

Original Research Article

A cross sectional study of knowledge and attitude of breastfeeding among mothers of children up to 2 years attending immunization clinic in tertiary care teaching hospital of Southern Rajasthan, India

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ABSTRACT

Background: The WHO recommends that infants should be exclusively breastfed for the first six months to achieve optimal growth, development, and health. NFHS-4, 28.4% children in Rajasthan are breastfed within 1 hour of birth and 58.2% are breastfed only for 6 months.

Methods: This study was an institution-based cross-sectional study carried out on breast-feeding mothers having children up to 2 years of age who attended an immunization clinic of tertiary care teaching hospital of Jhalawar Medical College, Jhalawar Rajasthan. By the complete enumeration method, 240 participants were selected and included in our study during the study period that fulfilled our inclusion and exclusion criteria.

Results: The present study revealed knowledge and attitude for breastfeeding among mothers having children up to 2 years old. 11.7% (28) of the participants had poor knowledge, 27.5% (66) of the mothers had average knowledge and 60.8% (146) of the study participants had good knowledge about breastfeeding. 47.5% of breastfeeding mothers revealed a positive attitude towards breast feeding. Significant associations were observed between knowledge and attitudes with mother's age, age of child, mother's education, and mother's occupation. No significant association was found between parity of the mother and their knowledge of breastfeeding

Conclusions: Present study revealed more than half study participants was having good knowledge of breastfeeding but majority participant have poor attitude towards breastfeeding. There was significant association found between knowledge of mothers and their attitude regarding breast feeding.

Keywords: Knowledge, Attitude, Breastfeeding, Mothers, Children, Immunization clinic

INTRODUCTION

The WHO recommends that infants should be exclusively breastfed for the first six months to achieve optimal growth, development, and health. Then, infants should receive nutritionally adequate and safe complementary foods, with continued breastfeed for up to two years or more.¹ Breastfeeding is one of the most important determinants of child survival, birth spacing, and

prevention of childhood infections. The importance of breastfeeding has been emphasized in various studies.²

According to NFHS- 4, 28.4% children in Rajasthan are breastfed with in 1 hour of birth and 58.2% are breastfed only for 6 months.³ The benefits of breastfeeding for the health and wellbeing of the mother and baby are well documented. A recent trial has shown that early initiation of breastfeeding could reduce neonatal mortality by 22%.⁴ the beneficial effects of breastfeeding depend upon

correct breastfeeding practices. Initiation of breastfeeding after birth is considerably delayed in India, and in most cases the valuable colostrums is discarded before putting the child to breast.⁵

Education has made more and more women economically independent and busy professionals. In modern India nuclear families are becoming quite common. Missing traditional family values and peer support for women might have a negative impact on the preservation of valuable breastfeeding practices in Indian population.⁶

Many factors play a role in breastfeeding such as customs, practices, parental education, family support and health workers. Lack of Breastfeeding is a very important factor for infant mortality rate. The awareness will help us in devising specific interventions to promote breastfeeding and need modification of strategies to correct that area. Therefore, this research among lactating mothers is planned, with the aim of identifying mothers' knowledge and attitudes regarding breastfeeding.

Objectives

Objective of current study was to assess the knowledge and attitude of breastfeeding among mothers of children up to 2 years of age and association their socio-demographic profile.

METHODS

A cross sectional study was conducted among the mothers of children up to 2 years of age visiting at immunization clinic, a tertiary care teaching hospital in southern Rajasthan. The study was initiated after obtaining ethical approval from institutional ethical committee in February 2021 to April 2021.

Sample size

Complete enumeration of study population was considered as sample size. All the study participants were included in our study during study period that fulfil our inclusion and exclusion criteria. Final study population was 240 Mothers.

Selection criteria

study participants are mother's having child up to 2 year of age and who had given verbal consent for participate in the study. Those who declined to participate or did not give consent or whose child's age above 2 years were not included in the study.

Data collection

A pre-tested, semi-structured questionnaire was used for data collection that was build based on literature review and was reviewed and validated by 5 arbitrators and

modified accordingly. The questionnaire has 2 parts: part I-questions about the participants' socio-demographic characteristics such as age of mother, occupation, religion, education status, type of family, age of children and parity part II - questions regarding knowledge and attitude among breastfeeding mothers regarding best time to start breast feed, best food for child, frequency of breastfed, bottle feeding, exclusive breastfeeding, complementary food, Colostrums, formula milk etc. We explained our purpose of study to all individual participants in local language and then written/informed consent was obtained from each participant for being included in the study before starting interview

Data analysis

All data was entered in MS-excel: 2007. Data were analysed via SPSS 23.0 (trial version) and the Chi square statistical test was used in the data analysis. P value of less than 0.05 was considered significant. To assess the knowledge and attitude in our study we give 1 mark for correct answer and 0 mark for wrong answer. Then we added the total marks after that we divided by its maximum marks. If the percentage falls between 0-33.3% it means that the participant had poor knowledge about breastfeeding and if the percentage falls between 33.4%-66.7% then it means average and more than 66.7% who had good knowledge about breastfeeding. If the percentage of answers for attitude falls less than 50% it means that the participant had poor attitude about breastfeeding and if the percentage falls more than 50% then it means good attitude regarding breastfeeding.⁷

RESULTS

The present institutional based cross-sectional study was carried out on (240) breastfeeding mothers of children up to 2 years of age who visited immunization clinic of Smt. Heera Kunwar Baa Mahila chikitsalya, Jhalawar medical college, Jhalawar, Rajasthan a tertiary care teaching hospital. 73.3% breastfeeding mothers were literate. The distribution of knowledge about breastfeeding among mothers of children up to 2 years, 3/5th (60.8%) mothers had good knowledge, while <2/5th mothers was either average (27.5%) or poor (11.7%) knowledge of breastfeeding (Table 1).

Table 1: Distribution of knowledge of breastfeeding among mothers.

Knowledge of breastfeeding	N	%
Poor	28	11.7
Average	66	27.5
Good	146	60.8
Total	240	100.0

Attitude towards breastfeeding was poor in majority of mothers while less than half of mothers were good attitude for breastfeeding (Table 2). Significant association between knowledge and attitude about breastfeeding is depicted in (Table 3).

Table 2: Distribution of attitude related to breastfeeding among mothers.

Attitude for breastfeeding	N	%
Poor	126	52.5
Good	114	47.5
Total	240	100.0

It was found that mothers whose knowledge was poor their attitude for breastfeeding was also found poor and vice versa mothers whose knowledge of breastfeeding was good their attitude was also good. Significant

association found between age of mothers, age of children with their knowledge of breastfeeding ($p < 0.05$) was depicted in (Table 4). It was found that mothers those age was more than 30 years had highest proportion of good knowledge 100% followed by reduction in good knowledge from 68.3%, 59.3%, 36.8% among who have age from 21-25 years, 26-30 years and 20 years respectively. Most of the participants who had good knowledge their children were 13-18 months and mothers whose children age > 6 months have average or good knowledge. Majority of participants had good knowledge they belonged to parity 2nd (62.2%) followed by parity 1nd and parity ≥ 3 rd participants irrespectively.

Table 3: Association of knowledge of breastfeeding with their attitude for breastfeeding.

Knowledge of breastfeeding	Attitude for breastfeeding		Total	Chi square	P value
	Poor	Good			
Poor	24 (85.7)	4 (14.3)	28 (100.0)	37.306	< 0.0001
Average	48 (72.7)	18 (27.3)	66 (100.0)		
Good	54 (37.0)	92 (63.0)	146 (100.0)		
Total	126 (52.5)	114 (47.5)	240 (100.0)		

Table 4: Association of knowledge of breastfeeding with age of mothers, age of child and parity.

Mothers age , age of children and parity		Knowledge of breastfeeding						Chi square	P value
		Poor (0-33.3%)		Average (33.4%-66.7%)		Good (>66.7%)			
		N	%	N	%	N	%		
Age of mother (years)	≤ 20	6	15.8	18	47.4	14	36.8	20.757	0.002
	21-25	16	14.8	28	25.9	64	59.3		
	26-30	6	7.3	20	24.4	56	68.3		
	More than 30	0	0.0	0	0.0	12	100.0		
Age of children (months)	0-6	28	14.4	54	27.8	112	57.7	17.353	0.008
	7-12	0	0.0	6	33.3	12	66.7		
	13-18	0	0.0	2	9.1	20	90.9		
	19-24	0	0.0	4	66.7	2	33.3		
Parity	1	20	14.5	34	24.6	84	60.9	3.55	0.470
	2	6	8.1	22	29.7	46	62.2		
	3 or more	2	7.1	10	35.7	16	57.1		

There was no significant association found between parity of breastfeeding mothers and their knowledge of breastfeeding ($p > 0.05$). Significant association was found between age of mothers, age of children, parity with their attitude for breastfeeding ($p < 0.05$) (Table 5). Mothers who were < 20 years of age had poor attitude for breastfeeding and half of Mothers age > 20 years have favourable attitude for breastfeeding. Whereas mothers who were age > 30 years had a higher proportion of good attitude toward breast feeding. Most of the participants who were well-confident about breastfeeding had babies aged 7-12 months. Majority of participants who believe that breast feeding is good they belonged to parity 2nd (62.2%) followed by parity 3rd and parity 1st participants irrespectively.

Significant association between mothers' education and occupation with their knowledge of breastfeeding

($p < 0.05$) is depicted in (Table 6). According to the results, the proportion of good knowledge (97.3%) was higher among the college going mothers and it was observed that the knowledge of breastfeeding was increased with the increase in the education of the mothers. Along with the reduction in the level of education, breastfeeding knowledge among mothers also declined from 66.7% to 57.1% and 15.6%, respectively. Skilled and semi-skilled mothers had good (100%) knowledge, followed by housewife's (57.6%) and unskilled (27.3%) respectively. College-graduating mother's and those who were professionally skilled had better attitudes toward breastfeeding than others and there was a significant association between mothers' education, occupation with their attitudes towards breastfeeding ($p < 0.05$) (Table 7).

Table 5: Association of attitude for breastfeeding with age of mothers, age of child and parity.

Mothers age , age of children and parity		Attitude for breastfeeding				Chi square	P value
		Poor (<50%)		Good (>50%)			
		N	%	N	%		
Age of mother (years)	≤20	32	84.2	6	15.8	29.46	<0.0001
	21-25	52	48.1	56	51.9		
	26-30	42	51.2	40	48.8		
	More than 30	0	0.0	12	100.0		
Age of children (months)	0-6	114	58.8	80	41.2	16.167	0.001
	7-12	4	22.2	14	77.8		
	13-18	6	27.3	16	72.7		
	19-24	2	33.3	4	66.7		
Parity	1	84	60.9	54	39.1	10.236	0.006
	2	28	37.8	46	62.2		
	3 or more	14	50.0	14	50.0		

Table 6: Association of knowledge of breastfeeding with education and occupation.

Education and occupation		Knowledge of breastfeeding						Chi square	P value
		Poor (0-33.3%)		Average (33.4%-66.7%)		Good (>66.7%)			
		N	%	N	%	N	%		
Education	Illiterate	24	37.5	30	46.9	10	15.6	117.059	<0.0001
	Up to middle school	4	9.5	14	33.3	24	57.1		
	Senior secondary school	0	0.0	20	33.3	40	66.7		
	Up to college	0	0.0	2	2.7	72	97.3		
Occupation	Housewife	28	15.2	50	27.2	106	57.6	47.204	<0.0001
	Unskilled	0	0.0	16	72.7	6	27.3		
	Semi-skilled	0	0.0	0	0.0	22	100.0		
	Skilled	0	0.0	0	0.0	12	100.0		

Table 7: Association of attitude for breastfeeding with education and occupation.

Education and occupation		Attitude for breastfeeding				Chi square	P value
		Poor (<50%)		Good (>50%)			
		N	%	N	%		
Education	Illiterate	52	81.3	12	18.8	34.746	<0.0001
	Up to middle school	18	42.9	24	57.1		
	Senior secondary school	32	53.3	28	46.7		
	Up to college	24	32.4	50	67.6		
Occupation	Housewife	104	56.5	80	43.5	17.848	<0.0001
	Unskilled	8	36.4	14	63.6		
	Semi-skilled	14	63.6	8	36.4		
	Skilled	0	0.0	12	100.0		

DISCUSSION

In current study knowledge and attitude towards breastfeeding among lactating mothers having infants aged 0-24 months was assessed. Gaps in mothers' knowledge and attitudes about breastfeeding, Misconceptions relating to duration of breastfeeding and the inadequacy of breast milk to meet their child's nutritional needs were noted.

Most mothers also had inadequate knowledge of the maternal benefits of exclusive breastfeeding. The present study of knowledge and attitude about breastfeeding among mothers having children up to 2 years found 11.7% (28) of the participants had poor knowledge, 27.5% (66) mothers had average knowledge and 60.8% (146) study participants were good knowledge about breastfeeding. the present study of knowledge about breastfeeding among mothers found 60.8% (146) had good knowledge about breastfeeding that was comparable to the rates obtained by Sandhya et al 60%, and high knowledge was obtained by Balaji et al 80%.^{8,9}

The present study attitude about breastfeeding among mothers reveals that 47.5% had positive attitude that was comparable to the rates obtained by Isam et al 52.9% and this was found contrast to a study done in Fiji by Temoirokomalani et al 34%.^{10,11} Present study observed that proportion of knowledge of mothers according age wise increase. more than 30 years age group mothers had higher (100%) good knowledge followed by 68.3%, 59.3% and 36.8% among who have age 26-30, 21-25 to ≤ 20 years age respectively that was comparable to the rates obtained Temoirokomalani et al.¹¹ Present study depicted that proportion of knowledge among up to college level educated mothers have higher proportion of good knowledge 97.3% followed by reduction in good knowledge from 66.7%, 57.1% and 15.6% among who have education from senior secondary, middle school level to illiterate respectively. Along with increasing the level of education among study population the knowledge level of mothers about breastfeeding was also found to increase in this study was comparable to the rates obtained by Rana et al.¹² Present study observed that proportion of knowledge among skilled workers (100%) have good knowledge followed by 100%, 57.6% and 27.3% among who have occupation semi-skilled, house wife and unskilled that as occupation grow in the higher reaches mother's knowledge levels about breast feeding also increase.

The present study was found contrast to the rates obtained by Rana et al which were higher among house wife (36.0%), followed by Service holder (32.2%) respectively.¹² The present study attitude for breastfeeding among mothers reveals according to age of mothers, age of children, and parity with education of mothers statically significant that study was somewhat comparable with the comparison rates obtained by the Abulreesh et al.¹³ The present study found that good attitude toward

breastfeeding higher among skilled 100.0% followed by house wife and semi-skilled that was some compare to rate obtained by Widodo et al.¹⁴

Limitations

This study was limited in itself because it was cross-sectional. A sample was drawn from only one setting, which would be a barrier to generalizing the findings. Our study was time-bound and spanned three months; however, a longer period is needed to evaluate the outcome of counselling for breastfeeding among mothers.

CONCLUSION

Present study revealed more than half study participants was having good knowledge of breastfeeding but majority participant has poor attitude towards breastfeeding. There was significant association found between knowledge of mothers and their attitude regarding breast feeding. Significant association was observed between knowledge, attitude with socio-demographic variable like mother's age, children's age, mother's education, mother's occupation. No significant association found with parity of mother and their knowledge about breastfeeding.

Recommendations

Breast feeding is crucial for the growth and development of the infant. Breast milk is the ideal food and it gives all the nutrients need for healthy development for new born and infants. Hence continued support with counselling and motivation is mandatory to mothers during antenatal and lactation period. Thus, we need to reinforce the advantage of breast feeding to mothers with emphasis on starting breast feeding within one hour of birth and giving colostrums.

In future research should be done on both breast feed and reproductive age group mothers to identify lacking and area to work it will enhance their knowledge, attitude and encourage breast feeding practices. Health education session should promote to mothers about significance of breast feeding. Health education should be provided at community level to obtain optimal success breast feeding rate. India has low rate of exclusive breast feeding it is time to explore cultural and traditional practices which cause suboptimal practice of exclusive breast feeding.

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