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Influence of Infant and Young Child Feeding Practices (IYCF) on Nutritional Status of Children Aged 6-59 Months in Moheshkhali, Cox'sbazar, Bangladesh: A Cross-Sectional Study

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ABSTRACT

Background: This study addresses the critical issue of malnutrition among under-five children in Moheshkhali, Cox's Bazar, Bangladesh. Despite the alarming rates of stunting, wasting, and underweight in this region, there is a significant lack of localized data on socioeconomic factors, IYCF practices, and overall health status. Understanding these variables is essential for developing effective interventions. **Methods:** The research involved a cross-sectional study design, where anthropometric measurements were conducted to assess the nutritional status of children aged 6 to 59 months. Maternal education, age, and Body Mass Index (BMI) were also evaluated to explore their impacts on child nutrition. Data were analyzed using standard statistical methods to draw correlations and identify trends. **Results:** The findings revealed a high prevalence of malnutrition among under-five children, with notable gender disparities in stunting and underweight. The analysis indicated a strong relationship between maternal health indicators—particularly BMI—and child nutritional outcomes. Moreover, inadequate adherence to IYCF practices was observed, with many mothers failing to implement optimal breastfeeding and complementary feeding strategies. **Conclusion:** The study underscores the urgent need for targeted interventions aimed at improving maternal education and IYCF practices in Moheshkhali. A multi-sectoral approach involving government and non-government organizations is essential to address the malnutrition crisis effectively. Investing in preventive measures and promoting healthy feeding practices are crucial for ensuring the well-being of both mothers and their children.

Keywords: Malnutrition; infant and young child feeding; IYCF; nutritional status; under-five children; socioeconomic factors

1. INTRODUCTION

Malnutrition remains a critical global health challenge, particularly among children under five years of age. It is a leading cause of morbidity and mortality, contributing to over half of childhood deaths worldwide. In 2022, the World Health Organization (WHO) estimated that approximately 149 million children globally suffer from stunting, while 45

million are affected by wasting.[1] These figures underscore the urgency of addressing nutritional issues in early childhood. Optimal Infant and Young Child Feeding (IYCF) practices are essential for ensuring children's survival and health. Recent studies, including those published in The Lancet series, have emphasized that over 800,000 infant deaths could be prevented through appropriate feeding practices, including exclusive breastfeeding for the first six months.[2,3] However, despite the widespread initiation of breastfeeding in Bangladesh, nearly 50% of mothers do not adhere to the recommended practice of exclusive breastfeeding during this critical period.[4] Various cultural, economic, and environmental factors contribute to this concerning trend, exacerbating child malnutrition.

Malnutrition encompasses deficiencies in energy, proteins, fats, vitamins, and minerals, leading to serious health issues such as stunted growth, compromised immunity, and increased susceptibility to infectious diseases. Currently, a significant number of children under five are affected by malnutrition, with a substantial concentration in sub-Saharan Africa and South Asia. Specifically, the prevalence of wasting and stunting in children aged 6-59 months in Moheshkhali Upazila, Bangladesh has reached alarming levels, with rates of 11.0% for global acute malnutrition and 35.3% for stunting.[5] In Bangladesh, 2 out of 3 children under five face food poverty, which leads to inadequate nutrition and increases the risk of wasting—a severe form of malnutrition—by up to 50 percent among those with a limited diet.[6] In addition, pregnant and lactating women in this region are particularly vulnerable, with a significant proportion classified as malnourished.[7] This highlights the interconnectedness of maternal and child nutrition, as maternal health significantly impacts infant nutritional outcomes.

Despite improvements in health and nutrition indicators in Bangladesh, a substantial portion of the population remains unaware of basic nutritional principles. This gap in knowledge contributes to persistently high rates of malnutrition, especially among children. Existing research on nutritional issues in host communities of Bangladesh is limited, particularly concerning vulnerable populations such as children under five. Previous studies, such as one conducted in Brazil, have demonstrated the impact of maternal anthropometry on child nutritional outcomes, revealing that maternal height and body mass index significantly correlate with children's height-for-age and body mass index-for-age.[8] Similar studies highlight the critical role of maternal education and nutritional knowledge in determining child health.[9] Malnutrition can be categorized into protein-energy malnutrition and micronutrient deficiencies, with common forms including severe acute malnutrition and moderate acute malnutrition. Factors driving malnutrition include poverty, high food prices, and inadequate dietary practices, particularly pronounced in developing countries.[10]

Breastfeeding is a vital preventive measure against malnutrition. It is estimated that widespread breastfeeding could prevent approximately 823,000 deaths of children under five annually.[11] Breast milk is rich in hundreds to thousands of unique bioactive compounds that help guard against infections and inflammation while supporting immune development and proper organ growth.[12] Breastfeeding provides essential micronutrients and strengthens children's immune systems, contributing to long-term health outcomes. Understanding the nutritional status of under-five children in Moheshkhali Island, along with the IYCF practices of mothers and caregivers, is essential for addressing the malnutrition crisis.

This study aims to identify the determinants of child malnutrition in selected areas of Moheshkhali Island. Specifically, it will assess maternal knowledge and practices related to IYCF, evaluate the nutritional status of under-five children in relation to maternal IYCF knowledge and practices, and investigate the nutritional status of under-five children in relation to maternal nutritional status. Through this analysis, the study seeks to engage policymakers and organizations in identifying effective interventions to enhance child nutrition in this vulnerable population.

2. METHODS

2.1 Study Design

A cross-sectional study design was employed to assess nutritional status and related factors among children in Moheshkhali Upazila from October 4 to November 28, 2021. This study was conducted in Moheshkhali Upazila, located in the southeastern part of Bangladesh, specifically within the Dhalghata, Matarbari, and Kutubjhom Unions. These areas have attracted national and international attention due to ongoing mega-projects, such as the Matarbari

development, and their status as high-risk zones for natural disasters. Geographically remote and challenging to access, these regions have limited government services and face significant obstacles for humanitarian organizations, highlighting the need for focused research on health, nutrition, and dietary habits among the local population.

2.2 Study Population

The target population consisted of children aged 6-59 months paired with their mothers residing in Moheshkhali Upazila during the study period. A total of 170 mother-child pairs were randomly selected. Inclusion criteria encompassed children aged 6-59 months with complete data and signed consent. Exclusion criteria included children who were acutely ill (e.g., fever, vomiting, diarrhea) at the time of the survey.

2.3 Data Collection

Data were collected using a structured questionnaire (Appendix I), which gathered information on anthropometric measurements, Infant and Young Child Feeding (IYCF) practices and demographic data. Child height was measured using a height board, while weight was assessed with a calibrated electronic weighing scale. Mid Upper Arm Circumference (MUAC) was measured using a MUAC tape following the guidelines set by the World Health Organization (WHO, 2006). Children's birth dates were verified using Expanded Programme on Immunization (EPI) cards or through maternal reports. The anthropometric data were processed using ENA for SMART software (2007) to convert measurements into Z-scores for Height-for-Age (HAZ), Weight-for-Height (WHZ), and Weight-for-Age (WAZ), in accordance with WHO standards (2006).

Primary data were collected through face-to-face interviews with mothers, which included questions on demographic information and IYCF practices. Secondary data, such as MUAC and Z-scores, were calculated based on WHO standard charts (2006). A pilot test of the questionnaire was conducted in areas outside the sampling region to ensure clarity and reliability, and necessary adjustments were made based on feedback received. Data collectors, who were trained and experienced in similar research projects, carried out all anthropometric measurements and interviews.

The sample size was calculated using a single proportion formula, assuming a 50% prevalence of malnutrition, with a 95% confidence interval and an 8% margin of error. After adjusting for a 13% non-response rate, the final sample size was determined to be 170 participants. Simple random sampling was employed to select participants, and in cases where mothers had multiple children under five, the child was selected using a lottery method.

Dependent variables included maternal IYCF knowledge and practices, such as colostrum consumption and breastfeeding practices. Independent variables included socio-demographic factors, such as the age and sex of the child, maternal education, age at marriage, and the number of children under five, as well as maternal characteristics. To ensure the effectiveness of the data collection tools and procedures, a pre-test was conducted on 5% of the sample size.

2.4 Ethical Considerations

The study adhered to ethical guidelines outlined in the Declaration of Helsinki (2001). Initial communication was established with relevant nutrition and health partners operating in Moheshkhali, who facilitated participant recruitment. Written consent was obtained from all respondents prior to data collection, and participant confidentiality was strictly maintained.

2.5 Data Analysis

The collected data were systematically reviewed for accuracy and completeness, coded, and entered into an MS Excel file. Discrepancies were addressed, and data were prepared for subsequent analysis based on specified study indicators. Statistical analyses were performed using SPSS version 16.0. After coding, the data were exported for analysis. Descriptive statistics were calculated and presented in tables, followed by bivariate analyses to explore associations between the outcomes of stunting, underweight, and wasting, with a significance threshold set at $p < 0.05$.

3. RESULTS

3.1 Demographic Characteristics

Table 1 summarizes the demographic information of the 170 children aged 6 to 59 months studied. Of these, 52.4% were boys and 47.6% were girls. The children were categorized into age groups according to World Health Organization standards:

Table 1. General information of the studied 6-59 months children and mothers

Variables		Frequency	Percentage
Information of the studied 6-59 months children			
Gender	Boy	89	52.4
	Girl	81	47.6
Age Groups (months)	6-11	16	9.4
	12-23	48	28.2
	24-35	50	29.4
	36-47	31	18.2
	48-59	25	14.7
Information of the mothers			
Educational status	Illiterate	119	70.1
	Primary	43	25.2
	Secondary	8	4.7
Age (years)	<20	8	4.7
	20-30	147	86.5
	>30	15	8.8
Marriage age (years)	<18	72	42.4
	18 to 21	94	55.3
	>21	4	2.4
Number of under five children	One	41	24.1
	Two	81	47.6
	Three	48	28.2
Nutritional status based on Body Mass Index (BMI)	Underweight	6	3.5
	Normal	121	71.2
	Overweight	38	22.4
	Obese	5	2.9
Nutritional status based on MUAC	Normal	161	94.7
	Moderate	9	5.3
	Malnourished	0	0

29.4% were aged 24-35 months, 28.2% were 12-23 months, 18.2% were 36-47 months, 14.7% were 48-59 months, and 9.4% were 6-11 months.

Table 1 also indicates that a significant majority of mothers (70.1%) were illiterate, with 25.2% having completed primary education and only 4.7% having secondary education. Most mothers (86.5%) were aged 20-30 years, while 8.8% were older than 30 and 4.7% were under 20. The majority of mothers (55.3%) married between the ages of 18 to 21 years, and 42.4% married before 18. Regarding family size, 24.1% had one child under five years, while 47.6% had two, and 28.2% had three.

3.2 Maternal Nutritional Status

According to Table 2, 71.2% of mothers had a normal Body Mass Index (BMI), while 3.5% were underweight, 22.4% were overweight, and 2.9% were obese. Additionally, maternal nutritional status measured by Mid Upper Arm Circumference (MUAC) revealed that 95% of mothers were normal, while about 5% were moderately malnourished; no mothers were severely malnourished.

In terms of knowledge about infant and young child feeding (IYCF), nearly all respondents (97.1%) were aware of the importance of colostrum, with 65.3% knowing the appropriate time to initiate colostrum feeding after birth. About 91% of mothers understood the duration of exclusive breastfeeding, and 73.5% were aware of the proper timing for introducing complementary foods.

Table 2 indicates that 93.5% of mothers fed colostrum to their babies. Among these, 44.7% initiated feeding within the first hour, while 52.8% did so between 1 to 3 hours. Only 24.7% practiced exclusive breastfeeding for the first six months, while 65.9% introduced complementary food timely (around 6 months). Furthermore, 82.9% continued breastfeeding

Table 2. Distribution of mothers based on knowledge on IYCF and practices

Variables		Frequency	Percentage
Knowledge on IYCF			
Colostrum feeding	Yes	165	97.1
	No	5	2.9
Time for initiation of colostrum	Within 1st hour	111	65.3
	1 to 3 hours	45	26.5
	>3 hours	4	2.4
	Do not know	10	5.9
Duration of exclusive breast feeding	<6 months	155	91.2
	6 months	7	4.1
	>6 months	1	0.6
	Do not know	7	4.1
Time for initiation of complementary feeding	<6 months	14	8.2
	6 months	125	73.5
	>6 months	30	17.6
	Do not know	1	0.6
Duration of breast-feeding continuation	<12 months	10	5.9
	12 to 18 months	22	12.9
	>18 months	138	81.2
IYCF practice			
Colostrum feeding after birth	Yes	159	93.5
	No	11	6.5
Time for initiation of colostrum (n=159)	Within 1st hour	71	44.7
	1 to 3 hours	84	52.8
	>3 hours	4	2.5
Exclusive breast feeding for 6 months	Yes	128	75.3
	No	42	24.7
Initiation of complementary feeding at proper time	Yes	112	65.9
	No	58	34.1
Breast feeding continuation up to 2 years	Yes	141	82.9
	No	29	17.1

up to 2 years.

Table 2 presents that, 93.5% of mothers fed colostrum to their baby while 6.5% did not feed colostrum to their baby. Colostrum was initiated within the first hour of birth by 44.7% of mothers. Among others, 52.8% of them started colostrum between 1 to 3 hours of birth and 2.5% more than 3 hours of birth. Only 24.7% of mothers practiced exclusive breast feeding while 75.3% of mothers gave other food to their baby. About 65.9% of mothers introduced complementary food to their baby timely (at 181 days) and 34.1% mothers initiated complementary feeding properly. 82.9% mothers continued breast feeding up to 2 years to their baby while 17.1% did not continue up to 2 years.

3.3 Prevalence of Wasting and Underweight

Figure 1 illustrates the prevalence of wasting among children by age. The highest prevalence occurred in the 6-11 month age group (18.8%), followed by 24-35 months (8.9%), 12-23 months (7.0%), and 36-47 months (3.2%). Overall, 93.1% of children were classified as normal.

Table 3 details the children's Weight for Age Z scores and sex, revealing a Global Acute Malnutrition (GAM) rate of 31.2% (< -2 WAZ). Boys exhibited higher rates of underweight than girls (37.1% vs. 24.7%), with 8.8% severely underweight and 22.4% moderately underweight. Severe underweight was notably higher among boys (13.5%) compared to girls (3.7%).

Figure 2 shows underweight prevalence by age, with the highest rates in 6-11 months (37.5%), followed by 12-23 months (37.0%), and 24-35 months (36.0%). The lowest prevalence was in 48-59 months (16.0%), with 68.5% of children classified as normal.

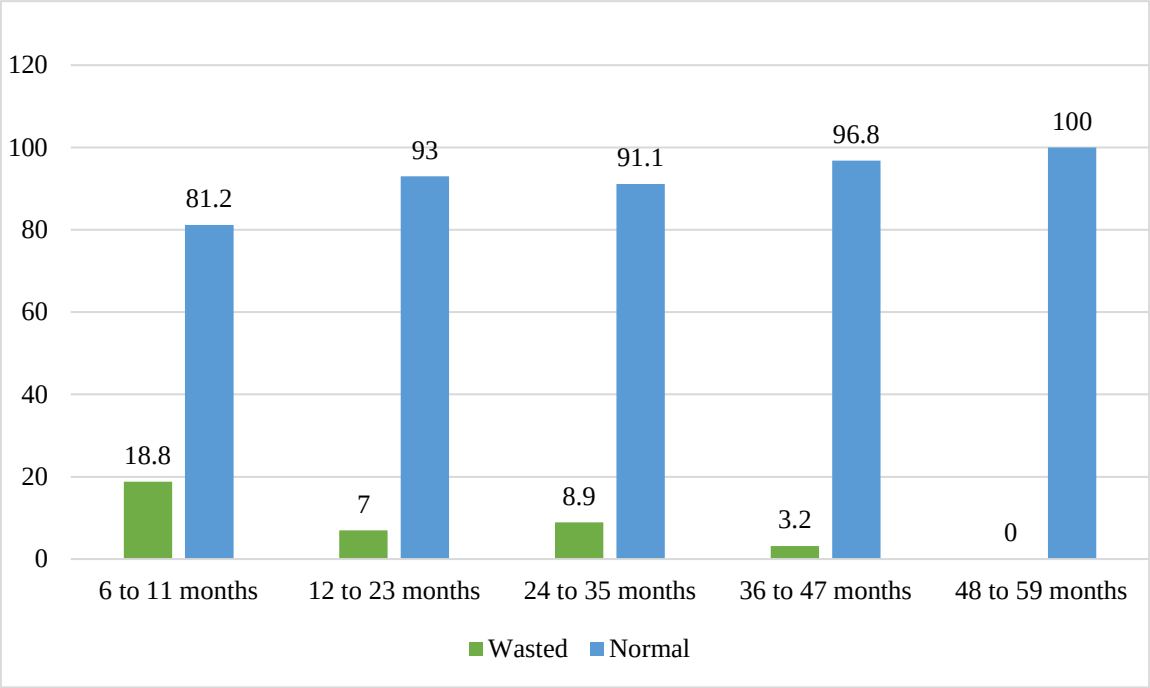

Figure 1. Prevalence of wasting among 6-59 month-aged children

Table 1. This is a table. Tables should be placed in the main text near to the first time they are cited

Nutritional problem	Boys (n = 89) %	Girls (n = 81) %	All (n = 170) %
Types of underweight (WAZ)			
Underweight (<-2 WAZ)	37.1	24.7	31.2
Moderately underweight (<-2 WAZ ≥-3)	23.6	21.0	22.4
Severely underweight (<-3 WAZ)	13.5	3.7	8.8
Normal (≥ -2 WAZ)	62.9	75.3	68.8
Types of Stunting (HAZ)			
Stunting (<-2 HAZ)	51.7	56.8	54.1
Moderate stunting (<-2 HAZ ≥-3)	24.7	30.9	27.6
Severe stunting (<-3 HAZ)	27.0	25.9	26.5
Normal (≥ -2 HAZ)	48.3	43.2	45.9
Types of Malnutrition			
Global malnutrition (MUAC < 125 mm)	10.1	4.9	7.6
Moderate malnutrition (115 mm ≤ MUAC >125 mm)	9.0	1.2	5.3
Severe malnutrition (MUAC < 115 mm)	1.1	3.7	2.4
Normal (MUAC ≥ 125 mm)	89.9	95.1	92.4

3.4 Stunting and Malnutrition

Table 3 also indicates that 54.1% of children were stunted, with 26.5% severely stunted and 27.6% moderately stunted. Stunting prevalence was higher in girls (56.8%) than boys (51.7%). Figure 3 reveals the lowest stunting rates in 6-11 months (31.2%) and the highest in 24-35 months (65.3%).

Additionally, 7.6% of children were globally acutely malnourished (MUAC < 125 mm), with 2.4% severely malnourished (MUAC < 115 mm) and 5.3% moderately malnourished. The remaining 92.4% were normal.

3.5 Maternal Knowledge and Practices

Table 4 presents the nutritional status of children based on maternal IYCF knowledge. Among

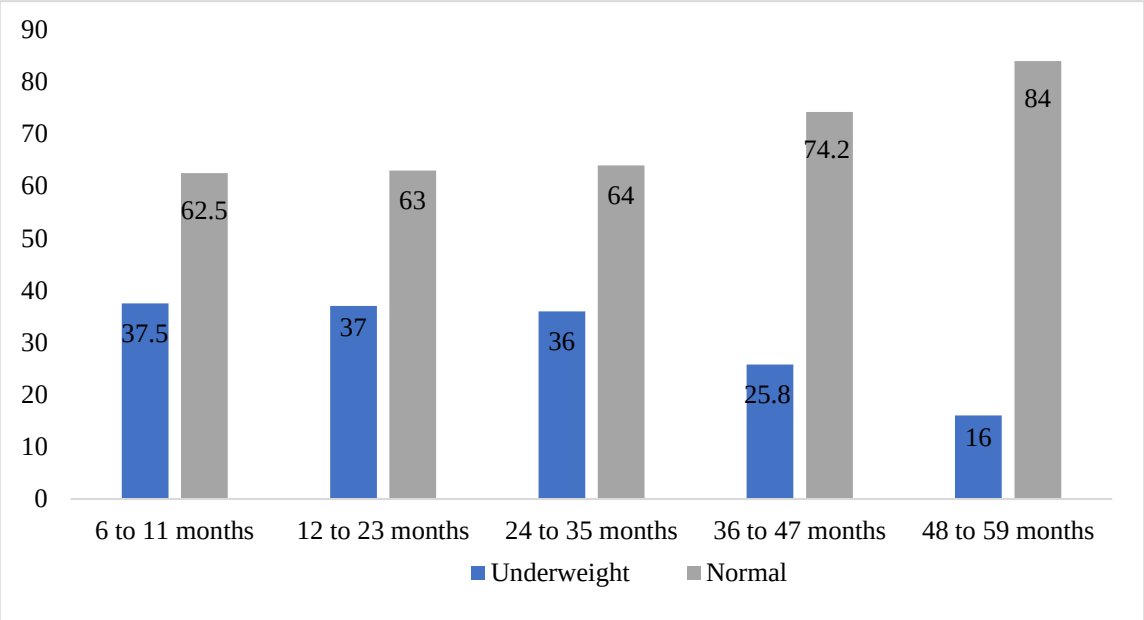

Figure 2. Prevalence of underweight among 6-59 months children based on Weight for Age Z-score (WAZ) by their age categories

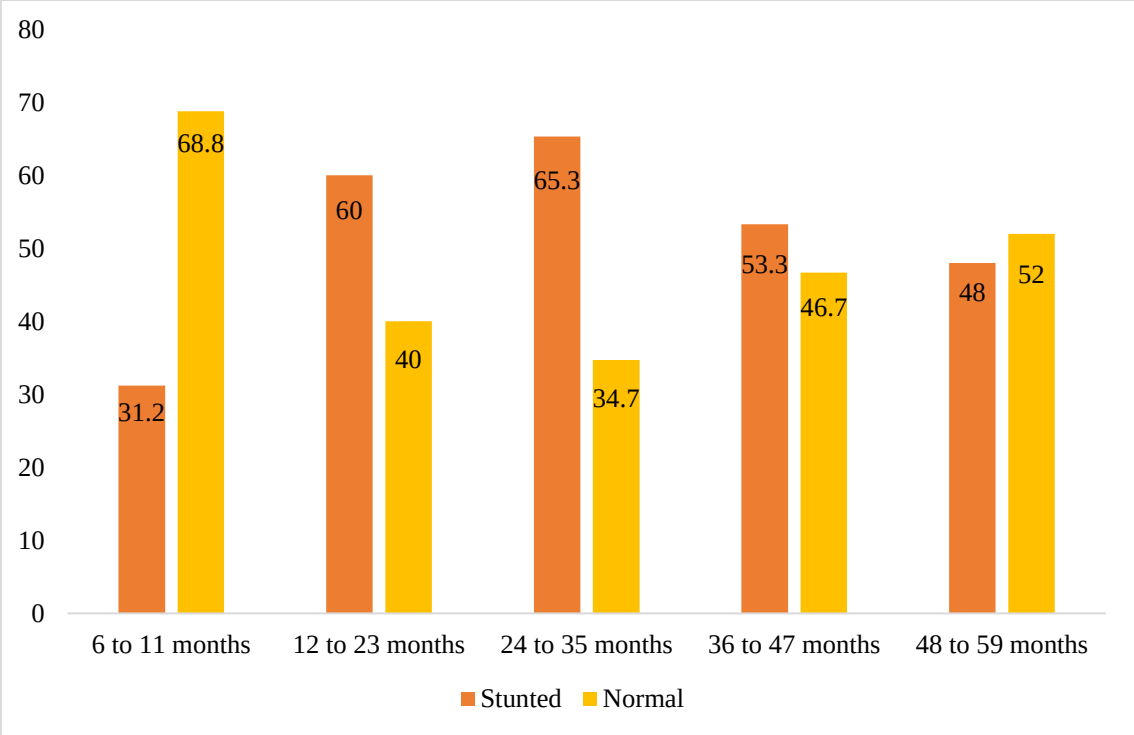

Figure 3. Percent distribution of stunting among 6-59 months children by age

underweight children, 30.9% had mothers with poor knowledge, while 32.8% had mothers with good knowledge. Stunting (55.8%) and wasting (6.9%) rates did not show significant differences based on maternal IYCF knowledge.

Table 4 further analyzes children's nutritional status based on maternal IYCF practices. Of the underweight children, 32.7% had mothers with poor practices, while 20% had mothers with good practices. Wasting was found in 6.9% of children, with similar rates of malnutrition (MUAC < 125 mm) among mothers with poor (7.7%) and good (6.7%) practices. No significant differences in nutritional status were observed between the two groups.

Table 4. Percent distribution of nutritional status of children according to the maternal IYCF knowledge and practices

Nutritional Status of Children	Maternal IYCF knowledge				Maternal IYCF practices			
	Poor (0-4) (%) N	Good (5) (%) N	Total	P-value (χ^2)	Poor (0-4) (%) N	Good (5) (%) N	Total	P-value (χ^2)
WAZ								
Underweight (WAZ < -2.0 SD)	30.9 (34)	32.8 (19)	31.5 (53)	0.806 (0.060)	32.7 (50)	20.0 (3)	31.5 (53)	0.313 (1.017)
Normal (WAZ ≥ -2.0 SD)	69.1 (76)	67.2 (39)	68.5 (115)		67.3 (103)	80 (12)	68.5 (115)	
WHZ								
Wasted (WHZ < -2.0 SD)	7.5 (8)	5.7 (3)	6.9 (11)	0.659 (0.195)	6.2 (9)	15.4 (2)	6.9 (11)	0.209 (1.576)
Normal (WHZ ≥ -2.0 SD)	92.5 (98)	94.3 (50)	93.1 (148)		93.8 (137)	84.6 (11)	93.1 (148)	
HAZ								
Stunted (HAZ < -2.0 SD)	54.6 (59)	57.9 (33)	55.8 (92)	0.688 (0.161)	55.3 (83)	60 (9)	55.8 (92)	0.729 (0.120)
Normal (HAZ ≥ -2.0 SD)	45.4 (49)	42.1 (24)	44.2 (73)		44.7 (67)	40 (6)	44.2 (73)	
MUAC								
Malnourished (MUAC < 125 mm)	7.1 (8)	8.6 (5)	7.6 (13)	0.731 (0.118)	7.7 (12)	6.7 (1)	7.6 (13)	0.881 (0.022)
Normal (MUAC ≥ 125 mm)	92.9 (104)	91.4 (53)	92.4 (157)		92.3 (143)	93.3 (14)	92.4 (157)	

3.6 Child Characteristics by Maternal Knowledge and Practices

Table 5 details the mean child characteristics related to maternal IYCF knowledge. The average age of children whose mothers had poor knowledge was 28.63 months, compared to 26.37 months for those with good knowledge. Mean MUAC values were similar between groups (14.15 cm vs. 14.11 cm), and mean WAZ scores showed no significant differences (-1.52 vs. -1.61).

Table 5 also describes characteristics by maternal IYCF practices. The mean WAZ for children of mothers with poor practices was -1.54 and -1.60 for those with good practices. Mean HAZ scores indicated -2.09 for

Table 5. Mean and standard deviation of child characteristics based on maternal IYCF knowledge and practices

Child Characteristics	Poor (0-4) (Mean ± SD)	Good (5) (Mean ± SD)	P-value
Maternal IYCF knowledge			
Age (months)	28.63 ± 13.33	26.37 ± 13.38	0.300
MUAC (cm)	14.15 ± 1.21	14.11 ± 1.45	0.844
WAZ	-1.52 ± 1.15	-1.61 ± 1.13	0.611
HAZ	-1.98 ± 1.69	-2.33 ± 1.57	0.188
WHZ	-0.59 ± 0.99	-0.43 ± 1.20	0.374
BMIZ	-0.37 ± 1.08	-0.17 ± 1.31	0.293
Maternal IYCF practices			
Age (months)	27.49 ± 13.25	31.67 ± 14.20	0.248
MUAC (cm)	14.10 ± 1.30	14.55 ± 1.25	0.196
WAZ	-1.54 ± 1.17	-1.60 ± 0.92	0.865
HAZ	-2.09 ± 1.69	-2.25 ± 1.20	0.719
WHZ	-0.53 ± 1.19	-0.56 ± 1.19	0.916
BMIZ	-0.30 ± 1.16	-0.26 ± 1.25	0.909

poor practices and -2.25 for good practices, with mean WHZ scores of -0.53 and -0.56, respectively. No significant differences were found between the two groups.

3.7 Correlation with Maternal Anthropometric Status

Table 6 shows Pearson correlation coefficients for children's anthropometric variables against maternal anthropometric status. A significant correlation was found between children's MUAC and maternal BMI (r = 0.205; p = 0.007), as well as between children's WHZ, BMIZ, and MUAC with maternal MUAC status.

4. DISCUSSION

This study provides important insights into the socioeconomic status, infant and young child feeding (IYCF) practices and nutritional health of children under five years old in Moheshkhali Upazila, located in the southeastern hill region of Bangladesh. Notably, there is a lack of specific data on this region, necessitating comparisons with existing survey data from the broader Chittagong division and the eastern hill regions (FSNSP) of Bangladesh. The sample consisted of 52.4% boys and 47.6% girls, with children categorized into age groups per World Health Organization standards. The largest age group was 24-35 months (29.4%), followed closely by 12-23 months (28.2%), indicating a diverse representation across different developmental stages. Alarmingly, 70.1% of mothers in the study were illiterate, and 42.4% were married before the age of 18. These findings reflect significant educational and social challenges that may affect family planning and health literacy.[13]

Table 6. Pearson correlation (r) of the child's anthropometric variables with maternal anthropometric status

Child characteristics	Maternal BMI		Maternal MUAC	
	r	P	r	P
Weight for Age Z score	0.131	0.089	0.098	0.204
Height for Age Z score	0.043	0.578	-0.015	0.845
Weight for Height Z score	0.141	0.066	0.158*	0.040
BMI for Age Z score	0.137	0.075	0.157*	0.040
MUAC	0.205**	0.007	0.226**	0.003

The relatively high family sizes reported—47.6% of mothers had two children under five, and 28.2% had three—could be attributed to low awareness of family planning methods and limited contraceptive use. Research indicates that factors such as maternal education, household size, and access to resources critically influence child nutrition.[14,15] The prevailing low levels of education among mothers in this area are linked to poor nutritional knowledge, which, in turn, contributes to child malnutrition.

Maternal nutritional status also plays a vital role. In this study, 71.2% of mothers had a normal Body Mass Index (BMI), while 26.3% were either underweight or overweight. These figures are crucial as maternal BMI can directly impact child health outcomes. Breastfeeding practices are critical for child nutrition. Our findings showed that 44.7% of mothers-initiated colostrum feeding within the first hour after birth, while only 24.7% practiced exclusive breastfeeding for the first six months. Timely introduction of complementary foods was observed in 65.9% of cases, with 82.9% of mothers continuing breastfeeding up to two years. These results suggest a gap in effective IYCF practices, likely due to insufficient maternal health education and awareness of the benefits of breastfeeding and timely complementary feeding.[16,17]

Moreover, the study found a significant relationship between maternal age and child nutritional status, as indicated by MUAC scores. Mothers in middle age were associated with better child nutritional outcomes, highlighting the importance of maternal age in caregiving capabilities.[18] Conversely, increasing parity and family size correlated with declining child MUAC and rising malnutrition rates. This aligns with existing literature suggesting that larger families can lead to increased competition for resources, negatively affecting child nutrition.[19,20]

The prevalence of underweight children in this study was 31.2%, with 8.8% classified as severely underweight. This figure is comparable to findings in other refugee contexts, indicating a broader issue of child malnutrition. The negative skewness in the weight-for-age (WAZ) curve suggests a significant proportion of children fall below the -2 SD threshold,

reinforcing the high prevalence of underweight status in this population. Regular access to a variety of nutritious foods is essential for improving health and nutrition among children, as supported by previous studies.[21,22]

Additionally, the high prevalence of underweight children in this study underscores the urgent need for targeted interventions in Moheshkhali, which should focus on enhancing maternal education and health literacy, as well as improving access to nutritional resources. Understanding cultural factors influencing IYCF practices is crucial for developing culturally sensitive interventions that resonate with the community. Programs aimed at educating mothers on effective feeding practices could significantly improve child health metrics, potentially through community workshops and partnerships with local organizations.[23] Moreover, future research should include longitudinal studies to better assess the long-term impact of IYCF practices on child health outcomes, thereby providing deeper insights into causal relationships and aiding in the development of sustainable solutions to combat malnutrition in similar contexts.

This study also has some limitations, including a short study period and a small sample size. A longer study with a larger sample size could enhance the findings. Additionally, incorporating more variables, such as food safety status and hygiene practices, could improve the study. Furthermore, measuring the nutritional value of daily intake could provide a stronger correlation to understand the prevalence of nutritional status.

5. CONCLUSION

This study underscores significant challenges regarding IYCF practices and malnutrition among under-five children in Moheshkhali, Cox's Bazar. The high prevalence of stunting, wasting, and underweight indicates urgent public health concerns. Maternal health, particularly BMI and nutrition knowledge, directly impacts child nutritional status. With suboptimal breastfeeding and complementary feeding practices, there's an evident need for improved maternal education and support. Addressing malnutrition requires a comprehensive, multi-sectoral approach involving governmental and non-governmental organizations. Viewing this issue as a fundamental rights concern is essential for developing sustainable interventions. Investing in preventive strategies will be crucial for enhancing the health and well-being of future generations. It is recommended that targeted educational programs be implemented to empower mothers with the knowledge and resources necessary for optimal infant and young child feeding practices.

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Conflict of Interest

The authors declare no conflict of interest.

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