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Original Article

Breastfeeding and Weaning of Children: Identifying the Practice-relevant Issues in an Urban Area of Bangladesh

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Abstract:

The initial six months of exclusive breastfeeding, followed by appropriate complementary feeding, are critical for children's optimal growth and development. Since the 1980s, numerous organizations in Bangladesh have been promoting breast feeding, yet age-old practices have not changed significantly. Still, approximately half of children in Bangladesh are not breastfed exclusively for six months and do not receive adequate complementary food. This study sought to identify the barriers and facilitators to implementing proper Infant and Young Child Feeding (IYCF) practices. A cross-sectional descriptive study was conducted at the Department of Pediatrics at Bangabandhu Sheikh Mujib Medical College, Faridpur, from February to June 2021. This study included sixty-six mothers with infants aged six to twenty-four months. Face-to-face in-depth interviews were used to collect qualitative data regarding the barriers and facilitators. Transcripts of interviews were translated, transcribed, and examined to determine the primary factors. The most prevalent factor was a lack of knowledge and experience with breastfeeding and supplemental feeding. In addition, contradictory feeding information from various sources and a lack of social support for pregnant and childbearing mothers with limited decision-making capabilities were significant obstacles. In contrast, mothers who received guidance from healthcare professionals before and after delivery and who were educated and received family support were more likely to follow the recommended practice. Interventions should be prioritized to encourage mothers to take timely antenatal and post-natal care and nutritional counseling during their visits. Educating and empowering them with adequate support from the family and society is essential.

Key words: Exclusive breastfeeding, Infant feeding practices, Barriers, Complementary feeding.

Introduction:

There is extensive evidence that initial six-month exclusive breastfeeding and then appropriate complementary feeding practices are vital for the optimal growth and development of infants[1-4]. The various antimicrobial substances and anti-inflammatory components of breast milk protect children against various childhood diseases and significantly reduces morbidities and mortalities[1,5-7]. The World Health Organization (WHO) recommends exclusive breastfeeding till the first six months of age, followed by nutritious complementary foods after six months[8]. Although numerous national and international projects have been promoting exclusive breastfeeding and proper complementary feeding practices, breastfeeding rates in many countries are hardly changing[9-11]. Since 1989, many programs are promoting breastfeeding in Bangladesh, but the rate of exclusive breastfeeding is hardly resistant to change[9,10,12]. WHO's Global Strategy for Infant and Young Child Feeding (2003) has been included in the national strategy of Bangladesh. However, it has been challenging to scale up proven approaches[12-13]. Bangladesh Demographic and Health Survey (2014 BDHS) reported that 55% of the children under the age of 6 months are exclusively breastfed, 27% of children receive a prelacteal feed, and complementary foods are not introduced in a timely fashion for all children[14]. Only 23% of children aged 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices in Bangladesh[14]. Clearly, there is a need to review the awareness program and determine what might be effective in helping women continue to breastfeed. This study aimed to understand the barriers and facilitators of optimal infant feeding practices in an urban area where the mothers have access to trained health care professionals, assistance to pregnant and newly delivered mothers, mass media, and legislation support to enable them to breastfeed properly.

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Understanding the barriers and facilitators is an essential first step toward preventing harmful feeding practices, and specific programs could be developed to rule them out.

Materials and Methods:

A descriptive, cross-sectional study was conducted at the Department of Pediatrics at Bangabandhu Sheikh Mujib Medical College Hospital, Faridpur (Formerly known as Faridpur Medical College Hospital), Bangladesh. The study period was five months (1/2/2021 to 30/6/2021). Mothers attending the hospital having a child aged between 6 months to 24 months were selected as study participants. Data were collected through face-to-face interviews. After obtaining informed oral and written consent, a semi-structured questionnaire was used to guide the interviewer in collecting data from the respondents. A total of 66 mothers who gave consent to participate were interviewed and included in the study. Collected data were rechecked and cleaned as per requirement.

The study contains both quantitative and qualitative data. From the quantitative data, mean, SD and frequency were calculated as per requirement. Qualitative responses were coded based on their importance, frequencies, and relevance, and further analysis was done to find out relationships. To analyze quantitative data, using Graph Pad Prism version 8.4.0 for Mac (Graph Pad Software, San Diego, California, USA) was used. For qualitative data analysis, ATLAS.ti Mac (Version 8.4.3) was used.

The protocol, informed consent form, and questionnaire were approved by the Ethical Review Committee (ERC) of Bangabandhu Sheikh Mujib Medical College, Faridpur.

Results:

Sixty-six mothers participated in this study. The mean age of the mothers was 24 years and had a mean of 6 years of schooling. Majority of them had a monthly income of 10,000-20,000 BDT ($120-$240 USD/month or $4-$8 USD/day). A quarter of them lived in a joint family, and they had a mean of 2 children. More than half of the children did not get exclusive breastfeeding for six months, 22% got prelacteal feeding, and only 53% got breastfeeding within 1 hour of delivery (Table I).

The qualitative analysis has resulted in 6 key themes that we classified as barriers and facilitators. The following are the key themes with exemplary quotations.

Table II: Table I: Demographic characteristics of the child and the family (n = 66)

Maternal and household characteristics	% or mean ± SD
Mother age (years)	24.2 ± 4.58
Mother education (years)	5.6 ± 2.53
Monthly income (BDT)	
<10,000	28%
10,000–20,000	52%
15,000	20%
Living in a joint family (%)	25%
Number of children	1.9 ± 0.96
Feeding practices	
Prelacteal feeding	22%
Breastfeeding within 1 h of delivery	53%
Exclusive breastfeeding for 6 months	46%
Duration of exclusive breastfeeding (months)	2.7 ± 1.57

Barriers to implementing recommended IYCF practices

Lack of knowledge and experience

Although most of the deliveries (61%) were done in hospitals or other health facilities, most (88%) did not enough scope for consultation regarding breastfeeding. One of the mothers who underwent CS said, I [mother] was very weak and ill after my operation. I barely could feed my child. I did not get to talk anything about feeding my child with the doctors. There were lots of patients and a few doctors. They were very busy all the time. Another mother who delivered a baby by vaginal delivery said, I was discharged the next day after my delivery. I was discharged before I knew it. My baby was not getting enough milk at home, so I brought formula milk for my child. One of my neighbors suggested it.

Most new mothers stayed at the hospital for a brief period, so they could not get appropriate feeding counseling in time. Again, most of them did not return to post-natal care (PNC), where doctors could evaluate the physical conditions of both mother and the child and counsel the mother regarding their feeding practices. Only 8% of them returned to the hospital for PNC. Also, many of them were unaware of the normal low-volume colostrum and began seeking alternatives.

For those, who became a mother for the first time, the situation was even more challenging due to limited or no prior experience. Also, as most of them lived in a nuclear family, their source for expert opinion from the elderlies was limited. They were unsure about the procedure, duration, and frequencies of breastfeeding. They were uncertain about the hunger cues of the baby,

which led them to over-feeding or underfeeding their offspring.

Around 10% of the mothers continued exclusive breastfeeding past six months. Approximately 13% of them started other semi-solid foods, mainly Suji (coarsely ground whole wheat) alongside breastmilk from 2 months for every meal. Some of them even provided cattle milk as daily meals.

Receiving contradictory information from various sources

Around 90% of the mothers reported conflicting information and advice from multiple sources, including family members, relatives, neighbors, and health workers. When the information from different sources was consistent, the mothers were more likely to follow it. However, when bits of advice were contradictory, they tended to follow the advice from the family members.

When the contradiction comes between the advice of a healthcare professional and the mother's family members, that is most challenging to navigate. However, it is often observed that most of the time, they follow the guidance of their family members as it is a cultural tradition. One mother said:

My mother-in-law is an experienced woman. She has raised several children like this; she would not listen to these modern medical talks, and so can't I. 22% of babies got prelacteal feeding mainly because the children were not getting enough breastmilk, and they thought the baby was hungry, so they provided warm water. Also, providing the baby honey before giving breastmilk is still a common culture. Only 46% of them maintained exclusive breastfeeding for 6 months. Many of them gave the child water as they thought the baby was thirsty. One mother explained:

I (mother) gave my child nothing but breastmilk and water for six months. At the age of 2 months, the baby was looking at us while we were drinking water, so my mother-in-law said that the baby was thirsty, and from then, we provided him (baby) warm water regularly. Seventeen out of 66 mothers (11%) reported that they were confused regarding the nutrient composition of the breastmilk with formula milk. As the advertisements routinely showed that their formula milk contained all essential nutrients, whenever they noticed any changing behavior of feeding pattern of the child, they promptly bought formula milk for the baby. Around 29% of the mothers preferred formula milk to breastmilk mainly because they thought they had insufficient breastmilk production. In one interview, one mother supported formula milk saying:

The doctor told me to provide breastmilk only. However, my baby was not getting enough milk. She [baby] was always hungry and cried a lot. In this situation, I had no alternative other than buying formula milk. Besides, I [mother] have seen on the TV that this milk is perfect for the growth and development of the child. The inconsistency of the information creates uncertainty about whom mothers will follow and worries about their ability to care.

Limited social support

Most mothers (64%) complained that they did not have enough social support to look after, support, or counsel them during or after child birth. About 75% of mothers lived in nuclear families, and many of the dependable family members were not with them, among those who lived in a joint family, very few received social and emotional support. Instead, the extra family responsibilities in the extended family, the limitations of decision-making power, and the pressures of family quarrels. The burden of maintaining all family chores and the baby was stressful for the new mothers, who mainly depend on other family members to make decisions about feeding the child. Around 32% of the mother were employed. So, they had to rely on the housemaid or other family members to care for the baby. One mother expressed her stress:

It was tough for me to maintain the proper care of my child and the full-time job. Neither could I bring my baby to my office, nor could I leave her at home alone. So, my mother came to take care of the baby, but she was getting old and could not maintain everything. Also, during my absence, my mother fed the formula milk as she had no other alternative.

Less decision-making efficacy

More than 56% of mothers said they lacked confidence in decision-making in child-raising. They often sought approval of decisions in every step of pregnancy, delivery, breastfeeding, and complementary feeding. Elderly members of the family, mainly the mother-in-law, were the final decision-maker. Mothers feared that if anything went wrong and the child became ill, she would be blamed for the illness and for not following the decisions of the elderly. So, despite strong advice on exclusive breastfeeding and complementary feeding from the healthcare professionals, the mothers often listened to the advice of their mothers-in-law.

Mothers tend to adhere to the one item the child likes most during the complementary feeding period. Usually, they provided mashed potato or Suji recommended by their in-law's house and did not take the risk of trying anything new. One mother said:

I know doctors advise for giving vegetables and other foods. But my child did not like them. But he likes to eat Suji very much. So, my mother-in-law said that there was no harm. I did not argue with her because she knew better.

In almost half of the cases, the mother-in-law was the final decision maker regarding the family meals. Also, other family members sometimes brought fast food and unhealthy snacks for the children that the children like very much, but the child's mother could not argue not to provide such snacks. One mother explained:

Once my father-in-law brought potato chips for my baby, and he (child) liked it very much. Since then, whenever my father-in-law went to market, he got my child potato chips and chocolate. He brought them so much love that I could not argue that they were not healthy.

Although most mothers knew that processed and fast foods were unhealthy for their children, mothers felt uncomfortable educating their elders. The dignity of the mother in the family and the fear of disrespecting the adults had gone beyond the ability to implement the nutritional recommendations of the experts.

Facilitators in implementing recommended IYCF practices

Guidance from the professionals before, during, and after delivery

Approximately 22% of mothers who went to ANC and PNC usually received guidance from healthcare professionals regarding infant and child feeding. Such mothers had a higher incidence of adhering to the recommendations of the experts. Mothers under regular ANC knew their health conditions beforehand and were prepared early for all possible situations. One mother who delivered a preterm baby by CS for eclampsia said:

I had high blood pressure and developed convulsions after seven weeks of pregnancy. So, I had to undergo an operation [CS] early before my EDD. The weight of my baby was very low, and I did not have enough breastmilk. But the doctors ensured my baby was not in danger and provided me some medications to increase my breastmilk production. During this period, I did not give anything else to my child, and my family obeyed the doctors' advice.

Another mother explained:

After my delivery, I did not have enough breastmilk. So many of my relatives told me to provide the child with formula milk. But I went back to the hospital and explained my problem. The doctor assured me not to worry, provided me with some medications, and told me not to discontinue breastfeeding. I was relieved, and within a few days, my breastmilk production was adequate for my child.

Assessment of the condition and counseling with a professional can empower mothers in trying recommended nutritional methods for optimal growth and development of the child.

Personal self-efficacy and empowerment

Nearly 14% of women with higher educational levels and those working full-time had higher self-confidence and were strict to the decision they took without the influence of the other family members. Mothers with higher education were more likely to seek options from the health care professionals than other family members and neighbors regarding their baby's nutrition. One mother explained her situation:

Many people around me advised many things. But I knew what was best for my child, and I was not afraid to argue with them as it was a matter of the wellbeing of my child. So, whenever I was confused, I made an appointment with a doctor and explained my problems. I always followed their advice.

Such mothers prioritized their children's nutrition, and most of them maintained exclusive breastfeeding for 6 months with appropriate complementary foods. These mothers were empowered enough to stand against the pressure of the unsupportive family members and community.

Family support

More than 71% of mothers who went to a maternal home during their pregnancy period and stayed there after delivery reported having more support from their family than others. One mother explained,

I did not have to worry about doing any other chores at home. So, I could only focus on my baby. I could adequately breastfeed her (child) and could try different homemade items after six months.

Also, working women in the extended family got emotional support after the delivery. During this period, they could reliably leave their child at home and ensure that their child's nutrition will be taken care of.

Mothers who received family support could exclusively breastfeed for up to 6 months, introducing solid foods at appropriate times, providing a variety of foods, and continuing to reintroduce recommended foods even if the baby initially refused. These mothers also avoided junk food for their children. A supportive family played a positive role when the mother lacked experience orhad low confidence in her child's ability to take care of her.

Discussion:

Our study found a web of complex factors influencing the implementation of IYFC guidelines. Lack of knowledge, experience and social support are some of the main barriers. On the other hand, conflicting information from different sources and a lack of empowerment prevent the mothers from making necessary decisions[14-16].

Mothers who went to ANC regularly had better knowledge and preparedness than others. As most hospitals are overcrowded, breastfeeding consultation after delivery is rare, and mothers who did not take ANC leave the hospital with incomplete knowledge of their child feeding[17]. Research has shown that women should receive information regarding proper IYCF practice in the antenatal period through ANC visits[15,16,18]. Mothers who did not get enough counseling and had difficulty producing breastmilk were more likely to divert from the recommended IYCF practices. Often conflicting information from various sources interrupted their decision-making abilities[19]. Uniform information and advice from all sources are essential for an expected feeding practice. In this regard, expanded interventions need to be conducted to update the traditional knowledge and cultures.

Wide spread advertisement of formula milk and other energy drinks influences the discontinuation of exclusive breastfeeding[20]. Also, the attractive packaging of processed foods and beverages encourages the family members and community to bring them as a treat to the children, and the mother can hardly argue with them not to. As a result, these unhealthy snacks become a part of their regular diet[21]. These unhealthy drinks and diets may pose another risk of developing unhealthy food preferences of the children later in life and could lead to stunting or over-weight children[15]. Several studies have reported that proper complementary feeding practices can successfully address this issue[22-24].

However, educated mothers or mothers who got support from their families were more likely to maintain the proper IYFC guidelines. Maternal education played a vital role in child-raising, including their feeding practices[18,25]. In addition to that, a supportive family environment can facilitate optimal neonatal and child feeding practices.

Limitations

This study was conducted in a single facility with limited participants due to time and resource limitations. Also, due to the COVID-19 pandemic, face-to-face interviews were challenging, maintaining all the social distancing procedures.

Conclusion:

Our findings suggest that programs that empower mothers and other family members with uniform knowledge of breastfeeding and complementary feeding are necessary. Additionally, timely ANC and PNC should be ensured for all mothers with proper counseling regarding IYCF guidelines during the visits.

Recommendations

1. Compulsory inclusion of breastfeeding counseling during prenatal visits
2. Provision of counseling prior to delivery by a trained counselor
3. Posting counselors in hospitals so that mothers/families can seek advice whenever they need it, whether in the hospital or at home.
4. Strict implementation of breastfeeding-related laws.
5. Promoting breastfeeding through mass communication and social media.

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Conflict of interest

Researchers of this study declare that they have no conflict of interest.

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