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Mother's Knowledge and Attitude Towards Complementary Feeding Practices at the South-Western Region of Bangladesh

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Abstract

Background: In developing countries like Bangladesh, limited knowledge of mothers on Complementary Feeding (CF) practices lead malnutrition among under two years old babies which hamper their proper physical and mental growth.

Objective: This study was designed to assess the knowledge and attitude of mothers towards complementary feeding practices.

Materials and methods: This descriptive and exploratory study was conducted from August 2019 to February 2020. A total number of 400 children less than 24 months of age were studied using a standard pretested and pre-validated questionnaire. Purposing sampling method was used to collect data from Jashore Child Hospital, Bangladesh (The south-western region of Bangladesh). Collected data were analyzed by using computerized methods of analysis (SPSS version 16 and Microsoft Office Excel).

Result: Among the selected sample of 400 babies, 52.5% were female & 47.5% were male. About 95% mothers started complementary feeding timely at 6 completed months of age and about only 5% mothers started early before 6 months. Most common complementary foods were carbohydrate rich cooked suji, barley , powdered milk and sugar. Only 15% mother gave khichuri as a complementary food. Bottle feeding was still higher and it was 36% cases. Mother's knowledge about importance of hygiene in complementary feeding was satisfied. About 70% mothers think that baby's immune system is less developed, so they attack by infection and 30% mothers believe babies are vulnerable to infection. The type of hygiene followed by the mothers were wash hands before preparing meals for the baby maintained by 50%, 2% mothers wash floor, kitchen area with hot, soapy water and 48% mothers wash babies hand when they eat by himself/herself. Some complications of infants were reported who had been given complementary food before 6 months. About 10% babies were suffered from fever, 35.8% babies were suffered digestion problem and 54.2% didn't suffer any complication. We also found that most of the mothers like to give fresh cooked foods to the babies, only 10% mothers like to keep baby foods in refrigerator.

Conclusion: This study showed that the trend of complementary feeding is changing positively. But still all those practices should be improved. Problems observed due to poor knowledge on feeding practices and low education and socio-economic level of mothers. There is the need to promote optimal feeding practices among mothers through different approaches like awareness build, demonstration and build consciousness.

Keywords: Complementary feeding; Malnutrition; Infection; Complementary foods; Mothers

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Introduction

The early stages of a child's life requires an optimal supply of energy and nutrients to the body when all parts of the infant are growing physically, mentally and socially [1-3]. Balanced supply of nutrients is highly required to prevent malnutrition [4], which can affect the health and development of the child, and impairs the intelligence, educability and productivity of the baby. It also leads to a high risk of chronic non-communicable diseases in the later life of the babies [4-5]. Introduction of safe and nutritious foods at about 6 months of age in addition to Breast Feeding (BF) is referred to as Complementary Feeding (CF) [6]. According to WHO/UNICEF malnutrition is responsible, directly or indirectly, for over half of all childhood deaths. Infants and young children are at increased risk of malnutrition from six months of age onwards, when breast milk alone is no longer sufficient to meet all nutritional requirements and complementary feeding needs to be started [7]. Cultural practices, beliefs and knowledge of parents regarding appropriate practices influence CF [8]. In developing countries like Bangladesh, inadequate knowledge on CF is one of the main reasons for malnutrition [9]. Knowledge, attitude and practice of mothers on infant and young child feeding in the early stages of child's life are very important for the child health, growth and development [10-14]. Complementary foods given to infants and young children in Bangladesh are often nutritionally inadequate and unsafe, leading to malnutrition [15-17]. This study was conducted to find the reasons behind the inadequate knowledge and practice of mothers about complementary feeding in the south-western region of Bangladesh. We have observed that at present the rate of knowledge and practice is increased comparing to past time but still now we can't achieve our goal. Training program in the Govt. and non-Govt. sector will contribute to the implementation of strategy on knowledge and practice complementary feeding through capacity development beyond health systems of Bangladesh.

Till date very few studies have been done to help mothers with low incomes at Bangladesh in transitioning their infants to complementary foods. The available interventions aim at nutritional knowledge enhancement; rather than developing the right attitude and skills to improve caregiver's responsiveness, feeding styles and practices [18]. This qualitative study was necessary to evaluate their knowledge on healthy complementary feeding; identify factors contributing to the poor compliance to complementary feeding guidelines and hence come up with an appropriate way of bridging these gaps.

Materials and Methods

Study area: The study was conducted in Jashore Child Hospital, Bangladesh. This hospital was chosen for data collection because Jashore is the biggest and oldest city in Bangladesh that represents the south-western region of the country.

Study design: The study was cross sectional in design and descriptive data related to the objectives were gathered.

Study period: This study was conducted for a period of 6 months starting from August-2019 to February-2020.

Study population: The study population was child 0 to 24 months came to the child hospital for regular checkup and treatment.

Sample size: 400 babies were selected purposively for interview.

Questionnaire development: A paper-based questionnaire was developed according to the recommendations of the complementary feeding knowledge and practice in mothers.

Data collection technique: A simple questionnaire was used for the data collection by the investigator himself. Data were collected by face to face interview.

Data analysis: Data were analyzed in the computer, with the help of software SPSS program.

Results

Figure 1 presenting the percentage of male and female respondent babies. It mentioned that most of the babies were female within 400 babies.

Figure 2 shows the age group of the babies in months. Here, majority of the babies age were between 6-12 months, then 32% were between 13-18 months, 20% were between 19-24 months within 400 babies.

Figure 3 shows the percentage of mother's knowledge about starting age of complementary feeding. Almost all the mothers started complementary feeding at 6 months.

Figure 4 shows the complications of starting complementary feeding before 6 months. Most of the babies didn't suffer from any complication but 10% babies were suffered from fever and 35.8% babies were suffered from digestion problem.

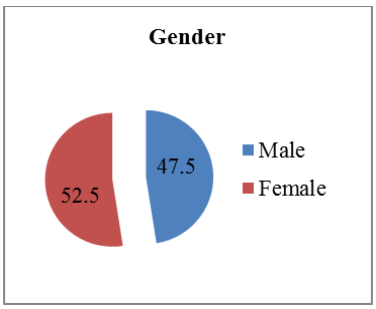

Figure 1 Distribution of respondent babies by gender (n=400).

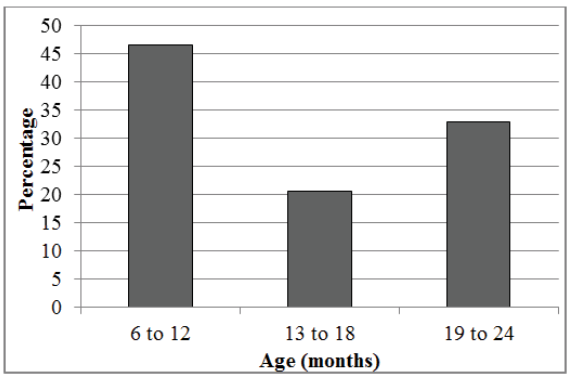

Figure 2 Age group of respondent babies (N=400).

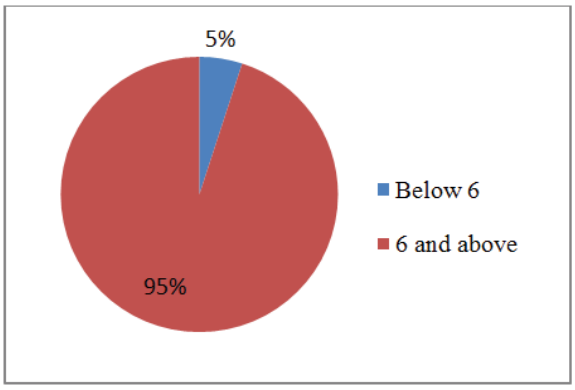

Figure 3 Age (month) of initiation of complementary feeding (n=400).

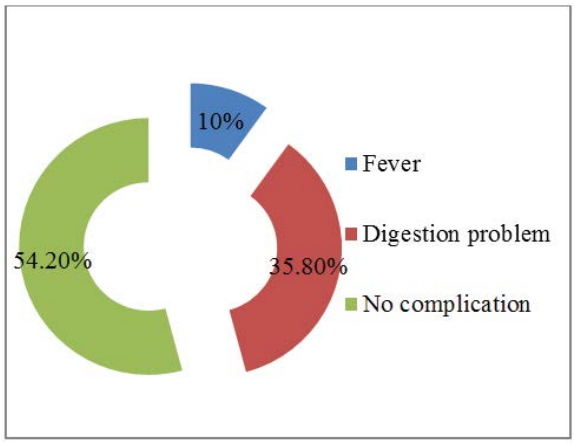

Figure 4 Complications of starting CF before 6 months.

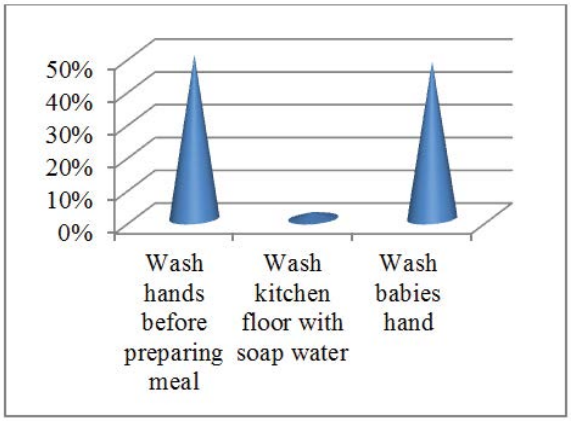

Figure 5 Types of hygiene practice among mothers.

Table 1: Types of first complementary foods (n=400).

CF	Frequency	Percentage
Khichdi	60	15
Suji	116	29
Barly	80	20
Bottle feeding	144	36
Total	400	100

Table 2: Percent distribution of mothers about the importance of hygiene during CF.

Importance of hygiene during CF	Frequency	Percentage
Babies immune system is less developed	280	70
Babies tummies are vulnerable to infection	120	30
Total	400	100

Table 3: Percent distribution of mothers about their practice of food storage.

Store foods safely	Frequency	Percentage
Store foods in refrigerator	10	4
Don't reheat foods more than once	3	1.2
If baby leave food in a bowl after a meal, throw it away	237	94.8
Total	250	100

Figure 5 shows the type of hygiene followed by the mothers. Wash hands before preparing meals for the baby were maintained by 50% mothers, 2% mothers were wash floor, kitchen area with hot, soapy water and 48% mothers were maintained hygiene when baby eat himself/herself wash his hand before eating.

Table 1 shows the knowledge about foods commonly given as a complementary feeding. Maximum mothers gave suji (granulated wheat/semolina), barley, khichdi (salty porridge) as a complementary foods. About 36% mothers gave bottle feeding.

Table 2 presenting the importance of hygiene in complementary feeding. About 70% mothers think babies immune system is less developed, so they attack by infection easily and 30% mothers believe babies tummies are vulnerable to infection'.

Table 3 presenting the practices of food storage. It shows most of the mothers discard baby foods away if baby leave any in the bowl after a meal. About 4% mothers were cooling foods quickly and store them in the fridge, 1.2% mothers didn't reheat foods more than once.

Discussion

Childhood feeding practices contribute to either risk of obesity or under nutrition among children. Transition from pure breast milk to solid foods poses a challenge to many caregivers as they receive misinterpreted information from peers and family members with different cultural basis [19]. Physical and mental development of children can be hampered by poor nutrition during childhood which may lead to a greater risk of casualty from communicable diseases or additional critical infections which ultimately end in a bigger economic burden of a society [20,21].

This study was carried out in the Jashore Child Hospital, Bangladesh (The south-western region of Bangladesh) after taking permission from the hospital authority. It was conducted for a period of six months. The desired data were collected and promptly recorded using structured and semi structured questionnaire interview and direct observation. There were some significant findings of this study. The study was assessed to give

a situation of complementary feeding of children 6-24 months. Among 400 babies, 52.50% (210 babies) were female & 47.50% (190 babies) were male. The age group of the babies categorized in months. About 46.5% babies were between 6-12 months, 20.7% were between 13-18 months and 32.8% were between 19-24 months within 400 babies. There are some complications of starting complementary feeding before 6 months. About 10% babies were suffered from fever, 35.8% babies were suffered digestion problem and 54.20% didn't suffer any complication.

The knowledge about foods commonly given as a complementary feeding, maximum caregiver's gave suji (granulated wheat/ semolina), barley, khichdi (salty porridge) as a complementary foods. About 36% mothers gave bottle feeding. About 70% respondents think 'Baby's immune system is less developed, so they attack by infection easily' and 30% respondents think 'their tummies are vulnerable to infection'. Wash hands before preparing meals for the baby were maintained by 50% mothers, 2% mothers were wash floor, kitchen area with hot, soapy water and 48% mothers were maintained hygiene when baby eat himself/herself wash his hand before eating.

Conclusion

To reduce the burden of malnutrition among children, a joint effort by the government, nongovernmental organizations and the community is absolutely necessary in an equitable manner to improve the nutritional knowledge of mothers. A mother who knows the importance and practice of complementary feeding can give a physically and healthy child to the nation. The results of this study confirm that there the trend of complementary feeding is changing positively in Bangladesh. But still all those practices should be improved. Problems observed due to poor knowledge on feeding practices and low education and socio-economic level of mothers. There is the need to promote optimal feeding practices among mothers through different approaches like awareness build, demonstration and build consciousness.

References

1 Kumar L, Shahnawaz K, Varma G, Choudhary SK, Gupta A, et al. (2014) Knowledge, Attitude And Practices of Nourishing Mothers About Breast Feeding, Attending Urban Health Centre: A Cross-Sectional Study From Kishanganj, Bihar. J Evol Med Dent Sci 3: 117-119.

2 Salama A, Elhawary D, El-Nmer (2014) Nutritional knowledge, attitude, and practice of parents and its impact on growth of their children. Menoufia Med J 27: 612.

3 United Nations Children's Fund (UNICEF). Improving Child Nutrition the Achievable imperative for global progress. 2013, New York, US.

4 Sawaya AL (2006) Malnutrition: long term consequences and nutritional recovery effects. Estudos Avançados 20: 147-158.

5 Burns CE, Brady MA, Dunn AM (2000) Pediatric Primary Care, A Hand Book for Nurse Pediatricians 2000, (2nd edn.) New york: Elsevier.

6 Imdad A, Yakoob MY, Bhutta ZA (2011) Impact of maternal education about complementary feeding and provition of complementary foods on child growth in developing countries. BMC Public Health 11.

7 WHO/UNICEF. Complementary feeding of young children in developing countries: A review of current knowledge. WHO/ NUT/98.1 Geneva: World Health Organization, 1998.

8 Bhandari N, Mazummder S, Bahl R, Mortines J, Black RE, et al. (2004) An educational intervention to promote appropriate complementary feeding practices and physical growth in infant and young children in rural Haryana. J Nutr 134: 2342-2348.

9 Dewey KG, Brown KH (2003) Update on technical issues concerning complementary feeding of young children in developing countries and implications for intervention programs. Food and Nutrition Bulletin 24: 5-28.

10 Kliegman RM, Bonita, Stanton, Geme JS, Schor NF, et al. (2011) NALSON text book of Pediatric 2011, 19. Sounders; USA: Philadephia.

11 United Nations Children's Fund (UNICEF) Indicators for assessing infant and young child feeding practices, 2010, 1-52.

12 World Food Program (WFP) Emergency Food Security Assessment Handbook, 2009, 296.

13 WHO. Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition. 2014.

14 WHO & UNICEF (2003) Global strategy for infant and young child feeding. Report 1-30.

15 BBF. KAP Baseline. Bangladesh Breastfeeding Foundation, Dhaka, Bangladesh. 2004.

16 BDHS. National Institute of Population Research and Training (NIPORT), Mitra and Associates, and ORC Macro, 2005. Bangladesh Demographic and Health Survey, 2004. Dhaka, Bangladesh and Beltsville, Maryland [USA].

17 BBS/UNICEF. ProgotirPathey 2003 On the Road to Progress. December 2004 (report from MICS 2003). Bangladesh Bureau of Statistics and UNICEF. Dhaka,

18 Horodynski MA (2011) Healthy babies through infant-centered feeding protocol: an intervention targeting early childhood obesity in vulnerable populations. BMC Public Health 11: 868.

19 Wafula NC, Rajula ER (2016) Assessing the cargiver,s knowledge and attitude towards complementary feeding practices of the under fives in Kenya national Hospital. East Afr Med J 93: 17-21.

20 Chen LC, Chowdhury A, Huffman SL (1980) Anthropometric assessment of energy protein malnutrition and subsequent risk of mortality among preschool aged children. Am J Clin Nutr 33: 1836-1845.

21 Bardosono S, Sastroamidjojo SL (2007) Determinants of child malnutrition during the 1999 economic crisis in selected poor areas of Indonesia. Asia Pac J Clin Nutr 16: 512-26.