of knowledge, baby illness, social customs and beliefs. The most common reason among social customs and beliefs was pre-lacteal ceremony before initiating breastfeeding. Few mothers also reported that lack of support and guidance regarding early initiation and difficulty of newborn attachment to breast was also reported by mothers a reason of delayed initiation. There was low prevalence of frequency of breastfeeding most mothers feed their child as demanded by their child, only 6.7 percent mothers feed their child in every 2 hours. The socio-demographic characteristics of the respondent comprised religion, type of family, total no. of family members and caste category as shown in Table 6. The majority of respondents in both urban (80.6%) and rural (86.6%) areas were Hindus whereas (19.3%) in urban and (13.3%) in rural areas respondents were belongs to Muslim religion. In India, the old traditional joint family system no longer continues. It was patriarchal in nature, its

size was large, status of women in the family was very low, members of family had no individual identity, and the decision-making power lied exclusively with the eldest male member of the family. Joint family provides a wonderful support system emotionally and financially. Indian family system has undergone drastic change in response to development in terms of industrialization, education and urbanization. Industrialization and urbanization, leading to accelerated rate of rural-urban migration, diversification of gainful economic activities and individual-friendly property laws, have had consequential impact in terms of drastic reduction in the size of family in the country. Most families, particularly in urban areas, have only one or two generation members (i.e. parents and their children). The findings of the present study reveals that percentage of joint families was more in rural areas (48.6%) comparatively to urban areas (42.6%) whereas nuclear families were found more in urban areas (58.0%) than rural areas (51.3%).

In urban area around (21.3%) of the mothers was illiterate followed by 19.3% was intermediate and 14 % mothers were graduate. 9.3% mother were know to read and write and studied up to Class V, 7.3% were studied upto High School, 6.0% were studied above graduation and 1.4 % were studied class VI to VII. In the rural area mothers who participated in the study were 24% illiterate, 19.3% were studied upto Class VI to VII, 16.6 % were studied upto class V, 16.0% were graduate, Two percent mother were Intermediate and post graduate and 9.3% mother were studied upto High School. Large family size forces a woman to go outside and earn money to supplement family income as single earner could not fulfill the needs of the family members. Due to lack of education and poverty most of women enter into low paid jobs. In the present study majority of women are not educated and not skilled that they cannot get into the highly paid jobs in the formal sector.

Family income is key determinant in child care. Family income per month influences IYCF practices engagement of the parents in income-earning activities ascribes an economic ability to the parents to afford supplementation of the child dietary requirements at the various stages of growth. Higher household income allows parents to provide better nutrition for their children, health care and access to safe environment. When a family do not have enough money to meet the basic requirements of their children it affects their

growth and development. Majority of mother had a normal delivery (63.3%) and (80.0%) in urban and rural area respectively. The caesarean deliveries were more in urban (30.6%) as compared to rural area(20.0%) and very less percentage of Instrumental deliveries were found in urban area six percent. Postnatal period is the first six weeks after birth of child is critical to the health and survival of mother and her newborn and through effective postnatal counseling can avert both maternal neonatal deaths as well as long term complications.

Table- 6:Association of Socio-Demographic Factors with Early Initiation of Breastfeeding Practices						
Variable	N	With in 1 hour after birth	Within 6 hour	Within 1 to 2 days	Chi square value χ^2	Significant Level
Religion						
Hindu	47	34	8	5	2.587 non significant	5 %
Muslim	13	10	1	2		
Total	60	41	15	4		
Type of Family						
Nuclear	35	33	1	1	*8.80 significant	5 %
Joint	25	20	3	2		
Total	60	41	15	4		
Educational Qualification of Mother						
Illiterate	13	5	5	3	25.98 significant	5 %
Know to read and Write	2	-	2	-		
Up to Class V	7	5	2	-		
Class VI to VIII	17	15	2	-		
High School	3	1	1	1		
Intermediate	8	6	2	-		
Graduation	7	7	-	-		
Above Graduation	3	2	1	-		
Total	60	41	15	4		
Mode of Delivery modified						
Normal	47	40	5	2	32.17 significant	5 %
Caesarian	13	1	10	2		
Any other (instrumental)	-	-	-	-		
Total	60	41	15	4		

DISCUSSION

A cross sectional study was done to estimate the prevalence of early initiation breastfeeding and socio-demographic factors associated with the breastfeeding practices in selected urban and rural area of Behraich district. Right after the birth sucking reflex is most active and babies are more alert during the first 60 minutes and if babies are put to mother breast with in this period the chances of exclusive breastfeeding increases. In this study the range of prelacteal feed is 5- 13% which is less to the studies conducted by Garg et al²⁷., (2015), Raval et al., (2011)²⁸ who showed 57%, 30%,43%.whereas the similar

finding was reported by Fazili et al., (2011)²⁹ and Hungama report (2011)³⁰ that 11 and 14 % respectively. Kulkarni et al., (2004)³¹ conducted a cross sectional descriptive study to estimate the prevalence of early initiation breastfeeding in Tamilnadu, Southern India reveals that 97.5 % of the respondents had initiated breastfeeding with one hour of the birth which is higher than the present study. Similar finding related to early initiation of breastfeeding was also reported in (Madhan et al, 2019)³² where 77 % of children were breastfed within 1 hour of birth. In the study it was found that mother fed their babies on demand this was low in comparison to S.K

Bandopadhaya et al, (2000)³³ where 84.5% mothers offered demand feeding to the babies. In the study it was also found that mothers living nuclear family pattern have positive impact and significantly impact on early initiation breastfeeding.

In the study it was found that commonly “plain water, sweetened water and ‘honey mixed water’ is used as pre-lacteal feed among mothers and as analysis of the data shows in urban area very meager percentage of urban mothers used the pre-lacteal feed such as Honey Plain water, Honey ghutti sweetened water etc. whereas majority 13.3 % of rural mothers used plain water as pre-lacteal feed followed by honey 8.6% and sweetened water 7.3% . Majority (70-73%) started initiation of breastfeeding with in 1 hour of the birth both in rural and urban area. Study also reveals that mother’s education is important contributing factor s associated with the early initiation of breastfeeding. Children received infant formula at some time in their life. Both cup and bottle were used by mothers and few mothers also used bowl (*Katori*) with spoon. It was also found that mothers who have normal delivery had better compliance of early initiation breastfeeding.

CONCLUSION AND RECOMMENDATIONS

Early initiation of breastfeeding is not only essential for the child, but also for mothers as well. It saves infants’ lives, creates bonds between mother and child, helps to reduce post-partum hemorrhage and increases breast milk secretion. Majority of the mothers had the knowledge of breastfeeding but there was a noticeable deficit in the implementation of the knowledge in the breastfeeding practices. Therefore, there is urgent need to take measures in helping mothers to fully carry out the responsibilities of nurturing and nourishing the child. Steps should be taken to improve access to practical demonstration of methods and various issues related to breastfeeding during

antenatal and postnatal counseling and routine follow up to know progress.

ACKNOWLEDGEMENT

The authors sincerely thank to the mothers who seriously participated in the study and provide requisite information concerning to the study.

Ethical Clearance: Consent taken from mothers before the starting the process of data collection.

Source of Funding: Nil

Conflicts of Interest: The author declares no conflict of interest.

REFERENCES

1. World Health Organization. Indicators for assessing infant and young child feeding practices Part 1 Definition. Washington DC [USA]: World Health Organization. Dept. of Child and Adolescent Health and Development; 2007.
2. Edmond, KM, Kirkwood BR, Amenga-Etego, Owusu-Agyei, S, Hurt, LS. Effect of Early Infant Feeding Practices on Infection-Specific Neonatal Mortality: An investigation of the causal links with observational data from rural Ghana. *Am J Clin Nutr.* 2007;86(4):1126-31.
3. Chirico GR, Marzollo, S, Fonte, CC, Gasparoni. A Anti-infective properties of human milk. *J Nutr.* 2008;138(9):1801-6.
4. Mercer JS, Erickson-Owens DA, Graves B, Haley MM. Evidence-based practices for the fetal to newborn transition. *J Midwifery Womens Health.* 2007;52(3):262-72.
5. World Health Organization. 2020. Infant and young child feeding. Available at: <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding> (Accessed on July 03, 2020).
6. Edmond K, Newton S, Hurt L, Shannon CS, Kirkwood BR, Mazumder S, et al. Timing of Initiation, Patterns of Breastfeeding, and Infant Survival: Prospective analysis of pooled data from three randomised trials. *Lancet Glob Heal.* 2016;(4):266-75.
7. UNICEF, The state of the world children. Reimagining the future: Innovation for every child. United Nations Children's Fund, New York, 2015; 116.

8. International Institute for Population Sciences (IIPS) and Macro International 2007. National Family Health Survey (NFHS-4), 2015–16.
9. International Institute for Population Sciences (IIPS) and Macro International 2005. National Family Health Survey (NFHS-3), 2005–06.
10. Comprehensive National Nutrition Survey (CNNS) National Report. Ministry of Health and Family Welfare (MoHFW), Government of India(2019), New Delhi.
11. Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India Census 2011.
12. Niti Aayog. Nourishing India: National Nutrition strategy, (2017) Government of India.
13. Office of the Registrar General & Census Commissioner, SRS Bulletin Sample Registration System Office of The Registrar General, Ministry of Home Affairs Government of India.
14. Atul, KS, Gupta, SB, Huma K. Early initiation of Breast feeding Practice among Institutional Delivered Women in District Bareilly. International Journal Community Med Public Health. 2017 Sep;4(9):3436-3441.
15. Rahman N, Akter N, Rashid O and Parvin, S. Impact of Colostrum and Exclusive Breast Feeding Practice on Health among under Two Years Children in the Rural Areas of Bangladesh. Paripex- Indian Journal of Research. 2018;7 (3): 1-3.
16. Gupta, A, Dadhich, J, Pand Suri, S. Enhancing optimal infant feeding practices in India. India Health Beat, Supporting evidence-based policies and implementation. 2011; 5 (4): 1-4.
17. Vyas Kumar Rathaur, Monika Pathania, Charu Pannu, Anand Jain, Minakshi Dhar, Nitish Pathania, and Rahul Goel. Prevalent infant feeding practices among the mothers presenting at a tertiary care hospital in Garhwal Himalayan region, Uttarakhand, J Family Med Prim Care. 2018 Jan-Feb; 7(1): 45–52.
18. Nandeeta S, Md Monoarul H, Sadia S. Pattern of delivery and early initiation of breastfeeding: an urban slum based cross cut study. J Nutr Health Food Eng. 2017;7(4): 332-335.
19. Sharma R. Revision of Prasad's social classification and provision of an online tool for real-time updating. 2014;2:157.
20. United Nations Environment Programme, World Health Organization & United Nations Children's Fund (UNICEF (2002). Children in the new millennium : environmental impact on health. Nairobi, Kenya : United Nations Environment Programme
21. Victora Cesar G, Bahl R, Barros AJ, Franca, G, Horton S et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and life long effect. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)01024-7/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)01024-7/abstract). The Lancet 2016;(387): 475 – 490.
22. Joyce Nankumbi and Joshua K. Muliira. Barriers to infant & child feeding Practices : A Qualitative Study of primary caregiver in rural Uganda : J. Health population nutrition 2015 ;33(1) 106-16.
23. Pandey VK, Aggarwal P, Kakkar R. Modified BG Prasad Socio-economic Classification, Update– 2019. Indian J Comm Health. 2019; 3 (1): 123-125.
24. Doaa, Abd, El, Salam, Amin, Yacout, and Marwa, Mohamed Ahmed Ouda. Pre-lacteal feeding practices and its predominant factors among mothers' of infants in Damanhour. International Journal of Nursing and Health Science. Nov -Dec .2019; 8(6): 26-38.
25. Polineni V, Boralingiah P, Kulkarni P, Manjunath R. 2016. A comparative study of breastfeeding practices among working and non-working women attending a tertiary care hospital, Mysuru. Ntl J Community Med 7(4):235–240.
26. Gopujkar PV, Chaudhari SN, Ramaswami MA, Gore MS, Goplan C. Infant feeding practice with special reference to the use of commercial infant foods. Nutrition Foundation of India, Scientific Report no 4. Ratna Offset New Delhi; 1984:115.
27. Garg M, Hasan, M, and Kapur, D. Infant and Young Child feeding (IYCF) Practices in Udupi Districts, Karnataka, J. Nut Res 2015; 3(1):38-44
28. Raval D, Jankar DV, Singh MP. A Study of Breastfeeding Practices among Infants Living in Slums of Bhavnagar City in Gujarat India. Health Line 2011.78-83.
29. Fazilli A, Bhat, J, M, Aabid, and Rohul, J. Infant and Young Child Feeding Practices of Multi Parous women attending the

- Antenatal Clinic in a Tertiary Care hospital. *Int. J. med. Public Health*,2011;(2):47-50.
30. HunGaMa Survey Report.Naandi Foundation, 2011.Hyderabad.
31. Kulkarni R, Anejenaya,S and Gujar R. Breastfeeding Practice in an Urban Community of Kalamboli, navi Mumbai. *Ind. J. community Med*2004; 29:179-180.
32. Madhan Kumar Velu, J. Reetheeswaran and Balaji Arumugam: A Study of Determinants on Infant and Young Child Feeding Practices among Mothers attending Primary Health Centers in Rural Area of Tamil Nadu, India. *Journal of Academia and Industrial Research (JAIR)* 2019Volume 7,(12):162-168.
33. Bandopadhyaya, SK. Breastfeeding Practices in Rural Areas of West Bengal Indian *Journal of Public Health* 2000;44(4):137-38.
- How to cite this article: Srivastava S, Chaturvedi N. Knowledge, attitude and practices of early initiation of breastfeeding in Behraich District of Uttar Pradesh, India. *Int J Health Sci Res.* 2021; 11(1):66-79.
