Original Article

DOI: https://doi.org/10.62143/dns6ge53

Awareness and Practice on Breastfeeding among Mothers Attending at Maternal and Child Health Clinic in a Tertiary Hospital

Chanta Maharjan[1*] Bhuwan Kumari Dangol[2]

[1]Budhanilkantha Nagar Hospital, Baluwakhani, Kathmandu, Nepal

[2] Maharajgunj Nursing Campus, Institute of Medicine, Tribhuvan University, Nepal

***Corresponding Author:** chantamaharjan25@gmail.com

ABSTRACT

Background: Breast milk is the natural food for babies which provides all the nutrients and energy that infants need for the first few months of life. Child morbidity and mortality can be reduced through the proper ways of breastfeeding. So, this study aims to find out the awareness and practice on breastfeeding among mothers attending maternal and child health clinic in Tribhuvan University Teaching Hospital.

Methods: A descriptive cross sectional study design was conducted in a Maternal Child Health (MCH) clinic of a Tertiary hospital. Non probability purposive sampling technique was used to collect data from 146 postnatal mothers. Data were collected through in-person interview technique using semi structured questionnaires. Data were analyzed using descriptive and inferential statistics to find out the result.

Results: More than half (64.4%) of the respondents had good awareness and more than half (58.2%) of the respondents had have exclusive breastfeeding for six months. Prelacteal feeding was practiced by 13.6% and initiation of breastfeeding within 1 hour of delivery by 39% of the respondents, 28.1% of the respondents had practiced expressed breast milk feeding. Statistically significant association was found between awareness on breastfeeding and maternal education level (*p=0.018*).

Conclusion: The study concluded that, though more than half of the respondents had good awareness, all of them had not practiced exclusive breastfeeding. Prelacteal feeding was practiced by few mothers. Therefore, the findings highlight the importance of providing women with education on how to properly breastfeed.

Keywords: Awareness, breastfeeding, postnatal mothers, practice, tertiary level hospital

INTRODUCTION

World Health Organization (WHO) has recommended initiation of breastfeeding within the first one hour of birth and exclusive breastfeeding (EBF) for the first six months of life. Breast feeding up to two years can save the lives of 820,000 children of under-five every year. About 44% of infants 0–6 months old were exclusively breastfed during 2015 to 2020. Breastfeeding improves child growth and lowers health care expenditures, which benefits individual families and the country as a whole economically.[1] Globally 47% of all newborns are given initial breastfeeding within first hour of delivery. The prevalence of early initiation of breastfeeding in Eastern Europe and Central Asia is nearly two times higher (72%) compared to 39% in South Asia and 41% in East Asia and the Pacific. Still one in three newborns receive food or liquids in the earliest days of life, which may lead

to delay first contact with their mother and make it difficult to establish breastfeeding. Despite the huge benefits of breastfeeding, only 48% of infants under five months of age worldwide are exclusively breastfed. Prevalence of exclusive breastfeeding to infants is highest in South Asia that is over 60 %.[2]

In Nepal, (87.14%) of the babies got colostrum feeding and only 59.02% among them received initial breastfeeding within one hour of deliver.[3] The knowledge and practice on breastfeeding is found different all over the world with 90% of the mothers having knowledge about benefits of colostrum feeding, 85% having knowledge on appropriate age of weaning. [4] Similarly, 78% of the mothers were known about the early initiation of breast feeding and 70% of them were known about feeding colostrum to the baby. [5] Breastfeeding practices in the Mid-western and Eastern regions of Nepal showed, 67.2% of infants were initially breastfed and only 23.2% of infants were exclusively breastfed till six months. Prelacteal feeding like honey, was still on practice. It was found that 16% mothers had inadequate knowledge on exclusive breastfeeding and 65% of the mothers reported breastfeeding problems in the first six months after delivery. [6] In Kathmandu, only 36% of the mothers had adequate knowledge on breastfeeding and 40% had practiced exclusive breastfeeding and continued breastfeeding for two years of age. [7] In Janakpur, only 12.2% knew about early initiation of breastfeeding however only 5% knew about the importance of colostrum, none had idea on importance of night feeding. Less than half (45%) of the babies got breastfeeding within first hour of delivery, 20.9% of the babies got exclusive breastfeeding for six months, 70% of the mothers were practicing night feeding, 15% of mothers practiced feeding one side at a time and 15% of mothers were practicing appropriate attachment and positioning during breastfeeding. [8]

Despite the fact that, breastfeeding is the natural feeding and right of the child, only 55% of children aged 0-23 months were given initial breastfeeding within one hour of delivery. Exclusive breastfeeding rate is decreasing from 66% (2016) to 56.4 % (2022). [9] Different studies in Nepal showed that only the fewer number of the babies have got breastfeeding properly, which may be due to the ignorance of mothers. Hence, the study aimed to find out the awareness and practice of breastfeeding among mothers.

METHODS

A descriptive cross sectional research design was adopted to find out the level of awareness and the practice on breastfeeding among mothers at MCH clinic of TUTH. Those mothers having babies aged between 9 to 15 months attending for immunization and other services were selected as the study population. The sample size was calculated using Cochran's formula, taking the prevalence (75.7%) of practice of exclusive breast feeding [10], which was 146. Data were collected, adopting the non-probability purposive sampling technique using in-person interview technique through semi structured questionnaire, developed by the researcher. A total of 28 questions were related to awareness, and 16 questions were related to breastfeeding practice. Among the practice related questions only 10, questions measure the practice. All correct responses were given one score. So, the total awareness score was 52. The level of knowledge was categorized as good awareness scoring (>75%), fair awareness (50%-75%) and poor awareness (<50%). [11] Content validity of the instrument was established by consulting with 5 subject matter experts. The content validity index was found CVI (I-CVI) 0.98. Pretesting was done in 10% (15) of the total sample size. Ethical approval was obtained from Institutional Review Committee (IRC) of Institute of Medicine, Tribhuvan University, {IRC Reg. No. 58 (6-11) E2,080/081}. Informed written consent was obtained from each respondent after explaining the objective. Privacy and confidentiality were maintained by keeping the respondent in a separate corner of the OPD and assured that they could withdraw from the study at any time without any clarification. Data were collected while mothers were waiting for baby's immunization and general checkup during four weeks, from 17th Sep 2023-13th Oct 2023. Collected data were

coded and entered in Statistical Package for Social Sciences (SPSS) 18 version. The obtained data were analyzed by using descriptive statistics like frequency, percentage, mean, standard deviation and inferential statistics (Chi-square test and Fisher exact test).

RESULTS

Among 146 respondents, most of the respondents (80.1%) were 20-34 years of age, with the mean age of 29.87 years. Almost all (93.2%) respondents were from urban residence. Concerning education, (55.5%) of the respondents had secondary level education. Most of them (68.5%) were homemakers while equal numbers (50%) of the mothers belong to joint as well as nuclear families. About half (50.7%) of the respondents were multiparous, among them 97.3% respondents breastfed to their previous babies. Sixty-six percent babies belonged to 9-12 months of age. Most (89.7%) of the babies were born at term. Almost all (97.9%) respondents delivered their babies in hospital, (50%) vaginally (50%) and by caesarian section (50%). Majority (72.7%) of the respondents faced problems during breastfeeding due to low birth weight of the babies.

Table 1: Respondents' Awareness on Initial Breastfeeding and Colostrum Feeding (n=146)

Variables	Frequency	Percentage
Correct time of starting first Breastfeeding	116	79.5
Advantages of early breastfeeding*		
Baby's sucking promote milk production	129	88.4
Baby is active and easy to feed	111	76.0
Prevents baby from hypothermia	109	74.7
Help uterine contraction and controls bleedings	45	30.8
Helps in placenta separation	22	15.1
Advantages of colostrum feeding*		
First immunization and prevents from infection	139	95.2
Promotes digestive function	102	69.9
Helps in passing meconium and prevents physiology jaundice	80	54.8

**Multiple responses*

Table 1 illustrates that 79.5% of the respondents answered correct meaning of initial breastfeeding. Most of the respondents (88.4%) said that baby's sucking on breast promotes milk production. Almost all (95.2%) mothers knew that colostrum feeding is the first immunization for baby that prevents infections.

Table 2: Respondents' Awareness on Benefits and Pattern of Breastfeeding (n=146)

Correct Responses	Frequency	Percentage
Benefits of breastfeeding		
Mother*		
Bonding between mother and baby	144	98.6
Prevents breast engorgement and other problems	142	97.3
Helps in uterine involution	83	56.8
Reduce the chance of postpartum bleeding	63	43.2
Baby*		
Provides complete nutrition	146	100.0

Provides immunity	142	97.3
Enhance growth and development	141	96.6
Protects from diarrhea and other infections	131	89.7
Frequency of breastfeeding: Demand feeding	131	89.7
Breastfeeding pattern		
Breastfeeding until baby switches off self	117	80.1
Complete feeding from one breast then another	98	67.1
Starting complimentary feeding after 6 months	140	95.9
Continuation of Breastfeeding up to 24 months	139	95.2
Ways of promoting milk secretion*		
Eating nutritious food	146	100.0
Get enough physical rest	134	91.8
Be free from stress	133	91.1
Following good positioning and attachment	114	78.1

**Multiple responses*

Table 2 depicts, most of the respondents were aware that, breastfeeding enhances bonding between mother and baby (98.6%), and provides complete nutrition to baby (100%). Most of the mothers were known about demand feeding (89.7%) and feeding the baby till she/he switches off self (80.1%). Almost all the mothers agreed that eating nutritious food promotes milk secretion.

Table 3: Respondents' Level of Awareness (n=146)

Variables	Frequency	Percentage	Mean ±SD
Awareness			
Good (>75%)	94	64.4	40.10±2.911
Fair (50% -75%)	50	34.2	32.48± 2.102
Poor (<50%)	2	1.4	18.00 ±1.414

Table 3 reveals that 64.4% of the respondents had good awareness, where as very few (1.4%) of the respondents had poor awareness.

Table 4: Respondents' Practice on Breastfeeding (n=146)

Practice	Frequency	Percentage
Exclusive breastfeeding till six months	85	58.2
Initial breastfeeding within one hour	89	61.0
Use of Prelacteal feeding	20	13.6
Types of prelacteal feeding (n=20)		
Formula feeding	19	90.4
Honey	1	4.8
Reasons of giving prelacteal feeding (n=20)		
No adequate milk secretion	9	45.0
Mother was in post-operative ward	6	30.0
Inability of sucking by baby	4	20.0
Cultural belief	1	5.0

Hand washing: before breastfeeding	130	89.0
Colostrum feeding	146	100.0
Each time, breastfeeding continues till the baby switches off self	122	83.6
During Breastfeeding :Feed completely one breast following another.	102	69.9
Complimentary feeding starting after 6 months	85	58.2

Table 4 depicts that 58.2% respondents practiced exclusive breastfeeding for 6 months. About (61%) of the respondents had initiated breastfeeding within one hour of baby birth while (13.6%) had given prelacteal feeding. The most common reason behind prelacteal feeding was inadequate milk secretion (45.0%). Most of the respondents (89%) had practiced hand washing before breastfeeding. All respondents fed colostrum to their babies and (58.2%) of the babies got complimentary feeding after six months.

Table 5: Association between Level of Awareness and Selected Variables of Respondents (n=136)

Variables	Level of Awareness		χ^2	*p*-value
	Good(n=94) No. (%)	Poor-fair(n=52) No. (%)		
Age in Years				
<30	37(56.1)	29(43.9)	3.639	0.056
≥30	57(71.3)	23(28.7)		
Address				
Urban	90(66.2)	46(33.8)	2.783	0.095
Rural	4(40.0)	6(60.0)		
Maternal education				
Upto secondary	58(58.0)	42(42.0)	5.640	0.018
Above secondary	36(78.3)	10(21.7)		
Ethnicity				
Brahmin/Chhetri	54(70.1)	23(29.9)	2.346	0.126
Others	40(58.0)	29(42.0)		
Occupation				
Home maker	64(64.0)	36(36.0)	0.020	0.887
Work outside home	30(65.2)	16(34.8)		
Type of family				
Nuclear	45(61.6)	28(38.4)	0.478	0.489
Joint	49(67.1)	24(32.9)		
Parity				
Primi	43(59.7)	29(40.3)	1.346	0.246
Multi	51(68.9)	23(31.1)		
Type of delivery				
Vaginal	47(64.4)	26(35.6)	0.000	1.000
Caesarean section	47(64.4)	26(35.6)		

P<0.05 is considered significant

Table 5 shows that there is statistically significant association between awareness on breastfeeding and maternal education (*p=0.018),*(χ2=5.640).

DISCUSSION

The findings of the study revealed that most of the mothers (79.5%) are aware about the initiation of breastfeeding within one hour of delivery. This finding is supported by the study conducted at Soran City hospital, where (76%) of the respondents were aware about it.[12] In present study, (96.6%) mothers answered correct meaning of colostrum, similar (94.4%) result was revealed in the study done in Jammu, India.[13] Regarding benefits of breastfeeding to mothers, almost all respondents (98.6%) know that breastfeeding promotes bonding between mother and baby, similar finding (94.9%) was found in the study done in Kathmandu. [14] however only (40%) respondents knew about it in the study done in India.[15] All the respondents in the study answered that, breast milk provides all nutrition to the baby but different result (54%) was found in the study done in rural tertiary hospital in India .[15] The difference may be due to the different study setting. Almost all (92.5%) mothers are aware about recommended duration of exclusive breastfeeding, contrast result (44%) was found in study conducted in Chennai, India .[16] In present study, (89.7%) mothers are found to be aware about demand feeding. Similar (88%) result was found with in a study done in Himachal Pradesh [5] and contrast result (54%) was found in the study conducted in Odisha.[17] The inconsistency may be due to less number of respondents who have got counseling on breastfeeding during antenatal period and more respondents living with nuclear family in previous studies. In present study, almost all (95.9%) mothers know that complimentary feeding should be started after six months of birth; this result is inconsistent (29.8%) with the study conducted in MCH clinic of Family Welfare Centre, Chhetrapati, Kathmandu.[14] The difference may be due to the low educational status of the respondents in previous study. Almost all (95.2%) respondents are aware about continuing breastfeeding up to two years of baby's age. Nearly similar (85.2%) result was observed in the study done in Jammu India.[13]Among all respondents, only (58.2%) of the respondents practiced exclusive breastfeeding for six months. Similar result (55.9%) was found in the study conducted in East Africa[18]and contrast result (23.3%) was found in the study done in Tertiary Care Hospital in Kathmandu[19]and (11%) in another study done in Tertiary level Hospital in Kathmandu[20] The difference may be due to the practice measured by asking the questions in present study and by observation in previous studies. Initial breastfeeding within 1 hour of delivery was practiced by (61%) of the respondents; the result was similar (63.7%) to the study conducted in India.[2,11] The study reveals that, all respondents fed colostrum to their babies which was consistent with the study conducted in Giza, Egypt (90.5%)[22] and in Ethiopia (92%)[23]. Most (82.2%) of respondents fed their babies on demand. This finding was different (60%) with the study conducted in Bundelkhand region of Uttar Pradesh, India [24] and (15.8%) in east Africa[18]. In this study, (69%) of the mothers practiced feeding one breast completely following another breast. Contrast result (7%) was found in the study conducted in Kathmandu.[14] Regarding complimentary feeding, (65.1%) of the mothers had introduced complimentary feeding after six months of the baby's age which was found closely similar (60%) to the study conducted in Tanahu Distirct, Nepal.[25] Inconsistent result (42.5%) was revealed in the study conducted in Meerut, India.[21] The level of awareness is associated with educational status of the respondents *(p*=0.018). This finding is supported by the study conducted in Odisha (*p=<0.0001*). [17]

CONCLUSION

It concludes that more than three fifth of the mothers have good awareness regarding breastfeeding and more than half of the mothers practiced exclusive breastfeeding. Less than half of the mothers have practiced expressed breast milk. Educational status of respondents was found significantly associated with level of awareness. So to meet the target of exclusive breastfeeding, working mothers should be encouraged to feed EBM.

REFERENCES

1. World Health Organization. Newborn mortality. Available from: https://www.who.int/news-room/fact-sheets/detail/levels-and-trends-in-child-mortality-report-2021

2. UNICEF/WHO/WB Joint Child Malnutrition Estimates (JME) group released new data for 2021. Available from: https://www.who.int/news/item/06-05-2021-the-unicef-who-wb-joint-child-malnutrition-estimates-group-released-new-data-for-2021

3. Acharya S, Thapa B, Dhakal AK, Singh SK. Colostrum Feeding among Newborns Visiting the Outpatient Department of Pediatrics of a Tertiary Care Centre: A Descriptive Cross-sectional Study. JNMA; 2023;61(259): 204–7. Available from: https://doi.org/10.31729/jnma.8062

4. Jamil M. Knowledge, Attitude and Breastfeeding practices of Mothers of Infants: An Experience from a Tertiary Care Hospital in Lahore. Proceedings of Shaikh Zayed Medical Complex Lahore;2018; 32(3): 1–7. Available from: https://doi.org/10.47489/p000s323z6841-7mc

5. Minhas DA, Sharma DK. Awareness, attitude and practices of breast-feeding among mothers at a secondary care centre in Himachal Pradesh. IJCOG. Comprehensive Publications;2021;5(4):270–2. Available from: https://doi.org/10.33545/gynae.2021.v5.i4e.996

6. Dharel D, Dhungana R, Basnet S, Gautam S, Dhungana A, Dudani R, et al. Breastfeeding practices within the first six months of age in mid-western and eastern regions of Nepal: a health facility-based cross-sectional study. BMC Pregnancy and Childbirth [internet].2020;20(1):59. Available from: https://doi.org/10.1186/s12884-020-2754-0

7. Sharma I, Khadka A. Assessing the level of knowledge and practice of breastfeeding among factory working mothers in Kathmandu, Nepal. Warasan Wichai Witthayasat Kanphaet [Internet]. 2019;33(1):24–34. Available from: http://dx.doi.org/10.1108/jhr-12-2018-0166

8. Paudel DR, Gupta DK, Giri A. Knowledge, attitude and practice of mothers in breast feeding: Ahospital based study. Vol. 10, JMCJMS. Nepal Journals Online (JOL); 2022; 10(1): 14–23. Available from: https://doi.org/10.3126/jmcjms.v10i1.44628

9. Nepal Demographic and Health Survey. 2022. Available from: https://www.dhsprogram.com/pubs/pdf/FR379/FR379.pdf

10. Bhandari N,Prajapati R. Prevalence of Exclusive Breast Feeding and its Associated Factors among Mothers. KUMJ. 2018 Apr-Jun; 16(62):166-170.

11. Gomaa N, Mohamed A. Knowledge and Practices of Exclusive Breastfeeding among Rural Women during the COVID-19 Pandemic: A Cross Sectional Study. Research Square. 2023 Feb 3;

12. Abdulrahman H, Jamal hamad K. Breastfeeding Knowledge among a Sample of Women Attending Maternal and Pediatric Hospital of Soran City. Polytechnic Journal. 2022; 12(1):149–54. Available from: http://dx.doi.org/10.25156/ptj.v12n1y2022.pp149-154

13. Bala K, Sahni B, Bavoria S, Narangyal A. Knowledge, attitude, and breast-feeding practices of postnatal mothers in Jammu: A community hospital based cross sectional study. JFMPC. 2020;9(7):3433–7. Available from: http://dx.doi.org/10.4103/jfmpc.jfmpc_333_20.

14.. Baral H , Bhattarai A. Awareness and Practices Regarding Health Promotional Measures of Infant among Mother in Kathmandu, Nepal. IJSR. 2020 Jul 5;9(7):1349–57.

15. Haricharan D, Vardhan DK, Naidu DR. Knowledge, attitude and practice of breast feeding among postnatal mothers at rural tertiary hospital. Pediatric Review: IJPR. 2017[cited 2025 Mar 26];4(2):113–9. Available

from: https://pediatrics.medresearch.in/index.php/ijpr/article/view/239

16. Jyotsna, Vijayalakshmi, Shinde R. Awareness, knowledge about breast feeding practices among urban mothers. IJRCOG. 2023 Jan 25;12(2):437–40.

17. Mohapatra I, Roy A. Breastfeeding awareness and perception among antenatal mothers: A cross-sectional study in urban slum population of Bhubaneswar, Odisha. JEHP. 2018;7(1):60. Available from: http://dx.doi.org/10.4103/jehp.jehp_98_17

18. Dukuzumuremyi JPC, Acheampong K, Abesig J, Luo J. Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa: a systematic review. Int breastfeeding J [Internet]. 2020;15(1):70. Available from: http://dx.doi.org/10.1186/s13006-020-00313-9

19. Bhatta A, Basnet R. Trend of Breastfeeding and its Impact on Morbidity in Children in a Tertiary Care Hospital in Kathmandu. JLMC [Internet]. 2019;7(1). Available from: http://dx.doi.org/10.22502/jlmc.v7i1.262

20. Bhandari MS, Manandhar P, Tamrakar D. Practice of Breastfeeding and its Barriers among Women Working in Tertiary Level Hospitals. JNMA. 2019; 57(215):8-13. Available from: http://dx.doi.org/10.31729/jnma.4035

21. Kumar D, Parashar P, Bansal R, Sharma S, Nasser K. A Community-based Study on Breastfeeding Practices in the Urban Area of Meerut, Uttar Pradesh. IJCRR. 2021;13(03):154–8. Available from: http://dx.doi.org/10.31782/ijcrr.2021.13313

22. Kamal N, Ismael F, Abdelrehim M, El-Khateeb A. Breastfeeding practice and perception among women attending Primary Health Care Center in Giza, Egypt. MJMP [Internet]. 2021;32(3):29–39. Available from:http://dx.doi.org/10.21608/mjmr.2021.241635

23. Zewde GT. Assessment of knowledge, Attitude and Practices of Colostrum Feeding among Postnatal Mothers in Harar Town Governmental Hospital Harar, Ethiopia 2019. JPDRR. 2020; 2(2):1. Available from: http://dx.doi.org/10.47363/jprrr/2020(2)104

24. Barman SK, Barman S, Patel AK, Kumar N. Knowledge attitude and practice regarding breast feeding mothers of Bundelkhand region of Uttar Pradesh. IJMPH. 2021;8(10):4928. Available from: http://dx.doi.org/10.18203/2394-6040.ijcmph20213796

25. Bhujel S, Khadka R, Baskota S, Poudel L, Bista S, Gurung M, et al. Knowledge and Practice of Complementary Feeding among the Mothers of the Child Aged Group 6-24 Months, TanahuDistirct, Nepal. JNHRC [Internet]. 2021; 19(1):127–34. Available from: http://dx.doi.org/10.33314/jnhrc.v19i1.3371