

Original Research Article

Disparity in knowledge, attitude and practice among mothers of children under three years of age about early initiation of breastfeeding, exclusive breastfeeding and continued breastfeeding in Alwar district, Rajasthan, India

Harish Chand^{1*}, Mansi Chopra², Jyoti Sharma³

¹Technical Programme, World Vision India, Delhi Liaison Office, New Delhi, India

²National Centre of Excellence and Advanced Research on Diets, Lady Irwin College, New Delhi, India

³Indian Institute of Public Health Delhi, New Delhi, India

Received: 14 December 2019

Revised: 10 February 2020

Accepted: 12 February 2020

*Correspondence:

Mr. Harish Chand,

E-mail: harish_chand@wvi.org

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Considering the poor practices of optimal breastfeeding, a cross-sectional study with the objective to ascertain the disparity in knowledge, attitude and practice (KAP) pertaining to early initiation, exclusive and continued breastfeeding behaviours was conducted among the mothers of children below 3 years of age.

Methods: 400 mothers of children ≤6 months from 52 villages of Rajasthan were included in the analysis for EBF. The data collection was analysed using statistical software SPSS version 23.0. All characteristics were summarized descriptively. Chi-square (χ^2) test was performed to study the association between two categorical variables. Three points likert scale was administered to assess the attitude of mothers.

Results: 72.8 % mothers initiated early breastfeeding, 22.5% continued breastfeeding, and exclusively breastfeeding was practiced by none. 34.3% mothers had knowledge on early initiation of breastfeeding, 34.6% on exclusive breastfeeding and 65.5% had knowledge on continued breastfeeding. 73.8% mothers had positive attitude towards early initiation of breastfeeding, 13.5 % on exclusive breastfeeding and 79.5% had positive attitude towards continued breastfeeding up to 2 years.

Conclusions: Though the attitude and knowledge on breastfeeding is good yet exclusive breastfeeding practice was observed very poor. These findings indicate that despite of having good knowledge and a positive attitude towards breastfeeding, there are certain myths and social determinants which hinder optimal breastfeeding. Identification of such barriers will be extremely useful, since counselling and behaviour change strategies will focus and address them, resulting in the practice of good behaviours.

Keywords: Knowledge, Attitude, Practice, Early initiation, Exclusive, Continued, Breastfeeding

INTRODUCTION

Optimal breastfeeding refers to early initiation of breastfeeding, exclusive breastfeeding and continued breastfeeding till the child is 2 years old and beyond. The breast milk has aptly been termed as a life-fluid for the

child.¹ Infant and child feeding practices are an important intervention to improve the nutrition and health status of a child.² Breastfeeding is one of the first and the most cost effective intervention to save new-born life and improve the health of children under the age of five years. The recent evidence suggests that breastfeeding is

associated with decreased diarrheal episodes and respiratory tract infections and hence reduce childhood mortality.³⁻⁵ It also improves a child's immune system, protects it from diseases, increases intelligence, and is essential for healthy growth.^{5,6} The poor breastfeeding practices during infancy and early childhood result in protein-energy malnutrition and micronutrient deficiencies which directly affect all dimensions of child's development. In particular, it obstructs the physical growth and cognitive development of child.⁷ The evidences suggests that optimal breastfeeding can prevent up to 13% mortality of children under 5 year of age.⁸ Poor breastfeeding is also associated with postpartum depression which affects about 7-15% women in an early postpartum period. Such conditions may lead to difficulty in breastfeeding and with mother-child affection.⁹ Evidence suggest that one dollar investment for improving breastfeeding practices would result in \$35 of economic return.¹⁰

Recent reports suggests that, globally only 38% of infants aged 0-6 months were breastfed between periods of 2007-2014.¹¹ Global breastfeeding scorecard report indicates that 45% of children are put to breast within 1 hour of birth, 43% children are exclusively breastfed at 0-5 months and 46% children are continued to be breastfed till 2 years of age.¹⁰ Recent National Family health Survey-4 of India reported the prevalence of early initiation of breastfeeding within 1 hour as 41.6% and exclusive breastfeeding up to 6 months as 54.9%.¹² The prevalence of continued breastfeeding till 2 years was 72%. Some of the determinants for poor exclusive breastfeeding practices suggested by the studies are cultural beliefs, a myth that water enables digestion of breastmilk and insufficient milk in breasts.¹³

Rajasthan is one of the poor performing states of India. The progress in maternal and child health indicator remain dismal in the state with 41.8% children are stunted and 18.5% are wasted. The initiation of breastfeeding in the state was only 29.7% despite 81.9% children born in institutions.¹² Many districts of state have staggering levels of malnutrition. Alwar is one of least developed districts in north Rajasthan has population of approx. 3.6 lakh. The district is predominantly comprised of rural population (82.2 %) with a sex ratio of 894 females for every 1000 males and a literacy rate of 71.68%. As per NFHS-4, 41.8 % children are stunted and 18.5% children are wasted in Alwar district. Only 29.7% children in district received breastmilk within one hour after birth and a little more than half (55%) of them were exclusively breastfed. Considering the poor prevalence of optimal breastfeeding practices and its impact on nutrition outcomes¹⁴, a study was conducted with an objective to determine the prevalence and gap in knowledge, attitude and practices pertaining to optimal breastfeeding practices among the mothers of children under 3 years in Alwar district.

METHODS

Study design and period

This was a cross sectional community-based study conducted in Alwar district of Rajasthan. The study period was from July-September 2018. The study was conducted in 52 villages from Rajgarh block (Alwar district), of Rajasthan. Mother of children less than three years of age residing in the selected villages included in the study.

Inclusion and exclusion criteria

The study included mothers of children under 3 years of age. Mothers of children less than 6 months were included only for analysis of knowledge, attitude and practice exclusive breastfeeding.

Sample size calculation

The census survey was conducted beforehand to determine the sampling frame (list of mothers of children <3 years of age) in the estimated 40,000 population from Rajgarh block of Alwar district, Rajasthan. Sample size (n=380) was calculated based on prevalence of women who practiced breastfeeding (45%) taking into consideration $\pm 5\%$ precision and 5% non-response rate the final sample size was 400 samples.¹⁵

Sampling technique

Samples were drawn from 52 villages of world vision, India's operational block. All mothers of children less than three years old children from each village were included to attain the required sample size.

Questionnaire and data collection

A structured questionnaire had been used to assess knowledge and attitudes and practices towards breastfeeding. Questions pertaining to attitude were adapted from food and agriculture organization's manual, guidelines for assessing nutrition-related knowledge, attitude and practices.¹⁶ The questionnaire comprised of two sections: section A included socio-demographic characteristics such as the age of mother, birth order, type of family, educational qualification, monthly household income, and obstetric history i.e. age of child, last delivery conducted, number of antenatal care visits in the last pregnancy. Section B comprised of questions pertaining to knowledge, attitude and practices pertaining to early initiation of breastfeeding, exclusive breastfeeding and continued breastfeeding up to 3 years of age. There were 5 items to measure knowledge of the participants towards breastfeeding. Each item in questionnaire had possible responses either correct practices or incorrect practices. One mark was awarded for every correct response, zero otherwise. Hence, the score in the knowledge section ranged from 0-5.

The attitude scale included 10 attitude items with three points likert scale response options; one positive, a middle option that captures attitudes that are still uncertain, and one negative. The questionnaire was structured reasonably beginning with practice, knowledge and attitude to ensure knowledge questionnaire does not influence practice section.

The questionnaire was translated into the Hindi language and pre-tested before initiation of data collection. Pre-testing was conducted on 10 non-sample participants from different socio-economic and education settings in Rajgarh block, and after required modifications tool was finalized. Field investigators were trained by research team members on process of data collection and ways to put up questions and probing.

Data collection process

All mothers were given an explanation of purpose of the study. Written or verbal informed consent was obtained from the mothers who were willing to participate in the study. Data were collected by the field investigators through face-to-face interview during house to house survey. It took approximately 25-30 minutes to complete the structured questionnaire.

Statistical analysis and interpretation

The survey responses were coded and entered into MS excel spreadsheets by a trained data entry operator. Correct skipping in the responses, probability distribution of the data, and range of variables in the data were checked in this process. The data were then analysed using statistical software SPSS version 23.0. Data visualisations were done using MS excel 2007. Mothers who had children under three years of age were considered for analysis of early initiation and continued breastfeeding. While mother of children up to 6 months were included in analysis of exclusive breastfeeding related knowledge, attitude and practices.

Mothers who scored 5 points for knowledge, 3 points for practice, and 9 points for attitude pertaining to early initiation of breastfeeding were considered of having a positive knowledge, practice and attitude towards early initiation of breastfeeding. Mothers who scored 4 points for knowledge, 1 point for practice and 13 points for attitude pertaining to exclusive breastfeeding were considered of having a positive knowledge, practice and attitude towards exclusive breastfeeding. Mothers who scored 5 points for knowledge, 7 for practice and 4 points for attitude pertaining to continued breastfeeding were considered of having a positive knowledge, practice and attitude towards continued breastfeeding.

All characteristics were summarized descriptively. For continuous variables, the summary statistics of mean \pm standard deviation (SD) were used. For categorical data, the number and % age was used in the data summaries

and diagrammatic presentation. Chi-square (χ^2) test was used for association between two categorical variables.

Ethical approval

The study was approved by ethic committee of World Vision India. Informed written consent was obtained from mothers who were included in the survey.

RESULTS

Descriptive characteristics of the study population.

Table 1: Socio-demographic profile of respondents (n=400).

Variables	N	(%)
Age (in years)		
<20	12	3
20-30	339	84.8
30-40	46	11.5
>40	3	0.8
Education qualification		
Illiterate	109	27.3
Primary	56	14
Secondary	81	20.3
Higher secondary	95	23.8
Graduate	53	13.3
Post graduate	6	1.5
Number of live births		
Nil	1	0.3
1-2	274	68.5
3-4	112	28
>5	13	3.3
Place of delivery		
Home	14	3.5
Govt. hospital	313	78.3
Private hospital	73	18.3
No. of ANC done in last pregnancy		
0	12	3
1	19	4.8
2	96	24
3 and more	124	31
4	149	37.3
Currently pregnant		
Yes	46	11.5
No	354	88.5
Type of family		
Nuclear	146	36.5
Joint	254	63.5

The study population comprised of a total of 400 mothers of children under three years of age in the estimated population of 40,000 Rajgarh block. Table 1, highlights the socio demographic profile of the studied mothers. Age wise classification was done, and 84.8% mothers found to be in appropriate reproductive age 20-30 years

of age. Majority of mothers were illiterate (27.3%), followed by those with higher secondary education (23.8%) and secondary education (20.3%). The mean age of mothers and children was 25.9 years and 14.9 months respectively. Majority (78.3%) of mothers delivered their youngest child in government health facilities, 18.3% in private hospital and 3.5% mothers delivered at home.

37.3% women had completed 4 ANC checkups and 3% women had no ANC checkup during the last pregnancy. 4.8% women had 1 ANC checkup, 24% women completed 2 and 31% women completed 3 ANC checkups.

Table 2: Gaps in knowledge, attitude and practices of breastfeeding (n=400).

	No	Percentage (%)
Early initiation of breastfeeding		
No. of women who early initiated breastfeeding within 1 hour of the delivery	291	72.8
Women who had positive attitude towards early initiation of breastfeeding	295	73.8
Women who had correct knowledge on early initiation of B/F	137	34.3
Exclusive Breastfeeding (n=52)		
No. women did not practice EBF	52	0.0
No. women who have positive attitude towards EBF	7	13.5
No. women who have correct knowledge on EBF	18	34.6
Continued breastfeeding (n=400)		
Women who continued to breastfeed their children upto 2 years and beyond	102	25.5
Women who had good attitude towards continued breastfeeding	318	79.5
Women who had correct knowledge breastfeeding their children upto 2 years and beyond	262	65.5

Table 3: Prevalence of knowledge, attitude and practice pertaining to optimal breastfeeding.

KAP indicators related to early initiation, exclusive and continued breastfeeding		N	%
Practice	Child breastfed in less than 1 hour after delivery	303	75.8
	Colostrum fed to the child	380	95
	Child fed previous day/night something besides breastmilk*	52	100
	Water was given to child day/night**	52	100
	Child was breastfed during previous day or night	388	97
	Child was breastfed 4-5 times previous day/night	161	40.3
	Child was breastfed 5-10 minutes one breast before switching another breast	177	44.3
Attitude	Initiation of breastfeeding within 1 hour after the birth is good	371	92.8
	Child will likely to have problem in suckling breastmilk later if initiated after 1 hour of birth	341	85.3
	It is good to exclusively breast-feed child for 6 months	50	96.15
	Child will likely to fall sick if not breastfed exclusively till 6 months	44	84.62
	It is good to continue breastfeeding child beyond six months	374	93.5
	It is difficult to continue breastfeeding beyond six months	320	80
Knowledge	Mother should begin breastfeeding within 1 hour of delivery?	310	77.5
	Breastfeeding within one hour after the delivery helps child to suck milk and expelling of placenta	188	47
	Exclusive breastfeeding means only breastmilk and no other liquids or food	35	67.31
	Child should receive only breastmilk from birth to 6 months	47	90.38
	Because breastmilk provides all the nutrients and liquids a child required in his/her first six months	25	48.08
	Beyond 2 years	113	28.3
	Breastfeeding up to 2 years and beyond helps in growth and development of child	267	66.8

*Mother of children upto 6 months were included for exclusive breastfeeding analysis/study. **Mother of children upto 6 months were included for exclusive breastfeeding analysis

Prevalence of knowledge, attitude and practice

Table 2, indicates the prevalence of knowledge, attitude and practice pertaining to early initiation of breastfeeding, exclusive breastfeeding and complementary feeding. The study indicates that 72.8%

mothers had initiated early breastfeeding within 1 hour of birth, 25.5% mothers had continued to breastfeed their child up to 2 years and beyond and 0% or no mother practiced exclusively breastfeeding till 6 months.

On studying the attitude, 73.8% mothers had a positive attitude about early initiation of breastfeeding, 13.5%

mothers had positive about exclusive breastfeeding and 79.5% mothers had positive attitude towards continued breastfeeding. The study highlights that 96.5% mothers had institutional delivery but only 72.8% mothers had initiated breastfeeding within 1 hour of birth. The prevalence of knowledge of early initiation of breastfeeding was 34.3%, exclusive breastfeeding 34.6% and continued breastfeeding 65.5%.

The study reveals that 32% mothers with higher secondary education, followed by 22% mothers with graduation knew that early initiation of breastfeeding helps the child to suck milk quickly and helps in expelling of placenta. 40.4% illiterate mothers were unaware about benefits of early initiation of breastfeeding.

Knowledge on early initiation of breastfeeding

Majority (97%) of the mothers knew that only breast milk is the first food for a new-born child. 77.5% of mothers were aware of the early initiation of breastfeeding within 1 hour of birth; while only 20% mothers reported that it should begin after 1 hour of birth. Less than half the mothers (47%) reported that the early initiation of breastfeeding helps the child to suck quickly and expel placenta, while 36.5% did not know the reason behind early initiation of breastfeeding. Only about 67% of mothers knew about colostrum and 77% of mothers reported that colostrum should be fed to the baby.

Attitude towards initiation of breastfeeding

Majority of the mothers (86.5%) believed that colostrum is good for the health and development of the child. Similarly, most mothers (92.8%) believed that the early initiation of breastfeeding within one hour of birth is good and 85.3% mothers believed that the child would likely have a problem in sucking breastmilk if early initiation of breastfeeding is delayed beyond an hour.

Practice of initiation of breastfeeding

76% mothers reported that they breastfed their child in less than 1 hour after the delivery. Most of the mothers (95%) reported feeding colostrum to the child, while 3.3% reported squeezing it out and rest did not know about it (1.8%).

Knowledge on exclusive breastfeeding

Majority of the mothers (85%) heard about the term exclusive breastfeeding. According to nearly 66% mothers, EBF meant feeding the infant only breast milk and no liquid or any other foods. 90% women reported that an infant should be breastfed from birth to 6 months of age. 37% mothers reported that breast milk provides all the nutrients and liquid to a child for the first 6 months, while 39% of the mothers knew that children cannot digest other food during the first 6 months.

Majority of the mothers (84.8%) reported that breast milk is beneficial as it helps the child to grow healthy and 3.5% mothers knew that it protects the child from diseases. About 11% mothers responded that breastmilk can be expressed by hand, stored and another family member/person can feed the child.

Attitude toward exclusive breastfeeding

Majority of mothers (95.3%) believed that EBF until 6 months is good and 89% mothers believed that feeding foods such as pre-lacteals other than breastmilk is severe for the health. About 74% mothers believed that expression of breastmilk by hand and storing it for the child would be not good, while only 19% mothers who believed it would be good. About 75% of mothers believe that exclusively breastfeeding the child for 6 months is not difficult but only 13.5% mothers have shown a positive attitude towards exclusive breastfeeding till 6 months. All mothers of irrespective of their education level have opinion that child will likely to fall sick (diarrhoea) if the child is not exclusive breastfed (illiterate-87.5%, primary-91%, secondary-88.8%, higher secondary-93.6%, graduate-92.4%).

Practice on exclusive breastfeeding

The prevalence of practice of exclusive breastfeeding was assessed. 4% mothers introduced pre-lacteals (food) soon after the child's birth and 5% mothers within a month of birth. A large proportion of mothers (67%) introduced food besides breastmilk when the child was 6 months old. 100 % mothers reported giving some or other pre-lacteals besides breastmilk to the children within the first six months. 100 % mothers gave water, 23.08% gave milk, 1.9 % juice, 5.7% porridge, 42.3% mothers gave other pre-lacteals to their child within the first six months. 23.0% % mothers gave animal milk, 7.6% biscuits, 46.1 % children given water when mothers were separated from the babies beyond 2 hours.

This study reveals that 13.46% children were introduced food/ pre-lacteals in 1st month, 26.92% children in 3rd months, 11.54% children in 5th months and 36.54% children in 6th months were introduced food or pre-lacteals by the family mothers. The mean age at which food was introduced to the children before 6 months is 4.05 month whereas mean age for giving water is 1 month.

Knowledge on continued breastfeeding

On assessing the prevalence of knowledge on continued breastfeeding, 38.2% mothers reported that breastfeeding should be continued until the child completes 2 years, while only 28.2 % mothers know that child should be continued breastfed beyond 2 years. 66.7% mothers knew that continued breastfeeding up to 2 years helps in the growth and development of the child and 13.2% of

mothers knew that mother's milk is the first food for the child.

Attitude towards continued breastfeeding

Approximately 93.5% mothers have opinion that breastfeeding beyond 6 months is good. 80% mothers believed that continuing breastfeeding beyond 6 months is not difficult but 16.2% mothers believed it is difficult. 79.5% mothers have a positive attitude towards continued breastfeeding up to two years and beyond. 26.8% illiterate women and 24.6% mother with higher secondary education think that is not difficult to continue to breastfeed the child.

Practice on continued breastfeeding

Majority of the mothers (97%) breastfed their child during the day and night, 41.4% mothers breastfed 4-5 times a day, 37.6% mothers breastfed more than 6 times a day, and 3 % mothers reported breastfeeding their child only once in a day. Less than half of the mothers (44.2%) breastfed their child for 5-10 minutes, while 26.2% breastfed for 0-5 mins, 24% mothers breastfed for 10-15 minutes and only 5.5% of them breastfed for 15-30 minutes. 75.5% mothers reported that their mother-in-law took care of their child in their absence.

DISCUSSION

To the best of my knowledge, this was the first study that measured the disparity between knowledge, attitude and practices pertaining to early initiation of breastfeeding, exclusive breastfeeding, and continued breastfeeding in Rajasthan, India. This study highlights prevalence of knowledge, attitude practices among mothers. A significant disparity is observed between knowledge and practices pertaining to breastfeeding behaviours, which indicate a great scope for improvement.

In the present study, 72.8% of lactating mothers initiated early breastfeeding within 1 hour of birth, 22.5% lactating mothers continued breastfeeding children up to 2 years of age, but no lactating mother practiced exclusively breastfeeding till 6 months after birth. Similar findings are observed in other studies from different countries.^{17,18}

34.3% mothers had knowledge on early initiation breastfeeding which is substantially lower than studies conducted earlier and 34.6% mothers had knowledge about exclusive breastfeeding, which is supported by previous studies done in Cameroon and Nigeria, but it is lower than other studies conducted in Ghana, Ethiopia and India 34% mothers had appropriate knowledge on continued breastfeeding.^{4,19,20-22,17,4}

On assessing the attitude of mothers towards breastfeeding, this study indicates that 73.7%, 13.4% and 79.5 % mothers had a positive attitude towards early

initiation, exclusive and continued breastfeeding respectively. Prevalence of early initiation of breastfeeding is observed high amongst the mother who delivered their children in health facilities.

Attitude of mothers towards exclusive breastfeeding is substantially lower than previous studies conducted in Ghana and Ethiopia exclusive breastfeeding declines further as the child approaches to 6 months of age education of mothers play a vital role in the knowledge and practices of breastfeeding behaviours.²⁰ According to IYCF-2006 guidelines, the government of India recommends early initiation of breastfeeding within one hour of birth, exclusive breastfeeding up to the first six months followed by continued breastfeeding up to two years and beyond.²³

This study indicates that 96.5% mothers delivered children in health facilities, but only 72.7% mothers initiated early breastfeeding within 1 hour after the birth. The finding indicates a clear gap in practice pertaining to early initiation of breastfeeding by 23.8% point even in an institutional setting.

This study indicates that 64.8 % and 95% mother-in-law's provided support during breastfeeding and colostrum feeding respectively. 64% mothers lived in a joint family; hence the mother-in-law was instrumental in providing knowledge and care towards breastfeeding behaviour. The influence of the mother-in-law is significant over mother and child. Mother-in-laws support system can be optimized to improve practices related to IYCF practices.

The current study suggests that mothers have a very positive attitude (79.5%) and substantial knowledge (34%), but a very low practice (24.7%) pertaining to continued breastfeeding. The gap between attitude and practice is observed 55 percentage point. Eventually, the gap between knowledge and practice is found 9% age point in relation to continued breastfeeding. The gap between positive attitude and knowledge is found to be 43% age point.

There is less knowledge (34.2%), good attitude (73.7%) and good practice (72.7%) pertaining to early initiation of breastfeeding within 1 hour of birth. 1 percentage point gap was observed between attitude and practice of mothers pertaining to breastfeeding. 38.5 percentage point positive increase in practice (72.7%), when compared to knowledge (34.2%) with regard to early initiation of breastfeeding. The NFHS-4 indicates that 41.6% mothers had initiated early breastfeeding. It is because the maximum number of deliveries that were reported were conducted in the health facilities. The gap between positive attitude and knowledge is found to be 39.5% age point, which is a significant gap.

With regard to exclusive breastfeeding, there was less knowledge (34.6%), poor attitude (13.4%) but no practice

of EBF. The gap between knowledge and practice was found to be 34.6 percentage point. The gap between attitude and practice was found to be 13.4 percentage point. The practice of exclusive breastfeeding is computed as 0% (zero) in this study. The gap between attitude (13.4%) and knowledge (34.6%) was found to be 21.2% age point. Though mothers had good knowledge, but they had a poor attitude towards exclusive breastfeeding.

Previous studies have indicated the prevalence of EBF practice ranging from 8.3% to 32.8%. Only 10.8% mothers knew that the child should be fed expressed breastmilk when a mother is separated from the child.^{1,19,24,25} A similar scenario was studied in southwestern Ethiopia, where prevalence declined from attitude (89.5%) to knowledge (34.7%) to and practice (26.4%) related to EBF. The current study suggests that attitude of mothers changed in different phases of lactation right from initiation of breastfeeding (73.8%) to exclusive breastfeeding (13.5%) and to continued breastfeeding (79.5%). Breastfeeding has been associated with lower rates of gastrointestinal and respiratory diseases, otitis media and allergies, better visual acuity, and speech and cognitive development.

Mother-in-laws play a vital role in influencing breastfeeding behaviours. Though knowledge is poor yet there is a positive attitude towards early initiation of breastfeeding and continued breastfeeding amongst mothers. Mothers perceived a benefit of these behaviours which contributed to positive attitude. Mothers have shown poor attitude (13.5%) towards exclusive breastfeeding which is built on community's belief. A higher proportion of the mothers (93.5%) believed that breastfeeding beyond 6 months is good for the child.

A statistically significant association was observed between educational qualifications and knowledge regarding the breastfeeding, indicating that an educated mother was more aware about breastfeeding. However, a higher proportion of illiterate mothers breastfed their children within 1 to 2 hours of delivery.

CONCLUSION

In general, the level of knowledge on breastfeeding was good with majority of the caregivers having information about early initiation, exclusive as well as continued breastfeeding. However, just knowledge is not sufficient since the data indicates that about 100 % mothers reported feeding animal milk, biscuits, water, food and others pre-lacteals besides breastmilk to the child before the child had completed 6 months of age. These findings indicate that despite of having knowledge and right attitude towards breastfeeding, there were certain barriers while practising breastfeeding behaviours. Such barriers will have to be identified at the time of counselling to the mothers and address them through behaviour change

strategies which will lead to good practice of breastfeeding behaviours.

ACKNOWLEDGEMENTS

I highly acknowledge the support from Alwar ADP team (Amlan Pani, Koshy John, Stainly and all community development facilitators) who supported the data collection process. I also acknowledge the dedication and skills of data collectors (community health workers) who have been instrumental in this process. Support from the strategy and research management team has been of great help for review of the research proposal and concurrence.

Funding: No funding sources

Conflict of interest: Mr. Harish Chand works with World Vision India

Ethical approval: The study was approved by the World Vision India, Institutional Ethics Committee

REFERENCES

1. Pal AC, Mukhopadhyay DK. Knowledge, attitude and practice of breastfeeding in a rural community of Bankura District, West Bengal, India. *Age (Year)*. 2014;30(232):66-3.
2. Black RE, Allen LH, Bhutta ZA, Caulfield LE, Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet*. 2008;371(9608):243-60.
3. Dasgupta R, Sinha D, Yumnam V. Rapid Survey of Wasting and Stunting in Children: Whats New, Whats Old and Whats the Buzz. *Indian Pediatr*. 2016;53(1):47-9.
4. Vijayalakshmi P, Susheela T, Mythili D. Knowledge, attitudes, and breast-feeding practices of postnatal mothers: A cross sectional survey. *Int J Health Sci (Qassim)*. 2015;9(4):364-74.
5. Lumbiganon P, Martis R, Laopaiboon M, Festin MR, Ho JJ, Hakimi M. Antenatal breastfeeding education for increasing breastfeeding duration. *Cochrane Database of Systematic Reviews*. 2011;11.
6. Ogbo FA, Agho KE, Page A. Determinants of suboptimal breastfeeding practices in Nigeria: evidence from the 2008 demographic and health survey. *BMC Public Health*. 2015;15(1):259.
7. Smith MJ, Ambrose NG. Breastfeeding may protect against persistent stuttering. *J Commun Disord*. 2013;46(4):351-60.
8. Sankar MJ, Sinha B, Chowdhury R, Bhandari N, Taneja S, Martines J, et al. Optimal breastfeeding practices and infant and child mortality: a systematic review and meta-analysis. *Acta Paediatrica*. 2015;104(S467):3-13.
9. Watkins S, Brody MS, Zolnoun D, Stuebe A. Early breastfeeding experiences and postpartum depression. *Obstet Gynecol*. 2011;118(2):214-21.

10. World Health O, United Nations Children's Fund. Global breastfeeding scorecard, 2019: increasing commitment to breastfeeding through funding and improved policies and programmes. Geneva: World Health Organization, 2019.
11. Hoche S, Meshesha B, Wakgari N. Sub-Optimal Breastfeeding and Its Associated Factors in Rural Communities of Hula District, Southern Ethiopia: A Cross-Sectional Study. *Ethiop J Health Sci.* 2018;28(1):49-62.
12. IIPS. National Family Health Survey-4- India Report International Institute of Population Sciences, MOHFW; 2015-16.
13. Yotebieng M, Chalachala JL, Labbok M, Behets F. Infant feeding practices and determinants of poor breastfeeding behavior in Kinshasa, Democratic Republic of Congo: a descriptive study. *Inte Breastfeeding J.* 2013;8(1):11.
14. IIPS. National Family Health Survey-4- District Alwar Factsheet International Institute of Population Sciences, MOHFW; 2015-16.
15. Raykar N, Majumder M, Laxminarayan R, Menon P. India health report: Nutrition New Delhi Public Health Foundation of India and International Food Policy Research Institute (IFPRI); 2015.
16. Macias YF, Glasauer P. Guidelines for assessing nutrition-related Knowledge, Attitudes and Practices Rome: Food and Agriculture Organization of the United Nations; 2014.
17. Zenebu BB, Belayneh KG, Alayou G, Ahimed A, Bereket C, Abreham A, et al. Knowledge and practice of mothers towards exclusive breastfeeding and its associated factors in Ambo Woreda West Shoa Zone Oromia Region, Ethiopia. *Epidemiology.* 2015;5(1):182.
18. Murage EW, Madise NJ, Fotso JC, Kyobutungi C, Mutua MK, Gitau TM, et al. Patterns and determinants of breastfeeding and complementary feeding practices in urban informal settlements, Nairobi Kenya. *BMC public health.* 2011;11(1):396.
19. Binali AM. Breastfeeding knowledge, attitude and practice among school teachers in Abha female educational district, southwestern Saudi Arabia. *Int breastfeeding J.* 2012;7(1):10.
20. Chiabi A, Kamga B, Mah E, Bogne J, Nguefack S, Fokam P, et al. Breastfeeding practices in infants in the west region of cameroon. *Iran J Public Health.* 2011;40(2):11-7.
21. Oche MO, Umar AS, Ahmed H. Knowledge and practice of exclusive breastfeeding in Kware, Nigeria. *Afr Health Sci.* 2011;11(3):518-23.
22. Mogre V, Dery M, Gaa PK. Knowledge, attitudes and determinants of exclusive breastfeeding practice among Ghanaian rural lactating mothers. *Inte Breastfeeding J.* 2016;11(1):12.
23. National Guildelines on Infant and Young Child Feeding. New Delhi: Ministry of Woemnt and Child Development (Food and Nutriion Board), Govt. of India; 2004.
24. Agampodi SB, Agampodi TC, Piyaseeli UKD. Breastfeeding practices in a public health field practice area in Sri Lanka: a survival analysis. *Int Breastfeeding J.* 2007;2(1):13.
25. Lumbiganon P, Martis R, Laopaiboon M, Festin MR, Ho JJ, Hakimi M. Antenatal breastfeeding education for increasing breastfeeding duration. *Cochrane Database Syst Rev.* 2011(11):006425.

Cite this article as: Chand H, Chopra M, Sharma J. Disparity in knowledge, attitude and practice among mothers of children under three years of age about early initiation of breastfeeding, exclusive breastfeeding and continued breastfeeding in Alwar district, Rajasthan, India. *Int J Sci Rep* 2020;6(4):146-53.