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Knowledge and Practice on Breastfeeding among Mothers of Infant

TULASHI ADHIKARI (MISHRA)* and ISHWAR SUBEDI[1]
*TU-Institute of Medicines, Maharajgunj Nursing Campus, Kathmandu-Nepal
[1]Department of Food Technology and Quality Control, Babarmahal, Kathmadu-Nepal

*Corresponding author: **tulsi_50@hotmail.com**

This descriptive explorative study was carried out with the aim of finding out the current status on breastfeeding among mothers of infants in Kanti Children Hospital, Maharajgunj, Kathmandu. A total of 100 mothers attending maternal and child health (MCH) Clinic of Kanti Children's hospital were selected on the first come first basis. A semi- structured questionnaire was used to collect data that assess the knowledge and actual practices of mothers regarding breastfeeding. The study finding revealed that 52% responded has correct meaning of exclusive breastfeeding. Regarding the initiation of breastfeeding only 41% respondents fed their babies correctly within 1 hour. Twenty six percent of them had given Prelacteal feeding from 52.6% of mothers from rural and 20.8% mothers from urban area. Only 12% of respondents had knowledge about expressing breast milk (EBM) and among them only 8.3% practiced it. Regarding the duration of exclusive breastfeeding (EBF), 34% respondents had given EBF up to 6 months, 26% had given prelacteal feed and 26% respondents did not practice EBF from 1st day of life.

Keywords: Exclusive breast feeding, Expressing breast milk, Prelacteal feeding

Introduction

Breast milk is the natural first food for babies, it provides all the energy and nutrients that the infant needs for the first months of life, and it continues to provide up to half or more of a child's nutritional needs during the second half of the first year, and up to one-third during the second year of life. The single most cost effective intervention to reduce infant mortality in developing countries would be the promotion of exclusive breastfeeding. The estimated reduction of infant mortality by promoting exclusive breastfeeding is 13 % (Jones, Steketee, Black, Bhutta & Morris, 2003). Too early introduction of breastfeeding substitutes and too late introduction of semi- solid complementary feeds are common and are responsible for rapid increase in prevalence of under nutrition between 6-24 months (Ramachandran, 2004). The Nutrition program under the National Nutrition Policy and Strategy 2004-2005 promotes exclusive breastfeeding through the age of six months and thereafter introducing complementary foods along with continued breast milk until the Child is at least two years of age.

Breastfeeding also contributes to the health and well-being of mothers. It helps to space children, reduce the risk of ovarian cancer and breast cancer. It is a secured way of feeding and is safe for the environment also. To enable mothers to establish and sustain exclusive breastfeeding for 6 months, WHO and UNICEF have recommended to initiate breastfeeding within the first hour of delivery with no other feed and to be given on demand (WHO, 2009).

Methodology

A descriptive exploratory study design was used. The study was conducted in Maternal and Child Health Clinic (MCH) of Kanti Children Hospital Kathmandu. The sample of the study consisted of a total 100 mothers having at least one child in the age group of six month to one year were selected by from the among the mothers meeting the criteria on first come first basis. A Semi-structured interview questionnaire was developed by review of literature. Content validity of the instrument was established by seeking the opinion of subject matter expert and research expert. The instrument was translated into Nepali version with the help of Nepali language expert. The Nepali version instrument was pretested among 10 similar mothers attending Child Health Clinic at Tribhuvan University, Teaching Hospital. Following pretesting the instrument was finalized and final version consisted of socio-demographic and obstetrics information in part I and part II consisted of questions related to factors that could affect the EBF. Institutional approval obtained from Kanti Children Hospital authority. Before collecting data, informed verbal consent was obtained from each mother meeting the criteria. The researcher collected data by interviewing the mothers one by one in a corner of MCH clinic. The data were coded and entered into Statistical Package for Social Science version 12.00.The data were analyzed by

using descriptive analysis such as frequency, percentage and inferential statistics such as Chi-square and odds ratio were used on relevant to find out the association between selected variables.

Results

Socio – Demographic Characteristics of Respondents

It can be revealed from table 1 that higher proportion (52%) of the respondents were of age group 21-25 years, 27% were 26–30 years, 11% were 15-20 years and 10% were 31-35 years. Majority of the respondents (48%) were from urban area, 33% were from Semi–urban area and 19% were from rural area. In the ethnic group, 35% mothers were Brahmin, 25% Chhetri, 14% Newar, 13% Tamang and 13% Rai and Magar. Regarding religion, there were 84% Hindu, 13% Buddhist and 3% Christian. As viewed in education, majorities (81%) were literate, among which Primary level was 21%, secondary level was 25% and higher secondary level was 35%. Concerning the occupation of mothers 78% were house wives, 14% were involved in service whereas 8% were involved business. Majority (67%) of respondent were

Table 1. Socio – Demographic Characteristics of Respondents (n=100)

Variables	Percentage
Age in years	
15-20	11.0
21-25	52.0
26-30	27.0
31-35	10.0
Residence	
Urban	48.0
Semi urban	33.0
Rural	19.0
Ethnicity	
Brahmin	35.0
Chhetri	25.0
Newar	14.0
Rai /Magar	13.0
Tamang	13.0
Educational Status	
Illiterate	19.0
Primary Level	21.0
Secondary Level	25.0
Higher Secondary Level	35.0
Occupation	
House wife	78.0
Service	14.0
Business	8.0
Type of Family	
Nuclear	67.0
Joint	33.0
Economic Status	
Lower Status	15.0
Middle Status	44.0
Higher Status	41.0

Table 2. Knowledge of Mother regarding on Exclusive Breastfeeding (EBF)

Knowledge regarding EBF	Number	Percent
Yes	52	52.0
No	48	48.0
Total	100	100.0

Among the 52 respondents, 40.4% of respondent's sources of information about EBF were from health professional, followed by radio/TV (26.9%), school curriculum (13.46%), newspaper /magazines (11.5%) and from the relatives and neighbors (7.7%) (Table 3)

Table 3. Sources of Information about EBF

Sources	Number	Percent
Health Professional	21	40.4
Radio/TV	14	26.9
School Curriculum	7	13.4
Newspaper/Magazine	6	11.5
Relatives/Neighbors	4	7.7
Total	52	100.0

Regarding the initiation of breastfeeding only 41% respondents fed their baby correctly i.e. within 1 hour (Table 4)

Table 4. Initiation of Breastfeeding after birth

Initiation of Breastfeeding	Number	Percent
Within 1 hour	41	41.0
After 1 hour	59	59.0
Total	100	100.0

Regarding practice of EBF, 34% respondents practiced EBF upto 6 months while 66% respondents started mixed feeding before 6 months (Table 5)

Table 5. Practice of EBF up to 6 Months

Responses	Number	Percent
Yes	34	34.0
No	66	66.0
Total	100	100.0

Regarding the duration of exclusive breastfeeding, 34% respondents had given EBF upto 6 months, 14% respondents had given EBF upto 4-5 months, 19% respondents had given EBF upto 2-3 months, 7% respondents had given EBF less than 2 months respectively and 26% respondents had given prelacteal feed. This means that 26% respondents did not practice EBF from 1st day of life (Table 6)

Table 6. Duration of Exclusive Breastfeeding

Duration of EBF	Number	Percent
Upto 6 months	34	34.0
4-5 Months	14	14.0
2-3 Months	19	19.0
Less than 2 Months	7	7.0
Prelacteal feed	26	26.0
Total	100	100.0

Regarding type of prelacteal feed among 26 mothers, 70% fed formula feed, 11.5% fed honey, 7.7% fed animal milk and 3% fed ghee (Table 7)

Table 7. Type of Prelacteal Feeding

Type of Prelacteal Feeding	Number	Percent
Formula Feed	20	77.0
Honey	3	11.5
Animal Milk	2	7.7
Ghee	1	3.8
Total	26	100.0

Regarding the causes for giving prelacteal feed, majority (61.5%) of respondents responded lack of milk secretion followed by insufficient milk (11.5%), suggested by health professional (11.5%), cultural practice (7.7%) and relative insisted (7.7%) (Table 8)

Table 8. Reason for giving Prelacteal Feeding

Reason	Number	Percent
Lack of milk secretion	16	61.5
Insufficient milk	3	11.5
Suggested by Health Professional	3	11.5
Cultural Practice	2	7.7
Relative insisted	2	7.7
Total	26	100.0

Regarding the knowledge on expressing breast milk only, 12% of respondents had knowledge about expressing breast milk and among them only 8.3% practiced expressing breast milk (Table 9)

Table 9. Knowledge and Practice on Expressing Breast Milk

Variable	Number	Percent
Knowledge on EBM (n=100)		
Yes	12	12.0
No	88	88.0
Practice on EBM (n=12)		
Yes	1	8.3
No	11	91.7

Results and Discussion

Regarding the residential areas of mothers, 52.6% mothers from rural area practiced on EBF. Only 20.8% of them practiced EBF who were from urban area. Statistically there was significant association between the residential area of mother and practiced of EBF (p value=0.021). Similar finding has been reported by Fenglion (2007), who considered living areas as one of the parameters of EBF. Regarding ethnicity and practiced of EBF, 84.6% Tamangs and 17% Brahmins practiced EBF. The ethnicity of mothers and EBF were statistically significant (p value=0.001). Regarding the educational status, 57% of respondents with educational status of primary level education and only 8.6% of respondents with higher educational level practiced EBF. (p value=0.001). Similar finding has been reported by (MOHP, USAID & New ERA, 2007) as mothers of children under 6 months of ages with a higher level of education are less likely to EBF. In terms of economic status and practice on EBF, 47.7% of the respondents practiced EBF belong to middle status, followed by lower status (46.6%) and higher status (14.6%). (p value=0.003). In the report published by (MOHP, USAID & New ERA, 2007) 67% children in the lowest wealth quintile were exclusively breastfed than 38% children in the highest wealth quintile. This may be because of low economic condition that they can not afford infant formula or other milk, so breastfeeding is must for the survival of their baby.

Majority of respondents (52%) who had antenatal visit less than 4 times practiced EBF on contrast to 21.5% respondents who visited 4 times and more. (p value=0.003). While comparing place of delivery and EBF, 64% of respondents with home delivery and 29 % of respondents with hospital delivery practiced EBF (p value=0.01). Similarly the odd of practicing EBF is 4.39 times more in home delivery than hospital delivery (95% CI=1.33 < OR <14.41). This result can be explained by the fact, that conducive home atmosphere in home delivery have probably resulted in the early initiation of breastfeeding and exclusive breastfeeding.

Regarding the mode of delivery and EBF, 44% of respondents with vaginal delivery practiced EBF than those with caesarian delivery (10%). The study done by Newton, Chaudari & Morewood, (2008) women with vaginal delivery had almost 3 times odds of exclusively breastfeeding than women with cesarean birth, which is almost similar to the present study 4.87 times odds of EBF between vaginal delivery and caesarean delivery. Regarding the timing of initiation of breastfeeding and practice of EBF, 51% of those who practiced EBF initiated breastfeeding within 1 hour out numbering those who

initiated breastfeeding after 1 hour (22%). The finding of study done by Tiwari (2008), where it was found that the early initiation of breastfeeding was associated with higher probability of exclusive breastfeeding. Only 12% of the mothers knew about the expressing breast milk and among them only 8.3% of the mothers actually practiced expressing breast milk. About the prelacteal feeding 26% were given prelacteal feed; majority of them (77%) gave formula feed, and 11.5% honey. In a study done in India by (Nepal, Jeeva, Mishra, & Paul 2009) showed similar findings 30% had given prelacteal feeding and 76.6% of infants received formula feed as prelacteal feed. In another study done by Chandrasekhar, (2006) reported 14% of the babies were given prelacteal feed and 6.2% were given formula feed. This result showed that the giving prelacteal feed interferes with the early initiation of breastfeeding as well as exclusive breastfeeding up to 6 months. So, formula feed should be discouraged right from hospital level in order to promote exclusive breastfeeding up to 6 months.

Conclusions

Based on the study findings, it is concluded that majority of mothers of rural area having primary education level, middle economic status, antenatal visit less than 4 times, home delivery, vaginal delivery and early initiation of breastfeeding practiced more exclusive breastfeeding. Mothers, who had delivered by caesarean section, had been found less practice of EBF. Similarly, the findings of this study have also indicated that there is no association between age of the mother, type of the family, occupation of mother, parity, sex of the baby and knowledge of mother on exclusive breast feeding. More awareness programs focusing on the importance of exclusive breastfeeding and harmful effect of formula feed should be delivered to expectant mothers. In addition every mother should be mentored, counseled and encouraged for early initiation of breastfeeding that will help in exclusive breastfeeding. Undesirable cultural practices such as giving Prelacteal feeds, late initiation of breastfeeding after birth, delay introduction of complementary foods and avoiding exclusive breastfeeding are still prevalent among the mothers. The maternal knowledge towards breastfeeding was inadequate and there was a big gap between actual and desired practices. Although breastfeeding is universal in Nepal, the knowledge and practice of EBF was low there is a need to promote the early initiation of breastfeeding and improving the knowledge and practice of breastfeeding.

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