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INFANT AND YOUNG CHILD FEEDING PRACTICES IN SELECTED RURAL COMMUNITY

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Abstract: Optimal infant and young child feeding practices of mothers are important for growth and development of children. A descriptive cross sectional study was carried out to assess status of infant and young child feeding practices by the rural mothers of Mohimaganj union in Gaibandha district, Bangladesh with a sample size 377 during the months of January 2016 to December 2016. Face to face interview was done among the 377 mothers who had child (0-3) years of age through semi structured questionnaire. Out of 377 children, 52% were female and 48% were male and 5.8% respondents were illiterate, 13% respondent's husband were illiterate. The proportion of infant with early initiation of breast feeding was 77.5%, exclusive breast feeding was 38.7% and continued breast feeding was 90.7%. The proportion of colostrum feeding were 97.10% and only 2.90% practiced pre lacteal feeding. The proportion of bottle feeding was 40.6% and age of initiation of bottle feeding was 31.85% at 6 months of age. The study showed that 86.2% mothers have knowledge about complementary feeding, 81.6% mothers practiced complementary feeding and 6.81% mothers practiced early initiation of complementary feeding. There is an urgent need for more programs aimed at promoting infant and young child feeding as well as educating health personnel and local public.

Keywords: pre-lacteal feeding, colostrum, early initiation of breast feeding, exclusive breast feeding, continued breast feeding, complementary feeding, Sustainable development goals, health education and promotion, patient education and safety

Introduction

Appropriate feeding practices are essential for the nutrition, growth, development and survival of infant and young children. These feeding practices known collectively as infant and young child feeding practices include breastfeeding and complementary feeding (National strategy for IYCF in Bangladesh, 2007).

To reduce infant mortality and ill health, WHO recommends that mothers first provide breast milk to their infant within one hour of birth referred to as early initiation of breast feeding (WHO, 2014).

Breast feeding till 6 months of child after birth exclusively not even water termed as exclusively breast feeding and initiate other nutritious foods besides breastfeeding from 181 days of child is termed as complementary feeding. Continued breast feeding till six months, accompanied by sufficient quantities of nutritionally adequate, safe and appropriate solid semi solid and soft food also helps in ensuring good nutritional status and protects against illnesses (Cai X, Wardlaw T, Brown DW, 2012).

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Globally malnutrition is responsible for nearly 45% of all deaths in children under five and around 3.1 million deaths in children in this age group annually (Maternal and Child Nutrition Study Group. (Maternal and child nutrition: building momentum for impact. (Lancer, 2013). In Bangladesh child malnutrition is a major public health problem .malnutrition is responsible directly or indirectly for about one half of the 343000 deaths that occur usually among under 5 children which are often about three quarters of these deaths which are often associated with inappropriate feeding practices (Black, et al., 2003).Infant and young child nutrition need utmost attention of scientists and planners for the very simple reason that growth rate in the early years of life is maximum and infant and young child feeding (IYCF) practices comprising breastfeeding as well as complementary feeding have major role in determining the nutritional status of children. Feeding practices of infants are chief determinants of future physical and mental well- being because of rapid growth and development of tissues during the first year of life.

Health status of child is immensely affected by the breastfeeding and complementary feeding practices. Childhood under nutrition is quite common in low- and middle-income countries and it is one of the contributing factors for child mortality. It has been estimated that around the globe about 2.1 million deaths in children less than 5 years of age occur just because of wasting, stunting and intrauterine growth restriction [Imdad A, Yakoob M, Bhutta Z. Impact of maternal education about complementary feeding and provision of complementary foods on child growth in developing countries. BMC Public Health.2011; 11(Suppl 3): S25.].

Bangladesh has a strong culture of breastfeeding. Almost all children (98%) are breastfed at some time in their lives and over 80% of children are still breastfed at 20-23 month of age (BDHS, 2004). However, many aspects of infant and young child feeding are far from optimal. The initiation of breastfeeding is often delayed, with less than one in four infants (24%) put to the breast within an hour of birth (BDHS, 2004).

While colostrum feeding has improved in the past decade (87%), the traditional practice of giving pre-lacteal feeds (48%) to the newborn has not (BBF, 2005). Only 42% of infants aged less than six months are exclusively breastfed (BDHS, 2004) because other liquids and complementary foods are given too early. Complementary feeding can also begin too late; almost one-third (29%) of children aged 6-9 months do not receive any solid or semi-solid foods (BDHS, 2004). Over one in five (22%) of infants aged under 6 months and 27% of infants aged 6-9 months are bottle-fed (BDHS, 2004).

The consequences of inappropriate feeding practices in early childhood are major obstacles to the government's efforts towards sustainable socioeconomic development and poverty reduction. In addition, the Millennium Development Goals (MDGs) will not be achieved without action to reduce the rate of malnutrition in infants and young children. Appropriate feeding contributes directly to achievement of MDG 1 (eradicate extreme poverty and hunger), MDG 4 (reduce child mortality), and to the six other MDGs. Recent research has shown that under-five mortality can be reduced by 13% with optimal breastfeeding and a further 6% with optimal complementary feeding (Jones et al, 2003).

Infant and young child feeding requires both advocacy and behavior change. Advocacy is needed to keep infant and young child feeding high on the public health agenda and obtain proactive support for infant and young child feeding among leaders at all levels, including local elites, religious leaders, government officials and political leaders. Behavior change will focus on the actions that need to be

taken by a mother, her family, her employer, community and many others in support of breastfeeding and complementary feeding practices that will best serve the nutritional needs of infants and young children (National strategy for IYCF in Bangladesh, 2007).

Objectives

1. To assess the infant and young child feeding practices in selected rural community.

Materials and Methods

This cross-sectional descriptive study was conducted from January 01 to December 31, 2017 at Mohimaganj union of Gaibandha District, Bangladesh which were selected purposively. Study population was the mothers having child 0-3 years of age,who were willingly to participate in the study. A total of 377 respondents were included in this study by purposive sampling. A pre-tested semi-structured questionnaire was used to collect data through face to face to interview. Before taking interview verbal consent and informed written consent was taken from the participants. Collected data were edited, processed and analyzed by using the SPSS version 23.

Results

Among 377 respondents, majority of the respondents 157(41.6%) were 21-25 years age group, 114(30.2%) were 26-30 years age group, 83(22%) were 18-20 age group and 19 (5%) were 31-45 years age group. Only 4(1.1%) respondents were 34 and above age group. The mean age of the respondents were 24.31 years, SD were ± 4.16 years.

Table 1. Distribution of the children by age

Children age group	Frequency(n)	Mean ± SD
0-6 months	60(15.9%)	13.23 ±10.36
7-12 months	62(16.4%)	
13-24 months	107(28.4%)	
25-36 months	148(39.3%)	

Table 1 shows the age of the children that mentioned by mothers/respondents were as follows, the majority of the children 148(39.3%) were between (25-36) months and (13-24) months represented 107 (28.4%) and the (7-12) months included 62(16.4%). The least was 60(15.9%) for (0-6) months. The mean ages were 13.23 months and SD were ± 10.36.

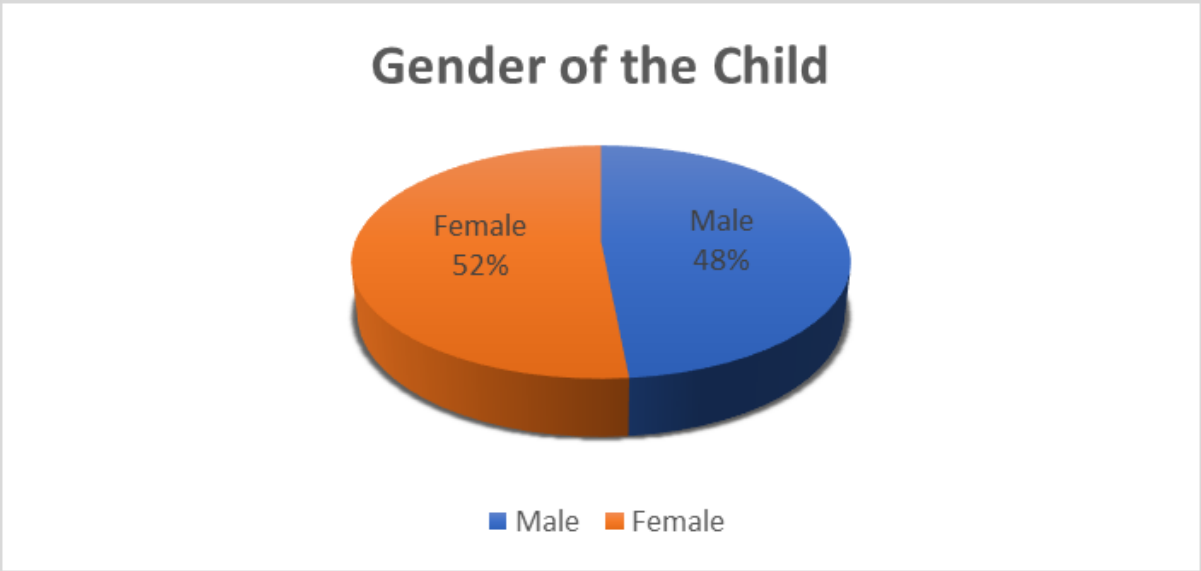

Figure no 1: Distribution of the children by gender.

The figure shows that out of 377 respondents 52% had female children and 48% had male children.

Table no 2: Distribution of the respondents by pre lacteal feeding of the baby

. Pre-lacteal feeding of the baby	Frequency(n)
No	366(97.1%)
Yes	11(2.9%)

Above table shows that, among 377 respondents, majority of the respondent 366 (97.1%) did not give pre lacteal feeding to their baby and they fed colostrum after birth. only 11 (2.95%) gave pre lacteal food and they used infant formula for their baby.

Table no 3: Distribution of the respondents by early initiation of breast feeding.

Table no 3: Distribution of the respondents by early initiation of breast feeding. Early initiation of breast feeding	Frequency(n)
Within 1 hour	292(77.5%)
After 1 hour	85(22.5%)

Table no 3 shows that 292 (77.5%) respondents had given breast milk after birth within 1 hour and 85(22.5%) respondents had given breast milk after 1 hour.

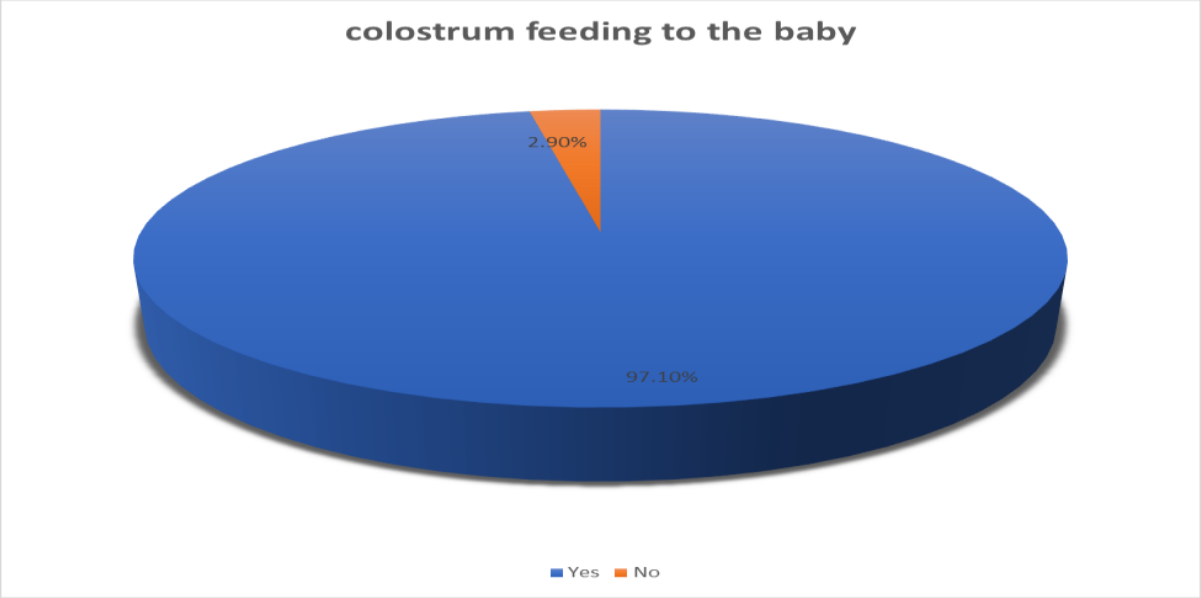

Figure no 2: Distribution of the respondents by feeding colostrum to the baby.

Table no 4: Distribution of the respondents by exclusive breast feeding.

Early initiation of breast feeding	Frequency(n)
Within 1 hour	292(77.5%)
After 1 hour	85(22.5%)

Above table shows that among 377 respondents, majority of the respondent 231 (61.5%) did not give only breast milk to their baby up to 6 months and only 146(38.7%) respondents practiced exclusive breast feeding to their baby.

Table no 5: Distribution of the respondents by knowing about definition of complementary feeding.

Define complementary feeding	Frequency(n)
Yes	325(86.2%)
No	52(13.8%)

Above table shows that among 377 respondents 325(86.2%) had knowledge about definition of complementary feeding and only 52(13.8%) had no knowledge about definition of complementary feeding.

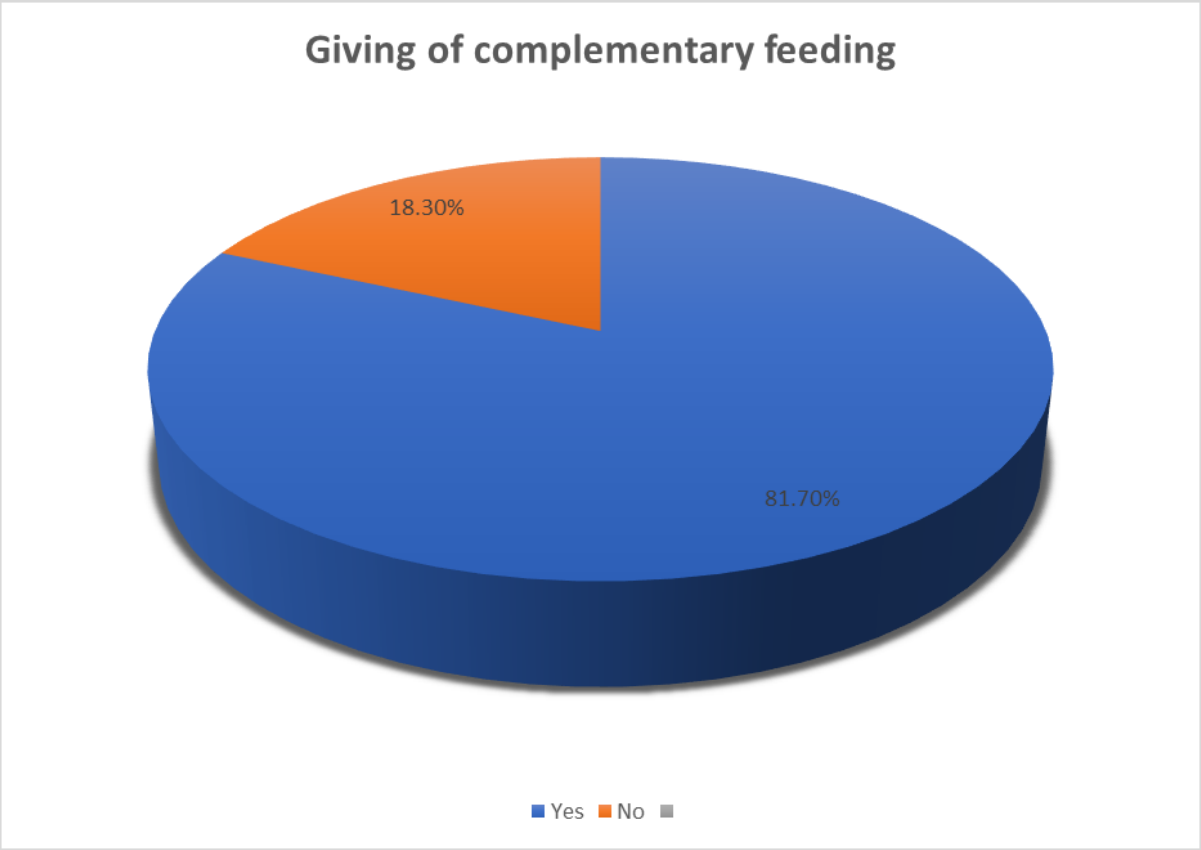

Figure 3: Distribution of the respondent by giving of complementary foods

Above figure shows that majority of the respondents 81.70% had given complementary foods to their baby and only 18.30% did not give complementary foods.

Table no 6: Distribution of the respondents by continued breast feeding

Continued breast feeding	Frequency(n)
Yes	341(90.7%)
No	36(9.3%)

In this study among 377 respondents majority of the respondents 341(90.7%) practiced continued breast feeding and only 36(9.3%) did not practice continued breast feeding.

Discussion

Early initiation of breast feeding, exclusive breast feeding for six months and timely introduction of complementary feeding are essential to achieve the sustainable development goal 1 and 4, which address child malnutrition and mortality. This cross sectional study revealed that among 377 children, age of the children that mentioned by mothers/respondents were as follows, the majority of the children 148 (39.3%) were between (25-36) months and (13-24) months represented 107 (28.4%) and the (7-12) months included 62 (16.4%). The least was 60 (15.9%) for (0-6) months. It shows that out of 377 respondents 52% had female children and 48% had male children.

In this study among 377 respondents, majority of the respondent 366 (97.1%) did not give pre lacteal feeding to their baby and they fed colostrum after birth. only 11 (2.95%) gave pre lacteal food and they used infant formula for their baby. Other study conducted in a rural area of West Bengal, India reported 89.5% mothers agreed that colostrum should be offered to the new born: but in practice 23.7% and large proportion of mothers at 42.1% had given pre lacteal feeds to the baby, mainly in the form of plain water, honey, jiggery water and sugar water (N Das et al, 2013).

The study showed out of 377 respondents' majority of the respondents 292 (77.5%) had given breast milk after birth within 1 hour and 85(22.5%) respondents had given breast milk after 1 hour. only few respondents could not feed breast milk of their baby after birth for causing feeding abnormality and illness of the mother. Another study conducted in selected rural areas of Bangladesh reported around 30.7% mother-initiated breast feeding with in 1 hour and about 36.7% mothers did within 2-3 hours. (Dr Jesmin Akhter,2015).

Among 377 respondents, majority of the respondents 231 (61.5%) did not give only breast milk to their baby up to 6 months and only 146(38.7%) respondents practiced exclusive breast feeding to their baby and among 377 respondents majority of the respondents 146(38.7%) practiced exclusive breast feeding, 76 (20.2%) respondents fed breast milk to their baby up to 7 months,59 (15.6%) respondents fed breast milk up to 4 months and 43 (11.4%) respondents fed breast milk to their baby up to 3 months .Another study conducted in selected rural areas of Bangladesh reported that exclusive breast feeding at 6 months was being practiced by 32% of surveyed mothers.(Dr Jesmin Akhter,2015).

Out of 377 respondents 325(86.2%) had knowledge about definition of complementary feeding and only 52(13.8%) had no knowledge about definition of complementary feeding and majority of the respondents 81.70% had given complementary foods to their baby and only 18.30% did not give complementary foods and 281 (91.23%) respondents were initiated complementary feeding at the age of 6 months, 21 (6.81%)) were initiated complementary feeding at the age of 1-5 months and 6(1.94%) were initiated complementary feeding at the age of 7-9 months. Another study conducted in selected rural areas of Bangladesh where 50% mothers knew that complementary feeding should be started at 6 months of age.

In this study among 377 respondent's majority of the respondent 341(90.7%) practiced continued breast feeding and only 36(9.3%) did not practice continued breast feeding. Another study conducted in Zambia reported the percentage of continued breast feeding were 89% and the duration of for those who had stopped breast feeding ranged from one to twenty two months (Mary katepa Bwalya,et al 2015).

Conclusion

Improper feeding practice is one of the main reasons for malnutrition among Bangladeshi children aged less than two years. Adequate nutrition during infancy and early childhood is essential to ensure growth, health, and development of children to their full potential. The findings of the study revealed that, in some cases, in spite of having knowledge on infant and child feeding, rural mothers did not make practices in accordance with their knowledge.

Reference

Akter S and M. M. Rahman, "Duration of breastfeeding and its correlates in Bangladesh, "*Journal of Health, Population and Nutrition*, vol. 28, no. 6, pp. 595-601, 2010.

Arifeen SE, Black RE, Antelman G,Baqui AR, Caulfield L, Becker S. Exclusive breastfeeding reduces acute respiratory infection and diarrhoea deaths among infants in Dhaka slums. Pediatrics 2001; 108:67-74. Arimond M, Rue! MT. Dietary diversity is associated with child nutritional status: evidence fromll demographic and health surveys. *Journal of Nutrition.* Vol.134, 2004, pp. 2579-2585.

BBF (2004). KAP Baseline. Bangladesh Breastfeeding Foundation, Dhaka Bangladesh.

BBF (2005). Surveillance Study on Breastfeeding and Complementary Feeding Situation & Nutrition Status of Mothers and Children in Bangladesh. Bangladesh Breastfeeding Foundation. Dhaka, Bangladesh.

BBS/UNICEF (2003). Progotir Pathey 2003 on the Road to Progress. December 2004 (report from MICS 2003). Bangladesh Bureau of Statistics and UNICEF. Dhaka, Bangladesh.

BBS/UNICEF (2004). Anaemia prevalence survey of urban Bangladesh and rural Chittagong Hill Tracts 2003. Bangladesh Bureau of Statistics, Dhaka.

BDHS (2004). 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].

Black, R.E., Morris, S.S. & Bryce, J. (2003). Where are why are 10 million children dying every year? Lancet 361, 2226-34.

Black RE, et al. Maternal and child under nutrition: global and regional exposures and health consequences. Lancet. 2008; 371(9608):243-60.

Bhutta ZA, Dan JK, Rizvi A, Gaffey MF,Walker N, Horton S, et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? Lancet. 2013; 382(9890):452-77.

Butte NF, Lopez-Alarcon MG, Garza C. Nutrient adequacy of exclusive for the term infant during the first six months of life. Geneva: World Health Organization, 2002.

Bhuyan AR. Millennium Development Goals (MDGs): A Review of Bangladesh's Achievements. http://ibtra.com/pdVjournal/v2_nl_article4.pdf (accessed June 2014).