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Social Protection Mixed Methods Study: Baseline Evaluation

USAID's Strengthening Multisectoral Nutrition Programming through Implementation Science Activity

APRIL 2019

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USAID's Strengthening Multisectoral Nutrition Programming through Implementation Science Activity is an implementation science project to test and refine multisectoral nutrition approaches in high stunting areas in Bangladesh, aiming to improve nutrition outcomes among pregnant and lactating women and children under 2 years of age. For additional information about the project contact: Jennifer Crum, Chief of Party, FHI 360 Bangladesh country office; email: jcrum@fhi360.org.

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ABBREVIATIONS AND ACRONYMS

ANC	antenatal care
BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi taka
CCT	conditional cash transfer
CNP	Community Nutrition Promoter
CRCT	cluster randomized controlled trial
FANTA	Food and Nutrition Technical Assistance III
FAO	Food and Agriculture Organization
GoB	Government of Bangladesh
HH	household
IFA	iron and folic acid
IYCF	infant and young child feeding
KAP	knowledge, attitudes and practices
MAD	minimum acceptable diet
MDD	minimum dietary diversity
MMF	minimum meal frequency
MoHFW	Ministry of Health and Family Welfare
NGO	nongovernmental organization
NIPORT	National Institute of Population Research and Training
NPAN-2	Second National Plan of Action for Nutrition 2016–2025
ORS	oral rehydration solution
PLW	pregnant and lactating women
PNC	postnatal care
SBCC	social and behavior change communication
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WASH	water, sanitation and hygiene
WHO	World Health Organization

EXECUTIVE SUMMARY

Background

The Government of Bangladesh (GoB) is committed to improving nutrition and eliminating malnutrition, with a specific focus on children, adolescent girls and pregnant and lactating mothers. While there have been positive trends in stunting and underweight since 2004, the decline rate of undernutrition has slowed. Gaps between urban and rural areas as well as between those in the highest and lowest wealth quintiles persist. Through USAID's Strengthening Multisectoral Nutrition Programming through Implementation Science Activity (the Project), FHI 360 is testing multisectoral nutrition intervention packages delivered through a coordinated approach with GoB, nongovernmental organizations (NGOs) and the private sector to improve the nutritional status of pregnant and lactating women (PLW) and children under 2 years of age.

One of the multisectoral packages includes conditional cash transfers (CCTs) for social protection. A cluster randomized controlled trial (CRCT) was designed to assess the effectiveness of two different interventions, packaged with nutrition-related service strengthening interventions, compared to the current standard of practice. Effectiveness will be measured in terms of the study's primary outcome: the percentage of children aged 6–23 months receiving a minimum acceptable diet (MAD), defined by the World Health Organization (WHO) as the proportion of children aged 6–23 months who receive both the minimum feeding frequency and minimum dietary diversity (MDD) for their age group and breastfeeding status (WHO, 2008). The intervention will be implemented in selected unions of Khulna and Barishal Divisions. In 2018, a baseline survey was conducted to obtain information on indicators of interest prior to the initiation of intervention activities.

Goals and Objectives

The primary objective of this study is to compare the effectiveness of the current standard of practice with two multisectoral intervention packages, one of which includes a CCT component. The two intervention arms are as follows:

- Referrals to nutrition-related services, strengthened health services and enhanced social and behavior change communication (SBCC)
- Referrals to nutrition-related services, strengthened health services, enhanced SBCC and cash transfers conditional on a woman's participation in antenatal care (ANC) visits and monthly nutrition education SBCC group sessions

A secondary objective is to compare the intervention package without the CCT component to standard practice.

The objective of the baseline survey is to provide reference measurements prior to the implementation of interventions. The key indicators of interest include MDD and minimum meal frequency (MMF), which will be used to calculate MAD, the study's primary outcome. Other areas of interest include (1) household (HH) food security, (2) mothers' knowledge, attitudes and practices (KAP) regarding young infant feeding, (3) knowledge and practices related to water, sanitation and hygiene (WASH), (4) gender norms and (5) use of health services including nutrition, maternal, newborn and child health services.

Method

This study uses a CRCT design. A total of 60 unions in Khulna and Barishal divisions of Bangladesh were randomly allocated to one of the three study arms: (1) enhanced SBCC, (2) enhanced SBCC and cash transfers conditional on a woman's participation in ANC visits and monthly nutrition education SBCC group sessions and (3) current standard practice (comparison).

Thirty-nine unions from Jashore and Kushtia districts (Khulna division) and 21 unions from Barishal district (Barishal division) were selected for inclusion in the study. Innovision Consulting led the collection of data. The data collection teams began listing and verifying the eligibility criteria of HHs in the selected unions on August 29, 2018. A total of 44,807 HHs were listed. From this list, approximately 53 extreme-poor mothers and caregivers from each union were randomly selected to participate in the HH surveys conducted from September 6 to December 1, 2018. A total of 2,928 mothers and caregivers of children aged 6–23 months participated in the survey interviews. Ethical approval to proceed with data collection was obtained from the Protection of Human Subjects Committee at FHI 360 and the National Research Ethics Committee of the Bangladesh Medical Research Council.

Results

Highlights of the results of the survey are presented below.

Sociodemographic and Household Characteristics

- The majority of women interviewed were mothers of children aged 6–23 months; only 1 percent were caregivers.
- Most women were married, and about two-thirds attended secondary school or college.
- Nearly all HHs surveyed obtain drinking water from an improved water source, usually a tube well or borehole; only 3 percent of HHs in both divisions treat their water before drinking.
- The majority of HHs (81 percent in Khulna and 85 percent in Barishal) have improved toilet facilities, most often a pit latrine with a slab.
- HH food security was measured using the Household Hunger Scale. In Khulna, 93 percent of HHs were classified as having little to no hunger, 7 percent as moderate hunger and 0.4 percent as severe hunger. In Barishal, the percentages were 85, 15 and 0 percent respectively.

Antenatal Care and Delivery

- Most mothers reported receiving ANC (93 percent in Khulna, with an average of 4.1 visits, and 76 percent in Barishal, with an average of 3.4 visits) during their last pregnancy. In both divisions, most mothers saw a qualified doctor, and less than 15 percent had their first ANC visit during their first trimester.
- Most mothers (86 percent) reported receiving a tetanus injection either during the current or a previous pregnancy to prevent the baby from contracting neonatal tetanus. Nearly two-thirds bought or were given iron and folic acid (IFA) supplements during their last pregnancy.
- The majority of mothers had someone assisting them during the delivery of their last pregnancy. More mothers in Barishal reported delivering at home compared to mothers in Khulna.

Maternal Minimum Dietary Diversity

- Mothers' MDD was measured using the Minimum Dietary Diversity for Women scale. MDD was calculated based on the foods they consumed from 10 food groups the day before the survey.

Overall, 42 percent of Khulna mothers and 37 percent of Barishal mothers were considered to have a diverse diet.

Mothers' Knowledge, Attitudes and Practices About Maternal Nutrition, Infant and Young Child Feeding, Complementary Feeding, Supplements, Diarrhea and Health Services

- Half of the mothers in both divisions reported eating the same as usual during their last pregnancy. In Khulna, 17 percent of mothers ate more than usual, compared to 7 percent in Barishal. The same pattern was observed for rest: half of the mothers got the same amount of rest, while a higher percentage of mothers in Khulna reported resting more compared to those in Barishal.
- Mothers were asked seven questions to measure their knowledge of infant and young child feeding (IYCF) practices. On average, mothers in both divisions answered 3.2 questions correctly. Most knew that babies should be given the colostrum and be exclusively breastfed until 6 months of age. There were gaps in knowledge about the introduction of liquids before 6 months, the introduction timing of solid, semi-solid and soft foods, and breastfeeding within the first hour after birth.
- About one quarter of mothers (23 percent in Khulna and 30 percent in Barishal) believed that water can be given to babies under 6 months of age. There were also misconceptions regarding when it is acceptable to introduce snack foods, cow or goat milk and other liquids (e.g., tea and fruit juice).
- While over half of the mothers knew at least one effect of iron deficiency, only a few knew it can lead to cognitive delays or anemia. Only 41 percent of mothers knew that salt is a source of iodine.
- Most mothers knew that babies should receive oral rehydration solution (ORS) if they have diarrhea, and over 90 percent could report at least one recommended treatment for diarrhea.
- Only 1 percent of mothers reported that their child had not been breastfed. About one-fourth of the babies were put to the breast within one hour of birth and 88 percent within the first 24 hours. One-fourth of the babies in Barishal and over one-third in Khulna were fed something besides breast milk in the first three days after delivery, usually formula, milk from an animal or water.
- Overall, 96 percent of mothers reported that they were still breastfeeding their baby and had done so the day before the survey. On average, mothers reported that their child ate solid, semi-solid or soft foods 2.91 times the day before the survey.
- About 95 percent of mothers took their child to a health facility in the past six months (on average, 5.7 times in Khulna and 4.9 times in Barishal), mainly for coughing and trouble breathing and fever. Overall, 62 percent of mothers visit "unqualified" doctors when they need health care.

Infant and Young Child Feeding Indicators

- Over 89 percent of mothers in both divisions reported that they had breastfed their baby, continued breastfeeding during the first and second year and practiced age-appropriate breastfeeding. Only about one-fourth reported initiating breastfeeding early, and one-third introduced solid, semi-solid or soft food at 6 months. Favorable practices were slightly more common among Khulna mothers compared to those in Barishal.

- In Khulna, 34 percent of mothers achieved MDD, and 66 percent achieved MMF, while 26 percent were considered to have a MAD. In Barishal, the percentages were 31, 63 and 23 percent respectively.

Household Decision-Making

- Only 38 percent of mothers in Khulna and 47 percent in Barishal can make decisions alone or jointly with their husband regarding their own health care, while just over half can make decisions regarding the health care of their child. Mothers have the most decision-making authority on the foods to be cooked each day, with 76 percent reporting that they can make this decision alone or jointly with their husband.
- In terms of division of roles and responsibilities, over 90 percent of women are always or usually responsible for washing clothes, cleaning the house and preparing food. Only 11 percent are responsible for buying food. Over 95 percent reported being either very satisfied or somewhat satisfied with the division of responsibilities in their HH.
- Women's empowerment was explored through mothers' participation in HH decision-making on the generation and use of income, specifically with regard to the following activities: food crop farming, cash crop farming, livestock raising, wage or salary employment and fishing. Approximately two-thirds of women in both divisions felt that, if they wanted, they had input into or could make decisions regarding the production of at least two of the activities listed. Fewer felt they had input into the use of income generated from these activities, with 43 percent of mothers in Barishal and 57 percent in Khulna reporting that they had input into decisions regarding the use of income for at least one activity.

Next Steps

The results highlight gaps that can be addressed through the Project to improve health and nutrition outcomes of children under 2 years of age.

The study intervention activities will start in May 2019 and continue for two years. Activities in the intervention study arms will provide SBCC and strengthened health services that will promote improved knowledge, attitudes and practices about maternal and infant feeding practices. In one study arm, CCTs could encourage greater use of health services and provide the cash needed for the purchase of nutritious foods. An endline survey will be conducted towards the end of the intervention period to measure the impact of the study interventions. A process evaluation and cost-effectiveness analysis will occur between the surveys to help explain endline findings and explore the activity's implementation, feasibility, acceptability and cost, as well as offering recommendations for future scalable implementation.

BACKGROUND

Undernutrition among children contributes significantly to global mortality and accounts for nearly half of deaths of children under 5 years of age (United Nations Children's Fund (UNICEF), WHO and the World Bank Group, 2018). The first 1,000 days (from pregnancy to a child's second birthday) are particularly crucial for establishing good nutrition and ensuring positive health outcomes throughout life. Poor fetal growth and chronic malnutrition lead to stunting in adulthood, lower attained education levels, decreased productivity, lower income in adulthood and decreased birthweight of future offspring for women (Black et al., 2013). Micronutrients (essential nutrients such as vitamin A, iron, iodine, zinc and folate) are necessary for fetal growth and development; deficiencies can lead to anemia, impaired cognitive development, poor immune function, blindness and impaired growth (Flour Fortification Initiative et al., 2009). Chronic malnutrition has been linked to poor immune function and increased risk of infectious diseases, including diarrheal disease and respiratory infections (Black et al., 2008; Save the Children, 2012; UNICEF, 2013).

According to the 2017 Joint Child Malnutrition Estimates, 155 million of children under 5 years of age had stunted growth, with South Asia and sub-Saharan Africa accounting for the majority of cases (UNICEF, WHO and the World Bank Group, 2017). While nearly one-fourth of the world's children are stunted, the global stunting prevalence declined from 32.7 percent in 2000 to 22.9 percent in 2016. The drivers of undernutrition are numerous and complex and include environmental, economic and socio-political factors (Black et al., 2008); effective strategies to address undernutrition therefore require comprehensive efforts that engage multiple sectors, including health, agriculture, WASH, social welfare, gender, education, labor and finance (Black et al., 2013; Food and Nutrition Technical Assistance III (FANTA) Project, 2017). For example, access to safe drinking (WASH sector) can help prevent diarrheal disease, leading to positive changes in nutrition status (WHO, UNICEF and U.S. Agency for International Development (USAID), 2015). On the other hand, gender inequality can contribute to inadequate nutrition among women and children when women are not empowered to make decisions on food and resource distribution within their HHs. In Bangladesh, male engagement in nutrition had a positive effect on improving dietary diversity and IYCF practices (FHI 360, 2016).

The GoB has made high-level commitments to nutrition with the endorsement of the World Health Assembly targets, the adoption of the National Nutrition Policy and participation in the international Scaling Up Nutrition Movement. According to the 2014 Bangladesh Demographic and Health Survey (BDHS) (National Institute of Population Research and Training (NIPORT), Mitra and Associates and ICF International, 2016), 36 percent of children under 5 years of age were stunted, 14 percent were wasted, and 33 percent were underweight. These results reflected positive trends in underweight and stunting decline since 2004.

Despite Bangladesh having met GoB 2016 targets as defined in the Health Population and Nutrition Sector Development Program, gaps remain in key indicators between rural and urban areas and between those in the highest and lowest wealth quintiles. For instance, according to the 2014 BDHS, 38 percent of rural children under 5 were stunted, compared to 31 percent of urban children. The wealth discrepancies are even greater: 49 percent of children under 5 in the lowest wealth quintile were stunted, compared to 19 percent in the highest quintile.

In 2017, the GoB approved the Second National Plan of Action for Nutrition 2016–2025 (NPAN-2). The Plan aims to improve nutrition and eliminate malnutrition, with a focus on children, adolescent girls and

PLW. Specific targets of NPAN-2 include reducing stunting to 25 percent, wasting to less than 8 percent and underweight to less than 15 percent among children under 5 years of age (Ministry of Health and Family Welfare (MoHFW), 2017).

Despite the achievements between 2004 and 2016, the decline in rate of stunting in Bangladesh has slowed in recent years. To achieve the ambitious World Health Assembly targets for stunting reduction by 2025, to which Bangladesh has made a global commitment, the country needs to increase the annual reduction rate to 3.3 percent. This goal requires high-level political commitment, a strong policy framework, effective coordinating mechanisms, adequate resourcing, strong involvement of local civil society groups and high-impact, cost-effective, multisectoral nutrition interventions.

In 2017, FHI 360 was awarded USAID's Strengthening Multisectoral Nutrition Programming through Implementation Science Activity (the Project). The five-year Project will test and refine multisectoral nutrition approaches, interventions and service delivery mechanisms in high stunting areas of Bangladesh, with a focus on PLW and children under 2 years of age. The Project is currently conducting mixed methods research to assess the impact of different multisectoral nutrition intervention packages delivered through a coordinated approach by the GoB, NGOs and the private sector on improving nutrition outcomes known to contribute to the overall healthy nutritional status of children under 2 years of age. The Project will also assess the fidelity of implementation and evaluate the adequacy, acceptability, relevance, coverage and cost-effectiveness of the packages. In addition, the Project will strengthen capacity among GoB stakeholders to interpret and utilize its findings, as well as other high-quality evidence related to nutrition programming, to inform future multisectoral nutrition policymaking and planning. The Project is directly supporting NPAN-2 by working through established structures that have been tested and shown to facilitate multisectoral activity convergence at subnational levels.

Social Protection for Improving Nutrition Outcomes

Global evidence (WHO, 2013) as well as national data (Ahmed et al., 2016) show improvements in child nutritional status associated with cash transfers, a type of social protection intervention. Cash transfers increase HH resources (e.g., to buy nutritious food or sanitation facilities) and, if conditional, stimulate the use of nutrition and health services. Transfers are targeted to the poorest segments of the population, fostering an equitable approach to improving nutrition outcomes. Cash transfers can either be unconditional (participants receive cash without meeting predetermined requirements) or conditional. Examples of conditions include ANC attendance, participation in growth monitoring and promotion for children under 2 years of age and participation in SBCC activities.

In recent years, the GoB has made significant strides in adopting social protection interventions for the most vulnerable populations, including pregnant women. The GoB considers cash transfers a viable mechanism for improving determinants of undernutrition in targeted populations, as reflected in current nutrition plans and policies. A specific target of the National Social Security Strategy Action Plan (2016–2017 to 2020–2021) is to strengthen schemes for children and vulnerable women, including nutrition-related services across multiple sectors. During the Technical Symposium on Nutrition-Sensitive Social Protection held in Bangladesh in December 2017, the Deputy Chief of the Planning Commission stated the GoB's priority to consolidate and coordinate schemes based on evidence for need and effectiveness (Islam, 2017).

One of the Project's intervention packages includes CCTs for social protection targeted to the poorest segments of the population. The Project team designed a CRCT to assess the effectiveness of two different interventions packages, one of which includes CCT, compared to the current standard of

practice. Effectiveness will be measured against the study's primary outcome: the percentage of children aged 6–23 months receiving a MAD, defined by WHO as the proportion of children aged 6–23 months receiving both the minimum feeding frequency and MDD for their age group and breastfeeding status (WHO, 2008). MAD was chosen as the primary outcome because NPAN-2 lists it as a priority indicator for development, and studies have demonstrated that MAD is associated with child growth. This outcome will be assessed using mothers' and caregivers' reports on child feeding practices. This report describes the results of the baseline survey conducted prior to the implementation of the interventions.

Study Interventions

In light of existing evidence and to generate the additional evidence needed to strengthen programs and policies, the study will deliver two alternative intervention packages designed to improve the nutritional status of children during their first 1,000 days of life. The first intervention will provide linkages to nutrition-related services, strengthened health services and enhanced SBCC. In addition to these components, the second intervention will also include cash transfers conditional on a woman's participation in ANC visits during pregnancy and monthly nutrition education (SBCC) group sessions. The study areas will be randomly allocated to the three study arms (two intervention arms and one comparison) in a 1:1:1 ratio. Extreme-poor pregnant women and mothers of children aged 2 months and younger (at the time of enrollment) in the study areas will be offered intervention components (provided they are not already enrolled in the Maternal and Lactating Women Stipend of the Ministry of Women and Child Affairs, GoB). Extreme poor is defined as a HH monthly per capita expenditure of less than 1,778 Bangladeshi taka (BDT) in Barishal and BDT1,677 in Khulna.

The interventions are briefly described below. Figure 1 summarizes the intervention components by study arm.

Conditional Cash Transfers

Participants in the cash transfer intervention will receive monthly cash transfers of BDT1,500 (approximately US$18), which is roughly 25 percent of the monthly consumption expenditure among poor rural HHs in Bangladesh (Ahmed et al., 2016). Cash transfers will begin when a woman enrolls to participate in the intervention at any time during her pregnancy or until 2 months after giving birth. The monthly transfer will continue until a child is 12 months old to support mothers during the critical period of complementary food introduction. Although the cash transfers end once the child is 1 year old, the mother will continue to be exposed to the other intervention components until the child is 2 years old or the intervention period ends, whichever comes first. Conditions for receipt of the cash transfer are as follows: participation in regular ANC visits and participation in monthly nutrition education (SBCC) group sessions.

Social and Behavior Change Communication, Referrals and Improved Nutrition Service Quality

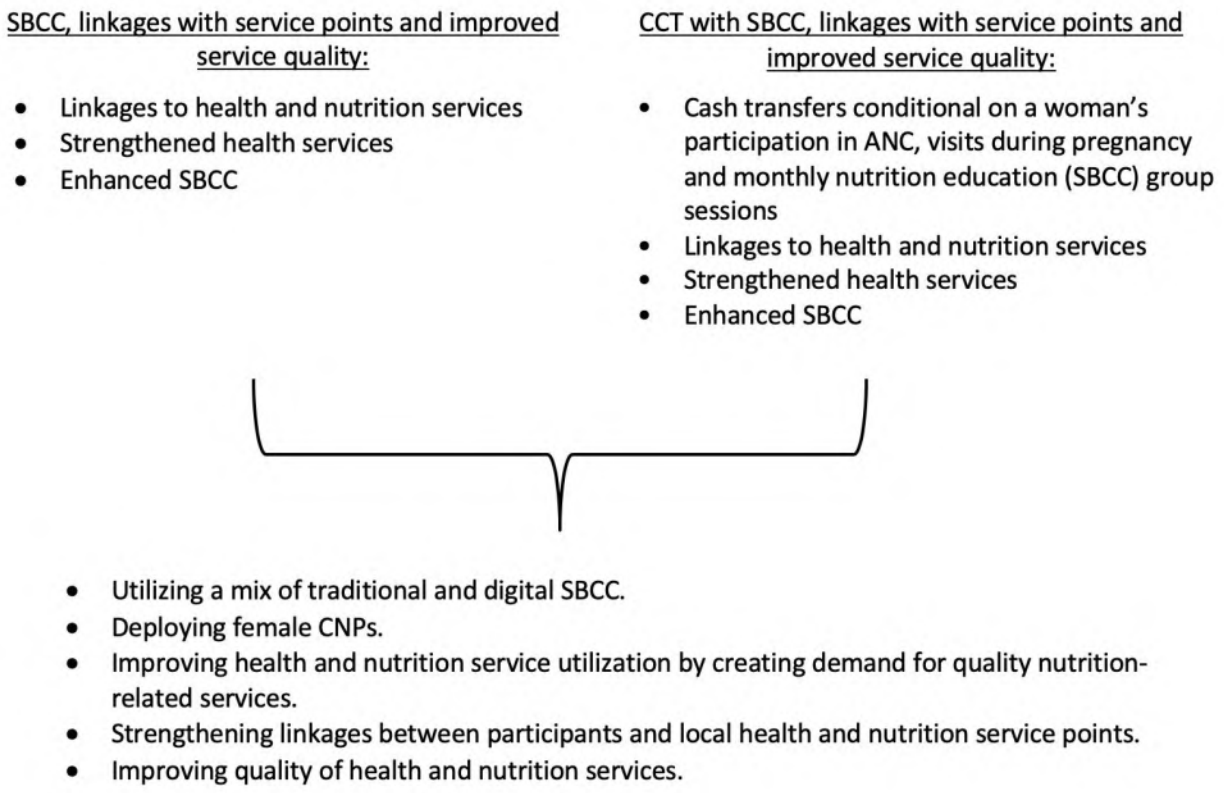
The package in both intervention arms will include identical components for SBCC, referrals to nutrition-related services and improved nutrition service quality. The primary targets for SBCC will be PLW (all pregnant women and mothers of children under 2 years of age) residing in the two intervention areas. Either the husband or mother-in-law will be a secondary target for SBCC. A mix of traditional and digital SBCC will be utilized, including weekly voice messages via mobile phone and the deployment of female Community Nutrition Promoters (CNPs). The intervention will aim to increase health and nutrition service utilization by strengthening linkages between participants, community clinics and health clinic/facility services and by creating demand for quality nutrition-related services, including ANC,

postnatal care (PNC), growth monitoring and promotion, nutrition commodities such as IFA and calcium supplements, childhood vaccinations and family planning. Local health and nutrition service quality will be improved by strengthening the monitoring process and building the capacity of service providers on the nutrition and counseling service package.

Gender Sensitivity

Both intervention packages will be implemented using a gender-sensitive lens. For instance, CNPs will work with HHs to determine existing responsibilities and workloads of all members, including domestic chores. CNPs will also discuss with family members the utilization of transferred cash to manage the nutrition needs of PLW and children under 2 years of age. During these discussions, HH members will agree on individual decision-making for the use of the cash transfers (in the CCT intervention arm) and on assuming responsibility for HH chores to allow PLW more time to engage in childcare (in both intervention arms).

Figure 1. Components of the intervention arms.



OBJECTIVES AND OUTCOMES

The primary objective of this study is to compare the effectiveness of the current standard of practice with two multisectoral intervention packages, one of which includes a CCT component. The two intervention arms are as follows:

- Referrals to nutrition-related services, strengthened health services and enhanced SBCC
- Referrals to nutrition-related services, strengthened health services, enhanced SBCC and cash transfers conditional on a woman's participation in ANC visits and monthly nutrition education SBCC group sessions

A secondary objective is to compare the two intervention packages—with and without the CCT component—to each other.

The objective of the baseline survey is to provide reference measurements prior to the implementation of interventions. The key indicators of interest include MDD and MMF, which will be used to calculate MAD, the study's primary outcome. Other areas of interest include (1) HH food security, (2) mothers' KAP regarding young infant feeding, (3) knowledge and practices related to water, sanitation and hygiene (WASH), (4) gender norms and (5) use of health services including nutrition, maternal, newborn and child health services.

METHOD

Study Design

This study will use a mixed methods CRCT design. A total of 60 unions in Khulna and Barishal divisions of Bangladesh will be randomly allocated to one of the three study arms: (1) enhanced SBCC, (2) enhanced SBCC and cash transfers conditional on a woman's participation in ANC visits and monthly nutrition education SBCC group sessions and (3) current standard practice (comparison).

Baseline outcome data were collected through face-to-face interviews using structured questionnaires with mothers and caregivers of children aged 6–23 months. Baseline data collection was conducted prior to the initiation of intervention activities.

Process data will be collected upon initiation of the intervention, and endline data collection with a separate sample of mothers and caregivers will be conducted after two years. In addition, qualitative and cost data will be collected, and the results will be reported separately.

Target Populations and Sample Size

Bangladesh is divided into eight administrative divisions, 64 districts and 545 upazilas. Each division is divided into districts and each district into upazilas. The rural areas of upazilas are divided into unions. The areas of interest for this study are 60 unions selected from two divisions: Khulna and Barishal. These divisions were chosen because they are USAID's Feed the Future zones of influence in southern Bangladesh.

The target population for the study is extreme-poor mothers of children aged 6–23 months. Mothers have to be aged 18 years or older and come from HHs with a monthly per capita expenditure of less than BDT1,778 in Barishal and BDT1,677 in Khulna.

The target sample size was calculated to provide enough power for the evaluation study at endline. Face-to-face interviews will be conducted using structured questionnaires with independent samples of extreme-poor mothers of children age 6–23 months. Because the primary effectiveness outcome is MAD, measured in children aged 6–23 months, the sample size justification focuses on the number of mothers with children aged 6–23 months.

A sample of approximately 53 respondents per union on average, or 3,180 in total across the 60 unions, provides at least 80 percent power to detect a 10 percent difference (i.e., from 40 percent to 50 percent for a superiority comparison) in the primary outcome between the two intervention arms, with 5 percent significance level for a two-sided comparison and an intra-cluster correlation of 0.03. This sample size will also allow a comparison between the intervention without CCT and the control arm and detect a similar effect (i.e., 10 percent) with power slightly greater than 80 percent. No adjustment for multiple comparisons has been included in the calculations. These calculations also account for up to 15 percent non-response rate (due to refusal or unavailability at the time of data collection).

Sampling Design and Recruitment

To select the unions for inclusion in this study, the team first selected three of the 13 districts in Khulna and Barishal. The purpose was to limit the zone of intervention to a manageable geographic area for implementation and overseeing. There are nine districts under Khulna and four under Barishal (Feed the Future zones). The team selected two districts from Khulna and one from Barishal to achieve maximum representativeness of the population in the most efficient way possible based on the following criteria:

- Total number of unions in the district (scoring: 3 for districts with >60 unions, 2 for 30–60 unions, 1 for <30 unions),
- Total number of unions with >20,000 population (scoring: 3 for >40 such unions, 2 for 20–40 unions, 1 for <20 unions),
- Districts that are not prone to natural disasters (scoring: 3 for no history of natural disasters, 2 for some history of natural disasters, 1 for districts known for natural disasters)
- Virgin districts in terms of nutrition interventions (scoring: 3 for almost no ongoing nutritional interventions, 2 for some such interventions, 1 for many such interventions).

The team ranked the districts based on these criteria and selected those with the highest scores: Jashore and Kushtia districts from Khulna division and Barishal district from Barishal division. There are 24 upazilas within these districts. To limit the number of intervention locations, the team selected 13 upazilas (nine from Khulna division and four from Barishal division) with the highest number of unions. A total of 39 unions were purposively selected from the upazilas under Khulna division and 21 unions from the upazilas under Barishal division, ensuring maximum possible geographical distance from one another (to avoid contamination) and larger population size (to minimize the chance of failing to find adequate samples).

Sampling

Prior to baseline survey data collection, the research team collected data to create the sampling frame of eligible respondents. CARE International, a project partner, obtained the initial list of HHs with children under 2 years of age from MoHFW. The research teams consulted with community members to ensure the accuracy and completeness of the list and included any additional HHs identified. There is a potential limitation in that some eligible HHs may be missing from the list depending on accuracy and whether lists are routinely updated. Further details about the HH listing procedure are described below under Field Implementation.

Once the listing was complete, the team entered the information collected into an electronic database for sample selection. Approximately 53 extreme-poor mothers and caregivers from each union were randomly selected as respondents. Where there was more than one eligible child aged 6–23 months in a HH, one of the children was selected through random sampling, and the child's mother or caregiver was selected for the survey.

Data Collection Instruments and Other Measurements

The survey form was translated into Bangla, and all interviews were conducted in that language. The survey used at baseline included modules on the following domains:

- HH demographics and assets, including sociodemographic information on the child's mother and father, HH water and sanitation knowledge and practices, HH assets, food security and participation in social safety net programs.
- Maternal health, including ANC and PNC received, use of other health services such as child health and nutrition services, immunizations and IFA supplements, and mothers' MDD.
- Mothers' KAP regarding IYCF, with a focus on the child aged 6–23 months, including breastfeeding, complementary feeding and awareness, and trial and adoption of key IYCF practices.
- Gender norms, including roles in HH decision-making, HH roles and women's empowerment.

Field Preparation

Study Approvals

This study was approved by the Protection of Human Subjects Committee at FHI 360 and the National Research Ethics Committee of the Bangladesh Medical Research Council. In addition, permission was sought from local government officials at the upazila and union levels to conduct the HH listing activity and survey the mothers.

Data Collector Training

Innovision Consulting led the data collection with 217 enumerators and 25 supervisors. The team was split into two groups: 153 enumerators responsible for the listing of HHs with mothers who had children aged 6–23 months and 64 enumerators trained to conduct the survey.

The survey team attended an initial training in Dhaka on August 13–17, 2018. The training included (1) research ethics, with an emphasis on safeguarding confidentiality and privacy, (2) information about the project and study objectives, (3) a detailed explanation of each question on the survey form, (4) instructions on how to use the tablets to complete the surveys and (5) interview techniques. In addition, mock interviews and a pretest were conducted. The pretest took place in Manikganji district, and changes to the survey form were made accordingly. Data collectors responsible for conducting the survey received additional training on September 4–5, 2018. The enumerators responsible for the HH listing attended one of the two regional training sessions that took place in Jhenaidah (on August 27) and Barishal (on August 30). These sessions included research ethics but focused on the HH listing questionnaire rather than the mothers' survey. All data collectors were required to pass an examination in research ethics in order to participate in data collection activities.

Field Implementation

The baseline study was conducted in two stages. In the first stage, Innovision Consulting conducted a listing of eligible HHs using the initial list obtained from MoHFW as a starting point. The data collection teams visited HHs on the list to assess eligibility. Data collectors asked to speak to the head of the HH or, if unavailable, some other adult knowledgeable of the HH expenditures. After administering informed consent, the data collectors completed the HH listing form to record first name, age and sex of each HH member as well as the estimated average monthly HH expenditures on food and non-food items.

The team identified extreme-poor HHs using measures derived from the Bangladesh Household Income and Expenditure Survey (Bangladesh Bureau of Statistics, 2017), which estimates HH poverty based on monthly per capita expenditure on food and non-food items. The information collected was also used to establish whether there was a child in the eligible age range in the HH. To help with data quality, the enumerators marked in chalk with "#" all HHs visited. If the visited HH had an eligible mother, it was marked with "##."

Among eligible HHs, unique HH IDs were assigned during the listing procedure and entered into a database of possible study participants. The listing procedures started on August 29, 2018, and a total of 44,807 HHs were listed (see table 1). During the listing, the team found that the demarcation areas of some villages had changed; these changes were noted. To select the sample included in the interview, approximately 53 extreme-poor mothers and caregivers from each union were randomly selected without replacement from the electronic database derived from the listing process. If more than one eligible child 6-23 months of age was found in a HH, one eligible child was randomly selected through random sampling. Field teams were provided a separate list of selected HHs for each of the 60 unions. To help guide the interview process and ensure the correct HH was being interviewed, lists of selected HHs included information collected during the listing process, including; HH address and/or identifiers, mother's name and age, and child sex and age.

Table 1. Households listed and surveys conducted, by district.

District	Total HHs listed	Did not consent to listing	HHs without mothers	Target sample size for mothers' survey	Mothers' surveys conducted
Jashore	17,904	14	110	1,166	1,062
Kushtia	13,834	6	137	901	811
Barishal	13,069	65	14	1,113	1,055
Total	**44,807**	**85**	**261**	**3,180**	**2,928**

Once the sample was chosen, the team conducted HH surveys from September 6 to December 1, 2018. Three attempts were made to complete the interview of each mother or caregiver that had been randomly selected. If the interview was not completed after three attempts, the participant was marked as not found. Other reasons for not completing an interview were also documented (e.g., refusal, error in the sampling frame etc.). In addition, the team faced a number of challenges during data collection, including errors on the HH list (e.g., the inclusion of HHs that did not have children aged 6–23 months), families that had moved out of the union, unwillingness to provide information and difficulty identifying the correct HH based on the names of the mother and father. However, the sample size had been adjusted to account for up to 15 percent of non-response rate, so no replacement HHs were selected. The rate of non-response was monitored periodically to check if it was higher than 15 percent in some unions.

Surveys were conducted with a total of 2,928 mothers and caregivers of children aged 6–23 months—252 fewer participants than the targeted sample size (table 1). The average non-response rate per union was 7.9 percent (n=252). A number of quality control procedures were implemented during data collection to ensure the highest quality of data, including field team monitoring, daily team discussions, daily data checks and verification of selected variables for randomly selected HHs.

Electronic Data Collection and Data Quality

Quantitative data were collected electronically on password-protected tablets using SurveyCTO. Network permitting, the data were uploaded daily to the SurveyCTO web-based server. The data remained on the tablets until collection was complete and all data were successfully uploaded onto the server. Data validation processes were carried out throughout the study, starting at the time of data entry. The electronic form was programmed to include predefined acceptable ranges for responses, conditionality rules for skip patterns and other logical applications to ensure that data were properly and accurately collected.

All variables used in the analysis and to construct derived variables were checked for completeness and consistency. Additionally, all variables were investigated for data entry errors and corrected where possible or set to missing. Data issues not resolved were not addressed analytically. No imputation of missing data was performed, but missing data patterns (e.g., percent missing per variable) were analyzed.

DATA ANALYSIS

Analysis of the baseline data was conducted using Stata version 15. Descriptive analysis was employed to produce simple summaries about the sample and measures. For the baseline report, the results are stratified by division. This will provide useful information for programmers and policy/decision-makers who work in these divisions. Summary statistics included mean and standard deviation for continuous variables, median and inter-quartile range for discrete variables, and frequencies and percents for categorical variables. For means, minimum and maximum values were also reported.
IYCF practices include the primary outcome measure (MAD) as well as other key IYCF indicators created as per WHO indicator guidelines on IYCF practices, including the handling of missing values (WHO, 2008). Missing data on breastfeeding was treated as “not currently breastfeeding” in the numerator and included in the denominator. Missing and “don’t know” data on foods and liquids given were treated as “not given” in the numerator and included in the denominator.

RESULTS

The results illustrated in this section include (1) mothers’ sociodemographic characteristics and the HH characteristics that can affect maternal and infant health, such as sources of water and sanitation and HH food security, (2) the care mothers received surrounding their last pregnancy, including ANC, delivery and PNC, (3) mothers’ knowledge and attitudes on IYCF practices and knowledge of diarrhea treatment, (4) maternal practices, including the use of health services and IYCF and (5) gender roles and women’s empowerment. The tables illustrating the results mentioned in this section can be found in the annex.

Sociodemographic Characteristics

The majority of women interviewed were mothers of children aged 6–23 months; only 1 percent were caregivers (annex, table 1). The average age of the mothers and caregivers was 26.31 years old, with 70 percent of the sample aged 18–29 years old. Only 2 percent were 40 years of age or older. While the age distribution is similar in the two divisions, mothers in Barishal are on average slightly older. Nearly all the women in both divisions were married, and most (94 percent) attended school or madrasa. While one-third only attended primary school, the rest received higher education, with 12 percent attending college (i.e., the equivalent of grades 11 and 12 in U.S. high schools) or higher. Mothers in Barishal were more likely to have attended only primary school compared to mothers in Khulna (40 and 30 percent, respectively). Most mothers (95 percent) practiced Islam.

Only 12 percent of mothers in Barishal worked to earn money, compared to 26 percent in Khulna. The most common occupation was raising livestock or poultry; other occupations included wage labor and self-employment.

Nearly all the mothers' husbands were currently employed; the most common occupations were wage labor, farming, self-employment and salary work. Farming was far more common among husbands in Khulna than Barishal. Overall, husbands were not as educated as mothers: only 82 percent of the husbands attended school or madrasa, and a higher percentage only attended primary school compared to mothers (49 percent). The rest of the husbands attended beyond primary school, and 13 percent went to college or higher. These patterns were similar for both divisions.

Mobile Phone Ownership and Use of Mass Media

Most HHs owned a mobile phone (96 percent), and over half of the mothers owned their own mobile phone. However, phone ownership was greater among mothers in Barishal compared to Khulna (annex, table 2). Nearly all the mothers reported not reading newspapers or magazines or listening to the radio. Many reported watching television; however, watching television at least once a week was more common among mothers in Khulna (60 percent) than Barishal (34 percent).

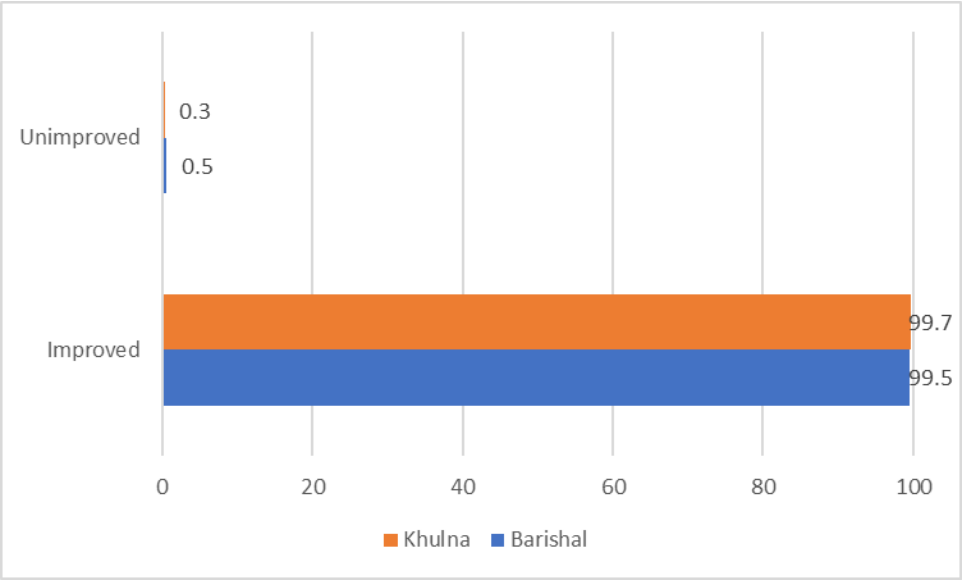
Household Members and Children in the Household

On average, mothers came from HHs with 5.41 members, including an average of 1.98 children aged between 6 months and 18 years (annex, table 3). Of the children aged 6–23 months included in the sample, slightly more than half in both divisions were male. The age distribution was similar across divisions, with 43 percent aged 6–12 months and the rest aged 13–23 months.

Household Water Source

Nearly all HHs in both divisions had improved water sources, usually a tube well or borehole (figure 2 and annex, table 4). An improved water source is defined as a source protected from outside contamination, such as piped water into a dwelling, plot or yard, tube wells or boreholes, protected wells and rainwater collection. For over three-quarters of HHs in Khulna, the water source was in their own yard or plot, compared to 36 percent in Barishal. For those HHs without a water source in the yard, it takes on average 13 minutes in Barishal and 10 minutes in Khulna to make a roundtrip to collect water. Most often, water is collected by an adult woman aged 15 years or older.

Figure 2. Percentage of households with improved and unimproved water sources, by division.

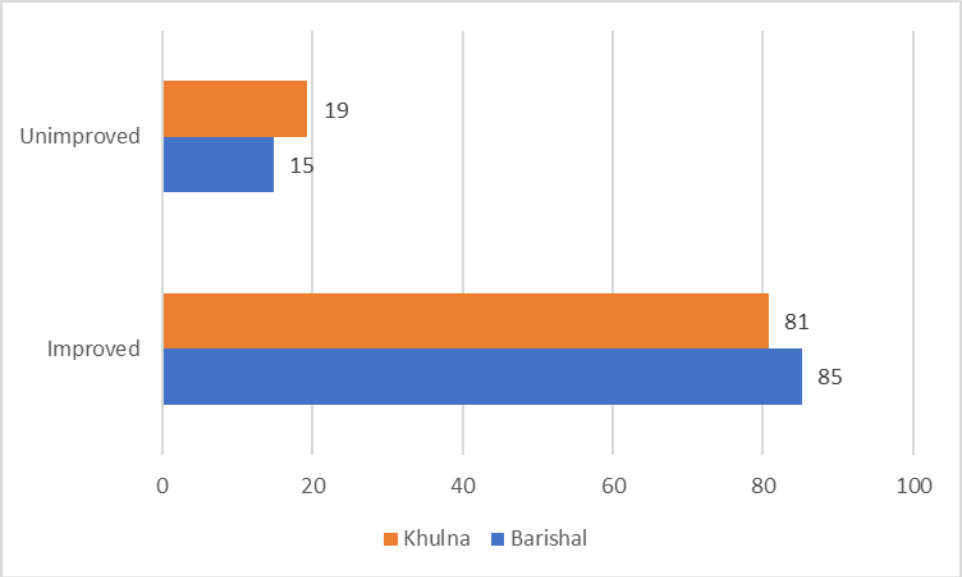


Despite the WASH program messages promoting the treatment of water before drinking, nearly all HHs (97 percent) did not treat their water before drinking it. The majority of HHs in Barishal stored their water, with most using a covered container (88 percent) and a minority using an uncovered container (4 percent). In contrast, about one-third of HHs in Khulna did not store their water, while 55 percent used a covered container and 11 percent an uncovered container.

Household Sanitation

Improved sanitation facilities are facilities that hygienically separate human waste from human contact. These include flush toilets, ventilated improved pit latrines, pit latrines with slab and composting toilets. Unimproved facilities include pit latrines without slab or open defecation. The majority of HHs in the survey (81 percent in Khulna and 85 percent in Barishal) had improved toilet facilities (figure 3 and annex, table 5). The main type of improved toilet facility in both divisions was a pit latrine with slab; however, nearly one-fourth of HHs in Khulna had a ventilated improved pit latrine. The most common type of unimproved facility was a pit latrine without a slab. The majority of HHs did not share their toilets, but sharing was reported by 19 percent of mothers in Barishal and 38 percent in Khulna. Nearly all HHs that share facilities do so with other HHs and do not use public facilities.

Figure 3. Percentage of households with improved and unimproved toilet facilities, by division.



Most HHs in Barishal (95 percent) had a place to wash hands, and most had water available (86 percent). About two-thirds had their hand-washing station in a shared open space, while most of the rest had it in an open space that was not shared. Nearly half did not have any cleaning agent at the hand-washing station, while 30 percent had ash, mud or sand, and one-fourth had soap. Khulna had fewer HHs with a hand-washing station (86 percent), and most of these had water available. No cleaning agent was observed in 26 percent of these stations, while 56 percent had soap. Most of the remainder had ash, mud or sand. More than half of the HHs did not share the hand-washing place.

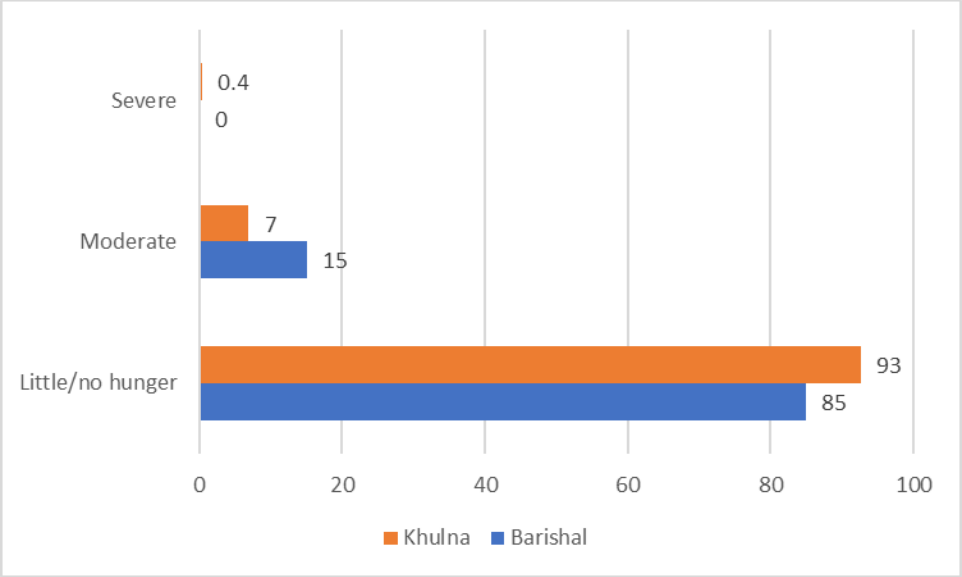
Household Assets

Khulna HHs were more likely to possess a television, an electric fan or electricity compared to HHs in Barishal (annex, table 6). Nearly all HHs in Khulna had an electric fan and electricity, while half had a television. Possession of these assets was 71, 75 and 29 percent respectively in Barishal. Ownership of an almirah or wardrobe was 37 percent in Barishal and 16 percent in Khulna, while ownership of a refrigerator was 18 and 14 percent respectively. Approximately one-fifth of HHs in Khulna and 16 percent in Barishal had a bank account. Nearly half of the HHs in Khulna but only 12 percent in Barishal had cement walls in the homes. The majority of HHs in both divisions had floors made of earth or sand, although these were more common in Barishal than Khulna. Approximately one-fourth of HHs in Khulna had cement floors.

Household Food Security

HH food insecurity in the 30 days preceding the survey was measured using the Household Hunger Scale developed by FANTA (Ballard et al., 2011). This scale takes into account (1) lack of food, (2) going to sleep hungry and (3) not eating for a day and night in the past 30 days. Based on the responses, twice as many HHs in Barishal were classified as having moderate or severe hunger compared to Khulna (figure 4). In Barishal, 85 percent of HHs were determined to have little or no hunger, 15 percent had moderate hunger, and no HHs were classified as having severe hunger. The corresponding percentages in Khulna were 93, 7 and less than 1 percent respectively.

Figure 4. Percentage of households with severe, moderate or little or no hunger, by division.



One-fourth of HHs in Barishal and 16 percent in Khulna reported not having the resources to get food at least once in the 30 days preceding the survey (annex, table 7). Among those HHs in Barishal, half reported that it happened rarely (once or twice), while 44 percent said it happened sometimes (3–10 times). Seven mothers reported that it happened often (more than 10 times). Of the HHs in Khulna, about one-third said it happened rarely, and 60 percent said it happened sometimes. Twelve mothers reported that it happened often. Fewer HHs reported that they had gone to sleep hungry in the past 30 days (16 percent in Barishal and 8 percent in Khulna), with most reporting it happened rarely or sometimes. About 3 percent overall reported they had gone a whole day and night without eating in the past 30 days because there was not enough food.

Participation in Social Safety Net Programs

Table 8 in the annex shows the extent of mothers' participation in social safety net programs, NGO programs and community committees. Participation in social safety net programs is more common in Barishal than Khulna (38 percent compared to 29 percent). The benefit received most often is a cash transfer, although some mothers reported receiving a non-cash agricultural or livestock input. Nearly half of the mothers are currently participating in an NGO program, and most are receiving a cash transfer. Very few mothers (5 percent) are participating in a community committee.

Antenatal Care

GoB guidelines recommend at least four ANC visits during pregnancy, with the first occurring during the first trimester. Over the course of the pregnancy, blood pressure should be monitored, blood should be drawn to check for anemia, and urine cultured to check for asymptomatic bacteriuria. More mothers in Khulna (93 percent) reported receiving ANC during their last pregnancy compared to Barishal (76 percent) (annex, table 9). In both divisions, most mothers saw a qualified doctor as well as NGO health workers, nurses or midwives and family welfare visitors. They were most likely to receive ANC in a private hospital or clinic, followed by their home; upazila health complexes and community clinics were also visited for ANC. Only 15 percent of mothers reported receiving their first ANC visit during the first trimester. Most received their first visit during the second trimester (67 percent), and approximately

one-fifth received their first visit in the third trimester. The average number of visits was 4.1 in Khulna and 3.4 in Barishal. During these visits, approximately 90 percent of mothers had their blood pressure taken at least once, while approximately 70 percent gave a urine sample and a blood sample at least once. Samples were taken slightly more often in Khulna compared to Barishal.

Antenatal Care Immunizations, Supplements and Nutrition

Over the course of a pregnancy, a mother should receive a tetanus vaccination (if she hasn't already had one) to prevent the baby from contracting neonatal tetanus. In addition, she should eat a healthy diet and take IFA supplements to prevent anemia, puerperal sepsis, low birthweight and preterm birth. Vitamin A supplements are indicated to prevent night blindness.

About two-thirds of the mothers reported having an immunization card, but only about half of them had the card available to show the data collector (annex, table 10). Most mothers in both divisions (86 percent) reported receiving a tetanus injection either during this pregnancy or a prior pregnancy to prevent their baby from contracting neonatal tetanus.

Nearly two-thirds of mothers reported taking IFA supplements during their last pregnancy. About one-fourth started taking them in their first trimester, while 61 percent started during their second trimester. The pattern was similar in both divisions. Very few mothers took any drugs for intestinal worms during their last pregnancy.

About 40 percent of mothers in both divisions reported eating less than usual during their last pregnancy. More mothers in Khulna reported eating more than usual (17 percent) compared to Barishal (7 percent). However, most mothers got the same amount or more rest than usual during their last pregnancy, with only 16 percent getting less rest. While similar proportions of mothers reported eating less than usual in Khulna and Barishal, more mothers in Khulna reported eating more than usual compared to Barishal mothers. Similarly, mothers in Khulna more often reported getting more rest than usual compared to Barishal mothers.

Delivery

Nearly all mothers had someone assisting them during the delivery of their last pregnancy; often, more than one person was present (annex, table 11). In Khulna, 55 percent of mothers reported being assisted by a qualified doctor, while 60 percent had a nurse or midwife. In Barishal, 42 percent of mothers reported having a nurse or midwife in attendance, with one-third reporting the presence of a qualified doctor and 34 percent a traditional birth attendant. In both divisions, many mothers reported that a relative, friend or family member assisted (60 percent in Barishal and 36 percent in Khulna).

Mothers in Barishal were more likely to deliver at home compared to Khulna mothers. In Barishal, nearly two-thirds reported that their last delivery was at home, while nearly one-fourth said it was at a private hospital or clinic. In Khulna, nearly half of the mothers reported that their delivery was at a private hospital or clinic, and one-third said it was at home. For mothers who delivered at home, the main reason they gave for not going to a facility was that they did not think it was necessary. However, 20 percent of these mothers said that the cost is too high; this was reported more often among Barishal mothers (31 percent) compared to Khulna mothers (10 percent).

Of the mothers whose last delivery was in a facility, over two-thirds in Barishal and nearly three-fourths in Khulna delivered by caesarian section, representing 26 and 50 percent of all births respectively.

The majority of mothers (62 percent overall) said their babies were an average size at birth, while 15 percent reported that the baby was larger than average and a similar percentage that the baby was smaller than average. Few reported their baby was either very large or very small. Two-thirds of the babies in Khulna and over one-third in Barishal were weighed at birth. The average weight was 2.97 kilograms.

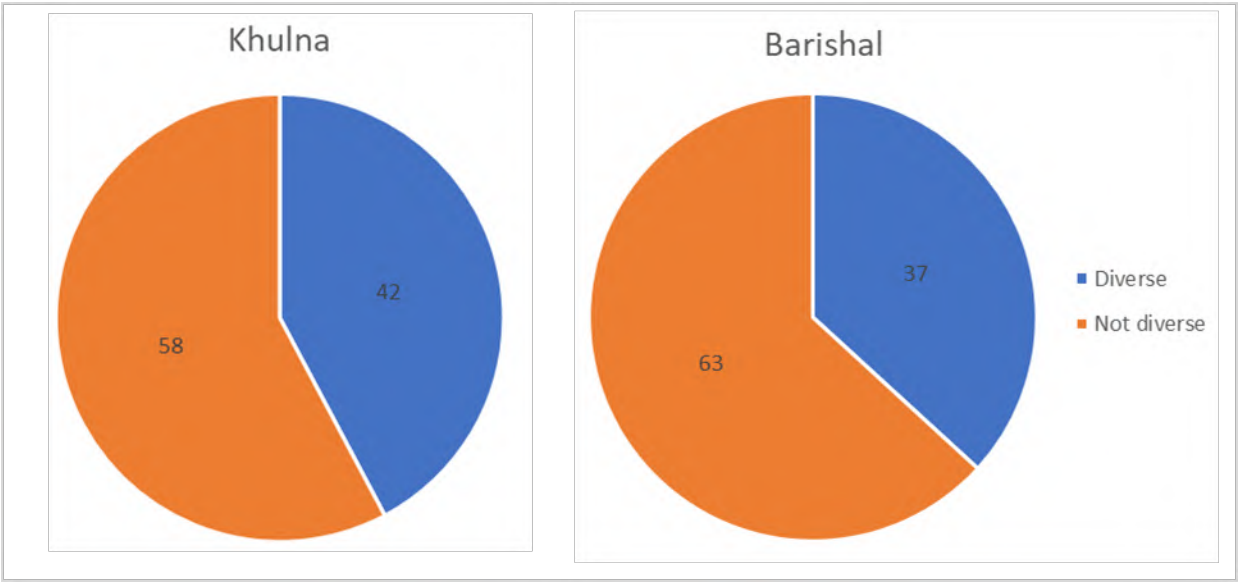
Most mothers did not receive any visit from a health professional after delivery; only 9 percent of Barishal mothers and 15 percent of Khulna mothers reported that they did. In most cases, it was an NGO health worker who made the visit. The visit was most often made more than two days after delivery. Of those who received a visit from a health professional, the majority were not given or did not purchase vitamin A supplements within two months after delivery.

Mothers' Minimum Dietary Diversity

Mothers' MDD scores were calculated based on the foods they consumed during the day before the survey using the Minimum Dietary Diversity for Women scale developed by the Food and Agriculture Organization (FAO) and FANTA (FAO and FHI 360, 2016). The score reflects the foods they consumed from 10 food groups: (1) grains, roots and tubers, (2) legumes, (3) nuts and seeds, (4) dairy products, (5) flesh foods (e.g., meat, poultry and fish), (6) eggs, (7) dark green, leafy vegetables, (8) vitamin A-rich fruits and vegetables, (9) other fruits and (10) other vegetables. If a mother consumed a food item in at least five of the 10 groups, her diet was considered diverse.

The specific foods consumed by mothers is shown in table 12 (annex). While most mothers ate grains, roots and tubers and, to a lesser extent, meat, fish and poultry, few ate nuts and seeds, and only one-fourth ate eggs. Overall, 42 percent of mothers in Khulna and 37 percent in Barishal were considered to have a diverse diet (figure 5). Mothers in Khulna were more likely than Barishal mothers to eat nuts and seeds (although consumption was very low in both divisions), dairy products, eggs, dark green, leafy vegetables and other fruits and vegetables. However, mothers in Barishal ate pulses (e.g., beans, peas and lentils) and vitamin A-rich fruits and vegetables more often.

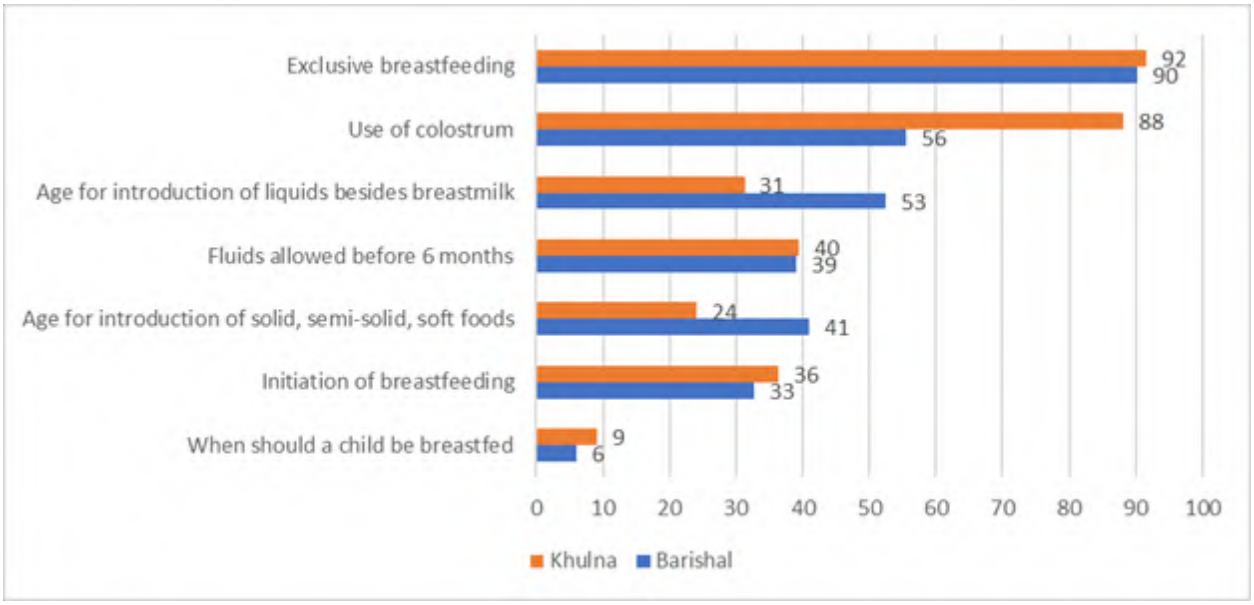
Figure 5. Percentage of mothers with minimum dietary diversity, by division.



Mothers' Knowledge About Infant and Young Child Feeding

Mothers were asked seven questions to measure their knowledge of IYCF practices (figure 6 and annex, table 13). The results reflect gaps in IYCF knowledge. Overall, mothers in Barishal and Khulna answered 3.2 questions correctly. Most of them knew that babies should be exclusively breastfed until 6 months of age. The majority of mothers also knew that they should give the colostrum (or "first milk") to the baby. However, approximately half or fewer of mothers in both divisions knew that (1) liquids besides breast milk can be introduced at 6 months, (2) no other fluids aside from breast milk should be given to a baby younger than 6 months, (3) solid, semi-solid and soft foods should be introduced at 6 months and (4) breastfeeding should begin within the first hour after birth. Only a few mothers knew that a baby should be breastfed whenever the baby wants.

Figure 6. Percentage of mothers with correct knowledge of infant and young child feeding indicators, by division.



Mothers' Knowledge About Complementary Feeding and Supplements

Table 14 (annex) shows mothers' KAP about complementary feeding. Mothers were asked at what age it is appropriate to introduce specific liquids and foods. The most misidentified items for babies younger than 6 months of age were water (23 percent) and cow or goat milk (10 percent) in Khulna and water (30 percent) and nuts and seeds (39 percent) in Barishal.

Minerals such as iron and iodine are essential in a child's diet. Iron deficiency can lead to impaired cognitive development, stunted growth, anemia and a weakened immune system. Iodine is critical to the development of the brain and nervous system, and deficiencies can impair intellectual abilities and ultimately affect school and work performance. Knowledge about iron among the mothers was moderate (annex, table 15). Just over half knew of at least one effect of iron deficiency, but only a few knew it can lead to cognitive delays. Only 41 percent of mothers knew that salt is a source of iodine.

Mothers' Knowledge Practices About Diarrhea

Table 16 (annex) shows mothers' knowledge of what to do when a child younger than 6 months or older than 6 months has diarrhea as well as their knowledge of hand-washing in order to prevent diarrhea. Most mothers knew that if a child either under 6 months or between 6 and 12 months has diarrhea, they should give the child ORS, and 90 percent could report at least one recommended treatment for diarrhea. Zinc syrup is a recommended treatment when given with ORS. Many mothers reported using zinc syrup to treat diarrhea, with 17 and 39 percent reporting this for children under 6 months and between 6 and 12 months respectively.

Knowledge about hand-washing was fairly high, with most mothers washing their hands before eating (95 percent) and after using the toilet (85 percent). Fewer knew they should wash their hands before feeding a child (50 percent) and before preparing or cooking food (45 percent). There was a noticeable difference between divisions, with only 30 percent of mothers in Barishal washing their hands after helping the child use the bathroom compared to 44 percent in Khulna.

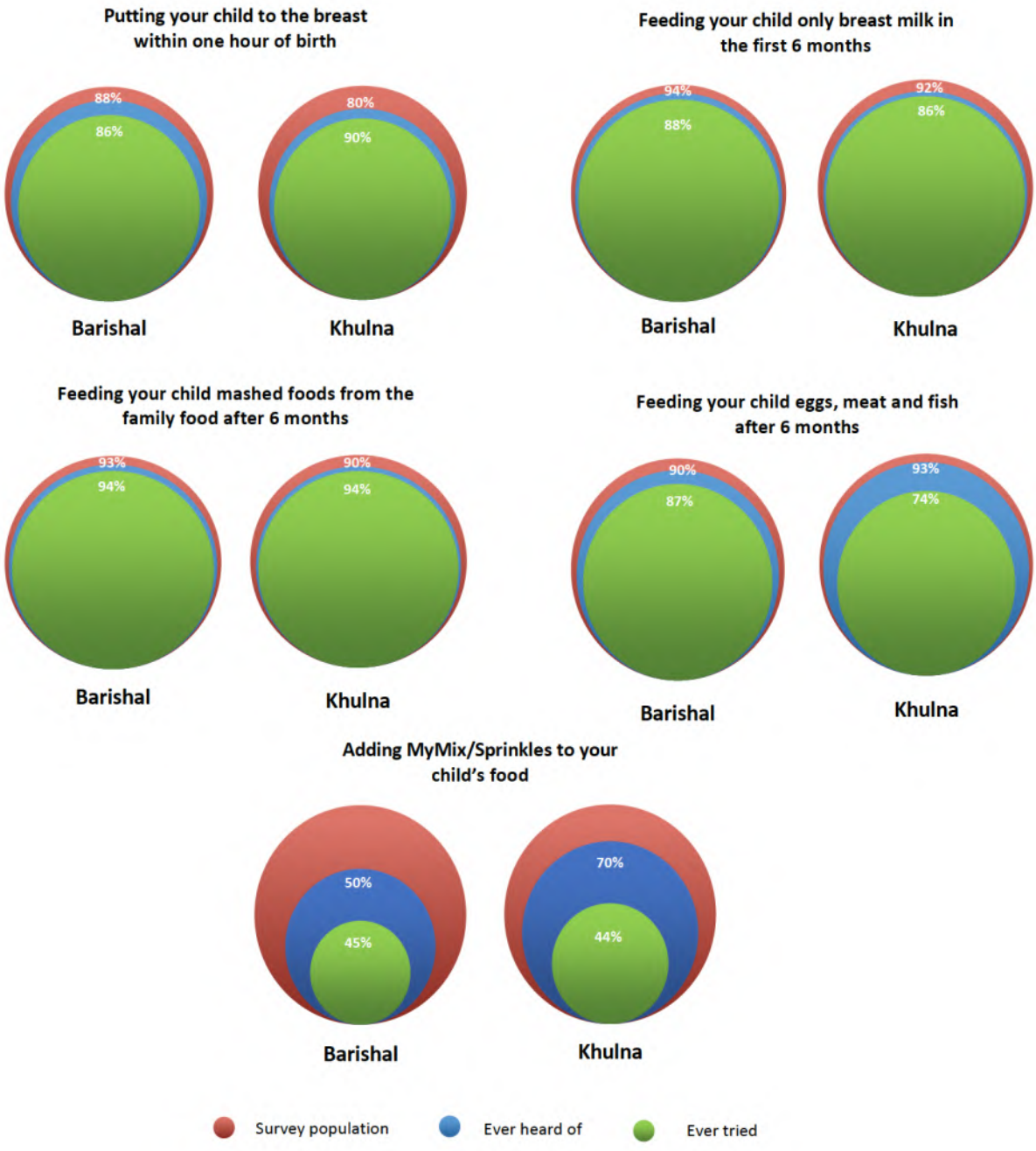
Awareness and Trial of Key Practices

Awareness and trial of key IYCF and maternal nutritional practices were measured using a module of questions adapted from Alive and Thrive. Awareness is defined as the mother reporting ever hearing of the specified practice; trial is when the mother who heard of the practice reports having ever tried it. Table 17 (annex) and figure 7 show that awareness and trial of most of the key messages are very high. Between 83 and 92 percent of mothers in both divisions had heard of the following key messages, and between 79 and 94 percent had ever tried them:

- A child should be breastfed within an hour after birth.
- A child should be exclusively breastfed for the first six months.
- A child should be fed mashed foods from the family food in addition to breastfeeding after 6 months.
- A child should be fed eggs, fish and meat at least once per day after 6 months.

The results differ from similar knowledge questions shown in table 13 (annex) and practice questions shown in tables 19–21 (annex), reflecting a discrepancy in responses based on how the question is asked. The only practice that was not as widely known or tried was adding Sprinkles (e.g., Pushtikona, MoniMix or MyMix) to the child's food. Less than two-thirds of the mothers had heard of this practice, and 44 percent of those had tried it.

Figure 7. Awareness and trial of key practices.



Use of Health Services

When health services are needed, the most common source of services is an unqualified village doctor's chamber or office (annex, table 18). Unqualified doctors are not licensed or recognized by the state. The majority of mothers in Khulna (62 percent) reported that they usually seek medical help or treatment from an unqualified doctor, while 10 percent usually go to a qualified doctor's chamber and 9 percent to a pharmacy. In Barishal, 38 percent of mothers visit an unqualified doctor, 35 percent go to the

pharmacy, and 7 percent visit a qualified doctor or community clinic. On average, the facility they usually attend is a 27-minute walk for Khulna mothers and a 40-minute walk for Barishal mothers.

About 95 percent of mothers in both divisions took their child to a health facility in the past six months, with an average of 5.7 visits for Khulna mothers and 4.9 visits for Barishal mothers. The two main reasons for these visits, cited by about 70 percent or more of mothers in both divisions, are coughing or trouble breathing and fever. Diarrhea was mentioned by one-fourth of mothers in Barishal and 13 percent of mothers in Khulna. Nearly all mothers who did not take their child to a health facility reported that the child was healthy and there was no reason to visit.

Early Initiation of Breastfeeding

The majority of mothers reported that their child had been breastfed; only 1 percent said that the child had not been breastfed (annex, table 19). The most common reasons for not breastfeeding were insufficient milk, the mother died, or the child refused.

Recommendations from WHO and UNICEF state that babies should be breastfed within the first hour after birth and be exclusively breastfed for the first six months (UNICEF, 2005). Approximately one-fourth of the babies were put to the breast within the first hour of birth and 88 percent within the first 24 hours. Nearly all mothers (97 percent) gave colostrum to their baby. Of those who did not, the main reason was that they were instructed not to.

One-fourth of babies in Barishal and over one-third in Khulna were given something besides breast milk in the first three days after delivery. One-third were fed baby formula milk (mostly among Khulna mothers), 39 percent were given milk from an animal, and just under 15 percent of mothers gave their babies plain water or honey (more common among Barishal mothers).

Current Breastfeeding and Supplemental Liquids

WHO and UNICEF recommend that babies continue to be breastfed for two years, with complementary feeding beginning at 6 months of age (UNICEF, 2005). Overall, 96 percent of mothers reported currently breastfeeding their babies, and 94 percent had done so the day before the survey (annex, table 20). Ten percent of mothers reported that their child drank from a bottle with a nipple and nearly all that the child had plain water the day before. Between 8 and 23 percent of mothers reported giving their children other liquids, including milk (tinned, powder or fresh), juice or juice drinks, thin porridge and vitamin or mineral supplements, while 6 percent reported feeding the child formula.

Supplemental Foods

After 6 months of age, children should be given supplemental foods in addition to breast milk. On average, mothers reported that their child ate solid, semi-solid or soft foods 2.91 times the previous day (annex, table 21). The average number of times the child ate was slightly higher in Khulna compared to Barishal. Overall, nearly 6 percent of children did not receive any meals during the previous day.

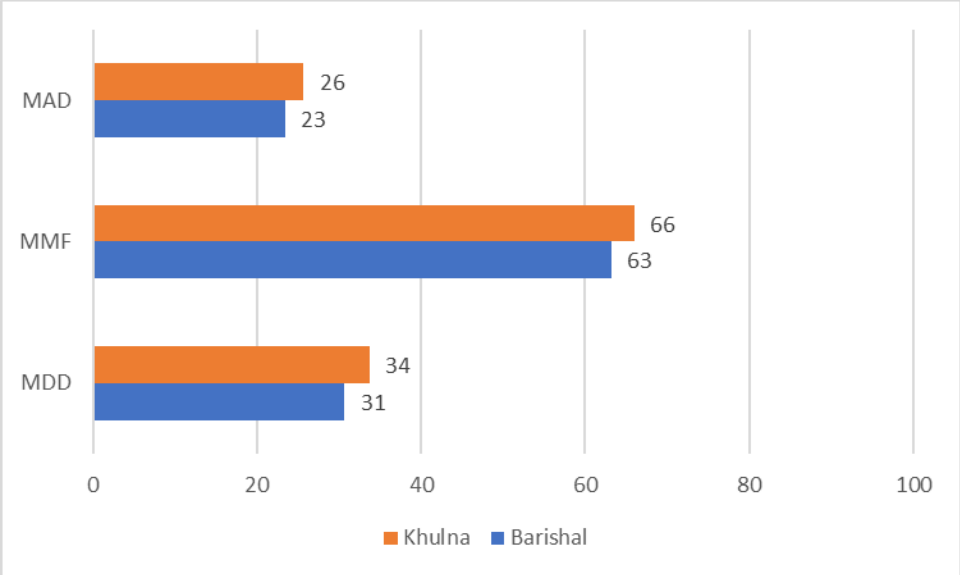
Most children ate grains, roots and tubers, and about half ate flesh foods (meat, fish or poultry). Legumes and nuts, dairy products, eggs, vitamin A-rich fruits and vegetables, and other fruits and vegetables were consumed by between 27 and 34 percent of children. Children in Khulna ate dairy products, flesh foods, eggs and other fruits and vegetables more often than children in Barishal. Children in Barishal ate legumes and nuts and vitamin A-rich foods more often than children in Khulna.

Infant and Young Child Feeding Practices and Indicators

IYCF practices are shown in table 22 (annex). Results for the two divisions are similar; however, favorable practices are generally slightly more common in Khulna than Barishal. Over 89 percent of mothers reported that they ever breastfed, continued breastfeeding during the first and second year and practiced age-appropriate breastfeeding, giving either only breast milk or breast milk with complementary foods according to child age. Only about one-fourth reported that they initiated breastfeeding early, and 32 percent introduced solid, semi-solid or soft foods at 6 months. Just under one-third of mothers reported giving a prelacteal feeding, a practice that is discouraged; this was reported more often in Khulna than Barishal.

One-fourth of the children sampled (26 percent in Khulna and 23 percent in Barishal) were considered to have a MAD based on the mothers' reports (figure 8). MAD is a composite measure that includes MDD and MMF. While just under two-thirds of the children met MMF, slightly less than one-third met MDD.

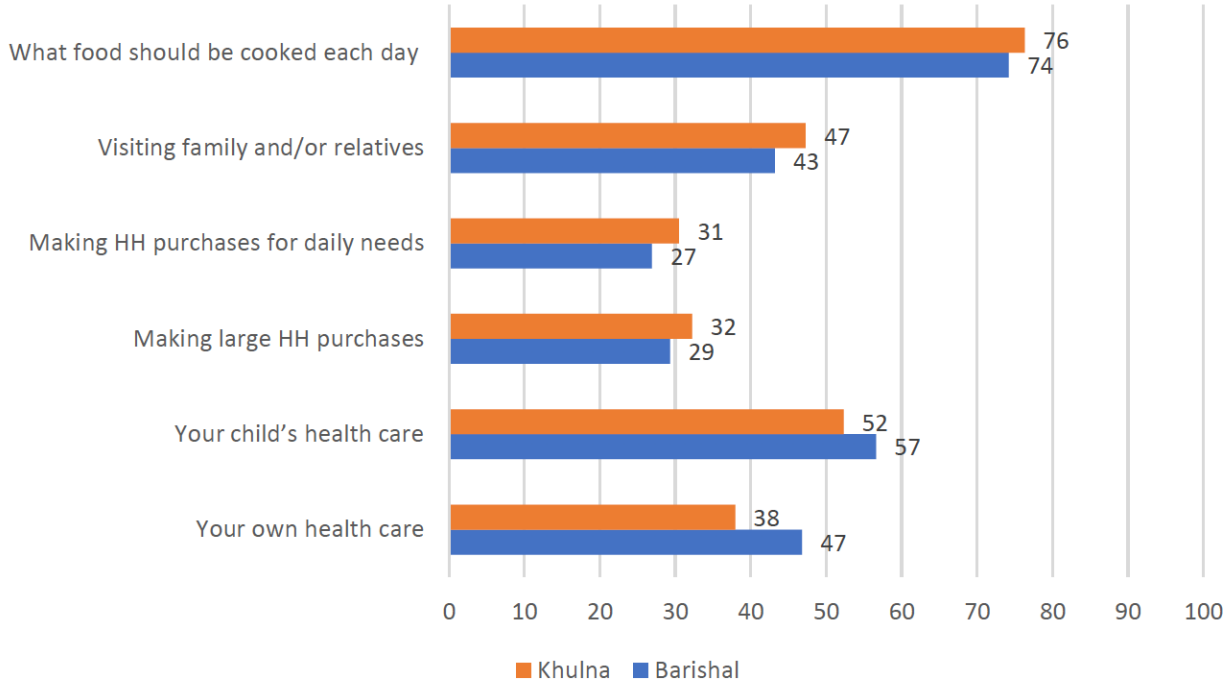
Figure 8. Percentage of children showing minimum acceptable diet, minimum dietary diversity and minimum meal frequency, by division.



Household Decision-Making

Gender roles in HH decision-making were explored to determine the extent of mothers' control over their own health and nutrition and that of their children. Table 23 (annex) shows who makes key decisions in the HH regarding health care, HH purchases, visits to family and friends and what foods should be cooked each day. Only 38 percent of mothers in Khulna and 47 percent in Barishal felt they could make decisions alone or jointly with their husband regarding their own health care (figure 9). Just over half could make decisions regarding the health care of their child. Overall, only about one-fourth to one-third could make decisions alone or jointly with their husband regarding large HH purchases or purchases for daily HH needs. Less than half could make decisions alone or jointly regarding visits to family members or friends. Mothers had the most decision-making authority on what foods should be cooked each day, with 76 percent being able to make this decision alone or jointly with their husband.

Figure 9. Percentage of mothers who can make household decisions on their own or jointly, by division.



Household Roles and Responsibilities

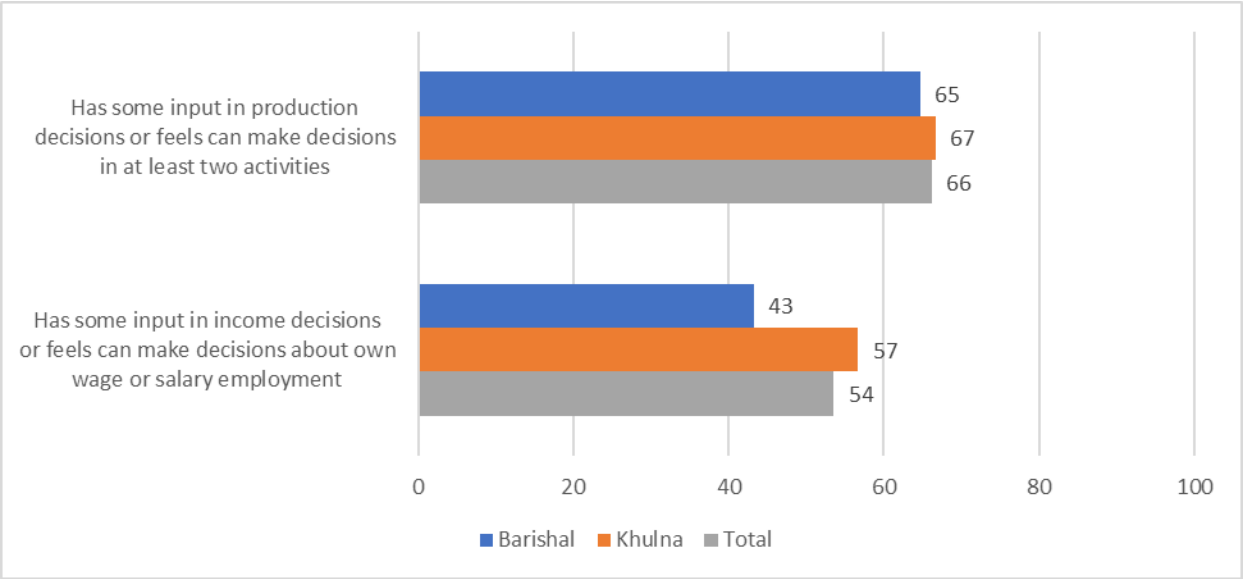
Mothers were asked about the division of labor on a number of HH responsibilities, including washing clothes, repairing the house, buying food, cleaning the house, preparing food and caring for or spending time with the children. Table 24 (annex) shows that over 90 percent of mothers in both divisions were always or usually responsible for washing clothes, cleaning the house and preparing the food, while 87 percent reported being always or usually responsible for caring for or spending time with the children. Less than one-fifth reported being responsible for repairing the house, and only 11 percent were responsible for buying food.

Overall, three-fourths of mothers felt that they did a lot more or a little more than their husband in terms of division of tasks. Over 95 percent of mothers in both divisions were either very satisfied or somewhat satisfied with the division of responsibilities. Similarly, over 95 percent thought that their husband was very satisfied or somewhat satisfied with the division of responsibilities.

Household Decision-Making on Production and Income Generation

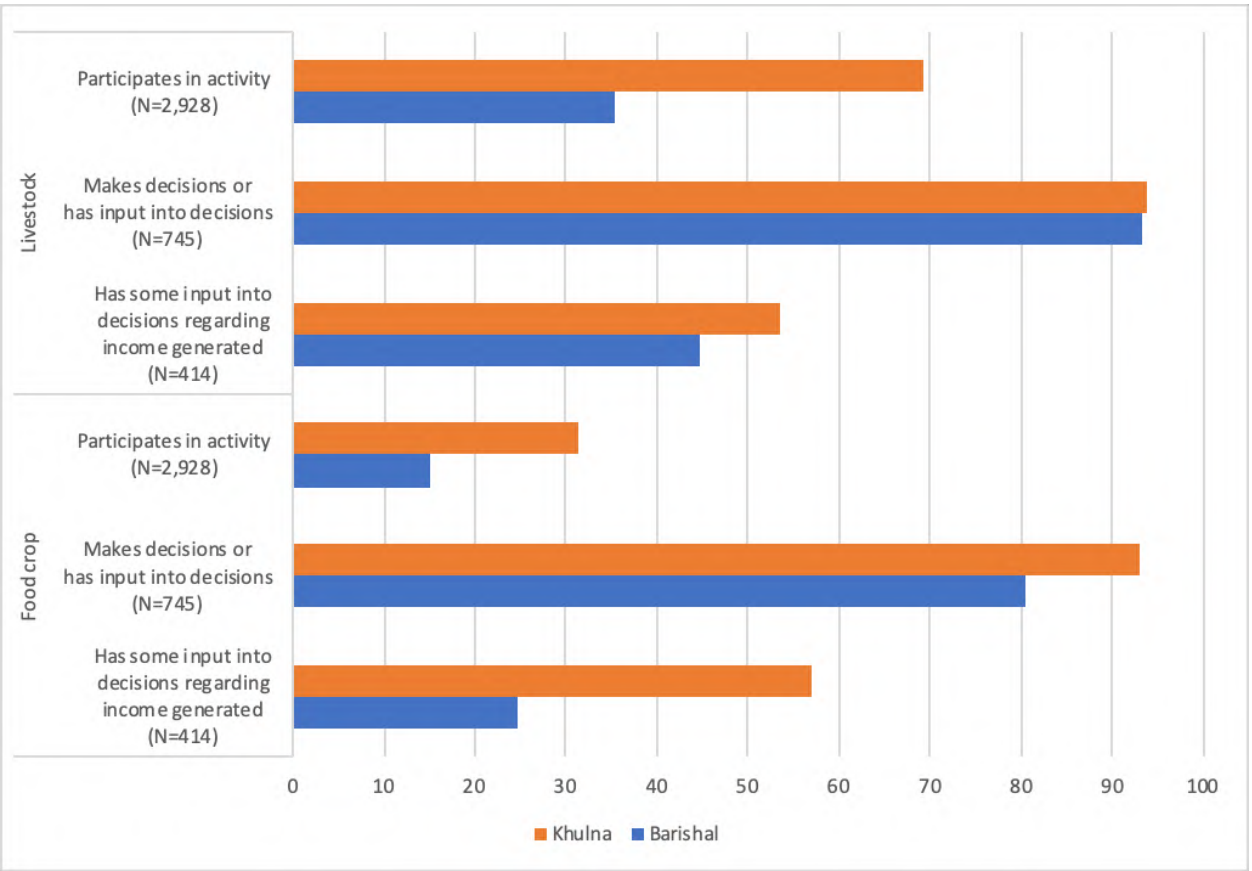
Women's empowerment was explored through mothers' participation in HH decision-making on the generation and use of income, specifically with regard to the following activities: food crop farming, cash crop farming, livestock raising, wage or salary employment and fishing (annex, table 25). Figure 10 shows that approximately two-thirds of women in both divisions felt that they had input or could make decisions regarding the production of at least two of these activities. Fewer felt that they had input into decisions about income generated from these activities or about their own wage or salary employment. However, more mothers in Khulna compared to mothers in Barishal reported having input into decisions about the use of income from at least one activity (57 percent and 43 percent respectively).

Figure 10. Percentage of mothers reporting input into decisions about production and income generation, by division.



The activities mothers were most likely to participate in were livestock raising (57 percent) and food crop farming (25 percent). Mothers in Khulna participated in these activities more often than mothers in Barishal; they also appeared to be more empowered to make decisions. Figure 11 shows that the majority of women participating in these two activities felt that they could make decisions or have input into decisions regarding the production of these activities. Far fewer felt that they had input into decisions regarding the income generated from these activities. While women in Khulna appeared to be more empowered to make decisions about food crop farming, mothers' decision-making power regarding livestock raising appeared to be equal in the two divisions.

Figure 11. Percentage of mothers reporting input into decisions about livestock raising and food crop farming, by division.



Far fewer women reported being engaged in cash crop farming (13 percent), wage or salary employment (6 percent) and fishing (3 percent) (annex, table 25). Similar to food crop farming and livestock raising, women involved in these activities felt that they had greater decision-making power regarding the production of the activities and less power to decide about the income generated.

SUMMARY AND NEXT STEPS

The results of the baseline survey describe maternal and child nutrition and health KAP among extreme-poor mothers and caregivers of children aged 6–23 months in Barishal and Khulna divisions. The results highlight gaps that can be addressed by the Project to improve health and nutrition outcomes of children under 2 years of age. The primary study outcome, MAD, was 23 percent in Barishal and 26 percent in Khulna. These results differed slightly from the 2014 BDHS, which observed higher MAD both in Barishal (24 percent) and in Khulna (31 percent). Of the two components that make up MAD, MDD is the area that shows the greatest need for improvement; only one-third of the mothers met MDD, whereas two-thirds met MMF.

The results on IYCF knowledge and practices were mixed. Knowledge about breastfeeding and giving colostrum to a newborn was high and supported by practices showing that nearly all the mothers surveyed breastfed and gave the colostrum to the baby. Most mothers were still breastfeeding their infant. However, only one-fourth began breastfeeding within the first hour after birth, which is the recommended practice. The results on complementary feeding reflect many misconceptions and practices that do not adhere to current recommendations. While infants should be exclusively breastfed for the first six months, the practice of giving liquids other than breast milk is common, even within the first three days after birth. The most common liquids provided were milk from an animal, formula and water. The use of formula is discouraged in Bangladesh since it is very expensive and can impact the ability to purchase other HH items needed. Further, practices such as preparing it with contaminated water, diluting it to make it last longer and storing it unhygienically can make it unsafe for the infant to drink. Knowledge about the introduction of age-appropriate foods and the importance of supplements such as salt was also low. For instance, many mothers believed it is acceptable to give snacks and fruit juice to babies aged 6–12 months.

The children in the study appear to be frequently sick, with the main symptoms being coughing or trouble breathing, fever and diarrhea. The average number of visits to a health facility is quite high, and there is a heavy reliance on visiting unqualified doctors for health care. Hygienic practices such as hand-washing are common but reflect areas for improvement to prevent the occurrence of diarrhea, such as washing hands before feeding a child, after helping the child use the bathroom and before preparing food. In both divisions, only a few mothers treat the water before drinking it; this increases the risk of diarrheal disease, one of the leading causes of child morbidity and mortality. Knowledge of ORS to treat diarrhea was high in Barishal, while in Khulna it was not mentioned as often as a possible treatment for children younger than 6 months.

Maternal health practices show that most mothers in Khulna but fewer in Barishal received at least one ANC visit; however, less than 15 percent in both divisions received the first visit in their first trimester. In terms of type of care received, most mothers had their blood pressure taken at least once and received a tetanus injection, and many also had blood and urine taken and received iron supplements. Delivery at home is still common, especially in Barishal, but over half of the mothers had a qualified health professional in attendance. Rates of caesarian section for those delivering in a health facility were quite high, which has also been noted in other studies in Bangladesh (Haider et al., 2018). PNC was far less common than ANC; mothers and providers should be educated about its importance in maternal and infant health. Further, the results on maternal nutrition show the need to improve their dietary diversity.

Results on gender roles and HH decisions highlight the need for activities aimed at women's empowerment. The majority of mothers reported that they could not participate in decisions about their health care, and only about half could participate in decisions about the health care of their children. While the majority can make decisions on what to cook on a daily basis, only 11 percent said they were responsible for buying food, which points to the need to include husbands and other HH members in education activities to ensure that diverse and nutritious foods are being purchased.

The Project activities will start in May 2019 and continue for two years. The activities will provide SBCC and strengthened nutrtion and health services. In one study arm, CCTs could motivate greater use of nutrition and health services and provide the cash needed to purchase of nutritious foods. Collectively, these intervention components could impact MAD outcomes and ultimately lead to improved maternal and infant health. An endline survey will be conducted towards the end of the intervention period to measure the impact of the activities.

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ANNEX: TABLES

Table 1. Mothers' sociodemographic characteristics.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
RELATIONSHIP TO SAMPLED CHILD			
MOTHER	1,035 (98.1)	1,856 (99.1)	2,891 (98.7)
PRIMARY CAREGIVER	20 (1.9)	17 (0.9)	37 (1.3)
MOTHER'S AGE			
18–29	706 (66.9)	1,345 (71.8)	2,051 (70.0)
30–39	328 (31.1)	490 (26.2)	818 (27.9)
40+	21 (2.0)	38 (2.0)	59 (2.0)
MOTHER'S AGE			
MEAN (SD)	26.73 (5.90)	26.07 (5.88)	26.31 (5.90)
MIN, MAX	18, 63	18, 60	18, 63
MARITAL STATUS			
CURRENTLY MARRIED/LIVING TOGETHER	1,038 (98.4)	1,842 (98.3)	2,880 (98.4)
SEPARATED	6 (0.6)	7 (0.4)	13 (0.4)
DESERTED	0 (0.0)	7 (0.4)	7 (0.2)
DIVORCED	0 (0.0)	7 (0.4)	7 (0.2)
WIDOWED	10 (0.9)	10 (0.5)	20 (0.7)
NEVER MARRIED	1 (0.1)	0 (0.0)	1 (0.0)
MOTHER EVER ATTENDED SCHOOL OR MADRASA	994 (94.2)	1,758 (93.9)	2,752 (94.0)
MOTHER'S EDUCATION			
PRIMARY	393 (39.5)	520 (29.6)	913 (33.2)
SECONDARY	475 (47.8)	1,040 (59.2)	1,515 (55.1)
COLLEGE OF HIGHER	126 (12.7)	198 (11.3)	324 (11.8)
MOTHER'S RELIGION			
ISLAM	982 (93.1)	1,806 (96.4)	2,788 (95.2)
HINDUISM	72 (6.8)	62 (3.3)	134 (4.6)
CHRISTIANITY	1 (0.1)	4 (0.2)	5 (0.2)
OTHER	0 (0.0)	1 (0.1)	1 (0.0)
MOTHER WORKS TO EARN MONEY	131 (12.4)	478 (25.5)	609 (20.8)
MOTHER'S OCCUPATION			
WAGE LABOR	12 (9.2)	94 (19.7)	106 (17.4)
SALARIED WORKER	4 (3.1)	13 (2.7)	17 (2.8)
SELF-EMPLOYED	22 (16.8)	74 (15.5)	96 (15.8)
FARMING	2 (1.5)	4 (0.8)	6 (1.0)
LIVESTOCK/POULTRY	88 (67.2)	292 (61.1)	380 (62.4)
CURRENTLY NOT WORKING	3 (2.3)	1 (0.2)	4 (0.7)

HUSBAND'S OCCUPATION			
WAGE LABOR	457 (44.0)	701 (38.1)	1,158 (40.2)
SALARIED WORKER	187 (18.0)	178 (9.7)	365 (12.7)
SELF-EMPLOYED	234 (22.5)	330 (17.9)	564 (19.6)
FARMING	128 (12.3)	568 (30.8)	696 (24.2)
CURRENTLY NOT WORKING	22 (2.1)	12 (0.7)	34 (1.2)
WORKS ABROAD	7 (0.7)	44 (2.4)	51 (1.8)
OTHER	3 (0.3)	9 (0.5)	12 (0.4)
HUSBAND EVER ATTENDED SCHOOL OR MADRASA	864 (83.2)	1,488 (80.8)	2,352 (81.7)
HUSBAND'S EDUCATION			
PRIMARY	438 (50.7)	706 (47.4)	1,144 (48.6)
SECONDARY	321 (37.2)	584 (39.2)	905 (38.5)
HIGHER THAN SECONDARY	105 (12.2)	198 (13.3)	303 (12.9)

Table 2. Mobile phone ownership and use of mass media.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
HH MEMBER MOBILE PHONE OWNERSHIP	1,017 (96.4)	1,778 (94.9)	2,795 (95.5)
MOTHER OWNS PERSONAL MOBILE PHONE	662 (62.7)	999 (53.3)	1,661 (56.7)
MOTHER READS A NEWSPAPER OR MAGAZINE			
AT LEAST ONCE A WEEK	10 (0.9)	14 (0.7)	24 (0.8)
LESS THAN ONCE PER WEEK	28 (2.7)	44 (2.3)	72 (2.5)
NOT AT ALL	1,017 (96.4)	1,815 (96.9)	2,832 (96.7)
MOTHER LISTENS TO THE RADIO			
AT LEAST ONCE A WEEK	40 (3.8)	36 (1.9)	76 (2.6)
LESS THAN ONCE PER WEEK	40 (3.8)	32 (1.7)	72 (2.5)
NOT AT ALL	975 (92.4)	1,805 (96.4)	2,780 (94.9)
MOTHER WATCHES TELEVISION			
AT LEAST ONCE A WEEK	358 (33.9)	1,129 (60.3)	1,487 (50.8)
LESS THAN ONCE PER WEEK	78 (7.4)	158 (8.4)	236 (8.1)
NOT AT ALL	619 (58.7)	586 (31.3)	1,205 (41.2)

Table 3. Children and household members.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
NUMBER OF HH MEMBERS			
MEDIAN (IQR)	5 (4, 7)	5 (4, 6)	5 (4, 6)
MIN, MAX	2.0, 16.0	1.0, 16.0	1.0, 16.0
TOTAL NUMBER OF CHILDREN	2,247	3,560	5,807
CHILDREN PER HH			

MEAN (SD)	2.13 (1.08)	1.90 (0.86)	1.98 (0.95)
MIN, MAX	1.0, 9.0	1.0, 5.0	1.0, 9.0
CHILDREN AGED 6–23 MONTHS	1,075	1,910	2,985
SEX OF SAMPLED CHILD			
MALE	540 (51.2)	977 (52.2)	1,517 (51.8)
FEMALE	515 (48.8)	896 (47.8)	1,411 (48.2)
AGE OF SAMPLED CHILD			
6–9 MONTHS	259 (24.5)	423 (22.6)	682 (23.3)
10–12 MONTHS	200 (19.0)	371 (19.8)	571 (19.5)
13–15 MONTHS	209 (19.8)	362 (19.3)	571 (19.5)
16–18 MONTHS	151 (14.3)	284 (15.2)	435 (14.9)
19–21 MONTHS	139 (13.2)	283 (15.1)	422 (14.4)
22–23 MONTHS	97 (9.2)	150 (8.0)	247 (8.4)

Table 4. Household water source.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
HH DRINKING WATER SOURCE			
IMPROVED	**1,050 (99.5)**	**1,867 (99.7)**	**2,917 (99.6)**
PIPED INTO DWELLING	2 (0.2)	0 (0.0)	2 (0.1)
PIPED INTO YARD/PLOT	0 (0.0)	1 (0.1)	1 (0.0)
PIPED TO NEIGHBOR	0 (0.0)	1 (0.1)	1 (0.0)
PUBLIC TAP/STANDPIPE	1 (0.1)	1 (0.1)	2 (0.1)
TUBE WELL/BOREHOLE	1,046 (99.1)	1,854 (99.0)	2,900 (99.0)
PROTECTED WELL	1 (0.1)	10 (0.5)	11 (0.4)
BOTTLED WATER	0 (0.0)	1 (0.1)	1 (0.0)
UNIMPROVED	**5 (0.5)**	**6 (0.3)**	**11 (0.4)**
UNPROTECTED WELL	0 (0.0)	3 (0.2)	3 (0.1)
UNPROTECTED SPRING	0 (0.0)	1 (0.1)	1 (0.0)
TANKER TRUCK	1 (0.1)	0 (0.0)	1 (0.0)
CART WITH SMALL TANK	0 (0.0)	1 (0.1)	1 (0.0)
SURFACE WATER	4 (0.4)	0 (0.0)	4 (0.1)
WATER SOURCE LOCATION			
IN OWN DWELLING	9 (0.9)	28 (1.5)	37 (1.3)
IN OWN YARD/PLOT	375 (35.6)	1,473 (78.8)	1,848 (63.2)
ELSEWHERE	668 (63.5)	369 (19.7)	1,037 (35.5)
ROUNDTRIP TO WATER SOURCE (MINUTES)			
MEAN (SD)	12.58 (9.63)	9.53 (7.28)	11.50 (8.99)
MIN, MAX	1, 60	1, 60	1, 60
WHO USUALLY COLLECTS WATER FOR THE HH			
ADULT WOMAN (AGED 15+ YEARS)	629 (94.2)	358 (97.0)	987 (95.2)
ADULT MAN (AGED 15+ YEARS)	16 (2.4)	7 (1.9)	23 (2.2)
FEMALE CHILD (UNDER 15)	19 (2.8)	4 (1.1)	23 (2.2)
MALE CHILD (UNDER 15)	4 (0.6)	0 (0.0)	4 (0.4)

TREAT WATER BEFORE DRINKING			
YES	9 (0.9)	69 (3.7)	78 (2.7)
NO	1,044 (99.0)	1,804 (96.3)	2,848 (97.3)
DON'T KNOW	2 (0.2)	0 (0.0)	2 (0.1)
HOW IS WATER TREATED*			
BOIL	0 (0.0)	3 (4.3)	3 (3.8)
STRAIN THROUGH CLOTH	2 (22.2)	2 (2.9)	4 (5.1)
USE WATER FILTER	4 (44.4)	12 (17.4)	16 (20.5)
LET IT STAND AND SETTLE	0 (0.0)	52 (75.4)	52 (66.7)
ALUMINUM SULFATE/ALUM	3 (33.3)	0 (0.0)	3 (3.8)
DRINKING WATER STORAGE			
COVERED CONTAINER	925 (87.7)	1,034 (55.2)	1,959 (66.9)
UNCOVERED CONTAINER	42 (4.0)	211 (11.3)	253 (8.6)
ROOF TANK	2 (0.2)	1 (0.1)	3 (0.1)
CISTERN	0 (0.0)	1 (0.1)	1 (0.0)
NO STORAGE	86 (8.2)	626 (33.4)	712 (24.3)

***MULTIPLE RESPONSES ALLOWED.**

Table 5. Household sanitation.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
HH TOILET FACILITY			
IMPROVED	**899 (85.2)**	**1,512 (80.7)**	**2,411 (82.3)**
FLUSH TO SEPTIC TANK	38 (3.6)	87 (4.6)	125 (4.3)
FLUSH TO PIT (LATRINE)	24 (2.3)	102 (5.4)	126 (4.3)
VENTILATED IMPROVED PIT LATRINE	68 (6.4)	414 (22.1)	482 (16.5)
PIT LATRINE WITH SLAB	769 (72.9)	907 (48.4)	1,676 (57.2)
FLUSH TO SOMEWHERE ELSE	5 (0.5)	4 (0.2)	9 (0.3)
FLUSH TO UNKNOWN PLACE	1 (0.1)	2 (0.1)	3 (0.1)
COMPOSTING TOILET	0 (0.0)	2 (0.1)	2 (0.1)
UNIMPROVED	**156 (14.8)**	**361 (19.3)**	**517 (17.7)**
PIT LATRINE WITHOUT SLAB/OPEN PIT	120 (11.4)	331 (17.7)	451 (15.4)
HANGING TOILET/LATRINE	20 (1.9)	18 (1.0)	38 (1.3)
NO FACILITY (BUSH, FIELD)	10 (0.9)	6 (0.3)	16 (0.5)
FACILITY SHARED WITH OTHER HHS	199 (19.0)	704 (37.7)	903 (31.0)
FACILITY SHARED WITH OTHER HHS/PUBLIC			
OTHER HHS ONLY (NOT PUBLIC)	195 (98.0)	701 (99.6)	896 (99.2)
PUBLIC FACILITY	4 (2.0)	3 (0.4)	7 (0.8)

HAND-WASHING STATION			
OBSERVED	1,000 (94.8)	1,605 (85.7)	2,605 (89.0)
NOT OBSERVED (NOT IN DWELLING/YARD/PLOT)	53 (5.0)	255 (13.6)	308 (10.5)
NOT OBSERVED (NO PERMISSION TO SEE)	2 (0.2)	9 (0.5)	11 (0.4)
NOT OBSERVED (OTHER REASONS)	0 (0.0)	4 (0.2)	4 (0.1)
PRESENCE OF WATER AT HAND-WASHING STATION			
WATER IS AVAILABLE	862 (86.2)	1,534 (95.6)	2,396 (92.0)
WATER IS NOT AVAILABLE	138 (13.8)	71 (4.4)	209 (8.0)
TYPE OF CLEANING AGENT OBSERVED*			
SOAP	242 (24.2)	905 (56.4)	1,147 (44.0)
DETERGENT	33 (3.3)	76 (4.7)	109 (4.2)
ASH, MUD OR SAND	301 (30.1)	603 (37.6)	904 (34.7)
NONE	486 (48.6)	411 (25.6)	897 (34.4)
TYPE OF HAND-WASHING STATION OBSERVED			
COVERED SPACE (INSIDE DWELLING)	38 (3.8)	156 (9.7)	194 (7.4)
OPEN SPACE, NOT SHARED	286 (28.6)	810 (50.5)	1,096 (42.1)
OPEN SPACE, SHARED	676 (67.6)	639 (39.8)	1,315 (50.5)
***MULTIPLE RESPONSES ALLOWED.**			

Table 6. Household assets.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
TELEVISION	306 (29.0)	939 (50.1)	1,245 (42.5)
ELECTRIC FAN	745 (70.6)	1,775 (94.8)	2,520 (86.1)
ELECTRICITY	787 (74.6)	1,775 (94.8)	2,562 (87.5)
ALMIRAH/WARDROBE	394 (37.3)	296 (15.8)	690 (23.6)
REFRIGERATOR	190 (18.0)	261 (13.9)	451 (15.4)
ANY MEMBER OF HH HAS A BANK ACCOUNT	164 (15.5)	428 (22.9)	592 (20.2)
MAIN MATERIAL OF WALLS			
CEMENT	121 (11.5)	912 (48.7)	1,033 (35.3)
OTHER	934 (88.5)	961 (51.3)	1,895 (64.7)
MAIN MATERIAL OF FLOOR			
CEMENT	80 (7.6)	517 (27.6)	597 (20.4)
EARTH OR SAND	961 (91.1)	1,337 (71.4)	2,298 (78.5)
OTHER	14 (1.3)	19 (1.0)	33 (1.1)

Table 7. Household food security.

	BARISHAL (N=1,055)	KHULNA (N=1,873)	TOTAL (N=2,928)
	N (%)	N (%)	N (%)
HH HUNGER SCALE			
LITTLE/NO HUNGER	894 (84.7)	1,736 (92.7)	2,630 (89.8)
MODERATE HUNGER	161 (15.3)	129 (6.9)	290 (9.9)
SEVERE HUNGER	0 (0.0)	8 (0.4)	8 (0.3)
NO FOOD TO EAT IN THE PAST 30 DAYS DUE TO LACK OF RESOURCES	277 (26.3)	299 (16.0)	576 (19.7)
FREQUENCY THE IN PAST 30 DAYS			
RARELY (1–2 TIMES)	148 (53.4)	107 (35.8)	255 (44.3)
SOMETIMES (3–10 TIMES)	122 (44.0)	180 (60.2)	302 (52.4)
OFTEN (MORE THAN 10 TIMES)	7 (2.5)	12 (4.0)	19 (3.3)
GO TO SLEEP HUNGRY IN THE PAST 30 DAYS BECAUSE NOT ENOUGH FOOD	171 (16.2)	143 (7.6)	314 (10.7)
FREQUENCY IN THE PAST 30 DAYS			
RARELY (1–2 TIMES)	85 (49.7)	76 (53.1)	161 (51.3)
SOMETIMES (3–10 TIMES)	83 (48.5)	62 (43.4)	145 (46.2)
OFTEN (MORE THAN 10 TIMES)	3 (1.8)	5 (3.5)	8 (2.5)
WHOLE DAY AND NIGHT WITHOUT EATING BECAUSE NOT ENOUGH FOOD	43 (4.1)	50 (2.7)	93 (3.2)
FREQUENCY IN THE PAST 30 DAYS			
RARELY (1–2 TIMES)	28 (65.1)	38 (76.0)	66 (71.0)
SOMETIMES (3–10 TIMES)	15 (34.9)	10 (20.0)	25 (26.9)
OFTEN (MORE THAN 10 TIMES)	0 (0.0)	2 (4.0)	2 (2.2)

Table 8. Participation in social safety net programs.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
PARTICIPATION IN SOCIAL SAFETY NET PROGRAMS			
CURRENTLY PARTICIPATING	398 (37.7)	541 (28.9)	939 (32.1)
PARTICIPATED IN THE LAST 12 MONTHS	24 (2.3)	72 (3.8)	96 (3.3)
PARTICIPATED BEFORE 12 MONTHS	22 (2.1)	41 (2.2)	63 (2.2)
NEVER PARTICIPATED	611 (57.9)	1,219 (65.1)	1,830 (62.5)
TYPE OF BENEFIT RECEIVED FROM THIS PROGRAM			
NON-CASH, AGRICULTURAL/LIVESTOCK INPUTS	86 (19.4)	98 (15.0)	184 (16.8)
CASH TRANSFER	301 (67.8)	544 (83.2)	845 (77.0)
OTHER	0 (0.0)	5 (0.8)	5 (0.5)
NO BENEFITS	57 (12.8)	7 (1.1)	64 (5.8)
PARTICIPATION IN NGO PROGRAM			
CURRENTLY PARTICIPATING	505 (47.9)	891 (47.6)	1,396 (47.7)

PARTICIPATED IN THE LAST 12 MONTHS	14 (1.3)	12 (0.6)	26 (0.9)
PARTICIPATED BEFORE 12 MONTHS	34 (3.2)	30 (1.6)	64 (2.2)
NEVER PARTICIPATED	502 (47.6)	940 (50.2)	1,442 (49.2)
TYPE OF BENEFIT RECEIVED FROM THIS PROGRAM			
NON-CASH AGRICULTURAL/LIVESTOCK INPUTS	6 (1.1)	33 (3.5)	39 (2.6)
CASH TRANSFER	494 (89.3)	798 (85.5)	1,292 (86.9)
OTHER	1 (0.2)	0 (0.0)	1 (0.1)
NO BENEFITS	52 (9.4)	102 (10.9)	154 (10.4)
PARTICIPATION IN ANY COMMUNITY COMMITTEE			
CURRENTLY PARTICIPATING	29 (2.7)	120 (6.4)	149 (5.1)
PARTICIPATED IN THE LAST 12 MONTHS	0 (0.0)	4 (0.2)	4 (0.1)
PARTICIPATED BEFORE 12 MONTHS	1 (0.1)	15 (0.8)	16 (0.5)
NEVER PARTICIPATED	1,025 (97.2)	1,734 (92.6)	2,759 (94.2)

Table 9. Antenatal care.*

	BARISHAL	KHULNA	TOTAL
	(N=1,035)	(N=1,856)	(N=2,891)
	N (%)	N (%)	N (%)
ANC DURING LAST PREGNANCY	782 (75.6)	1,721 (92.7)	2,503 (86.6)
WHO DID YOU SEE**			
QUALIFIED DOCTOR	595 (76.1)	1,446 (84.0)	2,041 (81.5)
NURSE/MIDWIFE	90 (11.5)	342 (19.9)	432 (17.3)
FAMILY WELFARE VISITOR	105 (13.4)	214 (12.4)	319 (12.7)
SUBASSISTANT COMMUNITY MEDICAL OFFICER	19 (2.4)	16 (0.9)	35 (1.4)
NGO HEALTH WORKER	194 (24.8)	409 (23.8)	603 (24.1)
SKILLED BIRTH ATTENDANT	19 (2.4)	56 (3.3)	75 (3.0)
TRADITIONAL BIRTH ATTENDANT	8 (1.0)	6 (0.3)	14 (0.6)
OTHER	31 (4.0)	126 (7.3)	157 (6.3)
WHERE DID YOU RECEIVE ANC**			
HOME	175 (22.4)	416 (24.2)	591 (23.6)
HOSPITAL/MEDICAL COLLEGE	71 (9.1)	59 (3.4)	130 (5.2)
DISTRICT HOSPITAL	59 (7.5)	138 (8.0)	197 (7.9)
MCWC	26 (3.3)	102 (5.9)	128 (5.1)
UPAZILA HEALTH COMPLEX	69 (8.8)	296 (17.2)	365 (14.6)
COMMUNITY CLINIC	134 (17.1)	228 (13.2)	362 (14.5)
OTHER PUBLIC SECTOR	26 (3.3)	16 (0.9)	42 (1.7)
NGO CLINIC	78 (10.0)	138 (8.0)	216 (8.6)
PRIVATE HOSPITAL/CLINIC	384 (49.1)	1,060 (61.6)	1,444 (57.7)
PHARMACY	36 (4.6)	26 (1.5)	62 (2.5)
WHEN DID YOU FIRST RECEIVE ANC			
DURING FIRST TRIMESTER	110 (14.1)	225 (13.1)	335 (13.4)
DURING SECOND TRIMESTER	487 (62.3)	1,178 (68.4)	1,665 (66.5)
DURING THIRD TRIMESTER	185 (23.7)	313 (18.2)	498 (19.9)

DON'T KNOW	0 (0.0)	5 (0.3)	5 (0.2)
NUMBER OF ANC VISITS			
MEDIAN (IQRSD)	3 (2, 4)	4 (2, 5)	3 (2, 5)
MIN, MAX	1, 20	1, 20	1, 20
BLOOD PRESSURE MEASURED AT LEAST ONCE	690 (88.2)	1,556 (90.4)	2,246 (89.7)
GAVE URINE SAMPLE AT LEAST ONCE	552 (70.6)	1,268 (73.7)	1,820 (72.7)
GAVE BLOOD SAMPLE AT LEAST ONCE	521 (66.6)	1,260 (73.2)	1,781 (71.2)
*RESPONDENTS IDENTIFYING AS CAREGIVERS WERE NOT ASKED THESE QUESTIONS. **MULTIPLE RESPONSES ALLOWED.			

Table 10. Antenatal care: immunizations, supplements and nutrition.

	BARISHAL	KHULNA	TOTAL
	(N=1,035)	(N=1,856)	(N=2891)
	N (%)	N (%)	N (%)
IMMUNIZATION CARD PRESENT			
YES (SEEN)	293 (37.5)	486 (28.2)	779 (31.1)
YES (NOT SEEN)	248 (31.7)	610 (35.4)	858 (34.3)
NO	240 (30.7)	622 (36.1)	862 (34.4)
DON'T KNOW	1 (0.1)	3 (0.2)	4 (0.2)
TOTAL	782	1,721	2,503
RECEIVED INJECTION DURING THIS OR PREVIOUS PREGNANCY TO PREVENT TETANUS	905 (87.4)	1,581 (85.2)	2,486 (86.0)
TOOK IFA SUPPLEMENTS DURING PREGNANCY	643 (62.1)	1,239 (66.8)	1,882 (65.1)
BEGAN TAKING IFA SUPPLEMENTS DURING:			
FIRST TRIMESTER	155 (24.1)	283 (22.8)	438 (23.3)
SECOND TRIMESTER	372 (57.9)	774 (62.5)	1,146 (60.9)
THIRD TRIMESTER	114 (17.7)	166 (13.4)	280 (14.9)
DON'T KNOW	2 (0.3)	16 (1.3)	18 (1.0)
TOOK DRUG FOR INTESTINAL WORMS DURING PREGNANCY	32 (3.1)	18 (1.0)	50 (1.7)
AMOUNT OF FOOD EATEN DURING LAST PREGNANCY*			
LESS THAN USUAL	408 (39.4)	759 (40.9)	1,167 (40.4)
SAME AS USUAL	554 (53.5)	782 (42.1)	1,336 (46.2)
MORE THAN USUAL	73 (7.1)	315 (17.0)	388 (13.4)
AMOUNT OF REST DURING LAST PREGNANCY*			
LESS THAN USUAL	188 (18.2)	279 (15.0)	467 (16.2)
SAME AS USUAL	623 (60.2)	807 (43.5)	1,430 (49.5)
MORE THAN USUAL	224 (21.6)	769 (41.4)	993 (34.3)
DON'T KNOW	0 (0.0)	1 (0.1)	1 (0.0)
*CAREGIVERS WERE NOT ASKED THESE			

QUESTIONS.

Table 11. Delivery.*

	BARISHAL	KHULNA	TOTAL
	(N=1,035)	(N=1,856)	(N=2,891)
	N (%)	N (%)	N (%)
WHO ASSISTED IN DELIVERY DURING LAST PREGNANCY**			
QUALIFIED DOCTOR	341 (32.9)	1,021 (55.0)	1,362 (47.1)
NURSE/MIDWIFE	431 (41.6)	1,115 (60.1)	1,546 (53.5)
FAMILY WELFARE VISITOR	5 (0.5)	19 (1.0)	24 (0.8)
SUBASSISTANT COMMUNITY MEDICAL OFFICER	0 (0.0)	2 (0.1)	2 (0.1)
SKILLED BIRTH ATTENDANT	31 (3.0)	19 (1.0)	50 (1.7)
TRADITIONAL BIRTH ATTENDANT	353 (34.1)	333 (17.9)	686 (23.7)
NGO HEALTH WORKER	13 (1.3)	7 (0.4)	20 (0.7)
RELATIVE/FRIEND/FAMILY	624 (60.3)	676 (36.4)	1,300 (45.0)
OTHER	2 (0.2)	16 (0.9)	18 (0.6)
NO ONE	1 (0.1)	4 (0.2)	5 (0.2)
WHERE DID YOU GIVE BIRTH DURING YOUR LAST PREGNANCY			
HOME	643 (62.1)	598 (32.2)	1,241 (42.9)
HOSPITAL/MEDICAL COLLEGE	76 (7.3)	21 (1.1)	97 (3.4)
DISTRICT HOSPITAL	43 (4.2)	118 (6.4)	161 (5.6)
MCWC	3 (0.3)	29 (1.6)	32 (1.1)
UPAZILA HEALTH COMPLEX	17 (1.6)	134 (7.2)	151 (5.2)
COMMUNITY CLINIC	1 (0.1)	10 (0.5)	11 (0.4)
OTHER PUBLIC SECTOR	1 (0.1)	5 (0.3)	6 (0.2)
NGO CLINIC	11 (1.1)	27 (1.5)	38 (1.3)
OTHER NGO	4 (0.4)	13 (0.7)	17 (0.6)
PRIVATE HOSPITAL/CLINIC	228 (22.0)	861 (46.4)	1,089 (37.7)
PHARMACY	2 (0.2)	1 (0.1)	3 (0.1)
OTHER, PRIVATE	6 (0.6)	39 (2.1)	45 (1.6)
REASON FOR NOT DELIVERING AT HEALTH FACILITY**			
COST TOO HIGH	198 (30.8)	57 (9.5)	255 (20.5)
TOO FAR/NO TRANSPORTATION	26 (4.0)	6 (1.0)	32 (2.6)
NOT NECESSARY	502 (78.1)	552 (92.3)	1,054 (84.9)
NO SUPPORT FROM FAMILY	12 (1.9)	14 (2.3)	26 (2.1)
OTHER	12 (1.9)	5 (0.8)	17 (1.4)
LAST PREGNANCY DELIVERED BY CAESAREAN SECTION (OF BIRTHS IN FACILITIES)	273 (69.6)	935 (74.3)	1,208 (73.2)
TOTAL BIRTHS IN FACILITIES	392	1,258	1,650
LAST PREGNANCY DELIVERED BY CAESAREAN SECTION (AMONG ALL BIRTHS)	273 (26.4)	935 (50.4)	1,208 (41.8)
CHILD SIZE AT BIRTH			
VERY LARGE	8 (0.8)	23 (1.2)	31 (1.1)

LARGER THAN AVERAGE	86 (8.2)	354 (18.9)	440 (15.0)
AVERAGE	718 (68.1)	1,093 (58.4)	1,811 (61.9)
SMALLER THAN AVERAGE	167 (15.8)	324 (17.3)	491 (16.8)
VERY SMALL	74 (7.0)	69 (3.7)	143 (4.9)
DON'T KNOW	2 (0.2)	10 (0.5)	12 (0.4)

CHILD WEIGHED AT BIRTH	375 (35.5)	1,225 (65.4)	1,600 (54.6)
WEIGHT RECORDED FROM			
CARD	58 (15.5)	78 (6.4)	136 (8.5)
RECALL	317 (84.5)	1,147 (93.6)	1,464 (91.5)
WEIGHT IN KILOGRAMS			
MEAN (SD)	2.86 (0.72)	3.00 (0.66)	2.97 (0.68)
RANGE (MIN, MAX)	1.0, 5.5	1.0, 5.5	1.0, 5.5
RECEIVED VISIT AFTER DELIVERY FROM**			
QUALIFIED DOCTOR	11 (1.1)	5 (0.3)	16 (0.6)
NURSE/MIDWIFE	5 (0.5)	11 (0.6)	16 (0.6)
FAMILY WELFARE VISITOR	5 (0.5)	30 (1.6)	35 (1.2)
SUBASSISTANT COMMUNITY MEDICAL OFFICER	1 (0.1)	2 (0.1)	3 (0.1)
SKILLED BIRTH ATTENDANT	4 (0.4)	3 (0.2)	7 (0.2)
TRADITIONAL BIRTH ATTENDANT	1 (0.1)	10 (0.5)	11 (0.4)
NGO HEALTH WORKER	62 (6.0)	175 (9.4)	237 (8.2)
DID NOT RECEIVE VISIT	948 (91.6)	1,584 (85.3)	2,532 (87.6)
OTHER	3 (0.3)	42 (2.3)	45 (1.6)
HOW SOON AFTER DELIVERY DID THEY VISIT			
WITHIN ONE HOUR	8 (9.2)	12 (4.3)	20 (5.5)
WITHIN ONE DAY	7 (8.0)	28 (10.1)	35 (9.6)
WITHIN TWO DAYS	9 (10.3)	12 (4.3)	21 (5.8)
MORE THAN TWO DAYS	61 (70.1)	220 (79.1)	281 (77.0)
DON'T KNOW	2 (2.3)	6 (2.2)	8 (2.2)
GIVEN OR PURCHASED VITAMIN A SUPPLEMENTS WITHIN TWO MONTHS AFTER DELIVERY	30 (34.5)	82 (29.5)	112 (30.7)

***RESPONDENTS IDENTIFYING AS CAREGIVERS WERE NOT ASKED THESE QUESTIONS.**
****MULTIPLE RESPONSES ALLOWED.**

Table 12. Mothers' minimum dietary diversity.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
GRAINS, ROOTS AND TUBERS	1,052 (99.7)	1,871 (99.9)	2,923 (99.8)
PULSES (BEANS, PEAS, LENTILS)	679 (64.4)	718 (38.3)	1,397 (47.7)
NUTS AND SEEDS	45 (4.3)	179 (9.6)	224 (7.7)
DAIRY PRODUCTS	111 (10.5)	393 (21.0)	504 (17.2)
MEAT, FISH, POULTRY	756 (71.7)	1,332 (71.1)	2,088 (71.3)
EGGS	229 (21.7)	510 (27.2)	739 (25.2)
DARK GREEN LEAFY VEGETABLES	310 (29.4)	602 (32.1)	912 (31.1)
VITAMIN A-RICH FRUITS/VEGETABLES	368 (34.9)	456 (24.3)	824 (28.1)
OTHER VEGETABLES	518 (49.1)	1,223 (65.3)	1,741 (59.5)

OTHER FRUITS	291 (27.6)	872 (46.6)	1,163 (39.7)
MOTHERS' MDD	387 (36.7)	794 (42.4)	1,181 (40.3)

Table 13. Mothers' infant and young child feeding knowledge.

	BARISHAL	KHULNA	TOTAL
KNOWLEDGE	(N=1,055) N (%)	(N=1,873) N (%)	(N=2,928) N (%)
INITIATION OF BREASTFEEDING	345 (32.7)	682 (36.4)	1,027 (35.1)
COLOSTRUM	586 (55.5)	1,650 (88.1)	2,236 (76.4)
WHEN SHOULD A CHILD BE BREASTFED	64 (6.1)	173 (9.2)	237 (8.1)
EXCLUSIVE BREASTFEEDING	952 (90.2)	1,716 (91.6)	2,668 (91.1)
OTHER FLUIDS BEFORE 6 MONTHS	412 (39.1)	739 (39.5)	1,151 (39.3)
CORRECT AGE FOR INTRODUCING LIQUIDS	554 (52.5)	586 (31.3)	1,140 (38.9)
CORRECT AGE FOR INTRODUCING SOLID, SEMI-SOLID AND SOFT FOODS	431 (40.9)	451 (24.1)	882 (30.1)
IYCF KNOWLEDGE SCORE (OUT OF 7)			
MEAN (SD)	3.17 (1.34)	3.20 (1.13)	3.19 (1.21)
MIN, MAX	0.0, 7.0	0.0, 7.0	0.0, 7.0

Table 14. Mothers' knowledge—complementary feeding.

	BARISHAL	KHULNA	BARISHAL	KHULNA	BARISHAL	KHULNA	BARISHAL	KHULNA
	<5		6–11		>=12		Don't know	
APPROPRIATE AGE (MONTHS) TO GIVE A CHILD THE FOLLOWING FOODS:	%	%	%	%	%	%	%	%
WATER	30.1*	22.7*	68.6	75.4	1.2	1.9	0.0	0.0
RICE, BREAD, PRESSED RICE	1.1*	1.8*	89.5	96.6	8.5	1.2	0.9	0.4
LEGUMES	0.3*	0.7*	89.3	94.2	9.1	3.3	1.3	1.8
GREEN LEAFY VEGETABLES	0.3*	0.6*	93.6	97.2	5.0	1.6	1.0	0.5
VITAMIN A-RICH VEGETABLES (YAMS)	1.1*	0.9*	93.0	95.8	5.1	2.6	0.8	0.7
PAPAYA/MANGO	0.9*	1.0*	91.5	92.9	5.8	4.9	1.8	1.2
BANANAS	1.2*	1.2*	93.5	92.0	3.5	5.9	1.8	0.9
MEAT	0.2*	0.2*	45.7	60.3	47.2	35.1	6.9	4.4
POULTRY	0.2*	0.3*	77.2	89.5	19.1	8.9	3.5	1.3

FISH (BIG)	0.2*	0.2*	81.3	94.7	16.3	4.5	2.2	0.5
FISH (SMALL)	0.1*	0.1*	46.5	27.4	47.6	66.2	5.8	6.4
EGGS	1.9*	0.7*	93.3	97.2	3.8	1.7	1.0	0.4
NUTS/SEEDS	39.0*	0.2*	53.8*	52.2*	7.2	43.6	0.0	4.1
MILK (COW, GOAT)	7.6*	10.4*	79.2*	80.8*	10.2	7.2	2.9	1.7
SNACK FOODS	0.4*	1.1*	57.5*	66.4*	38.3	30.3	3.8	2.2
OTHER LIQUIDS (TEA, FRUIT JUICE)	2.0*	1.5*	77.3*	87.7*	17.2	8.1	3.5	2.7
SEMI-SOLID FOODS	0.8*	0.5*	94.7	97.2	4.0	2.0	0.6	0.3

***INCORRECT RESPONSE.**

Table 15. Mothers' knowledge—supplements.

	BARISHAL	**KHULNA**	**TOTAL**
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
IDENTIFY EFFECT OF IRON DEFICIENCY			
IMPAIRED LEARNING*	8 (0.8)	6 (0.3)	14 (0.5)
IMPAIRED DEVELOPMENT*	149 (14.1)	148 (7.9)	297 (10.1)
LOWER HEIGHT*	12 (1.1)	32 (1.7)	44 (1.5)
WEAKENED IMMUNE DEFENSE*	254 (24.1)	484 (25.8)	738 (25.2)
FEEL TIRED*	63 (6.0)	57 (3.0)	120 (4.1)
BECOME ANEMIC*	120 (11.4)	261 (13.9)	381 (13.0)
OTHER	47 (4.5)	95 (5.1)	142 (4.8)
DON'T KNOW	402 (38.1)	790 (42.2)	1,192 (40.7)
KNOWLEDGE- IRON DEFICIENCY	606 (57.4)	988 (52.6)	1,594 (54.4)
IDENTIFY IODINE SOURCE			
SALT*	468 (44.4)	742 (39.6)	1,210 (41.3)
OTHER	94 (8.9)	99 (5.3)	193 (6.6)
DON'T KNOW	493 (46.7)	1,032 (55.1)	1,525 (52.1)
KNOWLEDGE- IODINE SOURCE	468 (44.4)	742 (39.6)	1,210 (41.3)

***CORRECT RESPONSE.**

Table 16. Mothers' knowledge and practices—diarrhea.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
CHILD FEEDING WHEN CHILD UNDER 6 MONTHS HAS DIARRHEA*			
GIVE ORS**	910 (86.3)	1,446 (77.2)	2,356 (80.5)
FEED LESS THAN USUAL	9 (0.9)	14 (0.7)	23 (0.8)
CONTINUE BREASTFEEDING**	373 (35.4)	830 (44.3)	1,203 (41.1)
BREASTFEED MORE OFTEN**	47 (4.5)	135 (7.2)	182 (6.2)
GIVE SYRUPS**	185 (17.5)	317 (16.9)	502 (17.1)
GIVE TRADITIONAL MEDICINE	97 (9.2)	24 (1.3)	121 (4.1)
GIVE TREATED WATER**	0 (0.0)	2 (0.1)	2 (0.1)
GIVE CARROT JUICE OR RICE WATER	9 (0.9)	34 (1.8)	43 (1.5)
OTHER	44 (4.2)	117 (6.2)	161 (5.5)
DON'T KNOW	80 (7.6)	97 (5.2)	177 (6.0)
CHILD FEEDING WHEN CHILD OVER 6 MONTHS HAS DIARRHEA*			
GIVE ORS**	946 (89.7)	1,746 (93.2)	2,692 (91.9)
FEED LESS THAN USUAL	16 (1.5)	82 (4.4)	98 (3.3)
CONTINUE BREASTFEEDING**	346 (32.8)	736 (39.3)	1,082 (37.0)
BREASTFEED MORE OFTEN**	46 (4.4)	84 (4.5)	130 (4.4)
GIVE SYRUPS**	334 (31.7)	807 (43.1)	1,141 (39.0)
GIVE TRADITIONAL MEDICINE	162 (15.4)	85 (4.5)	247 (8.4)
GIVE TREATED WATER**	5 (0.5)	6 (0.3)	11 (0.4)
GIVE RICE WATER**	104 (9.9)	277 (14.8)	381 (13.0)
OTHER	148 (14.0)	354 (18.9)	502 (17.1)
DON'T KNOW	58 (5.5)	51 (2.7)	109 (3.7)
IDENTIFIED AT LEAST ONE RECOMMENDED TREATMENT FOR UNDER AND OVER 6 MONTHS	940 (89.1)	1,707 (91.1)	2,647 (90.4)
HAND-WASHING*			
BEFORE EATING	1,019 (96.6)	1,767 (94.3)	2,786 (95.2)
AFTER USING THE TOILET	849 (80.5)	1,634 (87.2)	2,483 (84.8)
BEFORE FEEDING THE CHILD	485 (46.0)	984 (52.5)	1,469 (50.2)
AFTER HELPING CHILD USE THE BATHROOM	312 (29.6)	822 (43.9)	1,134 (38.7)
BEFORE PREPARING/COOKING FOOD	482 (45.7)	846 (45.2)	1,328 (45.4)
OTHER	136 (12.9)	97 (5.2)	233 (8.0)
DON'T KNOW	4 (0.4)	5 (0.3)	9 (0.3)

***MULTIPLE RESPONSE ALLOWED.**
****CORRECT RESPONSE.**

Table 17. Mothers' awareness and trial of key practices.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
HAS HEARD ABOUT ANY OF THE FOLLOWING CHILD FEEDING PRACTICES:			
STARTING BREASTFEEDING IMMEDIATELY AFTER DELIVERY	926 (87.8)	1,500 (80.1)	2,426 (82.9)
HEARD ABOUT THIS PRACTICE FROM			
FAMILY MEMBER	225 (24.3)	307 (20.5)	532 (21.9)
FRIEND/NEIGHBOR	122 (13.2)	305 (20.3)	427 (17.6)
HEALTH WORKER	309 (33.4)	345 (23.0)	654 (27.0)
NURSE/DISPENSARY	17 (1.8)	61 (4.1)	78 (3.2)
RADIO/TV	126 (13.6)	174 (11.6)	300 (12.4)
NGO WORKER	24 (2.6)	68 (4.5)	92 (3.8)
HEALTH CENTER	56 (6.0)	185 (12.3)	241 (9.9)
OTHER	47 (5.1)	55 (3.7)	102 (4.2)
TRIED THIS PRACTICE	799 (86.3)	1,349 (89.9)	2,148 (88.5)
MAIN REASON NEVER TRIED			
DO NOT KNOW	7 (5.5)	12 (7.9)	19 (6.8)
INSUFFICIENT BREAST MILK	28 (22.0)	73 (48.3)	101 (36.3)
FAMILY MEMBERS DISCOURAGED ME	0 (0.0)	1 (0.7)	1 (0.4)
OTHER PEOPLE DISCOURAGED ME	0 (0.0)	1 (0.7)	1 (0.4)
DOCTOR FORBADE ME	15 (11.8)	20 (13.2)	35 (12.6)
DID NOT FEEL IT WAS NECESSARY	5 (3.9)	5 (3.3)	10 (3.6)
OTHER	72 (56.7)	39 (25.8)	111 (39.9)
EXCLUSIVE BREASTFEEDING UNTIL 6 MONTHS	989 (93.7)	1,717 (91.7)	2,706 (92.4)
HEARD ABOUT THIS PRACTICE FROM			
FAMILY MEMBER	181 (18.3)	300 (17.5)	481 (17.8)
FRIEND/NEIGHBOR	110 (11.1)	381 (22.2)	491 (18.1)
HEALTH WORKER	416 (42.1)	465 (27.1)	881 (32.6)
NURSE/DISPENSARY	21 (2.1)	65 (3.8)	86 (3.2)
RADIO/TV	117 (11.8)	167 (9.7)	284 (10.5)
NGO WORKER	27 (2.7)	85 (5.0)	112 (4.1)
RELIGIOUS LEADER	2 (0.2)	1 (0.1)	3 (0.1)
HEALTH CENTER	67 (6.8)	202 (11.8)	269 (9.9)
OTHER	48 (4.9)	51 (3.0)	99 (3.7)
TRIED THIS PRACTICE	865 (87.5)	1,473 (85.8)	2,338 (86.4)
MAIN REASON NEVER TRIED			
DO NOT KNOW	5 (4.0)	5 (2.0)	10 (2.7)
MOTHER DID NOT WANT	1 (0.8)	7 (2.9)	8 (2.2)
FAMILY MEMBERS TOLD ME TO FEED SOMETHING ELSE	3 (2.4)	20 (8.2)	23 (6.3)
OTHERS TOLD ME TO FEED SOMETHING ELSE	0 (0.0)	3 (1.2)	3 (0.8)
INSUFFICIENT BREAST MILK	109 (87.9)	201 (82.4)	310 (84.2)
OTHER	6 (4.8)	8 (3.3)	14 (3.8)

FEEDING THE BABY MASHED FAMILY FOODS IN ADDITION TO BREASTFEEDING STARTING AT 6 MONTHS	978 (92.7)	1,687 (90.1)	2,665 (91.0)
HEARD ABOUT THIS PRACTICE FROM			
FAMILY MEMBER	216 (22.1)	355 (21.0)	571 (21.4)
FRIEND/NEIGHBOR	120 (12.3)	425 (25.2)	545 (20.5)
HEALTH WORKER	406 (41.5)	404 (23.9)	810 (30.4)
NURSE/DISPENSARY	21 (2.1)	44 (2.6)	65 (2.4)
RADIO/TV	94 (9.6)	140 (8.3)	234 (8.8)
NGO WORKER	24 (2.5)	98 (5.8)	122 (4.6)
RELIGIOUS LEADER	0 (0.0)	2 (0.1)	2 (0.1)
HEALTH CENTER	54 (5.5)	187 (11.1)	241 (9.0)
OTHER	43 (4.4)	32 (1.9)	75 (2.8)
TRIED THIS PRACTICE	919 (94.0)	1,587 (94.1)	2,506 (94.0)
MAIN REASON NEVER TRIED			
CHILD DOES NOT LIKE IT	19 (32.2)	62 (62.0)	81 (50.9)
NOT ENOUGH FOOD AT HOME	6 (10.2)	12 (12.0)	18 (11.3)
DID NOT HAVE REQUIRED INGREDIENTS	3 (5.1)	1 (1.0)	4 (2.5)
INGREDIENTS TOO EXPENSIVE	5 (8.5)	2 (2.0)	7 (4.4)
CHILD NOT OLD ENOUGH	7 (11.9)	9 (9.0)	16 (10.1)
OTHER	0 (0.0)	5 (5.0)	5 (3.1)
DID NOT FEEL IT WAS NECESSARY	19 (32.2)	9 (9.0)	28 (17.6)
FEEDING ANIMAL PROTEIN AT LEAST ONCE PER DAY FOR CHILDREN OLDER THAN 6 MONTHS	949 (90.0)	1,744 (93.1)	2,693 (92.0)
HEARD ABOUT THIS PRACTICE FROM			
FAMILY MEMBER	159 (16.8)	322 (18.5)	481 (17.9)
FRIEND/NEIGHBOR	104 (11.0)	395 (22.6)	499 (18.5)
HEALTH WORKER	417 (43.9)	462 (26.5)	879 (32.6)
NURSE/DISPENSARY	23 (2.4)	49 (2.8)	72 (2.7)
RADIO/TV	106 (11.2)	164 (9.4)	270 (10.0)
NGO WORKER	27 (2.8)	106 (6.1)	133 (4.9)
RELIGIOUS LEADER	0 (0.0)	2 (0.1)	2 (0.1)
HEALTH CENTER	66 (7.0)	209 (12.0)	275 (10.2)
OTHER	47 (5.0)	35 (2.0)	82 (3.0)
TRIED THIS PRACTICE	826 (87.0)	1,297 (74.4)	2,123 (78.8)
MAIN REASON NEVER TRIED			
DO NOT KNOW	1 (0.8)	5 (1.1)	6 (1.1)
CHILD DOES NOT LIKE IT	16 (13.0)	45 (10.1)	61 (10.7)
DID NOT HAVE MONEY	73 (59.3)	200 (44.7)	273 (47.9)
TOO EXPENSIVE	8 (6.5)	174 (38.9)	182 (31.9)
CHILD NOT OLD ENOUGH	12 (9.8)	9 (2.0)	21 (3.7)
OTHER	0 (0.0)	3 (0.7)	3 (0.5)
DID NOT FEEL IT WAS NECESSARY	13 (10.6)	11 (2.5)	24 (4.2)

ADDING MYMIX/SPRINKLES TO CHILD'S FOOD	532 (50.4)	1,302 (69.5)	1,834 (62.6)
HEARD ABOUT THIS PRACTICE FROM			
FAMILY MEMBER	71 (13.3)	67 (5.1)	138 (7.5)
FRIEND/NEIGHBOR	53 (10.0)	101 (7.8)	154 (8.4)
HEALTH WORKER	267 (50.2)	437 (33.6)	704 (38.4)
NURSE/DISPENSARY	20 (3.8)	20 (1.5)	40 (2.2)
RADIO/TV	36 (6.8)	63 (4.8)	99 (5.4)
NGO WORKER	33 (6.2)	544 (41.8)	577 (31.5)
RELIGIOUS LEADER	1 (0.2)	0 (0.0)	1 (0.1)
HEALTH CENTER	28 (5.3)	61 (4.7)	89 (4.9)
OTHER	23 (4.3)	9 (0.7)	32 (1.7)
TRIED THIS PRACTICE	240 (45.1)	567 (43.5)	807 (44.0)
MAIN REASON NEVER TRIED			
DO NOT KNOW	18 (6.2)	26 (3.5)	44 (4.3)
CHILD DOES NOT LIKE IT	42 (14.4)	119 (16.2)	161 (15.7)
DID NOT HAVE MONEY	69 (23.6)	135 (18.4)	204 (19.9)
TOO EXPENSIVE	12 (4.1)	21 (2.9)	33 (3.2)
CHILD NOT OLD ENOUGH	5 (1.7)	34 (4.6)	39 (3.8)
OTHER	21 (7.2)	32 (4.4)	53 (5.2)
DID NOT FEEL IT WAS NECESSARY	125 (42.8)	368 (50.1)	493 (48.0)

Table 18. Use of health services.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
WHERE DO YOU USUALLY SEEK ADVICE/MEDICAL HELP OR TREATMENT FOR ILLNESS?			
HOME	8 (0.8)	40 (2.1)	48 (1.6)
DISTRICT HOSPITAL	40 (3.8)	60 (3.2)	100 (3.4)
UPAZILA HEALTH COMPLEX	46 (4.4)	80 (4.3)	126 (4.3)
COMMUNITY CLINIC	71 (6.7)	89 (4.8)	160 (5.5)
PRIVATE HOSPITAL/CLINIC	13 (1.2)	37 (2.0)	50 (1.7)
QUALIFIED DOCTOR'S CHAMBER	70 (6.6)	193 (10.3)	263 (9.0)
UNQUALIFIED VILLAGE DOCTOR'S CHAMBER	397 (37.6)	1,162 (62.0)	1,559 (53.2)
PHARMACY	365 (34.6)	167 (8.9)	532 (18.2)
OTHER	45 (4.3)	45 (2.4)	90 (3.1)
WALKING DISTANCE TO HEALTH FACILITY IN MINUTES			
MEDIAN (IQR)	30 (15,60))	20 (10,30))	20 (10,30)
MIN, MAX	1.0, 300.0	1.0, 240.0	1.0, 300.0
TOOK CHILD TO THIS FACILITY FOR ANY REASON IN THE PAST SIX MONTHS	1,000 (95.5)	1,735 (94.7)	2,735 (95.0)
NUMBER OF TIMES TOOK CHILD TO THIS FACILITY IN THE PAST SIX MONTHS			
MEDIAN (IQR)	4 (3, 6)	5 (3, 6)	4 (3,6)
MIN, MAX	1.0, 34.0	1.0, 50.0	1.0, 50.0
REASON FOR VISIT*			
VACCINATION	67 (6.7)	231 (13.4)	298 (10.9)
GROWTH MONITORING	3 (0.3)	12 (0.7)	15 (0.5)
VITAMIN A SUPPLEMENTATION	6 (0.6)	3 (0.2)	9 (0.3)
DE-WORMING	3 (0.3)	3 (0.2)	6 (0.2)
NUTRITION COUNSELING	13 (1.3)	35 (2.0)	48 (1.8)
MALARIA TEST/TREATMENT/PREVENTION	19 (1.9)	3 (0.2)	22 (0.8)
COUGH/TROUBLE BREATHING	681 (68.1)	1,287 (74.4)	1,968 (72.1)
FEVER	799 (79.9)	1,202 (69.5)	2,001 (73.3)
DIARRHEA	247 (24.7)	229 (13.2)	476 (17.4)
OTHER	171 (17.1)	163 (9.4)	334 (12.2)
REASON FOR NOT VISITING*			
NO REASON TO VISIT/FAMILY IS HEALTHY	41 (87.2)	94 (95.9)	135 (93.1)
OTHER	6 (12.8)	4 (4.1)	10 (6.9)

***MULTIPLE RESPONSES ALLOWED.**

Table 19. Early initiation of breastfeeding.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
CHILD EVER BREASTFED	1,029 (97.5)	1,860 (99.3)	2,889 (98.7)
WHY WASN'T THE CHILD BREASTFED			
MOTHER WAS ILL/WEAK	2 (7.7)	1 (7.7)	3 (7.7)
CHILD WAS ILL/WEAK	0 (0.0)	3 (23.1)	3 (7.7)
INSUFFICIENT MILK	7 (26.9)	3 (23.1)	10 (25.6)
MOTHER WORKING	3 (11.5)	1 (7.7)	4 (10.3)
CHILD REFUSED	4 (15.4)	4 (30.8)	8 (20.5)
MOTHER DIED	9 (34.6)	0 (0.0)	9 (23.1)
OTHER	1 (3.8)	1 (7.7)	2 (5.1)
HOW LONG AFTER BIRTH DID YOU FIRST PUT YOUR CHILD TO THE BREAST			
LESS THAN ONE HOUR	277 (26.9)	538 (28.9)	815 (28.2)
1–23 HOURS	655 (63.7)	1,084 (58.3)	1,739 (60.2)
MORE THAN 24 HOURS	89 (8.6)	171 (9.2)	260 (9.0)
DON'T KNOW/DON'T REMEMBER	8 (0.8)	67 (3.6)	75 (2.6)
WHAT DID YOU DO WITH THE FIRST MILK (COLOSTRUM)			
GAVE TO THE CHILD	991 (96.3)	1,798 (96.7)	2,789 (96.5)
DID NOT GIVE TO THE CHILD	31 (3.0)	47 (2.5)	78 (2.7)
DON'T KNOW	7 (0.7)	15 (0.8)	22 (0.8)
WHY DID YOU NOT GIVE THE FIRST MILK			
NOT GOOD FOR THE BABY	5 (16.1)	4 (8.5)	9 (11.5)
IT WAS YELLOW	2 (6.5)	4 (8.5)	6 (7.7)
IT IS THE TRADITION	5 (16.1)	3 (6.4)	8 (10.3)
TOLD TO DO SO	8 (25.8)	17 (36.2)	25 (32.1)
OTHER	11 (35.5)	19 (40.4)	30 (38.5)
CHILD GIVEN ANYTHING BESIDES BREAST MILK DURING THE FIRST THREE DAYS AFTER DELIVERY	251 (23.8)	687 (36.7)	938 (32.0)
WHAT WAS CHILD GIVEN OTHER THAN BREAST MILK*			
MILK (FROM ANIMAL)	98 (39.0)	271 (39.4)	369 (39.3)
PLAIN WATER	23 (9.2)	95 (13.8)	118 (12.6)
SUGAR OR GLUCOSE WATER	44 (17.5)	18 (2.6)	62 (6.6)
GRIPE WATER	6 (2.4)	22 (3.2)	28 (3.0)
SUGAR-SALT-WATER SOLUTION	4 (1.6)	4 (0.6)	8 (0.9)
FRUIT JUICE	2 (0.8)	1 (0.1)	3 (0.3)
BABY FORMULA MILK	37 (14.7)	267 (38.9)	304 (32.4)
TEA/HERBAL INFUSION	0 (0.0)	1 (0.1)	1 (0.1)
HONEY	65 (25.9)	65 (9.5)	130 (13.9)
PRESCRIBED MEDICINE	9 (3.6)	16 (2.3)	25 (2.7)
OTHER	14 (5.6)	10 (1.5)	24 (2.6)

***MULTIPLE RESPONSES ALLOWED.**

Table 20. Current breastfeeding and supplemental liquids.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
CURRENTLY BREASTFEEDING	964 (93.7)	1,802 (96.9)	2,766 (95.7)
CHILD BREASTFED YESTERDAY	953 (90.3)	1,788 (95.5)	2,741 (93.6)
CHILD DRANK FROM A BOTTLE WITH A NIPPLE YESTERDAY	113 (10.7)	187 (10.0)	300 (10.2)
CHILD DRANK YESTERDAY			
PLAIN WATER	1,036 (98.2)	1,853 (98.9)	2,889 (98.7)
INFANT FORMULA	80 (7.6)	96 (5.1)	176 (6.0)
MILK (TINNED, POWDERED, FRESH)	190 (18.0)	477 (25.5)	667 (22.8)
JUICE OR JUICE DRINKS	106 (10.0)	249 (13.3)	355 (12.1)
CLEAR BROTH/CLEAR SOUP	22 (2.1)	88 (4.7)	110 (3.8)
VITAMIN OR MINERALS (DRINK OR EAT)	202 (19.1)	347 (18.5)	549 (18.8)
ORS	19 (1.8)	35 (1.9)	54 (1.8)
ANY OTHER LIQUIDS	76 (7.2)	167 (8.9)	243 (8.3)
YOGURT	1 (0.1)	22 (1.2)	23 (0.8)
THIN PORRIDGE	129 (12.2)	130 (6.9)	259 (8.8)

Table 21. Supplemental foods.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
GRAINS, ROOTS AND TUBERS	927 (87.9)	1,736 (92.7)	2,663 (90.9)
LEGUMES AND NUTS	459 (43.5)	363 (19.4)	822 (28.1)
DAIRY PRODUCTS (MILK, YOGURT, CHEESE)	328 (31.1)	677 (36.1)	1,005 (34.3)
FLESH FOODS (MEAT, FISH, POULTRY)	436 (41.3)	975 (52.1)	1,411 (48.2)
EGGS	289 (27.4)	671 (35.8)	960 (32.8)
VITAMIN A-RICH FRUITS AND VEGETABLES	330 (31.3)	471 (25.1)	801 (27.4)
OTHER FRUITS AND VEGETABLES	195 (18.5)	582 (31.1)	777 (26.5)
NUMBER OF TIMES ATE SOLID, SEMI-SOLID, SOFT FOODS			
MEAN (SD)	2.85 (1.55)	2.95 (1.55)	2.91 (1.55)
MIN, MAX	0.0, 10.0	0.0, 11.0	0.0, 11.0
CHILDREN THAT RECEIVED ZERO MEALS	74 (7.0)	88 (4.7)	162 (5.5)

Table 22. Infant and young child feeding practices and indicators.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
EVER BREASTFED	1,029 (97.5)	1,860 (99.3)	2,889 (98.7)
EARLY INITIATION OF BREASTFEEDING	277 (26.9)	538 (28.9)	815 (28.2)
RECEIVED PRELACTEAL FEEDING	251 (23.8)	687 (36.7)	938 (32.0)
CONTINUED BREASTFEEDING FIRST YEAR	259 (92.5)	477 (95.2)	736 (94.2)
CONTINUED BREASTFEEDING SECOND YEAR	162 (85.3)	293 (91.8)	455 (89.4)
AGE-APPROPRIATE BREASTFEEDING	884 (90.1)	1,705 (95.5)	2,589 (93.6)
INTRODUCED TO SOLD, SEMI-SOLID OR SOFT FOOD	162 (32.8)	267 (31.7)	429 (32.1)
MDD	324 (30.7)	631 (33.7)	955 (32.6)
MMF	667 (63.2)	1,236 (66.0)	1,903 (65.0)
MAD	247 (23.4)	482 (25.7)	729 (24.9)

Table 23. Household decision-making among currently married mothers and caregivers.

	BARISHAL	KHULNA	TOTAL
	(N=1,038)	(N=1,842)	(N=2,880)
	N (%)	N (%)	N (%)
DECISIONS MADE ALONE OR JOINTLY WITH HUSBAND			
OWN HEALTH CARE	486 (46.8)	698 (37.9)	1,184 (41.1)
CHILD'S HEALTH CARE	588 (56.6)	964 (52.3)	1,552 (53.9)
MAKING LARGE HH PURCHASES	304 (29.3)	594 (32.2)	898 (31.2)
MAKING PURCHASES FOR DAILY HH NEEDS	279 (26.9)	561 (30.5)	840 (29.2)
VISIT TO FAMILY AND/OR RELATIVES	448 (43.2)	872 (47.3)	1,320 (45.8)
WHAT FOOD SHOULD BE COOKED EACH DAY	770 (74.2)	1,406 (76.3)	2,176 (75.6)

Table 24. Household roles and responsibilities among currently married mothers and caregivers.

	BARISHAL	KHULNA	TOTAL
	(N=1,038)	(N=1,842)	(N=2,880)
	N (%)	N (%)	N (%)
RESPONSIBILITIES USUALLY OR ALWAYS DONE BY RESPONDENT (NOT SHARED)			
WASHING CLOTHES	1,011 (97.4)	1,819 (98.8)	2,830 (98.3)
REPAIRING HOUSE	136 (13.1)	344 (18.7)	480 (16.7)
BUYING FOOD	162 (15.6)	163 (8.8)	325 (11.3)
CLEANING THE HOUSE	976 (94.0)	1,785 (96.9)	2,761 (95.9)
PREPARING FOOD	999 (96.2)	1,769 (96.0)	2,768 (96.1)
CARING FOR OR SPENDING TIME WITH CHILDREN	771 (74.3)	1,733 (94.1)	2,504 (86.9)
HUSBAND'S OVERALL INVOLVEMENT IN THE DIVISION OF TASKS			
HE DOES A LOT MORE	60 (5.8)	63 (3.4)	123 (4.3)
HE DOES A LITTLE MORE	128 (12.3)	190 (10.3)	318 (11.0)
HE DOES THE SAME	84 (8.1)	192 (10.4)	276 (9.6)
I DO A LITTLE MORE	552 (53.2)	983 (53.4)	1,535 (53.3)
I DO A LOT MORE	214 (20.6)	414 (22.5)	628 (21.8)
SATISFACTION WITH HOW HH RESPONSIBILITIES ARE DIVIDED			
VERY SATISFIED	694 (66.9)	1,154 (62.6)	1,848 (64.2)
SOMEWHAT SATISFIED	313 (30.2)	600 (32.6)	913 (31.7)
SOMEWHAT DISSATISFIED	10 (1.0)	33 (1.8)	43 (1.5)
VERY DISSATISFIED	8 (0.8)	35 (1.9)	43 (1.5)
NO RESPONSE	13 (1.3)	20 (1.1)	33 (1.1)
HOW SATISFIED DO YOU THINK YOUR HUSBANDS IS WITH HOW HH RESPONSIBILITIES ARE DIVIDED			
VERY SATISFIED	681 (65.6)	1,138 (61.8)	1,819 (63.2)
SOMEWHAT SATISFIED	328 (31.6)	611 (33.2)	939 (32.6)
SOMEWHAT DISSATISFIED	6 (0.6)	14 (0.8)	20 (0.7)
VERY DISSATISFIED	8 (0.8)	23 (1.2)	31 (1.1)
NO RESPONSE	15 (1.4)	56 (3.0)	71 (2.5)

Table 25. Household decision-making about production and income generation.

	BARISHAL	KHULNA	TOTAL
	(N=1,055)	(N=1,873)	(N=2,928)
	N (%)	N (%)	N (%)
HAS SOME INPUT INTO DECISIONS OR FEELS CAN MAKE DECISIONS IN AT LEAST TWO ACTIVITIES	289 (64.7)	943 (66.7)	1,232 (66.2)
HAS SOME INPUT INTO INCOME DECISIONS OR FEELS CAN MAKE DECISIONS	129 (43.3)	575 (56.7)	704 (53.6)
PARTICIPATED IN ACTIVITIES IN THE PAST 12 MONTHS:			
FOOD CROP FARMING	158 (15.0)	587 (31.3)	745 (25.4)
HAS SOME INPUT INTO DECISIONS	97 (61.4)	443 (75.5)	540 (72.5)
HAS SOME INPUT INTO DECISIONS REGARDING INCOME GENERATED	25 (24.8)	178 (56.9)	203 (49.0)
FEELS CAN MAKE DECISIONS	65 (52.8)	345 (79.7)	410 (73.7)
CASH CROP FARMING	66 (6.3)	321 (17.1)	387 (13.2)
HAS SOME INPUT INTO DECISIONS	36 (54.5)	197 (61.4)	233 (60.2)
HAS SOME INPUT INTO DECISIONS REGARDING INCOME GENERATED	5 (11.6)	48 (24.7)	53 (22.4)
FEELS CAN MAKE DECISIONS	21 (48.8)	158 (65.3)	179 (62.8)
LIVESTOCK RAISING	373 (35.4)	1,298 (69.3)	1,671 (57.1)
HAS SOME INPUT INTO DECISIONS	285 (76.4)	992 (76.4)	1,277 (76.4)
HAS SOME INPUT INTO DECISIONS REGARDING INCOME GENERATED	107 (44.8)	482 (53.4)	589 (51.6)
FEELS CAN MAKE DECISIONS	268 (80.0)	868 (82.3)	1,136 (81.7)
WAGE OR SALARY EMPLOYMENT	45 (4.3)	119 (6.4)	164 (5.6)
HAS SOME INPUT INTO DECISIONS	24 (53.3)	72 (60.5)	96 (58.5)
HAS SOME INPUT INTO DECISIONS REGARDING INCOME GENERATED	11 (42.3)	33 (37.5)	44 (38.6)
FEELS CAN MAKE DECISIONS	17 (47.2)	59 (65.6)	76 (60.3)
FISHING OR FISH POND CULTURE	42 (4.0)	50 (2.7)	92 (3.1)
HAS SOME INPUT INTO DECISIONS	29 (69.0)	34 (68.0)	63 (68.5)
HAS SOME INPUT INTO DECISIONS REGARDING INCOME GENERATED	1 (5.9)	4 (21.1)	5 (13.9)
FEELS CAN MAKE DECISIONS	8 (42.1)	11 (44.0)	19 (43.2)