



Mother Support Group (MSG) Program's Contribution to Improve the Rate of Exclusive Breast Feeding (EBF) By Changing Knowledge, Attitude, Practice (KAP) of Mothers in Community Level of Bangladesh

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ABSTRACT

Introduction: Breast-feeding offers tremendous health benefits to both child and mother. Globally, it was estimated that more than nine million children under five years die annually and about two-thirds of these deaths are associated with inappropriate feeding practices occurring in the first year of life. However, majority of the mothers fail to practice exclusive breastfeeding due to inadequate or lack of knowledge which poses a challenge.

Objective: To assess the Mother Support Group (MSG) program's contribution to improve the rate of Exclusive Breast Feeding (EBF) by changing Knowledge, Attitude, Practice (KAP) of Mothers in community level of Bangladesh.

Methods: A cross-sectional study was used. Data was collected from 200 breast feeding mothers in several community clinics of Chandpur District using the pre-tested structured questionnaire.

Results: Majority (98%) of the mothers had an adequate knowledge on exclusive breastfeeding starting from early initiation, the feeding of colostrum and providing complementary feeding. Health staff and the national television were the main source of information for the mothers on exclusive breastfeeding. However, in terms of practice, 20% of them did not exclusively breastfeed and had given additional feeds along

with breast milk with the assumption of insufficient mother's milk. Similarly, 13.5% of them had squeezed and thrown away the colostrum.

Conclusions: Despite mothers having good knowledge on exclusive breastfeeding, it was not practiced and followed. This study's findings indicate a gap between the knowledge and the actual practice of exclusive breastfeeding among breastfeeding mothers in Chandpur.

Keywords: Attitude; Exclusive breastfeeding; Knowledge; Practice.

I. INTRODUCTION

The nutrients of the breast milk are present in proper balance and are provided in bioavailable and easily digestible forms [1]. It also possesses remarkable immunological and anti-inflammatory properties that protect both mothers and children against various infections and diseases [2]. Hence, breastfeeding is considered as one of the most important factors for growth and development of infants. Breast-feeding offers tremendous health benefits to both child and mother. Breastfeeding protects the infants against allergies, sickness and obesity [3]; at the same time, it reduces the risk of having childhood infections e.g. ear infections and diseases e.g. diabetes and cancer [4, 5]. Globally, it was estimated that more than nine million children



under five years die annually and about two-thirds of these deaths are associated with inappropriate feeding practices occurring in the first year of life [6]. However, early and exclusive breastfeeding could prevent over 800,000 deaths (13% of all deaths) in children under five years. The promotion of breastfeeding knowledge leads to the promotion of attitude and subsequently to the improvement of their breastfeeding practices [7]. The existing knowledge, unawareness, socio-cultural beliefs and misconceptions are reported to influence breastfeeding practice among mothers [7]. An adequate breastfeeding knowledge, positive attitude and the best practices have the potential to save the lives of 1.5 million children under five years annually [8]. Every infant must be exclusively breastfed for the first six months of life as per the recommendation of the World Health Organization (WHO). Exclusive breastfeeding (EBF) means that the newborn infant is fed only breast milk and no other liquids (not even water) or solids are given, with the exception of oral rehydration salt solution, vitamins, mineral supplements or medicines [9,10]. The World Health Organization (WHO) recommended that an able mother should practice and maintain exclusive breast-feeding for first six months of her infant's life [9, 10]. An effective EBF coverage has been estimated to avert 13%–15% of deaths among children under five years of age especially in middle and low earning settings [11]. Some researchers reported that children who received EBF were in lower risk of having acute respiratory and gastrointestinal infections compared to children who did not receive EBF [12, 13]. Every infant must be exclusively breastfed for the first six months of life as per the recommendation of the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) [8]. Exclusive breastfeeding is giving of only breast milk without any additional foods or drinks, including water but with exception of vitamins and oral rehydration solution [14]. Mother's milk is an ideal nourishment containing nutrients for survival, growth and development in the first six months of life [15, 16]. It also builds the immune system of the baby and protects against gastro intestinal and acute respiratory infections [15, 16]. Those children who are partially breastfed or not breastfed at all are more at risk of dying due to diarrhea and other infections than exclusively breastfed babies [17, 18]. However, the actual practice of exclusive breastfeeding is confronted with a number of challenges and barriers like poor family and social support, lack of knowledge, social norms, mothers shyness, problems related to breast and barriers related to health services [19]. It was also found

that major reasons for poor health outcomes among children was mainly due to the poor practices and attitudes toward exclusive breastfeeding especially in developing countries [19,20,21]. Furthermore, to the best of our knowledge, no elaborate study has been conducted to determine the prevalence and associated factors influencing EBF nationwide. A recent study conducted on the prevalence of EBF in a rural sub-district in Bangladesh which showed a significantly lower prevalence of EBF (36%) [22] than the national figure (55%) [23]. Therefore, it is important to sort out the local factors that influence EBF in order to implement strategies and interventions that could speed up the government efforts in improving EBF trend among mothers having infants aged 0–6 months. Therefore, this study intends to assess the knowledge, attitude and practices of exclusive breastfeeding among breastfeeding mothers to develop appropriate program interventions and evidence-based policy decisions. The findings will enable identification of gaps in knowledge, attitude and practices related to exclusive breastfeeding practices and assist health care professionals to promote exclusive breastfeeding practice with a focused effort. Furthermore, as there is limited research on exclusive breastfeeding in Bangladesh, this study can be used as a benchmark for further studies.

II. MATERIALS & METHODS

A quantitative study with cross-sectional design was used to assess knowledge, attitude and practice towards exclusive breastfeeding among breastfeeding mothers from several community clinics of Faridganj, Chandpur Sadar and Matlab North of Chandpur district from January to June 2022. A total of 200 breast feeding mothers participated in this study. The mean age of the participants was 26.61 years and their age ranged from 15-45 years. All breast feeding mothers with infants less than six months during the study period were included in the study.

DATA COLLECTION

Data was collected using a pre-tested, structured questionnaire which was self-administered for literate participants and was conducted via a face-to-face interview for illiterate participants by the trained health workers. The questionnaire included socio-demographic characteristics of the participants, initiation and duration of exclusive breastfeeding and weaning practices. The questionnaire was validated by three experts using Rovinelli & Hambleton's three categories of ratings for the index of Item-



Objective Congruence (IOC) [24] and was further field tested before the study.

DATA ENTRY AND ANALYSIS

Data was checked for completeness, coded and double entered from the questionnaire into statistical software (SPSS version 20) and analyzed using descriptive statistics comprising of frequencies, percentages and measures of central tendencies.

MEASUREMENT OF VARIABLES

Knowledge was measured using a set of questions on exclusive breastfeeding especially on the duration and the initiation of breast feeding, definition and information on feeding the “first milk” or colostrum. Respondents who answered positively were assessed to be knowledgeable about exclusive breastfeeding. Attitude was measured using a set of questions that focused on the reactions and fulfillments of mothers during

exclusive breastfeeding. Respondents who answered in the affirmative were considered to have had positive attitude. Practice was measured by assessing response to questions that dealt with the conduct of exclusive breastfeeding. Those with positive responses were assumed to have had good practices of exclusive breastfeeding as detailed in the result section.

III. RESULTS

A total of 200 breast feeding mothers participated in this study. The mean age of the participants was 26.61 years and their age ranged from 15-45 years. More than 45% of urban and them were from rural areas (55%). The major occupational group was housewives (54.5%) followed by farmers (20.0%) and corporate and private employees (13.5%) and civil servants (12.0%). Nearly 49% of respondents had an education level of high school (grade 7-12). However, 20.5% of them had no formal education.

Table-1: Socio-demographic characteristics of study participants (N=200)

Variables	N	%
Age Category		
<15-25 years	104	52%
26-35 years	51	25.5%
35-45 years	45	22.5%
Residence Area		
Urban	90	45%
Rural	110	55%
Religion		
Muslim	92	46%
Hindu	68	34%
Other	40	20%
Educational level		
Secondary School	41	20.5
High School	98	49%
1st degree	61	30.5
major occupational		
Housewife	109	54.5%
Farmers	40	20.0%
Private Employees	27	13.5%
Civil Servants	24	12.0%

Table-2: Knowledge on exclusive breastfeeding among breastfeeding mothers (N=200)

breastfeeding among breastfeeding mothers	N	%
Breastfeeding soon after birth	150	75.0%
Less than one hour after the delivery	50	21.5%
Knowledge on exclusive breastfeeding		
Start breast- feeding when the real milk	3	1.5%
Complementary Food	197	98.5%
Before six months	2	1.0%
Started at six months	194	97.0%
Nine months or later	4	2.0%



Of the 200 breastfeeding mothers, 75.0% knew about immediate initiation of breastfeeding soon after birth. About 25.0% of them responded as initiation being less than one hour after the delivery. About 98.5% of the mothers had a knowledge on feeding the first milk “colostrum” and thought that has to be given to the baby soon after birth. However, 1.5% of them had no knowledge and thought that they need to throw it away and start breast-feeding when the real milk comes in. A total of 97.0% mothers knew that the complementary food should be started at six months, whereas 1.0% introduced it before six months and 2.0% stated it is to be given only at nine months or later. About 91.5% mothers had heard, seen and read about exclusive breastfeeding in the last one month and the main source of information was obtained from doctors and health workers (51.5%) followed by national television (24.5%). Other sources mentioned were neighbours, friends and families (5.5%), radio, posters, leaflets and books (9%). Very few of them cited newspapers and social media as a source. With regards to the actual duration of the exclusive breastfeeding, almost all (98.5%) knew that the baby should be exclusively breastfed till six months.

Attitudes and practices regarding exclusive breastfeeding among lactating mothers

Although 98.5% breastfeeding mothers reported having breastfed their child, only 20% of them had not exclusively breastfed. About 36.6% of them gave plain water followed by infant formula (12.5%), cow’s milk (9.5%), butter (7.5%), fruit juice and tea (4.5%), sugar and glucose (2.5%) and others local foods such as porridge and floor. It was found that 13.5% of them had squeezed and thrown away colostrum. Reasons for non-exclusive breastfeeding were because mothers had a feeling of producing insufficient breast milk for their babies (56.5%) and having to return for work before six months due to absence of six months maternity leave (22%). Some of the mothers (7.5%) gave additional feed when their children fell sick and when the child refused to drink even when well (4.5%). Very few mothers reported that due to problems related to the breast such as breast engorgement and nipple sores, they had to discontinue breastfeeding and started with the additional foods and drinks.

IV. DISCUSSION

This study showed that although mothers had an adequate knowledge on exclusive breastfeeding, their knowledge did not trans-

late to practice; thereby resulting in a big knowledge and practice gap. The findings were similar to a study conducted by Victor Mogre et al [24] where the attitude towards exclusive breastfeeding was positive and the knowledge was generally high but the practice was found to be lower than desired. The World Health Assembly (WHA) has set a global target in order to increase the rate of EBF for infants aged 0–6 months up to at least 50% in 2012–2025 [25]. Adherence to these guidelines varies globally, only 38% of infants are exclusively breastfed for the first six months of life [25, 26]. High-income countries such as the United States (19%), United Kingdom (1%), and Australia (15%) [27], have shorter breastfeeding duration than do low-income and middle-income countries. However, even in low-income and middle-income countries, only 37% of infants younger than six months are exclusively breastfed [28]. According to recent papers in the sub-Saharan Africa region, only 53.5% of infants in east African countries were EBF for six months [29], which is way below the WHO target of 90% [30]. A total of 200 breastfeeding mothers participated in this study. The mean age of the participants was 26.61 years and their age ranged from 15–45 years. More than 45% of urban and them were from rural areas (55%). The major occupational group was housewives (54.5%) followed by farmers (20.0%) and corporate and private employees (13.5%) and civil servants (12.0%). Nearly 49% of respondents had an education level of high school (grade 7-12). However, 20.5% of them had no formal education. The results of this study indicate that mothers with a high level of knowledge about the importance of exclusive breastfeeding know that only breast milk is nutritionally important for the baby in the first six months, the right time to give breast milk to the child within one hour after birth. This result was similar to the previous studies conducted in Ghana [31] and Brazil [32]. It has also shown that the majority of them knew about the actual duration of the exclusive breastfeeding. Results were similar to a study carried out by Maeza Mitiku Asfaw et al [33]. However, 20% of mothers did not breastfeed exclusively and had given additional feeds along with breast milk before six months of age. Mothers perceived that once the baby is born and as the child grows and increases in age, breast milk alone might not be sufficient to get the required nutrition for growth and development. In addition, about 98% of mothers knew the importance and necessity of feeding of first milk “colostrum” to the baby soon after the birth but 13.2% of them had squeezed and thrown away colostrum. Majority of the mothers knew about complementary feeding



that has to be started after six months since they heard, seen and read about the exclusive breastfeeding from doctors and health workers, national television and other sources. This is similar to a study conducted in Nigeria [34]. The finding from the Bhutan Multiple Indicator Survey, 2010 highlighted that the main source of information to mothers was through family and friends [35]. The reason why lactating mothers started foods or drinks apart from breast milk before six months was mainly because they assumed that mother's milk is not sufficient for their babies. The findings were similar to the studies conducted by 36. Shommo SA et al. in Saudi Arabia [36] but different from other studies [37, 38]. Another reason stated was mothers having to return to their work which is similar to the finding from this study in Saudi Arabia [36]. Health problems for both the baby and the mother was an additional reason for the early introduction of other feeds, which was similar to studies in Saudi Arabia and Ajman [36, 39]. Similar reasons were cited in the study conducted by Ruwei Li et al where the child's health issues and mother's health problems were stated to be reasons for adopting and preferring bottle feeding [40]. Mother's poor knowledge and negative attitude towards breastfeeding may influence their practices and constitute a barrier to optimizing. Hence, it is necessary that breastfeeding mothers should have a positive attitude, adequate knowledge and appropriate practices of breastfeeding.

V. CONCLUSIONS

This study found that there was an adequate level of knowledge among the breastfeeding mothers in community level of Bangladesh. However, there were gaps between the knowledge, attitude and their practice level. Mothers were aware that their babies need to be exclusively breastfed for the first six months, only 20% of the mothers started additional feeds such as plain water, milk, tea and juice before six months of age. Similarly, they knew that colostrum was supposed to be given soon after the birth but 13% threw it away instead of feeding.

VI. REFERENCES

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