

Assessment of infant and young child feeding (IYCF) Program in the Secondary and Tertiary Level Hospitals in Bangladesh

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Context to the study

Undernutrition in children is one of the most significant public health issues on a global scale. It is estimated that 35% of fatalities in children under the age of five in the world can be attributed to malnutrition [1]. Complementary feeding has the potential role to improve the nutritional status of children. Given that good complementary feeding depends on not only what is fed to a kid but also how, when, where, and by whom they are fed, the complementary feeding stage is the most difficult for infants to navigate. Early breastfeeding initiation, exclusive breastfeeding for the first six months of life, adequate, timely, and appropriate complementary feeding from six to 24 months of age, continued breastfeeding following the introduction of complementary foods, sufficient dietary diversity in complementary foods, and adequate frequency of meals are all aspects of infant and young child feeding (IYCF) that are crucial in the first two years of life [6-11].

Summary of findings: The mean age of the service receivers was 26.29 ± 5.12 years, where most of the respondents (98.1%) were female. Regarding the practice of IYCF elements, 86.3% of respondents initiated early breastfeeding, 72% exclusively breastfed their baby, 92.3% continued breastfeeding up to 24 months, and 91.8% started complementary feeding after 6 months. About 86.3% of caregivers gave homemade complementary food to their babies, whereas 6.3% of mothers gave infant formula. Around one-third (24.3%) of the respondents practiced bottle feeding, and almost all were satisfied with hospital services. Around two-thirds of service providers are female, and 36.6% had post-graduation degrees that needed the CGA evaluation. The median survival was $8 \pm \text{SD } 6.41$ months.

Introduction

Undernutrition in children is one of the most significant public health issues on a global scale. It is estimated that 35% of fatalities in children under the age of five in the world can be attributed to malnutrition [1]. The first two years of life are the crucial "window of opportunity" for a child's growth; current investigations have discovered that the impact of development halting during this time is more severe than previously believed [2]. It is crucial to guarantee sufficient nutrition throughout this vital time for a child's growth before age two. The most critical factor in a child's survival is breastfeeding. It is both inexpensive and conveniently accessible to the baby. There is an elevated risk of mortality in the first two years of life due to inadequate breastfeeding. It is estimated that undernutrition is the accumulation of fetal growth restriction, stunting, wasting, vitamin A and zinc deficits, and poor nursing. Both nutritional intake and health care are essential factors of child undernutrition, according to UNICEF's conceptual framework for child nutrition [3].

Complementary feeding has the potential role to improve the nutritional status of children. Complementary foods are introduced when breast milk is insufficient to support the infant's rising nutritional and energy needs. Therefore, introducing complementary foods aims to supplement breast milk to suit the infant's needs [4]. The energy intake from breast milk declines with infant age; therefore, the 200 kcal/day, 300 kcal/day, and 550 kcal/day energy deficits at ages 6 to 8, 9 to 11, and 12 to 23 months, respectively, must be made up by supplemental meals [4, 5].



WHO and UNICEF suggest that complementary feeding begins at 6 months and that breastfeeding be continued for 2 years [4]. Given that good complementary feeding depends on not only what is fed to a kid but also how, when, where, and by whom they are fed, the complementary feeding stage is the most difficult for infants to navigate. Early breastfeeding initiation, exclusive breastfeeding for the first six months of life, adequate, timely, and appropriate complementary feeding from six to 24 months of age, continued breastfeeding following the introduction of complementary foods, sufficient dietary diversity in complementary foods, and proper frequency of meals are all aspects of infant and young child feeding (IYCF) that are crucial in the first two years of life [6-11]. Breastfeeding and complementary feeding are included in infant and young child feeding (IYCF), which plays a significant role in influencing the nutritional condition of kids. Malnutrition caused by improper feeding practices throughout infancy and early childhood impairs cognitive and social development, lowers academic achievement, and lowers productivity in later life. Three suggestions from WHO for IYCF practices for infants and young children (ages 6 to 23 months) are maintained. Feeding solid or semi-solid food a minimum number of times per day according to age and breastfeeding status, including foods from a minimum number of food groups per day according to breastfeeding status and breastfeeding, or feeding with appropriate calcium-rich foods if not breastfed [12]. In Bangladesh, two-thirds of all deaths in children aged less than one year caused by infectious diseases such as diarrhea and acute respiratory infections could be prevented by breastfeeding is well documented. Breastfeeding has the most significant protective benefit in populations with high infant mortality, high illiteracy, poor sanitation facilities, poor nutritional status, and overall low economic position. According to global monitoring studies, around 38% of newborns under the age of 6 months in poor nations are exclusively breastfed; however, in Bangladesh, the exclusive breastfeeding rate is 65% up to 6 months [13]

Summary of Research

A descriptive cross-sectional study assessed the knowledge, attitude, and practice of IYCF among the health service providers and service receivers of Bangladesh's secondary and tertiary hospitals.

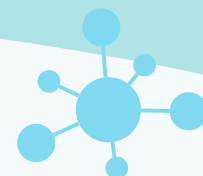
In the study, the service providers of both sexes of the ANC corner, IMCI nutrition corner, breastfeeding corner, and department of pediatrics of every hospital were taken. Service receivers were male and female residents of those selected districts of Bangladesh. They took services from the ANC corner, IMCI nutrition corner, breastfeeding corner, and department of pediatrics at those hospitals. A face-to-face interview was conducted among the eligible study population.

Research Findings

Descriptive cross-sectional research was done in 32 health facilities in Bangladesh, including two medical college hospitals and two sadar hospitals from each of the eight divisions of Bangladesh. The research aims to assess the knowledge, attitude, and practice of IYCF among the health service providers and service receivers of Bangladesh's secondary and tertiary hospitals.

Two different groups of respondents were included in the research. A total of 416 respondents from service receivers and 142 service providers were included in the study. In this research, among 416 respondents, about 61.3% were in the age group of 18-27 years, and the lowest 0.2% was between the age group of 58-67 years.

The minimum age range was between 18 and 27 years, and the maximum was between 58 and 67 years. In this study, only 15% of providers have formal IYCF training, while the rest (85%) do not have formal training. But 81.7% of workers had working experiences with IYCF, and the rest, 18.3%, had no working experiences. Among 416 respondents, the highest percentage, 98.1%, were female, and the rest were male.



In the study regarding IYCF elements, about 86.3% of respondents said they breastfed a baby immediately after birth.

In this study, exclusively breastfed babies up to 6 months, 72.1% and 27.9% of respondents didn't breastfeed their babies. The practice level of IYCF among service providers is typical. Only 65.5% of providers had very good practice, and 28.9% had a good practice. Poor practice level is below 1%.

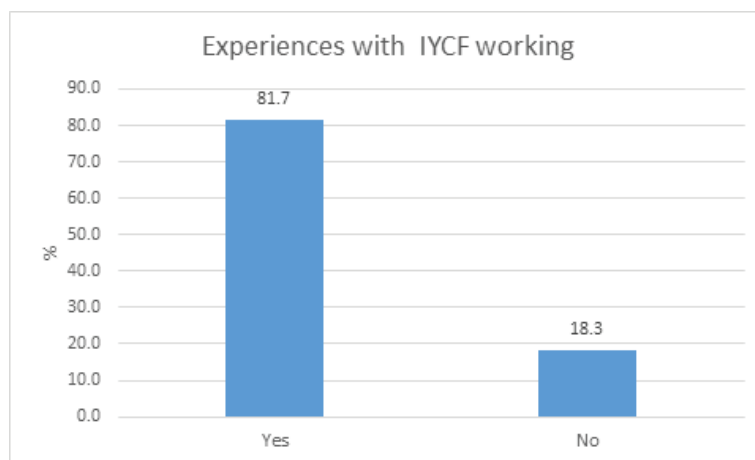


Fig 1: Providers' experiences with IYCF

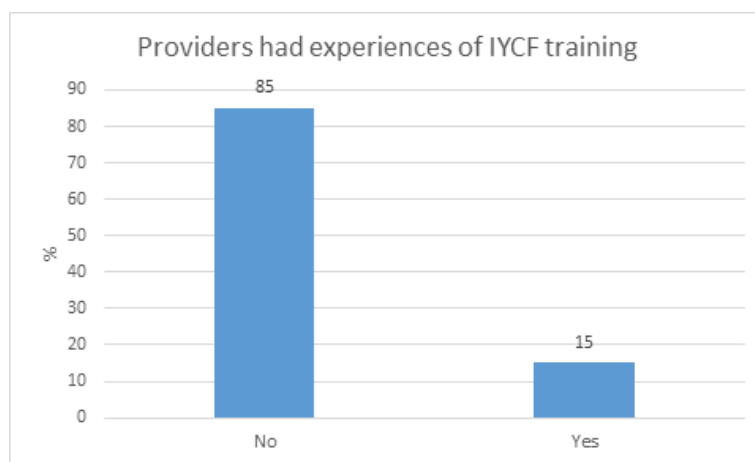
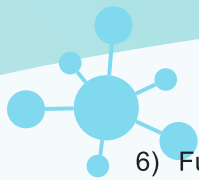


Fig 2: Providers' experiences with IYCF training

Policy Recommendations

- 1) Around one-third of respondents didn't exclusively breastfeed their babies, so an awareness campaign program should be arranged.
- 2) Still, some respondents are practicing pre-lacteal feeding; to reduce pre-lacteal feeding, initiatives should be taken to make people.
- 3) Comprehensive training programs should be arranged to build awareness about complementary food.
- 4) Frequent IYCF training programs should be arranged for healthcare professionals in secondary and tertiary-level hospitals.
- 5) In almost all the tertiary hospitals, the IMCI nutrition corner was found inactive; these corners should be activated.



- 6) Further research should be done on this topic to find out how better IYCF practice can be provided among service receivers as health care professionals.

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