Using BRAC's community health volunteer network to scale up sale of multiple micronutrient powders in Bangladesh:

Results of an uptake survey conducted in June-July 2012

Submitted to:

Global Alliance for Improved Nutrition (GAIN) BRAC

Written by: Rahul Rawat, Andrew Kennedy, Kuntal Saha, Adiba Khaled, Parul Tyagi, and Purnima Menon,

> VERSION DATE: November 13, 2013

ACKNOWLEDGEMENTS:

Data collection for this uptake survey was funded by the Global Alliance for Improving Nutrition. IFPRI staff labor to support the survey and the data analysis was funded by the Global Alliance for Improved Nutrition (Adiba Khaled and Parul Tyagi), Transform Nutrition (Purnima Menon), Alive & Thrive (Kuntal Saha), and the CGIAR Research Program on Agriculture for Nutrition and Health (Andrew Kennedy and Rahul Rawat).

Contents

EXECUTIVE SUMMARYi
1. INTRODUCTION AND BACKGROUND1
1.1. Structure of this report1
2. RESEARCH OBJECTIVES AND PROGRAM THEORY
2.1. Using program theory to define research questions2
3. METHODS
3.2. Sampling and sample size7
3.3. Data Collection7
3.4. Data entry and analysis8
3.5. Ethical clearance
3.6. Study challenges10
4. SUMMARY OF RESULTS11
4.1. Sample description11
4.2. Implementation of the Pushtikona program11
4.2.1. Training
4.2.2. Knowledge about Pushtikona among program staff11
4.2.3. Supplies and stocks of Pushtikona12
4.2.4. Sales of Pushtikona12
4.2.5. Difficulties faced and support received in work on Pushtikona activities
4.3. Household exposure to BRAC staff and promotion of Pushtikona12
4.4. Program utilization: household awareness, purchase and utilization of Pushtikona13
4.4.1. Awareness and knowledge about Pushtikona13
4.4.2. Pushtikona exposure and purchases14
4.4.3. Household use of Pushtikona14
4.5
5. RESULTS TABLES – PROGRAM IMPLEMENTATION
6. RESULTS TABLES – PROGRAM UTILIZATION
7. REFERENCES
8. ANNEXES

EXECUTIVE SUMMARY

Objectives and methods

The results presented in this report emerge from the quantitative component of the mixed-methods process evaluation carried out on BRAC's Pushtikona program in June-July 2012. The overall objective of the program theory-oriented process evaluation was to carefully examine steps and links in the impact pathway, in order to identify strengths and weaknesses in program implementation, processes and uptake which could ultimately affect program outcomes. These research areas were divided broadly into implementation and utilization areas, corresponding to supply- and demand-side issues respectively. The principal data collection approach for this quantitative work was a survey assessing uptake of MNPs, in which interviews were carried out with household members and with BRAC FHW staff. Data presented here are from ten upazilas, five from A&T intensive areas and five from A&T nonintensive areas. A total of 800 household interviews (462 HH's randomly sampled and 338 "purchaser" HH's purposively sampled) form the basis for the findings in this report. All households had a child in the age range of 6-23 months. Field work for the results in this report was conducted in June and July of 2012. Data cleaning and analysis were done using Stata 11. Results were organized based on major domains in the program impact pathway. Results on Pushtikona are presented here for upazilas that had both the Pushtikona program and the Alive&Thrive BCC interventions to improve IYCF (A&T intensive areas) and for upazilas that only had the Pushtikona program (A&T non-intensive areas).

Findings: Program implementation

The Pushtikona program implementation is fairly smooth with regard to training. Nearly two-thirds of PKs and over three-quarters of SSs reported having received full training on Pushtikona, with refresher training attendance near universal. On average, the last refresher training that SSs attended was within the past half month. Program staff, particularly SSs, are well informed about Pushtikona, the benefits of feeding it to the child, and its use. SSs in A&T intensive areas demonstrated better knowledge of the benefits than those in A&T non-intensive areas.

Supply and stock issues have improved since the first year of operations. Approximately 90% of SSs receive a regular supply of Pushtikona, with the major source being the BRAC PO. The quantity of Pushtikona sachets that SSs have purchased each month from the office has increased from a mean of zero to 38 sachets over two years.

Household demand for Pushtikona has been slowly rising over time. Nearly 90% of SSs sell Pushtikona. The number of sachets sold in the last month is higher among SSs in A&T areas. Although distribution has increased sharply in the past year, the volume of sales per SS remains fairly low.

Findings: Household level exposure, awareness and utilization

Household level exposure to the Pushtikona appears to be primarily through the BRAC frontline staff. Overall, Pushtikona is the dominant MNP brand that households are aware of and purchase. Pushtikona awareness is higher in A&T areas. Given that BRAC staff are the primary source of information about MNPs, in areas where the SSs are not as active (e.g., Chirirbandar) this has implications for awareness about the product. Only 32% of households in the random sample have ever been visited by a BRAC SS (although almost half in A&T areas have), and awareness is in line with this.

Household knowledge of the benefits of feeding Pushtikona to the child and recommended dosage is low, although higher among A&T area households. Only around 40% of households are able to name

such benefits as "good for child's brain/intelligence" and "child will grow well". Other specific benefits have even lower recognition. Approximately 44% of households are able to indicate the recommended dosage of Pushtikona.

Household purchase rates of Pushtikona are just below that of exposure. Approximately 26% of random sample households have ever purchased Pushtikona from the SS, with households in A&T areas having a slightly higher rate. Households of higher SES are purchasing more sachets of Pushtikona. Additionally, social networks are important, as 70% of households that purchase Pushtikona know someone who uses MNPs, compared to 47% of households that do not purchase Pushtikona. It appears that female relatives play a key role in influencing others to purchase Pushtikona.

About half of households have ever given Pushtikona to the index child, again with households in the A&T areas having a slightly higher rate. The reasons that the rate of giving the Pushtikona to the child is higher than purchasing from the SS is that households acquire Pushtikona from many sources, not just the SS, and some households receive free Pushtikona. The most common reason for not giving Pushtikona to the child is the misperception that Pushtikona "is like sugar, not needed."

Program implications and areas for further research

The findings in this report are summarized in Table ES1 below, and offer key insights about the Pushtikona program, and highlight some key areas for potential programmatic action. Broadly, they indicate the following:

- 1) Technical knowledge among SSs about Pushtikona appears to be strong, however, increasing the role of SKs could be explored.
- Stock issues at the offices are not a constraint at this point in time, but as demand continues to increase, this could emerge as an issue.
- Household exposure to BRAC FHWs, particularly home visits by the SS needs to be ramped up (especially in Chirirbandar, Jaintiapur, Alamdanga, and Araihazar).
- 4) More and better information on benefits and recommended dosage needs to be given to households who are purchasing Pushtikona.
- 5) Regarding acceptability, further work needs to be done to combat misperceptions about the product.
- 6) Additional strategies for lower SES households (e.g., vouchers or direct distribution) may be needed to increase uptake among those with the greatest financial constraints.

Conclusions

Overall, the quantitative research findings on the implementation aspects of the Pushtikona program link well with previous findings from the survey of the frontline workers that was conducted in late 2011 as well as the qualitative study that was conducted in early 2012. Health worker awareness and knowledge is good, and though sales have increased, they remain low.

Household awareness about Pushtikona is reasonable, at about 40%. BRAC FHWs are the primary source of information, and purchase, of Pushtikona, and Pushtikona is the most recognized brand of MNP. Awareness of Pushtikona is higher in A&T areas than in non-A&T areas, likely due to the higher FHW contact in A&T areas. However, cumulatively, households in non-A&T intensive areas have purchased a greater number of sachets than households in A&T intensive areas in both random and purposive samples. This appears to be reversing as implementation has ramped up (see figure 2). In addition, when disaggregated by socioeconomic status (SES), it is clear that lower SES households are

purchasing fewer sachets of Pushtikona than higher SES households. This may indicate a need for adapted strategies in order to reach these households. Overall, if household awareness, knowledge and reach are improved, there is much potential for scaling up the MNP intervention in Bangladesh through BRAC frontline health workers.

Table ES1. Summary of process evaluation findings, mapped against the program impact pathways (PIPs) and critical process evaluation questions

PRO	CESS EVALUATION QUESTIONS	KEY FINDINGS
Sup	oply side	
•	Are BRAC SS adequately trained in behavior change communication related to Pushtikona use as well as supporting IYCF practices?	 BRAC SS receive adequate training in BCC related to Pushtikona and IYCF. 77% (n=144) of SS reported having received full training on Pushtikona. Knowledge about Pushtikona's benefits and the recommended dosing is high. For example, 84% (n=144)of SS reported it being beneficial for a child's intellectual development (90% (n=82) in A&T areas). 61% (n=144) of SSs reported having discussed issues related to IYCF at refresher training.
•	Do BRAC health volunteers have adequate stocks of Pushtikona with them to meet demand?	 Overall, BRAC health volunteers have adequate stocks of Pushtikona to meet current demand. 90% (n=144) of SSs receive a regular supply of Pushtikona, most often from the BRAC PO (85% of those who reported receiving supplies). This should continue to be monitored as demand rises.
•	What programmatic factors enable or constrain the sales of Pushtikona by the BRAC volunteer network?	 Overall, Pushtikona sales are enabled by recent visits by the FHW, advice on Pushtikona, and knowledge that Pushtikona is good for intelligence. Households that purchase Pushtikona have been visited more recently by an SS (22 days ago) compared to households that do not purchase Pushtikona (48 days ago). A higher proportion of households that receive advice from SS on Pushtikona actually purchase Pushtikona than don't purchase Pushtikona (66% compared to 34%, n=144). A higher proportion of households that know that Pushtikona is good for the child's brain and intelligence purchase Pushtikona (71% compared to 29%, n=220).
Demand and use side:		
•	What is the reach of the BRAC health volunteers as a distribution network? How does their reach vary by household SES?	 Approximately 62% (n=144) of households have ever been visited at home by a BRAC SS, with 84% (n=217) reporting as such in A&T intensive areas. Exposure to FHWs is higher among higher SES households than lower SES households (72% of richer compared to 48% of poorer households have ever been visited by SS, n=269).
•	What does overall uptake of the Pushtikona look like? What factors influence purchase of the Pushtikona?	 Although knowledge of Pushtikona was higher than other brands, overall uptake of Pushtikona is low, with 26% (n=207) of households reporting that they have ever purchased Pushtikona from an SS. Households of higher SES are purchasing more Pushtikona sachets than those of lower SES (14.3 compared to 8.5 last purchased, n=156). Social networks are important, with knowing someone else who uses MNPs having a strong influence on whether and how much households purchase. 70% (n=106) of households that purchase know someone who uses MNPs. It appears that female relatives are particularly important in influencing purchases, as 92% of those MNP users mentioned are female relatives. As mentioned, Pushtikona sales are enabled by recent visits by the FHW, advice on Pushtikona, and

PRC	CESS EVALUATION QUESTIONS	KEY	FINDINGS
			knowledge that Pushtikona is good for intelligence.
•	What are the patterns of adherence to recommended use of Pushtikona?	•	Patterns of adherence to recommended use cannot be evaluated at this time, only patterns related to knowledge of recommended use. A higher proportion of households that received advice about Pushtikona were able to indicate the recommended dosage of one sachet every alternate day, compared with households that did not receive advice (70% compared to 33%, n=144). Social Networks are important: Households that know someone else who uses MNPs have a higher rate of correctly indicating the recommended dosage, compared to households that did not know someone who uses MNPs (64% compared to 33%, n=220). Female relatives play a big role in this regard.
•	What are the characteristics of early adopters of Pushtikona? What are the characteristics of sustained users?	•	There is some evidence that there are more early adopters and sustained users of Pushtikona who are of higher SES than lower SES.
•	Are Pushtikona purchasers/adopters low-income or of a different SES than non-purchasers?	•	Given the very low purchase in the random sample, it is difficult to make any comparisons between purchasers and non-purchasers. This will be addressed in the 2013 process evaluation survey.
•	Once purchased, do families use Pushtikona as intended (for children of the appropriate age group, and for the intended duration)?	•	Correct use is not addressed, however knowledge of correct dosage is higher among purchaser HHs (86% compared to 18%, n=220).
•	How do purchase and utilization patterns differ based on SES and/or women's control over household purchases and money?	•	SES has strong relationships with early adopters and sustained users of Pushtikona. Households of higher SES are purchasing more Pushtikona sachets than those of lower SES SES (14.3 compared to 8.5 last purchased, n=156). However, there are not significant differences in knowledge of correct dosage by SES.

1. INTRODUCTION AND BACKGROUND

Multiple micronutrient powders (MNPs), specifically the nutritional anemia formulation (<u>www.sghi.org</u>), have been used in many settings worldwide to address the problem of childhood anemia (Ip et al, 2007; Menon et al., 2007; Zlotkin et al 2003). They are considered to be a promising anemia-reduction strategy, particularly for infants and young children who are unable or unwilling to consume syrups and tablets regularly. The use and distribution of MNPs have been attempted through a variety of delivery channels, including public- and private-sector approaches. In all cases, however, the requirements are fundamentally the same – any delivery channel must be capable of delivering Sprinkles to intended beneficiaries as well as of ensuring their appropriate use through effective communication strategies. Even though MNPs are now delivered through many channels (Schauer et al, 2007; Loechl et al., 2009), there is little research on market-based approaches to ensure delivery and appropriate use of Sprinkles (Olney et al. 2012).

In Bangladesh, GAIN IYCN is supporting BRAC and Renata Pharmaceuticals to manufacture and subsidize a brand of MNPs called **Pushtikona** for sale by BRAC health volunteers (called Shasthya Sebikas (SS)). This is a potentially high coverage approach for ensuring use of Pushtikona in Bangladesh, since BRAC SS already sell a variety of health products in their geographic and program catchment areas. Although the effectiveness and feasibility of delivering MNPs and ensuring their use has been established in other models, evidence on the public health impact of sales-based models is very limited. Thus, this study investigates the suitability of market-based systems for reaching intended Pushtikona beneficiaries, providing their caregivers with the necessary information on the appropriate use of Pushtikona and encouraging purchase and use of Sprinkles for reducing anemia among young children. Such an investigation can help to understand and specify the critical capacities that are needed to ensure efficient delivery and effective communications for such a system.

Previous studies on MNPs have been largely based on models of distribution that are direct to the beneficiary, with no purchase required. The only study of a market-based approach (the NICHE study in Kenya) has identified a number of questions that are relevant to investigate on the client demand side as well, factors that relate to purchase and adoption patterns (Suchdev et al. 2010). The NICHE study in Kenya has found that although sales are high immediately following promotion activities for Sprinkles, sustaining sales can be challenging, particularly in environments where health workers also sell other products (Suchdev, P; personal communication). Given the importance, therefore, of understanding and documenting the process aspects of a market-based intervention for Pushtikona in this context, we have embedded a theory-driven process evaluation into the impact evaluation to enable an investigation of issues related both to the supply side as well as the demand side of the proposed intervention.

Data collection for this household uptake study was conducted between June and July 2012. It is complemented by a survey of 400 frontline health volunteers, conducted for the Alive & Thrive process evaluation, which was conducted in October-November 2012. A qualitative study has also been conducted as part of the Pushtikona program process evaluation, and data collection was completed in end-March 2012. Taken together, the 3 data points, along with BRAC's own monitoring data provide an overview of key aspects of implementation, and potential directions for both the program implementation and the impact evaluation.

1.1. Structure of this report

Section 2 in this report presents the research objectives and program theory and highlights data sources for the different areas of research that were laid out for the process evaluation. Section 3 presents the methods for the uptake survey, and Section 4 presents the main findings of the survey and

its implications for the Pushtikona program. Sections 5 and 6 present the detailed results tables and figures.

2. RESEARCH OBJECTIVES AND PROGRAM THEORY

The following were the original research objectives of the overall process evaluation for the Pushtikona program. Given the mixed methods nature of the process evaluation, some of these objectives are addressed through quantitative survey data, while others are addressed through qualitative research.

- 1. What are the purchasing patterns of Pushtikona promoted by BRAC? Who purchases them, in what quantities; what are the reasons for purchase and non-purchase?
- 2. What are post-purchase utilization patterns of Pushtikona like? Which age groups are the Pushtikona used for; are there gender-related patterns of use? What is the regularity of use and what are the main reasons for adherence, or lack of adherence, to recommended use patterns?
- 3. What spill-over effects exist, if any, of Pushtikona in non-Pushtikona upazilas, given the increasing availability of micronutrient powders in Bangladesh, and plans for expansion of micronutrient powders into other programs?
- 4. How do the skills, incentive structures and motivations of front line health workers in the BRAC program influence sales and adherence among consumers?

2.1. Using program theory to define research questions

A first step in defining the key aspects of the program that should be assessed as part of the process evaluation was to develop a program impact pathway based on the program theory¹ for the Pushtikona program. Thus, the program impact pathway laid out the steps that are designed to ensure that Pushtikona are procured, delivered to all upazilas, promoted and sold by the BRAC health program, and that they are then used at the household level for the intended child in the appropriate amounts. The impact pathway was then used to guide the development of specific methods for the process evaluation. An overarching goal was to ensure that information is gathered on all steps in the program pathway as that is essential to evaluate the most critical steps for ensuring successful promotion, sales and utilization of Pushtikona.

The program theory framework in the figures below was developed based on discussions with BRAC so that the steps in delivering the Pushtikona intervention are laid out fully. Based on this, the specific research questions for the process evaluation were:

(1) Supply side

- a. Are BRAC SS adequately trained in behavior change communication related to Pushtikona use as well as supporting IYCF practices?
- b. Do BRAC health volunteers have adequate stocks of Pushtikona with them to meet demand?
- c. What programmatic factors enable or constrain the sales of Pushtikona by the BRAC volunteer network?

¹ "Program theory" refers to the definition of the processes by which a program is intended to achieve its intended impacts. It is now well recognized in the field of program evaluation that evaluations should be theory-driven to the extent possible as this allows for the best understanding of whether, why and how programs achieve, or do not achieve, their intended impacts. Usually, program theory should include both impact theory (which specifies the impact pathways) and process theory (which specifies the program implementation and utilization pathways). For further information on program theory driven evaluations, refer to Rossi, Lipsey and Freeman, 2004.

- (2) <u>Demand and use side</u>:
 - a. What is the reach of the BRAC health volunteers as a distribution network? How does their reach vary by household SES?
 - b. What does overall uptake of the Pushtikona look like? What factors influence purchase of the Pushtikona?
 - c. What are the patterns of adherence to recommended use of Pushtikona?
 - d. What are the characteristics of early adopters of Pushtikona? What are the characteristics of sustained users?
 - e. Are Pushtikona purchasers/adopters low-income or of a different SES than non-purchasers?
 - f. Once purchased, do families use Pushtikona as intended (for children of the appropriate age group, and for the intended duration)?
 - g. How do purchase and utilization patterns differ based on SES and/or women's control over household purchases and money?

Table 1. Data sources for process evaluation questions

PRO	CESS EVALUATION QUESTIONS	DATA SOURCES
Sup	ply side	
•	Are BRAC SS adequately trained in behavior change communication related to Pushtikona use as well as supporting IYCF practices?	A&T FHW survey (2011) MNP uptake survey (2012) Qualitative research (2011-2012)
•	Do BRAC health volunteers have adequate stocks of Pushtikona with them to meet demand?	A&T FHW survey (2011) MNP uptake survey (2012) Qualitative research (2011-2012)
•	What programmatic factors enable or constrain the sales of Pushtikona by the BRAC volunteer network?	Qualitative research (2011-2012)
Der	nand and use side:	
•	What is the reach of the BRAC health volunteers as a distribution network? How does their reach vary by household SES?	Baseline survey (2010) MNP uptake survey (2012)
•	What does overall uptake of the Pushtikona look like? What factors influence purchase of the Pushtikona?	Qualitative research (2011-2012) MNP uptake survey (2012)
•	What are the patterns of adherence to recommended use of Pushtikona?	MNP uptake survey (2012) Qualitative research (2011-2012)
•	What are the characteristics of early adopters of Pushtikona? What are the characteristics of sustained users?	MNP uptake survey (2012)
•	Are Pushtikona purchasers/adopters low-income or of a different SES than non-purchasers?	MNP uptake survey (2012)
•	Once purchased, do families use Pushtikona as intended (for children of the appropriate age group, and for the intended duration)?	Qualitative research (2011-2012) MNP uptake survey (2012)
•	How do purchase and utilization patterns differ based on SES and/or women's control over household purchases and money?	MNP uptake survey (2012)





3. METHODS

3.1. Study design

The evaluation of the impact of the GAIN-supported MNP (Pushtikona) intervention by BRAC in Bangladesh has been planned using a 2x2 cluster-randomized design. It takes advantage of the cluster-randomized impact evaluation design of the community component of the Alive & Thrive (A&T) initiative, also implemented by BRAC. The Pushtikona evaluation is nested within the main A&T impact evaluation, resulting in a 2x2 factorial design with 4 arms – (1) A&T + Pushtikona; (2) A&T alone; (3) Pushtikona alone; and 4) No A&T; No Pushtikona.

For the A&T impact evaluation 20 upazila were randomly assigned to either A&T intervention (10 upazila) or comparison (10 upazila) areas. These 10 upazila were further assigned randomly to the above mentioned 4 arms - (1) A&T + Pushtikona (5 upazila); (2) A&T alone (5 upazila); (3) Pushtikona alone (5 upazila); and 4) No A&T, No Pushtikona (5 upazila).





3.2. Sampling and sample size

The uptake survey, a key component of the process evaluation for Pushtikona intervention, was conducted in all 10 Pushtikona evaluation upazila (5 A&T + Pushtikona and 5 Pushtikona alone). In this uptake survey, the same sampling frame was used as of the baseline survey done in 2010. *First*, two unions per upazila were randomly selected from 10 Pushtikona upazila. *Second*, from each selected union, 5 villages were randomly selected. Thus, 100 villages, which are half of the villages from the baseline survey, were covered during this uptake survey in 2012. *Third*, it was decided that 4 households with children 6-23 months of age from each village would be randomly selected to have a total of 400 households.

While we anticipated a proportion of the random sample of 400 households would also be Pushtikona 'purchaser' households, this proportion might be insufficient to fully unpack characteristics of these households and examine variability in post-purchase utilization of Pushtikona. Therefore, we decided to oversample an additional 400 households with children 6-23 months of age who were identified as Pushtikona 'purchaser' households by the survey team during household listing. The rationale for this oversample of 'purchaser' households was to help identify determinants of decision-making around purchasing and consumption of Pushtikona. However, only 338 households were identified as Pushtikona 'purchaser' households during the household listing in the survey upazila. Due to low number of Pushtikona 'purchaser' households in the survey upazila, an additional 62 households with children 6-23 months of age were randomly selected that gave rise to a total of 462 randomly selected households.

Thus, total sample size of this Pushtikona uptake survey was 800 households with children 6-23 months of age, of which 462 households were randomly selected and 338 'purchaser' households were purposively selected.

3.3. Data Collection

Data were collected from households as well as from frontline health workers and BRAC office staff. The household survey consisted of interviews with the mother, father and grandmother of the index child. The frontline health workers survey included Shasthya Sebika and/or Pushti Sebika and IYCF promoters (Pushtikormi). Among the BRAC office staff at sub-district level, upazila manager and program organizers were interviewed. A short community survey was also conducted during this uptake survey. A brief description on surveys on all types of respondents is given below –

Household listing: Household listing was done in the sampled villages using a simple household listing form. This form was used to randomly identify households with children 6-23 months of age. This form was also used to identify the households as Pushtikona 'purchaser'.

Household survey: Household survey included three types of respondents – (1) mothers of children 6-23 months of age (index child); (2) fathers of the index child; and (3) grandmothers of the index child. While the mother's questionnaire covered broader issues related to Pushtikona, short father's and grandmother's questionnaires were used in the HH questionnaire to understand their awareness, knowledge, purchase and use of Pushtikona. The list of modules in HH questionnaire for mothers, fathers and grandmothers are presented in the Annex, Table A.1.

Frontline Health Workers [Shasthya/Pushti Sebika (SS/PS) and Pushti Kormi (PK)] survey: The Uptake survey included a SS/PS survey for all SS/PS (N = 144) and PK (N = 42) in the 100 survey villages. The purpose was to document sales trends and patterns of Pushtikona for the SS/PS and to document how PK promote and sell Pushtikona in the A&T villages. In addition, the questionnaire included SS/PS's exposure to training, technical knowledge and skill about Pushtikona, sales of Pushtikona and basic demographic information (See Annex Table A.2).

BRAC Office survey: The Uptake survey also included a BRAC Office survey to document sale trends of Pushtikona from upazila managers and program organizers (POs) (See Annex Table A.3). All upazila managers (N = 10) and POs (N = 28) in the survey areas of 10 upazila were covered. The questionnaire also included their exposure to Pushtikona training/orientation, and knowledge and skill regarding Pushtikona.

Community survey: A short community survey was conducted to get information on any ongoing health, nutrition and IYCF related programs in the survey areas. All survey villages (N = 100) were included in the community survey. Interviews were conducted with key informants, such as union council (*parishad*) chairmen, members of the union *parishad*, village school teachers, farmers, and health workers in the communities, to complete the community questionnaire.

3.3.1 Training of data collection team

All questionnaires were first developed in English and then translated to Bangla, the local language. After pre-testing the questionnaires in the field, the translation was further modified for easier understanding of the respondents. The interviewers who carried out the Uptake survey received a week-long in-house training as well as one day field practice. At the training center, the questionnaires were discussed in detail, facilitated with video presentations and role play. After the field practice, another day was spent to discuss and resolve any concerns that appeared while practicing in the field.

All interviewers were particularly trained on anthropometry and were fully standardized on anthropometry measurements following the methods recommended in FANTA (Cogill 2003).

3.3.2 Fieldwork logistics

The Uptake survey was conducted by a well-qualified and experienced survey firm, DATA (Data Analysis and Technical Assistance, Limited) that conducted the A&T baseline survey in 2010. The senior management team of DATA worked closely with the IFPRI team in planning and training activities, and was also closely engaged in field supervision of the survey. Ten survey teams were formed for ten survey sub-districts, each team consisting of five or six members, one of the team members acting as the supervisor for the team. Over a time period of four weeks, each team carried out the survey in one sub-district from their designated districts. The IFPRI team and DATA staff made visits to the survey sites to monitor the survey work and provide any necessary supervision on a regular basis.

3.4. Data entry and analysis

The data entry template was designed by DATA and data entry was done at DATA, the survey firm that conducted the survey. Data were not double-entered, but several data verification procedures were used to ensure data quality. The data entry template included data input rules, e.g., ranges

with bounds and skips. After data entry was completed, detailed data cleaning and verification was done. Data cleaning included consistency checks and logical bounds of variables with ranges. This process was done simultaneously using STATA and SPSS to see if there was any difference. Interfile consistency was checked for multiple section variables. Data were then sent to IFPRI for further checking and cleaning.

At IFPRI, the data cleaning procedure involved screening of the data variable by variable. Data screening included identification of missing entries, logical inconsistencies or incorrect entries. Once the problem areas were identified, they were conveyed to DATA for verification and any necessary corrections to the primary dataset. Once the corrected dataset was received, changes made were verified. Any data errors were detected during preliminary analysis were also conveyed to DATA for corrections. A record of all data cleaning issues was carefully maintained through the cleaning and analysis process, with all changes noted.

All data cleaning and analysis at IFPRI were done using Stata 11. Appropriate variables were created for each section. Descriptive analysis was run to present results on each variable. Results on means and proportions were generated for the random and purposive samples as well as separately for A&T and non-A&T areas in the sample, to assess the differential contributions of the intensive behavior change intervention implemented by A&T on the uptake of MNPs and IYCF practices.

Variable creation

Child feeding practices were described using the WHO-recommended IYCF indicators (WHO 2010). These included age-appropriate breastfeeding practices (timing and duration but not exclusivity), and timely and adequate consumption of high quality complementary foods. Exclusive breastfeeding could not be estimated as the age of the sample was beyond 6 months of age. The eight core IYCF indicators were calculated based on the WHO guidelines.

Children's weight and height measurements were used to derive Z-scores by comparing each child's anthropometric measurements to the 2006 WHO child growth standards for his/her age and gender (WHO 2006). The three indicators created were height-for-age Z-score (HAZ), weight-for-age Z-score (WAZ) and weight-for-height Z-score (WHZ). Stunting was defined as HAZ < -2 Z-scores; underweight was defined as WAZ < -2 Z-scores; and wasting was defined as WHZ < -2 Z-scores.

An index of socioeconomic status (SES) quartiles was created and used to analyze relationships between SES and program implementation and utilization variables. A selection of household fixed assets, durable goods assets, and productive assets were chosen to include in a factor analysis in order to create SES quartiles.

Results on means and proportions were generated for the entire survey sample as well as separately for intervention and comparison areas. Statistical testing of select bivariate associations were carried out using regression techniques taking into account the clustering of errors within and across subdistricts (*upazilas*). All analysis was done using Stata 11.

3.5. Ethical clearance

Informed consent was obtained from the mothers of children 6-23 months of age about their participation in the study. The research received ethical clearance from the Bangladesh Medical Research Council and Institutional Review Board at the International Food Policy Research Institute. The randomized evaluation is also registered with the Clinical Trials registry at ClinicalTrials.gov (NCT01678716).

3.6. Study challenges

The survey was conducted in June-July which is a hot and humid period of the year in Bangladesh. With regular rainfall in monsoon and flooding in some survey areas, road communication in some places was difficult. In some places, country boats were the only mode of transportation that took long time to travel to the sample villages and households. This was particularly a problem for the survey teams to carry the weight scale and length/height boards to measure children and their mothers.

4. SUMMARY OF RESULTS

4.1. Sample description

Descriptive statistics were created and compared for both the random (n=462) and "purchaser" (n=338) households (**Table 4.1.1**). The mean age of the index child is 13.8 months and 16 months in the random and purposive sample respectively. Both samples have similar nutritional status with regards to anthropometry, with the exception that the prevalence of wasting is higher in the purposive sample (21% compared to 16% in the random sample). The purposive sample has a smaller proportion of females (45% compared to 51% in the random sample).

4.2. Implementation of the Pushtikona program

Implementation aspects of the Pushtikona program are presented below, including on 1) trainings of BRAC FHWs on Pushtikona; 2) knowledge among FHWs related to Pushtikona; 3) monthly supplies and stocks of Pushtikona; 4) sales for Pushtikona; and 5) difficulties faced and support received related to their Pushtikona activities.

4.2.1. Training

Training of Pushti Kormi and Shasthya Shebika, related to Pushtikona were examined (**Tables 5.1.1** and **5.1.2**).

Sixty percent of Pushti Kormis received full training on Pushtikona, with all attending refresher trainings. Discussions on Pushtikona at the last refresher training were near universal. On average, the last refresher training that PKs attended was within the past 2 weeks. Nearly all PKs responded that there was a discussion about Pushtikona during these refresher trainings. Approximately 77% of Shasthya Shebika received full training on Pushtikona, with nearly all attending refresher trainings. In A&T areas and non-A&T areas, 72% and 84% of SSs received full training on Pushtikona respectively. On average, the last refresher training that SSs attended was within the past half month. Overall, 94% of SSs responded that there was discussion about Pushtikona during these refresher trainings, with 98% and 90% of SSs responding as such in A&T areas and non-A&T areas respectively.

Overall, training of frontline health workers on Pushtikona is well implemented, covering a large proportion of FHWs in the program areas, with frequent refresher trainings.

4.2.2. Knowledge about Pushtikona among program staff

Knowledge and skills relating to Pushtikona were examined for both PKs and SSs (**Tables 5.2.1 and 5.2.2**). Nearly all PKs and SSs reported having ever heard of Pushtikona, with the primary source being BRAC trainings. Knowledge regarding the benefits of feeding Pushtikona to the child was significantly higher overall for SSs compared to PKs; less than 25% of PKs reported Pushtikona being beneficial for a child's intellectual development, compared to 84% among SSs. Of note, SSs in A&T areas demonstrated better knowledge than those in non-A&T areas regarding the benefits of feeding Pushtikona to children. Approximately 85% of both SSs and PKs reported that Pushtikona should be provided to children every alternate day, which is the dosing promoted by the program.

Overall, knowledge about Pushtikona, its benefits, and the recommended dosing is high, particularly among SS.

4.2.3. Supplies and stocks of Pushtikona

Patterns of supply of Pushtikona were examined among SSs (**Table 5.3.2**), as well as their stocks each month from July 2010 to June 2012 (**Table 5.4.1**). Ninety percent of SSs report receiving a regular supply of Pushtikona, with the major source being the BRAC PO. Upon examination of BRAC monthly sales reports (**Table 5.4.1**) there is a clear trend between July 2010 and June 2012 in terms of the quantity of Pushtikona sachets that SSs have purchased each month from the BRAC office, which has increased from a monthly mean of zero during the first two months of the program to a monthly mean of 38 sachets. However, though there is a clear increase in purchase of Pushtikona sachets by SS from BRAC, this number is likely very low compared to the total number of children aged 6-23 months of age within the SS's catchment area who are intended beneficiaries of Pushtikona.

4.2.4. Sales of Pushtikona

Approximately 89% of SSs report having sold Pushtikona both in A&T and non-A&T areas (**Table 5.3.2**). On average, SSs report initiating sales of Pushtikona 11 months ago, in August-September 2011. The number of reported Pushtikona sachets sold in the last month was higher among SSs in A&T areas compared to those in non-A&T areas. The quantity of Pushtikona sachets that SSs have sold to households each month, as reported in BRAC sales registers, has increased from a mean of zero to 39 sachets over a period of two years, although the first year did not see much of an increase in monthly sales (**Figure 2 and Table 5.4.1**).

4.2.5. Difficulties faced and support received in work on Pushtikona activities

FHW difficulties were not addressed in this survey, however from the recent qualitative study, the most common difficulties were related to insufficient time, attrition of SSs, and complaints by mothers about having to pay for Pushtikona.

4.3. Household exposure to BRAC staff and promotion of Pushtikona

Household exposure to BRAC frontline health worker staff, and exposure to Pushtikona during home visits by BRAC staff are presented below.

4.3.1. Household exposure to BRAC program staff

Household exposure to BRAC FHWs was examined for the random (**Table 6.2.8.a**) and purposive (**Table 6.2.8.b**) sample. We used two methods to assess HH exposure to BRAC FHWs—an aided and unaided recall method, whereby a photograph of the BRAC FHWs was used in the aided recall. There is a marked difference in recall of exposure to BRAC FHWs when using these different methods. In the random sample, using unaided recall, only 32% of HHs report having been visited by a BRAC SS, with 46% in A&T areas compared to 18% in non-A&T areas. These numbers increase significantly when using the aided recall method. Using this method, 62% of HHs report having been visited by a BRAC SS, with 84% in the A&T areas compared to 32% in the non-A&T areas. Similar differences are seen for BRAC SKs and PKs when using these two different methods. As expected by design, a greater percentage of households in the purposive sample compared to the random sample recall having received such visits by BRAC FHWs. Overall, HH exposure to BRAC FHWs, and SSs in particular, is high.

4.3.2. Use of home visits for promotion of Pushtikona

Visits to households by BRAC FHWs for the purpose of promoting and educating households about Pushtikona were examined in the random (**Tables 6.2.4.a**) and purposive (6.2.4.b) samples. Approximately 47% of households in the random sample received advice on Pushtikona during the BRAC SS's last visit, with a clear difference in A&T compared to non-A&T areas(53% and 25% in A&T and non-A&T areas respectively). As expected by design, these rates were higher in the purposive sample. Approximately 81% of households in the purposive sample received advice on Pushtikona during the BRAC SS's last visit (79% and 85% in A&T and non-A&T areas respectively.

4.4. Program utilization: household awareness, purchase and utilization of Pushtikona

In this section, we examine program utilization through 1) household awareness and knowledge of Pushtikina; and 2) household purchase and use of Pushtikona.

4.4.1. Awareness and knowledge about Pushtikona

Awareness of Pushtikona, knowledge of the benefits for the child, as well as knowledge of appropriate frequency and dosage were examined among both the random (**Table 6.1.2a**) and purposive (**Table 6.1.2b**) samples. Approximately 38% of households in the random sample had ever heard about or seen a sachet of Pushtikona, with a higher proportion reporting in A&T areas (54%) compared to non-A&T areas (24%). Knowledge of Pushtikona was significantly higher than the two other brands available in the market i.e. Monimix and MyMix. The most common source from where these households hear about Pushtikona is a BRAC frontline worker, particularly in the A&T areas. Following BRAC FHWs, neighbors and friends were frequently reported sources of information about MNPs. Approximately 44% of households in the random sample were able to indicate the recommended dosage of one sachet given to a child every alternate day (51% and 31% in the A&T area and the non-A&T area respectively). A relatively large percentage of households (37%) were not able to identify what the recommended dosage is (**Figure 3**).

Awareness is, as expected by design, substantially higher in the purposive sample. Nearly all households in the purposive sample have ever heard about or seen a sachet of Pushtikona (100% and 99% in the A&T area and the non-A&T area respectively). Again, the most common source from where these households hear about Pushtikona is a BRAC frontline worker. Approximately 70% of purposive sample households are able to indicate the recommended dosage of one sachet given to a child every alternate day (75% and 64% in the A&T area and the non-A&T area respectively). In both the random and the purposive sample, the mean age at which children should be introduced Pushtikona was between 6-7 months of age.

Additionally, awareness was examined by SES group. Households of higher SES had higher rates of ever hearing about or seeing a sachet of Pushtikona (46% among the highest SES group compared to 31% among the lowest SES group).

Household knowledge on the benefits of feeding Pushtikona to children is below that of BRAC SSs, but reasonable for such benefits as "good for intelligence", "increases appetite", "child will grow well", and "child suffers less from illness". However, other specific benefits are practically unknown to households, such as those about anemia, vitamins and minerals, crying less, and prevention and treatment of diarrhea.

4.4.2. Pushtikona exposure and purchases

Purchases of Pushtikona by households were examined in both the random (**Table 6.2.1.a**) and the purposive (**Table 6.2.1.b**) samples. Households in the purposive sample reported last purchasing an average of 17 sachets of Pushtikona, 4 more than households in the random sample. In both samples, households in A&T intensive areas purchased fewer sachets in their last purchase than those in non-A&T intensive areas.

The cumulative number of sachets of Pushtikona purchased from any BRAC/NGO worker over time was also examined. Households in the random sample have purchased an average (mean) of 19.6 sachets (18.6 and 25.3 in A&T and non-A&T areas respectively) while those in the purposive sample have purchased an average of 26.2 sachets (22.5 and 30.9 in A&T and non-A&T areas respectively). Note that in both samples, households in A&T intensive areas have purchased less sachets than those in non-A&T intensive areas. However, this appears to be reversing as implementation has ramped up (see figure 1).

When asked if they've ever purchased Pushtikona specifically from the SS (**Figure 4**), only 26% of households in the random sample responded affirmatively (31% and 11% in the A&T and non-A&T areas respectively). Approximately 70% of households in the purposive sample responded affirmatively (67% and 76% in the A&T and non-A&T areas respectively).

Rates of household purchase of Pushtikona were also examined by socioeconomic status (SES) (**Table 6.2.3**). When households in the random sample were asked if they purchase Pushtikona for children in their household, respondents of higher SES had higher rates of affirmative responses. It is also clear that households of higher SES are purchasing more sachets of Pushtikona than those of lower SES in both samples (**Tables 6.2.4** and **6.2.5**).

Additionally, social networks are an important factor when it comes to purchases, as 70% of households that purchase Pushtikona know someone who uses MNPs, compared to 47% of households that do not purchase Pushtikona (**Table 6.3.8**). It appears that female relatives play a key role in influencing others to purchase Pushtikona. Additionally, those that know someone who uses MNPs have purchased more Pushtikona sachets (an average of 20), compared to those who do not know someone who uses MNPs (an average of 12).

4.4.3. Household use of Pushtikona

Use of Pushtikona by households was examined in both the random (**Table 6.2.6.a**) and purposive (**Table 6.2.6.b**) sample. In the random sample, approximately 51% of households have ever given Pushtikona to the index child (61% and 19% in A&T and non-A&T areas respectively). The most common reason for not giving Pushtikona to the child is the misperception that Pushtikona "is like sugar, not needed".

In the purposive sample, as expected by design, nearly 100% of households have ever given Pushtikona to the index child (100% and 99% in A&T and non-A&T areas respectively).

4.5. Program implications and areas for further research

Overall implementation is running smoothly. BRAC FHWs, particularly SSs, are being trained and have good knowledge of Pushtikona. For now, their supplies and stocks seem to be sufficient, but

this needs to be closely monitored as household demand increases. Household awareness about Pushtikona is reasonable, at about 40%, but exposure to FHWs should improve, especially in Chirirbandar, Jaintiapur, Alamdanga, and Araihazar. Purchaser households, not surprisingly, have better knowledge in terms of the benefits to the child of Pushtikona and the recommended dosage. BRAC FHWs are the primary source of information, and purchase, of Pushtikona. Therefore, additional effort should be made to disseminate information on the benefits and recommended dosage of Pushtikona when visiting households. Rates of ever having purchased Pushtikona from an SS are quite low (around 26%), and frequency of purchase and number of sachets purchased remains well below what is recommended. Until recently, households in non-A&T intensive areas have been purchasing more sachets than households in A&T intensive areas in both random and purposive samples, however, this appears to be reversing as program implementation has ramped up. In addition, when disaggregated by socioeconomic status (SES), it is clear that lower SES households are purchasing fewer sachets of Pushtikona than higher SES households. This may indicate a need for adapted strategies in order to reach these households. Overall, if awareness, knowledge and reach are improved, there is much potential for scaling up the MNP intervention in Bangladesh through the BRAC frontline health workers.

PROCESS EVALUATION QUESTIONS	KEY FINDINGS
Supply side	
• Are BRAC SS adequately trained in behavior change communication related to Pushtikona use as well as supporting IYCF practices?	 BRAC SS receive adequate training in BCC related to Pushtikona and IYCF. 77% of SS reported having received full training on Pushtikona. Knowledge about Pushtikona's benefits and the recommended dosing is high. Over half of SSs reported having discussed issues related IYCF at refresher training.
• Do BRAC health volunteers have adequate stocks of Pushtikona with them to meet demand?	 Overall, BRAC health volunteers have adequate stocks of Pushtikona to meet current demand. 90% of SSs receive a regular supply of Pushtikona, most often from the BRAC PO. This should continue to be monitored as demand rises.
 What programmatic factors enable or constrain the sales of Pushtikona by the BRAC volunteer network? 	 Overall, Pushtikona sales are enabled by recent visits by the FHW, advice on Pushtikona, and knowledge that Pushtikona is good for intelligence. Households that purchase Pushtikona have been visited more recently by an SS compared to households that do not purchase Pushtikona. A higher proportion of households that receive advice from SS on Pushtikona actually purchase Pushtikona than don't purchase Pushtikona. A higher proportion of households that know that Pushtikona is good for the child's brain and intelligence purchase Pushtikona.
Demand and use side:	
• What is the reach of the BRAC health volunteers as a distribution network? How does their reach vary by household SES?	 Approximately 62% of households have ever been visited at home by a BRAC SS, with 84% reporting as such in A&T intensive areas.

Table 2: Findings from Program Impact Pathway analysis

PROCESS EVALUATION QUESTIONS			KEY FINDINGS		
		•	Exposure to FHWs is higher among higher SES households than lower SES households		
•	What does overall uptake of the Pushtikona look like? What factors influence purchase of the Pushtikona?	•	Although knowledge of Pushtikona was higher than other brands, overall uptake of Pushtikona is low, with 26% of households reporting that they have ever purchased Pushtikona from an SS. Households of higher SES are purchasing more Pushtikona sachets than those of lower SES. Social networks are important, with knowing someone else who uses MNPs having a strong influence on whether and how much households purchase. It appears that female relatives are particularly important in influencing purchases. As mentioned, Pushtikona sales are enabled by recent visits by the FHW, advice on Pushtikona, and knowledge that Pushtikona is good for intelligence.		
•	What are the patterns of adherence to recommended use of Pushtikona?	•	Patterns of adherence to recommended use cannot be evaluated at this time, only patterns related to knowledge of recommended use. A higher proportion of households that received advice about Pushtikona were able to indicate the recommended dosage of one sachet every alternate day, compared with households that did not receive advice. Social Networks are important: Households that know someone else who uses MNPs have a higher rate of correctly indicating the recommended dosage, compared to households that did not know someone who uses MNPs. Female relatives play a big role in this regard.		
•	What are the characteristics of early adopters of Pushtikona? What are the characteristics of sustained users?	•	There is some evidence that there are more early adopters and sustained users of Pushtikona who are of higher SES than lower SES.		
•	Are Pushtikona purchasers/adopters low-income or of a different SES than non-purchasers?	•	Given the very low purchase in the random sample, it is difficult to make any comparisons between purchasers and non-purchasers. This will be addressed in the 2013 process evaluation survey.		
•	Once purchased, do families use Pushtikona as intended (for children of the appropriate age group, and for the intended duration)?	•	Correct use is not addressed, however knowledge of correct dosage is higher among purchaser HHs.		
•	How do purchase and utilization patterns differ based on SES and/or women's control over household purchases and money?	•	SES has strong relationships with early adopters and sustained users of Pushtikona. Households of higher SES are purchasing more Pushtikona sachets than those of lower SES. However, there are not significant differences in knowledge of correct dosage by SES.		

5. RESULTS TABLES - PROGRAM IMPLEMENTATION

This section includes the Results tables on program implementation. These results are summarized in the previous section.

5.1 Training of staff

Table 5.1.1: Training of Pushti Kormi

	All
	(N=42)
	Percent
Received full training on Pushtikona	59.5
Usually attend refresher trainings	100.0
Discussion about Pushtikona at the last refresher	97.6
Refresher training topics	
Breastfeeding techniques and difficulty management	19.6
Discussion on issues related to IYCF	17.7
Age specific complementary feeding and difficulty management	15.7
Childhood anemia and Pushtikona	15.0
Seven characteristics of complementary feeding	14.4
Counseling techniques	11.8
Maternal nutrition	5.2
Others	0.7
Discussed the following at the refresher trainings	
Field findings and issues related to IYCF	100.0
Counseling techniques	92.9
Breastfeeding techniques and difficulty management	100.0
Age specific complementary feeding and difficulty management	100.0
Maternal nutrition	92.9
Seven characteristics of complementary feeding	97.6
Childhood anemia and Pushtikona	97.6
	Mean ± SD
	Median (Min;Max)
	(N=25)
Number of months are reacted full typicing on Duchtilians	15.1 ± 4.7
Number of months ago received full training on Pushtikona	18 (3;21)
	(N=42)
Number of months are other last refuse on the initial	0.4 ± 0.6
Number of months ago attended the last refresher training	0 (0;2)

Table 5.1.2:	Training	of Shasthy	a Shebika
--------------	----------	------------	-----------

	A&T	Non-A&T	All
	area	Area	
	(N=82)	(N=62)	(N=144)
	Percent	Percent	Percent
Received a full training/orientation on Pushtikona	71.95	83.87	77.08
Attend refresher trainings	98.78	98.39	98.61
	N=81	N=61	N=142
Discussion about Pushtikona during the last monthly refresher training	97.53	90.16	94.37
Topics discussed at refresher training			
Discussion on issues related to IYCF	59.26	62.3	60.56
Breastfeeding techniques and difficulty management	71.6	40.98	58.45
Childhood anemia and Pushtikona	48.15	57.38	52.11
Age specific complementary feeding and difficulty management	46.91	27.87	38.73
Maternal nutrition	34.57	32.79	33.8
Seven characteristics of complementary feeding	30.86	11.48	22.54
Counseling techniques	20.99	21.31	21.13
Others	4.94	18.03	10.56
Topics covered at any refresher training you attended			
Field findings & discussion on issues related to IYCF	98.77	91.8	95.77
Counseling techniques	96.3	67.21	83.8
Breastfeeding techniques & difficulty management	97.53	88.52	93.66
Age specific complementary feeding and difficulty management	96.3	88.52	92.96
Maternal nutrition	83.95	86.89	85.21
Seven characteristics of complementary feeding	98.77	50.82	78.17
Childhood anemia & Pushtikona	98.77	96.72	97.89
		Mean + SD	
	Μ	edian(min; ma	x)
	N=59	N=52	N=111
Number of months ago received a full training/orientation on Pushtikona	16.6 <u>+</u> 4.5	14.3 <u>+</u> 4.9	15.5 <u>+</u> 4.8
	19(1-24)	15(2-22)	18(1-24)
	N=81	N=61	N=142
Number of months ago the last monthly refresher training attended	.5 <u>+</u> .6	.5 <u>+</u> .6	.5 <u>+</u> .6
	1(0-3)	0(0-3)	0(0-3)

5.2 Knowledge and skills among staff

Table 5.2.1: Knowledge and skills of Pushti Kormi about Pushtikona

	All
	(N=42)
	Percent
Ever heard of Pushtikona	100
Where heard about Pushtikona	
BRAC training	91.3
Television advertisement	2.2
Pharmacy/shop in village	2.2
Doctor	2.2
Others	2.2
Benefits of feeding Pushtikona to the child:	
Good for child's brains and intelligence/good in studies or school	21.4
Child will grow well (height or weight)	21.4
Child will not be anemic	20.8
Increases child's appetite	13.3
Child suffers less from illness	13.3
It has vitamins/minerals	8.1
Prevents diarrhea	1.2
Child cries less	0.6
Pushtikona sachets should be given to children:	
One sachets every alternate day	85.7
Sixty sachets in 120 days	14.3
Advised mothers to prepare the food they mix the Pushtikona with:	
In a separate bowl/dish for infant with mashed family food	74.5
Combine it with the family pot of food	23.5
Others	2
Quantity of Pushtikona sachet advised to the mother to mix with child food at on	ie meal:
Full sachet	97.6
Half sachet	2.4
Time advised the mothers to give the food to the child after adding Pushtikona:	
Within 30 minutes	92.9
Don't know	7.1
Quantity of child's food bowl(baati) advised to the mothers to mix with Pushtikor	na during one meal
Less than one half of total food given	71.4
Full amount of food given	28.6
Temperature of the food be before adding Pushtikona:	
Hot (just cooked)	4.8
Warm	95.2
Kind of problems they faced	
Child has diarrhea	48

Child dislikes eating food	44
Child has constipation	8
Advice given on the following	
Continue feeding the child Pushtikona	54.8
Mothers should wash hands to prevent diarrhea	21.4
Mix the Pushtikona without showing the child	14.3
Others	9.5
	Mean + SD
	Median(min;max)
Age that children should start to receive Pushtikona	6.4 ± 0.5
	6(6-8)

	A&T area	Non-A&T Area	All
	(N=82)	(N=62)	(N=144)
	Percent	Percent	Percent
Ever heard of Pushtikona	100	98.4	99.3
	(N=82)	(N=61)	(N=143)
Where heard about Pushtikona			
BRAC training	98.8	100	99.3
Television advertisement	7.3	9.8	8.4
Pharmacy/shop in village	1.2	0	0.7
Others	2.4	1.6	2.1
Benefits of feeding Pushtikona to the child:			
Good for child's brains and intelligence/good in studies or school	90.2	75.4	83.9
Child will grow well (height or weight)	82.9	67.2	76.2
Child will not be anemic	63.4	59	61.5
Increases child's appetite	46.3	41	44.1
Child suffers less from illness	46.3	32.8	40.6
It has vitamins/minerals	23.2	14.8	19.6
Prevents diarrhea	3.7	4.9	4.2
Child cries less	3.7	1.6	2.8
Don't know	1.2	0	0.7
Pushtikona sachets should be given to children:			
One sachets every alternate day	84.2	85.3	84.6
Sixty sachets in 120 days	12.2	4.9	9.1
One sachets every day	0	8.2	3.5
Others	1.2	0	0.7
Don't know	2.4	1.6	2.1
Advised mothers to prepare the food they mix the Pushtikona with:			
In a separate bowl/dish for infant with mashed family food	90.2	83.6	87.4

Table 5.2.2: Knowledge and skills of Shasthya Shebika about Pushtikona

	A&T area	Non-A&T Area	All
	(N=82)	(N=62)	(N=144)
	Percent	Percent	Percent
Combine it with the family pot of food	18.3	9.8	14.7
In a separate bowl/dish for infant with other solid dry food	0	16.4	7
With water or other liquid	0	6.6	2.8
Only Pushtikona	0	1.6	0.7
Others	1.2	4.9	2.8
Don't know	3.7	0	2.1
Quantity of Pushtikona sachet advised to the mother to mix with chi	ld food at one	meal:	
Full sachet	96.3	96.7	96.5
Half sachet	1.2	1.6	1.4
Others	0	1.6	0.7
Don't know	2.4	0	1.4
Time advised the mothers to give the food to the child after adding P	ushtikona:		
Within 30 minutes	92.7	95.1	93.7
Other mins	4.9	1.6	3.5
Don't know	2.4	3.3	2.8
Quantity of child's food bowl(baati) advised to the mothers to mix w	ith Pushtikona	during one meal	
Less than one half of total food given	78.1	67.2	73.4
Full amount of food given	19.5	29.5	23.8
Others	0	1.6	0.7
Don't know	2.4	1.6	2.1
Temperature of the food be before adding Pushtikona:			
Hot (just cooked)	6.1	0	3.5
Warm	91.5	65.6	80.4
Cold	1.2	32.8	14.7
Don't know	1.2	1.6	1.4
Mothers contacted you to consult problems they have faced with feeding Pushtikona	52.4	27.9	42
	N=43	N=17	N=60
Kind of problems they faced:			
Child dislikes eating food	46.5	76.5	55
Child has diarrhea	58.1	29.4	50
Child has constipation	9.3	0	6.7
Others	7	23.5	11.7
Advice given:			
Continue feeding the child Pushtikona	60.5	100	71.7
Mothers should wash hands to prevent diarrhea	23.3	0	16.7
Mix the Pushtikona without showing the child	14	0	10
Others	11.6	5.9	10
		Mean + SD	
	r	Vledian(min;max)	

	A&T area	Non-A&T Area	All
	(N=82)	(N=62)	(N=144)
	Percent	Percent	Percent
	N=81	N=61	N=142
Age at children start to receive Pushtikona	6.3 + .5	6.3 + .6	6.3 + .5
	6(6-8)	6(4-8)	6(4-8)

5.3 Supplies and sale

Table 5.3.1: Pattern of Supply and Sale of Pushtikona with Pushti Kormi

	All
	(N=42)
	Percent
Talked about Pushtikona with mothers during HH visits	100.0
Talked about Pushtikona with other family members during HH visits	95.2
Sold Pushtikona to households	0.0

Table 5.3.2: Pattern of Supply and Sale of Pushtikona with Shasthya Shebika

	A&T area	Non-A&T Area	All
	(N=82)	(N=62)	(N=144)
	Percent	Percent	Percent
Receive regular supply of Pushtikona	89	91.9	90.3
	N=73	N=57	N=130
Source of supply from:			
BRAC PO	93.2	73.7	84.6
A&T PO	4.1	1.8	3.1
BRAC Upazila manager	2.7	15.8	8.5
Other	0	8.8	3.9
	N=82	N=62	N=144
Sell Pushtikona	89	88.7	88.9
Reasons for not selling Pushtikona			
Households/mothers not willing to buy	3.7	6.5	4.9
Pushtikona sachets too expensive	0	1.6	0.7
New product, mothers are not aware of Pushtikona	0	1.6	0.7
Others	2.4	1.6	2.1
Not applicable	93.9	88.7	91.7
Ever received an incentives for your work with A&T program	92.7	12.9	58.3
	N=76	N=8	N=84
Reasons for receiving these incentives from A&T			
Ensuring initiation of bf within one hour of birth	88.2	75	86.9

Ensuring exclusive breastfeeding	54	37.5	52.38			
Ensuring appropriate hand washing	52.6	0	47.62			
Ensuring appropriate frequency of complementary foods	38.2	25	36.9			
Ensuring appropriate amount of homemade complementary foods	23.7	0	21.43			
Ensuring appropriate animal source protein of homemade complementary foods	18.4	0	16.67			
Others	0	62.5	5.95			
	N=73	N=55	N=128			
BRAC give incentives/trade-subsidy to SS's						
Every month	8.2	1.8	5.5			
Every 3 months	75.3	94.6	83.6			
Other	16.4	3.6	10.9			
		Mean + SD				
	Median(min;max)					
	N=73	N=55	N=128			
When started selling Pushtikona (months)	10.6 + 5.8	11.1 + 6.2	10.8 + 5.9			
	12(1-19)	12(1-24)	12(1-24)			
Number of sachets sold since you first received the sachets after training	381.8 + 330.5	404.9 + 341.9	391.7 + 334.3			
	340(30-2220)	260(30- 1500)	300(30- 2220)			
Number of Pushtikona sachets sold in the last month	56.9 + 61.5	42.5 + 35.3	50.7 + 52.2			
	34(0-330)	30(0-150)	32(0-330)			
Amount you charge for each sachet of Pushtikona (Taka)	2.5 + .2	2.5 + .2	2.5 + .2			
	2.5(2-3)	2.5(2-3.5)	2.5(2-3.5)			
Incentives received last time from selling Pushtikona (Taka)	26.2 + 27.6	34.6 + 33.2	29.8 + 30.3			
	16(0-116)	25(0-180)	17(0-180)			
	N=76	N=8	N=84			
A&T incentives received last time (Taka)	249.7 + 141.3	157.5 + 124.8	240.9 + 141.8			
	222.5(50- 585)	137.5(60- 450)	217.5(50- 585)			
Total amount of incentive received (Taka)	1728.1 + 964	558.8 + 339.3	1616.7 + 984.2			
	1487.5(105- 5200)	475(100- 1250)	1377.5(100- 5200)			

5.4 Stock and sale of Pushtikona sachets



Figure 2. Monthly sales of Pushtikona by SS in MNP only and MNP + A&T upazilas

	Jan	Feb	Mar	Apr	May	June	July	August	Sep	Oct	Nov	Dec
						N=1	44					
						201	0					
Quantity of Pushtikona sachets							0	0	0	1.4 <u>+</u> 16.7	0	7.1 <u>+</u> 51.2
the SS/PS Purchased from the office										0(0-200)		0(0-600)
Quantity of Pushtikona sachets							0	0	0	0	0	5.4 <u>+</u> 50.3
the SS/PS sold to HH												0(0-600)
						201	1					
Quantity of Pushtikona sachets	7.9 <u>+</u> 22	8.1 <u>+</u> 20.8	11.3 <u>+</u> 25.3	15.7 <u>+</u> 40.5	9.1 <u>+</u> 22.5	13.6 <u>+</u> 35.3	11.9 <u>+</u> 25	17.3 <u>+</u> 47.8	16.2 <u>+</u> 38.5	16. 1 <u>+</u> 36.5	19.9 <u>+</u> 37.3	18.9 <u>+</u> 38.3
the SS/PS Purchased from the office	0(0-120)	0(0-120)	0(0-145)	0(0-250)	0(0-120)	0(0-330)	0(0- 180)	0(0-450)	0(0-280)	0(0-350)	0(0-200)	0(0-210)
Quantity of Pushtikona sachets	2.3 <u>+</u> 9.1	2.8 <u>+</u> 10.6	2.7 <u>+</u> 12	4.4 <u>+</u> 15.8	4.5 <u>+</u> 17.6	2.7 <u>+</u> 9.8	3.5 <u>+</u> 12.8	4.7 <u>+</u> 16.6	5.2 <u>+</u> 19.2	5.7 <u>+</u> 19	7.2 <u>+</u> 20.8	7.5 <u>+</u> 25.8
the SS/PS sold to HH	0(0-60)	0(0-60)	0(0-100)	0(0-130)	0(0-120)	0(0-65)	0(0-90)	0(0-120)	0(0-120)	0(0-120)	0(0-110)	0(0-180)
						201	2					
Quantity of Pushtikona sachets	24.2 <u>+</u> 34.1	25.7 <u>+</u> 42.3	25.4 <u>+</u> 39	32.2 <u>+</u> 44.7	33.5 <u>+</u> 39	37.8 <u>+</u> 57.5						
the SS/PS Purchased from the office	0(0-200)	0(0-210)	0(0-200)	10(0-200)	30(0-150)	30(0- 330)						
Quantity of	15.6 + 25.6	16.9 + 34.8	25.6 + 36.8	29.5 + 39.3	30.9 + 32.9	38.5 + 50.7						
the SS/PS sold to HH	0(0-130)	0(0-190)	10(0- 200)	20(0-180)	28.5(0- 150)	30(0- 330)						

Table 5.4.1: Stock quantity and sale of Pushtikona by Shasthya Shebika

6. RESULTS TABLES – PROGRAM UTILIZATION

Table 6.0.1: Sample Characteristics

		Random Sample			Purposive Sample	
	A&T area	Non-A&T Area	All	A&T area	Non-A&T Area	All
	(N=217)	(N=245)	(N=462)	(N=183)	(N=155)	(N=338)
		Mean <u>+</u> SD			Mean <u>+</u> SD	
		Median (min;max)			Median (min;max)	
Maternal age (years)	26.0 <u>+</u> 5.2	25.5 <u>+</u> 5.9	25.8 <u>+</u> 5.6	25.3 <u>+</u> 5.4	25.7 <u>+</u> 5.7	25.5 <u>+</u> 5.5
	25 (17-43)	25 (17-50)	25 (17-50)	24 (16-45)	25 (16-48)	25 (16-48)
Maternal height (cm)	150.8 <u>+</u> 5.4	150.1 <u>+</u> 5.4	150.4 <u>+</u> 5.4	151.0 <u>+</u> 5.7	150.8 <u>+</u> 5.05	150.9 <u>+</u> 5.4
	150.3	150.1	150.1	150.8	151.1	150.9
	(136.4-165.7)	(132.7-166.9)	(132.7-166.9)	(137.1-167)	(138-162.4)	(137.1-167)
Child's age (months)	14.0 <u>+</u> 5.2	13.6 <u>+</u> 5.2	13.8 <u>+</u> 5.2	15.6 <u>+</u> 5.0	16.5 <u>+</u> 4.7	16.0 <u>+</u> 4.9
	14 (6-23)	13 (6-23)	13 (6-23)	17 (6-23)	17.5 (6-23)	17 (6-23)
LAZ	-1.4 <u>+</u> 1.2	-1.2 <u>+</u> 1.3	-1.3 <u>+</u> 1.3	-1.4 <u>+</u> 1.3	-1.3 <u>+</u> 1.3	-1.3 <u>+</u> 1.3
	-1.4 (-4.0-2.4)	-1.2 (-5.7-2.1)	-1.2 (-5.7-2.4)	-1.3 (-1.4-1.5)	-1.4 (-5.6-2.3)	-1.4 (-5.6-2.3)
WAZ	-1.4 <u>+</u> 1.1	-1.4 <u>+</u> 1.2	-1.4 <u>+</u> 1.1	-1.4 <u>+</u> 1.2	-1.5 <u>+</u> 1.1	-1.5 <u>+</u> 1.2
	-1.3 (-4.4-2.1)	-1.4 (-5.3-2.2)	-1.4 (-5.3-2.2)	-1.4 (-4.8-1.3)	-1.6 (-4.8-1.6)	-1.5 (-4.8-1.6)
WLZ	-0.9 <u>+</u> 1.1	-1.1 <u>+</u> 1.2	-1.0 <u>+</u> 1.1	-0.9 <u>+</u> 1.1	-1.2 <u>+</u> 1.1	-1.1 <u>+</u> 1.1
	-0.9 (-5.0-2.3)	-1.0 (-4.4-2.6)	-1.0 (-5.0-2.6)	-0.9 (-3.7-1.5)	-1.3 (-3.6-1.9)	-1.1 (-3.7-1.9)
	Percent	Percent	Percent	Percent	Percent	Percent
Female	50.2	52.2	51.3	43.7	47.1	45.3
Stunted	29.3	29.4	29.4	33.0	25.5	30.0
underweight	30.0	28.2	29.0	31.7	30.1	31.0
wasted	13.9	19.6	16.9	19.1	23.5	21.1

6.1 Household awareness of MNP

Table 6.1.1: Knowledge of IYCF by Households

	Random Sample			Purposive Sample		
	A&T area	Non-A&T Area	All	A&T area	Non-A&T Area	All
	(N=217)	(N=245)	(N=462)	(N=183)	(N=155)	(N=338)
	Percent	Percent	Percent	Percent	Percent	Percent
Foods young children (<24 months) need to grow & devel	op their brain					
Eggs	75.1	59.6	66.9	70.5	61.3	66.3
Fish	48.4	53.9	51.3	57.9	63.9	60.7
Fruits	44.7	49.4	47.2	31.7	42.6	36.7
Vegetables	41	39.2	40	41.5	45.8	43.5
Animal food such as meat or chicken	40.6	24.9	32.3	43.2	31	37.6
Cow's/goat's milk	24.4	23.3	23.8	25.1	18.7	22.2
Gruels/bread/rice	7.4	9	8.2	8.7	8.4	8.6
Powdered milk	4.2	9.4	6.9	5.5	5.8	5.6
Gruel with milk	2.8	2.9	2.8	2.2	5.2	3.6
Pulses (daal)	3.2	1.6	2.4	4.4	2.6	3.6
Breastmilk	0.5	3.7	2.2	1.1	1.3	1.2
Family food	0	1.6	0.9	1.6	1.3	1.5
Others	1.4	4.9	3.3	2.7	3.9	3.3
Don't know	0	1.2	0.7	0	0	0
Possible impact on children due to iron deficiency						
Weakened immune defense	35.5	40.8	38.3	37.7	38.7	38.2
Feel tired/ weak	32.3	36.7	34.6	36.6	43.2	39.6
Impaired development	20.7	11	15.6	25.7	13.6	20.1
Lower height	6.5	8.6	7.6	9.3	10.3	9.8
Become anemic	6.5	8.2	7.4	10.9	12.3	11.5
Impaired learning	2.3	4.5	3.5	4.9	11	7.7
Others	1.8	3.7	2.8	2.7	3.9	3.3
Don't know	36.9	32.7	34.6	29.5	24.5	27.2

Foods that contain vitamin A						
Orange colored fruits/vegetables	57.1	47.8	52.2	56.3	51.6	54.1
Green leafs	40.1	50.2	45.5	50.3	54.2	52.1
Eggs	31.8	47.4	40	35.5	42.6	38.8
Cow's milk	14.8	20.4	17.8	15.3	19.4	17.2
Liver	13.8	12.7	13.2	16.4	16.1	16.3
Breast milk	2.3	9	5.8	3.8	7.1	5.3
Others	6.9	5.7	6.3	5.5	9.7	7.4
Don't know	18	12.2	14.9	9.8	7.7	8.9
Heard of any nutrition powder to put in the food of young children	59.5	24.9	41.1	98.4	98.1	98.2
Table 6.1.2.a: Knowledge of **MNP** by HH (Random Sample)

	Random Sample									
	A&T	area (N=217))	Non-A8	&T Area (N=2	45)	Α	ll (N=462)		
		Percent			Percent			Percent		
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	
Heard about or seen sachet of:	53.5	7.4	2.3	24.1	6.9	0.4	37.9	7.1	1.3	
	(N=116)	(N=16)	(N=5)	(N=59)	(N=17)	(N=1)	(N=175)	(N=33)	(N=6)	
Where heard about:										
From BRAC volunteer or worker	88.8	0	0	49.2	0	0	75.4	0	0	
From neighbor or family member	15.5	37.5	60	22	23.5	0	17.7	30.3	50	
Television advertisement	4.3	12.5	0	25.4	17.7	0	11.4	15.2	0	
Pharmacy/shop in village	5.2	37.5	20	5.1	29.4	100	5.1	33.3	33.3	
From doctor (MBBS/village doctor)	0.9	12.5	0	3.4	29.4	0	1.7	21.2	0	
From other NGO worker	0	0	0	1.7	0	0	0.6	0	0	
Hospital	0.9	6.3	20	0	0	0	0.6	3	16.7	
Others	0.9	0	0	3.4	0	0	1.7	0	0	
Name some benefits for the child of:										
Good for child's brains and										
intelligence/good in studies or school	50.9	31.3	0	23.7	11.8	0	41.7	21.2	0	
Increases child's appetite	37.9	37.5	20	49.2	41.2	0	41.7	39.4	16.7	
Child will grow well (height or weight)	43.1	18.8	20	30.5	41.2	0	38.9	30.3	16.7	
Child suffers less from illness	28.5	0	0	22	11.8	0	26.3	6.1	0	
Child will not be anemic	9.5	12.5	0	13.6	17.7	0	10.9	15.2	0	
It has vitamins and minerals	8.6	6.3	20	3.4	17.7	0	6.9	12.1	16.7	
Child cries less	0.9	0	0	0	0	0	0.6	0	0	
Prevents diarrhea	0.9	0	0	0	0	0	0.6	0	0	
Treats diarrhea	0	0	0	0	5.9	0	0	3	0	
Others										
Don't know	14.7	50	60	20.3	17.7	100	16.6	33.3	66.7	
Number of sachets to be given to children:										

One sachets every alternate day	50.86	25	0	30.5	17.7	0	44	21.2	0
Sixty sachets in 120 days	1.72	0	0	1.7	0	0	1.7	0	0
One sachets every day	15.52	12.5	0	15.3	41.2	0	15.4	27.3	0
Two sachets every day	0	0	0	3.4	5.9	0	1.1	3	0
Others	0	0	0	1.7	0	0	0.6	0	0
Don't know	31.9	62.5	100	47.5	35.29	100	37.1	48.5	100
		Mean <u>+</u> SD			Mean <u>+</u> SD			Mean <u>+</u> SD	
	Me	dian(min;max)		Med	dian(min;max)		Me	dian(min;max)	
	N=89	N=9	N=2	N=38	N=12	N=0	N=127	N=21	N=2
Age at which children should be given	6.8 <u>+</u> 1.9	7.7 <u>+</u> 2.6	7 <u>+</u> 0	7.9 <u>+</u> 5.3	8.6 <u>+</u> 5.3	-	7.1 <u>+</u> 3.3	8.2 <u>+</u> 4.3	7 <u>+</u> 0
Pushtikona	6(4-18)	7(5-12)	7(7-7)	6(2-36)	6(5-24)	-	6(2-36)	6 (5-24)	7 (7-7)

Table 6.1.2.b: Knowledge of **MNP** by HH (Purposive Sample)

	Purposive Sample										
	A&T	area (N=183)		Non-A8	&T Area (N=1	55)	А	ll (N=338)			
		Percent			Percent			Percent			
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix		
Heard about or seen sachet of:	100	6.56	2.73	98.71	5.81	0.65	99.4	6.2	1.8		
	(N=183)	(N=12)	(N=5)	(N=153)	(N=9)	(N=1)	(N=336)	(N=21)	(N=6)		
Where heard about:											
From BRAC volunteer or worker	90.2	16.7	20	73.9	11.1	0	82.7	14.3	0		
From neighbor or family member	10.9	33.3	20	17.7	44.4	0	14	38.1	0		
Television advertisement	1.6	8.3	20	7.2	0	0	4.2	4.8	0		
Pharmacy/shop in village	2.2	33.3	40	5.9	22.2	0	3.9	28.6	0		
From doctor (MBBS/village doctor)	3.8	8.3	0	13.1	33.3	0	8	19.1	0		
From other NGO worker	0	8.3	0	1.3	0	100	0.6	4.8	0		
Hospital	1.1	8.3	0	0.7	0	0	0.9	4.8	0		
Others	1.6	0	0	0.7	11.1	0	1.2	4.8	0		
Name some benefits for the child of:											
Good for child's brains and	59.7	8.3	0	48.4	33.3	0	54.5	19.1	0		
intelligence/good in studies or school		0.0	Ũ		0010	Ū	0.110	2012	C C		
Increases child's appetite	39.3	33.3	20	57.5	44.4	0	47.6	38.1	0		
Child will grow well (height or weight)	59	25	0	44.4	22.2	0	52.4	23.8	0		
Child suffers less from illness	28.4	16.7	0	28.1	0	0	28.3	9.5	0		
Child will not be anemic	13.7	8.3	0	19	11.1	0	16.1	9.5	0		
It has vitamins and minerals	11.5	25	0	11.8	22.2	0	11.6	23.8	0		
Child cries less	1.1	0	0	1.3	0	0	1.2	0	0		
Prevents diarrhea	2.2	0	0	2.6	11.1	0	2.4	4.8	0		
Treats diarrhea	0.6	8.3	0	0	0	0	0.3	4.8	0		
Others	0.6	0	0	0	0	0	0.3	0	0		
Don't know	1.6	25	80	1.3	11.1	100	1.5	19.1	83.33		
Number of sachets to be given to children:											
One sachets every alternate day	74.86	33.3	20	64.05	44.4	0	69.94	38.1	16.7		
Sixty sachets in 120 days	1.64	0	0	1.96	0	0	1.79		0		

One sachets every day	17.49	33.3	20	23.53	33.3	0	20.24	33.33	16.7
Two sachets every day	1.64	0	0	1.31	0	0	1.49		0
Others	0.55	0	0	3.92	22.2	0	2.08	9.52	0
Don't know	3.83	33.33	60	5.23	0	100	4.46	19.05	66.7
		Mean <u>+</u> SD			Mean <u>+</u> SD		1	Mean <u>+</u> SD	
	Me	dian(min;max)		Me	dian(min;max)		Med	lian(min;max)	
	N=149	N=5	N=1	N=139	N=7	N=1	N=288	N=12	N=2
Age at which children should be given	6.5 <u>+</u> 1.5	6.4 <u>+</u> .5	8 <u>+</u> -	6.8 <u>+</u> 2	6.3 <u>+</u> .5	6 <u>+</u> -	6.6 <u>+</u> 1.7	6.3 <u>+</u> .5	7 <u>+</u> 1.4
Pushtikona	6 (3-18)	6 (6-7)	8 (8-8)	6 (3-17)	6(6-7)	6 (6-6)	6 (3-18)	6(6-7)	7(6-8)

Figure 3. Household knowledge of recommended Pushtikona dosage



6.2 Household purchase and utilization of MNP

Table 6.2.1.a: Purchase of **MNP** by Households (Random Sample)

				Ra	andom Sampl	e			
		A&T area		No	on-A&T Area			All	
		Percent			Percent			Percent	
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix
	(N=116)	(N=16)	(N=5)	(N=59)	(N=17)	(N=1)	(N=175)	(N=33)	(N=6)
Purchased for children	53.5	37.5	0	18.6	52.9	0	41.7	45.5	0
	(N=54)	(N=10)	(N=5)	(N=48)	(N=8)	(N=1)	(N=102)	(N=18)	(N=6)
Reason for not purchasing									
Don't think that it is useful for the child	29.6	40	40	31.3	37.5	100	30.4	38.9	50
It is like sugar, not needed	14.8	0	20	35.4	0	0	24.5	0	16.7
Not affordable/too expensive	24.1	0	0	14.6	0	0	19.6	0	0
Doctor/SS/other health official did not prescribe	5.6	10	0	12.5	37.5	0	8.8	22.2	0
Family barriers/family members discourage	11.1	0	0	4.2	0	0	7.8	0	0
Child doesn't like Pushtikona/MyMix/Monimix	0	0	0	2.1	0	0	1	0	0
It is medicine, only needed if child is ill	0	0	0	2.1	12.5	0	1	5.6	0
Buy another brand of MNP((Pushtikona, Monimix, MyMix etc)	0	40	40	0	0	0	0	22.2	33.3
Received it for free	0	0	0	0	0	0	0	0	0
Child gets constipation/black stool	0	0	0	0	0	0	0	0	0
Others	14.8	10	0	2.1	0	0	8.8	5.6	0
Don't know	3.7	0	0	2.1	12.5	0	2.9	5.6	0
	(N=62)	(N=6)	-	(N=11)	(N=9)	-	(N=73)	(N=15)	-
Ever bought any MNP	90.3	83.3	-	100	44.4	-	91.8	60	-
From where you or someone else purchased:									
BRAC SS/SP	69.4	0	-	36.4	0	-	64.4	0	-
Other BRAC health workers (SK/PK/PO)	17.7	0	-	45.5	0	-	21.9	0	-
Local/nearby shop	0	16.7	-	0	11.1	-	0	13.3	-
From another NGO worker	0	16.7	-	9.1	0	-	1.4	6.7	-

							•		
Shops in local/nearby market	1.6	0	-	0	0	-	1.4	0	-
Local/nearby pharmacy	9.7	66.7	-	9.1	55.6	-	9.6	60	-
Doctor's chamber	0	0	-	0	33.3	-	0	20	-
Others	1.6	0	-	0	0	-	1.4	0	-
Name all the place you or someone else ever purchased:									
BRAC SS/SP	77.4	0	-	36.4	0	-	71.2	0	-
Other BRAC health workers (SK/PK/PO)	16.1	0	-	54.6	0	-	21.9	0	-
From another NGO worker	0	16.7	-	9.1	0	-	1.4	6.7	-
Local/nearby shop	1.61	16.7	-	0	0	-	1.4	6.7	-
Shops in local/nearby market	0	0	-	0	11.1	-	0	6.7	-
Local/nearby pharmacy	8.1	33.3	-	9.1	44.4	-	8.2	40	-
Doctor's chamber	3.2	33.3	-	0	44.4	-	2.7	40	-
Others	0	0	-	0	0	-	0	0	-
		Mean <u>+</u> SD			Mean <u>+</u> SD			Mean <u>+</u> SD	
	Me	dian(min;max)		Me	dian(min;max)		Me	dian(min; max)	
	(N=62)	(N=6)	-	(N=11)	(N=9)	-	(N=73)	(N=15)	-
Months ago first purchased for the child	6.6 <u>+</u> 8.1	10.5 <u>+</u> 12.8	-	9.5 <u>+</u> 8.7	15.2 <u>+</u> 11.5	-	7.1 <u>+</u> 8.2	13.3 <u>+</u> 11.8	-
	3(1-39)	4.5(3-36)	-	7(1-24)	13(0-36)	-	3 (1-39)	11 (0-36)	-
Number of sachets first purchased by you or someone else	11.9 <u>+</u> 10	18.8 <u>+</u> 12.5	-	18.3 <u>+</u> 18.4	23 <u>+</u> 27.1	-	12.9 <u>+</u> 11.7	21.3 <u>+</u> 22	-
	8(1-30)	20(3-30)	-	15(3-60)	14(4-90)	-	8 (1-60)	14 (3-90)	-
Days ago last purchased by you or someone else	86.3 <u>+</u> 122.2	148.3 <u>+</u> 104.6	-	146.1 <u>+</u> 128.6	338.9 <u>+</u> 278.3	-	95.2 <u>+</u> 124.1	262.7 <u>+</u> 239.7	-
	21(1-400)	135(20-330)	-	120(3-320)	320(20-745)	-	30(1-400)	150(20-745)	-
Number of sachets last purchased by you or someone else	12.6 <u>+</u> 10.2	18.8 <u>+</u> 12.5	-	14.6 <u>+</u> 12.2	19.7 <u>+</u> 27.9	-	12.9 <u>+</u> 10.4	19.3 <u>+</u> 22.3	-
	10(1-30)	20(3-30)	-	15(1-40)	8(2-90)	-	12(1-40)	10(2-90)	-
	(N=57)	(N=1)	-	(N=10)	-	-	(N=67)	(N=1)	-
Number of sachets purchased from									
another NGO worker/volunteer	18.6 <u>+</u> 16.2 15(1-70)	12 12(12-12)	-	25.3 <u>+</u> 21.8 19(3-60)	-	-	19.6 <u>+</u> 17.1 15(1-70)	12 12(12-12)	-

another NGO worker/volunteer									
Paid per sachet to SS/SK/PK/PS/PO or another NGO worker/volunteer	2.6 <u>+</u> .3 2.5(2 - 3.5)	2 2(2-2)	-	2.3 + .3 2.5(1.75 - 2.5)	-	-	2.6 + .3 2.5(1.75 - 3.5)	2 2(2-2)	-
	(N=8)	(N=5)	-	(N=1)	(N=9)	-	(N=9)	(N=14)	-
Number of sachets purchased from shops/market/pharmacies	16.6 <u>+</u> 19.8 9(1-60)	20.6 <u>+</u> 13.1 30(3-30)	-	30 30(30-30)	26 <u>+</u> 27.3 20(4-90)	-	18.1 <u>+</u> 19.1 10(1-60)	24.1 <u>+</u> 22.8 25(3-90)	-
Number of sachets purchased from shops/market/pharmacies only for index child	12.9 <u>+</u> 11.6 9(1-30)	6 <u>+</u> 13.4 0(0-30)	-	0 0(0-0)	13.2 <u>+</u> 15.6 6(0-40)	-	11.4 <u>+</u> 11.6 8(0-30)	10.6 <u>+</u> 14.8 2.5(0-40)	-
Paid per sachet to	2.9 <u>+</u> 1	2.2 <u>+</u> .4	-	2	2.6 <u>+</u> 1		2.8 <u>+</u> .9	2.4 <u>+</u> .9	
shops/market/pharmacies	2.75(2-5)	2(2-5)	-	2(2-2)	2(2-5)		2.5(2-5)	2(2-5)	

Table 6.2.1.b: Purchase of **MNP** by Households (Purposive Sample)

		Purposive Sample									
		A&T area		Nor	n-A&T Area			All			
		Percent			Percent			Percent			
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix		
	(N=183)	(N=12)	(N=5)	(N=153)	(N=9)	(N=1)	(N=336)	(N=21)	(N=6)		
Purchased for children	88.5	41.7	20	94.8	55.6	0	91.4	47.6	16.7		
	(N=21)	(N=7)	(N=4)	(N=8)	(N=4)	(N=1)	(N=29)	(N=11)	(N=5)		
Reason for not purchasing											
Don't think that it is useful for the child	0	42.9	25	12.5	0	0	3.5	27.3	20		
It is like sugar, not needed	0	0	0	12.5	0	0	3.5	0	0		
Not affordable/too expensive	4.8	0	25	0	0	0	3.5	0	20		
Doctor/ss/other health official did not prescribe	0	14.3	0	0	0	0	0	9.1	0		
Family barriers/family members discourage	0	0	0	0	0	0	0	0	0		
Child doesn't like Pushtikona/MyMix/Monimix	4.8	0	0	0	0	0	3.5	0	0		
It is medicine, only needed if child is ill	0	0	0	0	25	0	0	9.1	0		

Buy another brand of MNP((Pushtikona, Monimix, MyMix etc)	0	42.9	50	0	25	100	0	36.4	60
Received it for free	85.7	0	0	75	25	0	82.8	9.1	0
Child gets constipation/black stool	0	14.3	0	0	0	0	0	9.1	0
Others	4.8	0	0	0	25	0	3.5	9.1	0
Don't know	0	0	0	0	0	0	0	0	0
	(N=162)	(N=5)	(N=1)	(N=145)	(N=5)	-	(N=307)	(N=10)	(N=1)
Ever bought any MNP From where you or someone else purchased:	87	60	0	77.93	60	-	82.74	60	0
BRAC SS/SP	65.4	0	0	42.1	0	-	54.4	0	0
Other BRAC health workers (SK/PK/PO)	21	0	0	29.7	0	-	25.1	0	0
Local/nearby shop	0	0	0	0.7	0	-	0.3	0	0
From another NGO worker	0	20	0	1.4	0	-	0.7	10	0
Shops in local/nearby market	0	0	100	0.7	20	-	0.3	10	100
Local/nearby pharmacy	8	60	0	20.7	60	-	14	60	0
Doctor's chamber	4.3	20	0	2.8	20	-	3.6	20	0
Others	1.2	0	0	2.1	0	-	1.6	0	0
Name all the place you or someone else ever	purchased:								
BRAC SS/SP	69.8	0	0	44.8	0	-	58	0	0
Other BRAC health workers (SK/PK/PO)	20.4	0	0	31	0	-	25.4	0	0
From another NGO worker	0	20	0	1.4	0	-	0.7	10	0
Local/nearby shop	1.6	0	0	2.1	0	-	2	0	0
Shops in local/nearby market	0	20	100	0.7	20	-	0.3	20	100
Local/nearby pharmacy	7.4	40	0	13.1	60	-	10.1	50	0
Doctor's chamber	6.8	20	0	8.3	20	-	7.5	20	0
Others	1.2	0	0	1.4	0	-	1.3	0	0
		Mean <u>+</u> SD		1	Mean <u>+</u> SD			Mean <u>+</u> SD	
	Mee	dian(min;ma)	()	Med	dian(min;max)		М	edian(min;ma	x)
	(N=162)	(N=5)	(N=1)	(N=145)	(N=5)	-	(N=307)	(N=10)	(N=1)
Months ago first purchased for the child	6 <u>+</u> 5.7	14.4 <u>+</u> 19.6	7	5 <u>+</u> 5	11.8 <u>+</u> 8.2	-	5.5 <u>+</u> 5.4	13.1 <u>+</u> 14.2	7
	4.5(1-42)	8(0-48)	7(7-7)	4(1-42)	12(1-24)	-	4(1-42)	11(0-48)	7(7-7)

Number of sachets first purchased by you or someone else	14.2 <u>+</u> 12.7	24.6 <u>+</u> 12.1	10	20.6 <u>+</u> 17.4	6.8 <u>+</u> 2.6	-	17.3 <u>+</u> 15.4	15.7 <u>+</u> 12.5	10
	9(1-60)	30(3-30)	10(10- 10)	15(1-120)	7(3-10)	-	12(1-120)	9(3-30)	10(10-10)
Days ago last purchased by you or someone else	87.9 <u>+</u> 112.9	213.2 <u>+</u> 207.1	210	91.8 <u>+</u> 93.5	255 <u>+</u> 295.8	-	89.7 <u>+</u> 104	234.1 <u>+</u> 241.7	210
	30(1-390)	240(2- 460)	210(210- 210)	60(1-370)	150(10- 720)	-	34(1-390)	195(2- 720)	210(210- 210)
Number of sachets last purchased by you or someone else	14.5 <u>+</u> 12.4	15.6 <u>+</u> 13.4	10	20.5 <u>+</u> 17.8	5.6 <u>+</u> 2.1	-	17.4 <u>+</u> 15.5	10.6 <u>+</u> 10.5	10
	10(1-60)	10(3-30)	10(10- 10)	15(1-120)	6(3-8)	-	12(1-120)	6.5(3-30)	10(10-10)
	(N=144)	(N=1)	-	(N=111)	-	-	(N=255)	(N=1)	-
Number of sachets purchased from SS/SK/PK/PS/PO or another NGO worker/volunteer	22.5 <u>+</u> 26.9 15(1-225)	30 30(30-30)	-	30.9 <u>+</u> 28.9 30(1-165)	-	-	26.2 <u>+</u> 28 19(1-225)	30 30(30-30)	-
Number of sachets purchased only for index child from SS/SK/PK/PS/PO or another NGO worker/volunteer	21.2 <u>+</u> 26.7 15(0-225)	30 30(30-30)	-	29.6 <u>+</u> 28.7 30(1-165)	-	-	24.9 <u>+</u> 27.8 15(0-225)	30 30(30-30)	-
Paid per sachet to SS/SK/PK/PS/PO or	2.7 <u>+</u> .7	2		2.5 <u>+</u> .4			2.6 <u>+</u> .6	2	
another NGO worker/volunteer	2.5(1.6-5)	2(2-2)	-	2.5(2-5)	-	-	2.5(1.6-5)	2(2-2)	-
	(N=26)	(N=4)	(N=1)	(N=36)	(N=5)	-	(N=62)	(N=9)	(N=1)
Number of sachets purchased from shops/market/pharmacies	27.8 <u>+</u> 19 30(1-90)	27 <u>+</u> 16.5 32.5(3-40)	10 10(10- 10)	24.7 <u>+</u> 30.2 17.5(3-150)	7.8 <u>+</u> 4.4 7(3-15)	-	26 <u>+</u> 25.9 27.5 (1-150)	16.3 <u>+</u> 14.6 8(3-40)	10 10(10-10)
Number of sachets purchased from shops/market/pharmacies only for index child Paid per sachet to	25.8 <u>+</u> 19.5 30(0-90)	18.3 <u>+</u> 19.8 16.5 (0- 40)	10 10(10- 10)	24.2 <u>+</u> 30.3 15(2-150)	5.8 <u>+</u> 6 6(0-15)	-	24.9 <u>+</u> 26.1 21(0-150)	11.3 <u>+</u> 14.4 6(0-40)	10 10(10-10)
shops/market/pharmacies									



Figure 4. Household purchase of Pushtikona from SS

	_			Rand	dom Sample	•				
	4	&T area		Nor	n-A&T Area		All			
		Percent			Percent			Percent		
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	
	(N=116)	(N=16)	(N=5)	(N=59)	(N=17)	(N=1)	(N=175)	(N=33)	(N=6)	
Received free sachets	6	0	0	3.4	5.9	0	5.1	3	0	
	N	1ean <u>+</u> SD		N	/lean <u>+</u> SD		~	lean <u>+</u> SD		
	Medi	an(min;max)	Medi	am(min;max)	Med	ian(min;max))	
	(N=7)	(N=0)	(N=0)	(N=2)	(N=1)	(N=0)	(N=9)	(N=1)	(N=0)	
Number of sachets received fee	2.4 <u>+</u> 2.4	-	-	4 <u>+</u> 1.4	1	-	2.7 <u>+</u> 2.3	1	-	
	1(1-6)	-	-	4(3-5)	1(1-1)	-	1 (1-6)	1(1-1)	-	
Time ago received these free sachets	2.3 <u>+</u> 1.6	-	-	3.5 <u>+</u> 3.5	12	-	2.5 + 1.9	12	-	
	2(0-5)	-	-	3.5(1-6)	12(12-12)	-	2(0-6)	12(12-12)	-	

Table 6.2.2.a: Purchase of free **MNP** samples by Households (Random Sample)

Table 6.2.2.b: Purchase of free **MNP** samples by Households (Purposive Sample)

	Purposive Sample										
	4	A&T area		Non-A&T Ar	ea		All				
		Percent			Percent		Percent				
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix		
	(N=183)	(N=12)	(N=5)	(N=153)	(N=9)	(N=1)	(N=336)	(N=21)	(N=6)		
Received free sachets	19.7	0	0	11.1	11.1	0	15.8	4.8	0		
	Ν	/lean <u>+</u> SD	N	/lean <u>+</u> SD		N	/lean <u>+</u> SD				
	Med	ian(min;max	:)	Med	ian(min;max)	Med	ian(min;max)		
	(N=36)	(N=0)	(N=0)	(N=17)	(N=1)	(N=0)	(N=53)	(N=1)	(N=0)		
Number of sachets received fee	8.7 <u>+</u> 19.8	-	-	7.3 <u>+</u> 9.2	60	-	8.2 <u>+</u> 17	60	-		
	2(1-100)	-	-	3(1-30)	60(60-60)	-	2(1-100)	60(60-60)	-		
Time ago received these free sachets	3.9 <u>+</u> 4.1	-	-	4.1 <u>+</u> 3.1	15	-	4 <u>+</u> 3.7	15	-		
	2.5 (0-17)	-	-	3(0-10)	15(15-15)	-	3(0-17)	15(15-15)	-		

Table 6.2.3. Rates of Pushtikona Purchase for children, by SES

	Random Sample
SES Quartile	Percent (frequency)
	N=175
Poorer	41.5 (17)
Poor	27.9 (12)
Rich	42.2 (19)
Richer	54.4 (25)

Table 6.2.4. Average number of Pushtikona sachets last purchased by households, by SES

	Random Sample	Purposive Sample					
SES Quartile	Mean ± SD	Mean ± SD					
	Median(min;max)	Median(min;max)					
	N=156	N=150					
Dooror	8.5 <u>+</u> 9.1	15.2 + 15.7					
POOLEI	4(1-30)	10(1-75)					
Poor	12.3 <u>+</u> 11.7	16.2 <u>+</u> 14.5					
FUUI	5.5(3-30)	10(1-60)					
Dich	15.5 <u>+</u> 8.8	16.4 <u>+</u> 14.1					
Men	15(3-30)	12(1-60)					
Picher	14.3 <u>+</u> 11.3	20.5 <u>+</u> 17.0					
	15(1-40)	18(2-120)					

	Random Sample	Purposive Sample
SES Quartile	Mean ± SD	Mean ± SD
	Median(min;max)	Median(min;max)
	N=156	N=150
Dooror	11.6 <u>+</u> 11.6	23.0 + 24.2
Poorer	6 (1-40)	15 (1-150)
Deer	17.4 <u>+</u> 17.9	22.4 <u>+</u> 29.7
POOL	6 (3-60)	15 (1-225)
Diah	25.3 <u>+</u> 17.1	25.4 <u>+</u> 23.6
KILII	25 (3-70)	25 (1-93)
Dieber	22.4 <u>+</u> 18.9	32.8 <u>+</u> 32.2
Richer	15 (3-60)	30 (2-165)

Table 6.2.5. Average total number of Pushtikona sachets purchased from any worker, by SES

Table 6.2.6.a: Use of **MNP** by Households (Random Sample)

	Random Sample									
	ŀ	A&T area		Noi	n-A&T Area			All		
		Percent		Percent			Percent			
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	
	(N=116)	(N=16)	(N=5)	(N=59)	(N=17)	(N=1)	(N=175)	(N=33)	(N=6)	
MNP ever given to any one	73.3	43.8	0	45.8	52.94	0	64	48.5	0	
	(N=31)	(N=9)	(N=5)	(N=32)	(N=8)	(N=1)	(N=63)	(N=17)	(N=6)	
Reason for not using MNP:										
It is like sugar, not needed	12.9	0	0	43.75	0	0	28.57	0	0	
Don't think that it is useful for the child	22.58	22.22	60	25	37.5	100	23.81	29.41	66.67	
Not affordable/too expensive	19.35	0	0	12.5	0	0	15.87	0	0	
Doctor/SS/other health official did not prescribe	12.9	11.11	0	9.38	25	0	11.11	17.65	0	
Family barriers/family members discourage	12.9	0	0	3.13	0	0	7.94	0	0	
Child doesn't like Pushtikona/Monimix/MyMix	3.23	11.11	0	9.38	25	0	6.35	17.65	0	
Give another brand of MNP (Monimix, MyMix etc.)	0	44.44	40	0	12.5	0	0	29.41	33.33	
Child gets stomach ache										
Child gets constipation/black stool										
Others	9.68	11.11	0	0.00	12.5	0	4.76	11.76	0	
Don't know	16.13	0	0	9.38	0	0	12.7	0	0	
	(N=85)	(N=7)	-	(N=27)	(N=9)	-	(N=112)	(N=16)	-	
Ever given MNP to index child	61.2	42.86	-	18.5	55.6	-	50.9	50	-	
	(N=33)	(N=4)	-	(N=22)	(N=4)	-	(N=55)	(N=8)	-	
Reason for not using MNP(index child):										
Don't think that it is useful for the child Child doesn't like	3.03	25	-	0	50	-	1.82	37.5	-	
Pushtikona/Monimix/MyMix	0	0	-	4.55	0	-	1.82	0	-	
Child gets constipation/black stool	3.03	0	-	0	0	-	1.82	0	-	
Family barriers/family members discourage	3.03	25	-	0	0	-	1.82	12.5	-	
It is like sugar, not needed	72.73	25	-	72.73	0	-	72.73	12.5	-	

Planning to start but haven't yet start	18.18	0	-	18.18	0	-	18.18	0	-
Doctor/SS/other health official did not prescribe	0	25	-	0	25	-	0	25	-
Buy another brand of MNP (Monimix, MyMix etc.)	0	0	-	0	0	-	0	0	-
Others	0	0	-	4.55	25	-	1.82	0	-
	(N=52)	(N=3)	(N=0)	(N=5)	(N=5)	(N=0)	(N=57)	(N=8)	(N=0)
Mix MNP sachet to prepare the food for index									
child:									
In a separate bowl/dish for infant with mashed family food	96.15	66.67	-	100	40	-	96.49	50	-
In a separate bowl/dish for infant with other solid dry food	3.85	33.33	-	0	20	-	3.51	25	-
Combine it with the family pot of food (for sharing with									
infant & other family members)									
With water or other liquid	0	0	-	0	40	-	0	25	-
Quantity of the MNP sachet usually mix with the food at									
one meal (index child):									
Full sachet	94.2	100	-	80	80	-	93	87.5	-
Half sachet	5.8	0	-	20	20	-	7	12.5	-
Less than half sachet	0	0	-	0	0	-	0	0	-
Quantity of food bowl(baati) mix with MNP									
during one meal									
One quarter of total food given	19.23	0	-	0	0	-	17.54	0	-
One half of total food given	15.38	33.33	-	0	0	-	14.04	12.5	-
Full amount of food given	65.38	66.67	-	100	100	-	68.42	87.5	-
Others	0	0	-	0	0	-	0	0	-
Food temperature when you add MNP to it:									
Hot(just cooked)	1.92	0	-	0	0	-	1.75	0	-
Warm/room temperature	84.62	66.67	-	100	80	-	85.96	75	-
Cold	13.46	33.33	-	0	20	-	12.28	25	-
Don't know									
Meal of the day prefer to add to your MNP:									

Breakfast	21.15	0	-	40	40	-	22.81	25	-
Lunch	67.31	66.67	-	40	60	-	64.91	62.5	-
Dinner	7.69	33.33	-	0	0	-	7.02	12.5	-
Midday snack	0	0	-	20	0	-	1.75	0	-
Evening snack									
No preference	3.85	0	-	0	0	-	3.51	0	-
Seen any changes after feeding	46.15	66.67	-	20	40	-	43.86	50	-
Following are the changes seen after feeding:	(N=24)	(N=2)	(N=0)	(N=1)	(N=2)	(N=0)	(N=25)	(N=4)	(N=0)
Increased appetite	66.67	0	-	0	50	-	64	25	-
Child growing well	41.67	50	-	0	50	-	40	50	-
Child gets sick less often	25	50	-	100	50	-	28	50	-
Child plays more	4.17	50	-	0	0	-	4	25	-
Child cries less	4.17	0	-	0	0	-	4	0	-
Others	0	0	-	100	0	-	4	0	-
	(N=52)	(N=3)	(N=0)	(N=5)	(N=5)	(N=0)	(N=57)	(N=8)	(N=0)
After having MNP child faced problem	15.38	0	-	20	0	-	15.79	0	-
-		Mean <u>+</u> SD		N	/lean <u>+</u> SD			Mean <u>+</u> SD	
	Med	dian(min;max)	Medi	ian(min; ma	<)	Med	lian(min; max	()
	(N=52)	(N=3)	(N=0)	(N=5)	(N=5)	(N=0)	(N=57)	(N=8)	(N=0)
Number of sachet fed to index child in the last	1.1 <u>+</u> .9	1.3 <u>+</u> 2.3	-	1.2 <u>+</u> 1.1	1 <u>+</u> 1.7	-	1.1 <u>+</u> .9	1.1 <u>+</u> 1.8	-
4 days	1(0-4)	0 (0-4)	-	2 (0-2)	0 (0-4)	-	1(0-4)	0 (0-4)	-

Table 6.2.6.b: Use of **MNP** by Households (Purposive Sample)

	Purposive Sample								
	-	A&T area		Noi	n-A&T Area			All	
		Percent		Percent			Percent		
	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix	Pushtikona	Monimix	MyMix
	(N=183)	(N=12)	(N=5)	(N=153)	(N=9)	(N=1)	(N=336)	(N=21)	(N=6)
MNP ever given to any one	99.5	50	40	98	55.6	0	98.8	52.4	33.3
	(N=1)	(N=6)	(N=3)	(N=3)	(N=4)	(N=1)	(N=4)	(N=10)	(N=4)
Reason for not using MNP:									
It is like sugar, not needed	0	0	0	0	25	0	0	10	0
Don't think that it is useful for the child	0	33.33	33.3	0	25	0	0	30	25
Not affordable/too expensive	0	0	33.3	0	0	0	0	0	25
Doctor/SS/other health official did not prescribe	0	0	0	33.33	25	0	25	10	0
Family barriers/family members discourage	0	0	0	0	0	0	0	0	0
Child doesn't like Pushtikona/Monimix/MyMix	0	0	0	0	0	0	0	0	0
Give another brand of MNP (Monimix, MyMix etc.)	0	33.33	33.3	0	25	100	0	30	50
Child gets stomach ache	100	0	0	33.33	0	0	50	0	0
Child gets constipation/black stool	0	16.67	0	0	0	0	0	10	0
Others	0	16.67	0	0	0	0	0	10	0
Don't know	0	0	0	33.33	0	0	25	0	0
	(N=182)	(N=6)	(N=2)	(N=150)	(N=5)	-	(N=332)	(N=11)	(N=2)
Ever given MNP to index child	100	83.33	100	99.3	80	-	99.7	81.8	100
	-	(N=1)	-	(N=1)	(N=1)	-	(N=1)	(N=2)	-
Reason for not using MNP(index child):									
Don't think that it is useful for the child	-	0	-	0	0	-	0	0	-
Child doesn't like Pushtikona/Monimix/MyMix	-	0	-	0	0	-	0	0	-
Child gets constipation/black stool	-	0	-	0	0	-	0	0	-
Family barriers/family members discourage	-	0	-	0	0	-	0	0	-
It is like sugar, not needed	-	0	-	100	0	-	100	0	-

Planning to start but haven't yet start	-	0	-	0	0	-	0	0	-
Doctor/SS/other health official did not prescribe	-	0	-	0	100	-	0	50	-
Buy another brand of MNP (Monimix, MyMix etc.)	-	100	-	0	0	-	0	50	-
Others	-	0	-	0	0	-	0	0	-
	(N=182)	(N=5)	(N=2)	(N=149)	(N=4)	(N=0)	(N=331)	(N=9)	(N=2)
Mix MNP sachet to prepare the food for index child:									
In a separate bowl/dish for infant with mashed family food	97.8	100	100	86.58	75	-	92.8	88.89	100
In a separate bowl/dish for infant with other solid dry food	1.1	0	0	2.68	0	-	1.81	0	0
Combine it with the family pot of food (for									
sharing with	0	0	0	0.67	0	-	0.3	0	0
Mith water or other linuid	1 1	0	0	10.07	25		F 11	11 1	0
Quantity of the MNP sachet usually mix with	1.1	0	0	10.07	23	-	5.14	11.1	0
one meal (index child):									
Full sachet	89.56	100	100	90.6	50	-	90	77.78	100
Half sachet	5.49	0	0	6.71	25	-	6.04	11.11	0
Less than half sachet	4.95	0	0	2.68	25	-	3.93	11.11	0
Quantity of food bowl(baati) mix with MNP during one meal									
One quarter of total food given	29.67	20	0	10.74	0	-	21.15	11.11	0
One half of total food given	12.09	40	0	7.38	50	-	9.97	44.44	0
Full amount of food given	58.24	40	100	81.21	50	-	68.58	44.44	100
Others	0	0	0	0.67	0	-	0.3	0	0
Food temperature when you add MNP to it:									
Hot(just cooked)	0.55	0	0	1.34	0	-	0.91	0	0
Warm/room temperature	89.01	100	100	89.26	75	-	89.12	88.89	100
Cold	9.89	0	0	9.4	25	-	9.67	11.11	0
Don't know	0.55	0	0	0	0	-	0.3	0	0
Meal of the day prefer to add to your MNP:									

Breakfast	37.36	80	0	43.62	0	-	40.18	44.44	0
Lunch	54.4	20	100	44.97	100	-	50.15	55.56	100
Dinner	6.59	0	0	8.72	0	-	7.55	0	0
Midday snack	0	0	0	0.67	0	-	0.3	0	0
Evening snack	0.55	0	0	0	0	-	0.3	0	0
No preference	1.1	0	0	2.01	0	-	1.51	0	0
Seen any changes after feeding	45.6	80	0	52.35	100	-	48.64	88.89	0
Following are the changes seen after feeding:	(N=83)	(N=4)	-	(N=78)	(N=4)	-	(N=161)	(N=8)	-
Increased appetite	50.6	50	-	62.82	75	-	56.52	62.5	-
Child growing well	43.37	25	-	44.87	50	-	44.1	37.5	-
Child gets sick less often	38.55	25	-	26.92	25	-	32.92	25	-
Child plays more	12.05	50	-	7.69	0	-	9.94	25	-
Child cries less	1.2	0	-	11.54	0	-	6.21	0	-
Others	2.41	0	-	2.56	0	-	2.48	0	-
	(N=182)	(N=5)	(N=2)	(N=149)	(N=4)	(N=0)	(N=331)	(N=9)	(N=2)
After having MNP child faced problem	15.38	20	0	14.09	25	-	14.8	22.22	0
	Ν	/lean <u>+</u> SD		N	/lean <u>+</u> SD		N	/lean <u>+</u> SD	
	Med	ian(min;ma>	()	Med	ian(min;max	x)	Med	ian(min;ma>	x)
	(N=182)	(N=5)	(N=2)	(N=149)	(N=4)	(N=0)	(N=331)	(N=9)	(N=2)
Number of sachet fed to index child in the last	.9 <u>+ 1</u> .2	.6 <u>+</u> .9	0 <u>+</u> 0	1 <u>+</u> 1.6	0 <u>+</u> 0	-	.9 <u>+</u> 1.4	.3 <u>+</u> .7	0 <u>+</u> 0
4 days	0(0-10)	0(0-2)	0(0-0)	0(0-12)	0(0-0)	-	0(0-12)	0(0-2)	0(0-0)

Table 6.2.7.a: Use of BRAC services on Pushtikona by HH (Random Sample)

		Random Sample								
		A&T are	а	Nor	n-A&T Area			All		
	SS/PS SK PK			SS/PS	SK	РК	SS/PS	SK	РК	
		Percent	:		Percent			Percent		
	N=131	N=66	N=156	N=36	N=65	N=0	N=167	N=131	N=156	
Received any advice on Pushtikona during last visit	52.67	30.3	51.28	25	26.15	-	46.71	28.24	51.28	
Ever bought Pushtikona	30.53	0	5.77	11.11	7.69	-	26.35	3.82	5.77	
	N=40	N=0	N=9	N=4	N=5	N=0	N=44	N=5	N=9	
Bought any Pushtikona from BRAC worker during last home visit	60	-	77.78	50	80	-	59.09	80	77.78	
		Mean <u>+</u> S	D	N	/lean <u>+</u> SD			Mean <u>+</u> SD		
	Med	lian(min;	max)	Med	ian(min;max)	М	edian(min;ma	ax)	
	N=40	N=0	N=9	N=4	N=5	N=0	N=44	N=5	N=9	
Time ago last purchased Pushtikona from BRAC	24.3 <u>+</u> 49.2	-	14.8 <u>+</u> 11.6	12.5 <u>+</u> 12	30 <u>+</u> 34.1	-	23.2 <u>+</u> 47.1	30 <u>+</u> 34.1	14.8 <u>+</u> 11.6	
worker(no. days)	10(0-240)	-	13(2-42)	8.5(3-30)	18(8-90)	-	10(0-240)	18(8-90)	13(2-42)	

Table 6.2.7.b: Use of BRAC services on Pushtikona by HH (Purposive Sample)

	i ushtikonu by		ve Sumple/							
		Purposive Sample								
		A&T area	No	Non-A&T Area			All			
	SS/PS	SK	РК	SS/PS	SK	РК	SS/PS	SK	РК	
		%			%			%		
	N=143	N=79	N=150	N=72	N=83	N=0	N=215	N=162	N=150	
Received any advice on Pushtikona during last visit	79.72	45.57	84	84.72	67.47	-	81.4	56.79	84	
Ever bought Pushtikona	67.13	11.39	20	76.39	45.78	-	70.23	29.01	20	
	N=96	N=9	N=30	N=55	N=38	N=0	N=151	N=47	N=30	
Bought any Pushtikona from BRAC worker during last home visit	43.75	66.67	66.67	49.09	73.68	-	45.7	72.34	66.67	
		Mean <u>+</u> SD		Г	Mean <u>+</u> SD			Mean <u>+</u> SD		
	N	ledian(min;ma	ax)	Med	lian(min;max)		N	/ledian(min;m	ax)	
	N=96	N=9	N=29	N=55	N=38	N=1	N=151	N=47	N=30	
Time ago last purchased Pushtikona from	29.4 <u>+</u> 70.9	44.6 <u>+</u> 107.1	21.6 <u>+</u> 56.9	41.9 <u>+</u> 65.5	35.5 <u>+</u> 58.3	1	33.9 <u>+</u> 69	37.2 <u>+</u> 68.9	20.9 <u>+</u> 56	
BRAC WORKER(NO. GAYS)	10.5(1-390)	11(3-330)	12(1-315)	15(1-365)	13.5(1-300)	1(1-1)	12(1-390)	12(1-330)	11.5(1-315)	

Table 6.2.8.a: Use of BRAC services by Household (Random Sample)

				Rar	ndom Sampl	e			
		A&T area		N	on-A&T Area	a		All	
	SS/PS	SK	РК	SS/PS	SK	РК	SS/PS	SK	РК
	N=217	N=216	N=217	N=217	N=223	N=146	N=434	N=439	N=363
		Percent			Percent			Percent	
Ever been visited at home by a BRAC FHW	45.6	24.1	51.6	17.5	25.1	0	31.6	24.6	30.9
Home visit from BRAC that gives advice on nutrition & child feeding and also sell's medicine	52.53			14.75			33.64		
Home visit from BRAC to conduct pregnancy tests, check-ups with pregnant mothers & health forums		31.9			24.22			28.02	
Home visit from BRAC to give advice on nutrition & child feeding			62.67			0			37.47
Know about BRAC worker in your area	42.4	20.83	46.54	22.58	26.01	0	32.49	23.46	27.82
	N=156	N=78	N=166	N=113	N=92	N=0	N=269	N=170	N=166
Kind of job these woman (BRAC worker) do									
Gives nutrition or child feeding advice	63.46	26.92	85.54	6.19	5.43	-	39.41	15.29	85.54
Gives health advice	37.82	43.59	45.18	10.62	21.74	-	26.39	31.76	45.18
Sells medicines	12.18	5.13	1.2	40.71	26.09	-	24.16	16.47	1.2
Sells Pushtikona	26.92	1.28	12.65	13.27	7.61	-	21.19	4.71	12.65
Check up on pregnant women	6.41	69.23	3.61	15.93	72.83	-	10.41	71.18	3.61
Checks up on children	3.85	16.67	7.83	4.42	31.52	-	4.09	24.71	7.83
Conducts Shasto Forum	0	3.85	0.6	0	4.35	-	0	4.12	0.6
Others	3.21	3.85	0.6	6.19	2.17	-	4.46	2.94	0.6
Don't know	14.1	2.56	6.02	38.05	7.61	-	24.16	5.29	6.02
Where seen these woman (BRAC workers)									
Visiting my home	78.21	83.33	91.57	32.74	68.48	-	59.11	75.29	91.57
In the para/village	21.79	16.67	7.83	66.37	30.43	-	40.52	24.12	7.83
Other	0	0	0.6	0.88	1.09	-	0.37	0.59	0.6
Ever been visited at home by these woman	83.97	84.62	93.98	31.86	70.65	-	62.08	77.06	93.98
	N=131	N=66	N=156	N=36	N=65	N=0	N=167	N=131	N=156

Received advice from BRAC worker on child feeding during last visit	84.73	63.64	95.51	44.44	46.15	-	76.05	54.96	95.51
	N=111	N=42	N=149	N=16	N=30	N=0	N=127	N=72	N=149
Advise received from BRAC worker on child feeding									
Feeding animal source foods	50.45	50	55.7	18.75	16.67	-	46.46	36.11	55.7
Adding MNP to child's food	45.95	26.19	36.24	37.5	36.67	-	44.88	30.56	36.24
Feeding mashed family food after 6 months	45.05	47.62	52.35	12.5	20	-	40.94	36.11	52.35
Washing hands with water and soap before preparation/feeding child	20.72	28.57	22.15	18.75	13.33	-	20.47	22.22	22.15
Feed only breast milk up to six months	13.51	28.57	16.11	18.75	33.33	-	14.17	30.56	16.11
Cooking/adding with oil	11.71	14.29	13.42	0	3.33	-	10.24	9.72	13.42
Positioning & attachment for breastfeeding	7.21	7.14	8.05	6.25	10	-	7.09	8.33	8.05
Giving only colostrum	2.7	9.52	0	12.5	30	-	3.94	18.06	0
No pre- or post-lacteals (honey/mustard oil/glucose water)	0.9	2.38	0.67	12.5	3.33	-	2.36	2.78	0.67
Putting baby to breast immediately after birth	0.9	0	1.34	6.3	16.67	-	1.57	6.94	1.34
Feeding during illness/extra after illness	0.9	4.76	0.67	6.3	3.33	-	1.57	4.17	0.67
Other	0.9	0	0.67	6.3	3.33	-	1.57	1.39	0.67
Don't know	0	0	0	0	3.33	-	0	1.39	0
		Mean + SI)		Mean + SD			Mean + S	D
		Median(min;ı	max)	Med	dian(min;max)		Me	dian(min;	max)
	N=131	N=66	N=156	N=36	N=65	N=0	N=167	N=131	N=156
Last visit by BRAC (days ago)	35.8 <u>+</u> 49.6	154.2 <u>+</u> 177.8	51.3 + 75.2	66.6 <u>+</u> 85.2	174 + 208.4	-	42.5 <u>+</u> 60.1	164 <u>+</u> 193	51.3 + 75.2
	15(1- 330)	60(3-630)	25(1-90)	27(1-330)	90(1-900)	-	18(1-330)	75(1- 900)	25(1-90)
Time spent by BRAC worker during last home visit	17.7 <u>+</u> 14.3	20.3 <u>+</u> 12.7	19.2 + 14.9	14.5 <u>+</u> 11.5	18.5 <u>+</u> 14.3	-	17 <u>+</u> 13.8	19.4 <u>+</u> 13.5	19.2 + 14.9
	15(1- 90)	20(2-60)	15(3-90)	10(2-50)	15(2-60)	-	10(1-90)	15(2- 60)	15(3-90)
	N=111	N=42	N=149	N=16	N=30	N=0	N=127	N=72	N=149
Time spent talking about nutrition & child feeding during last home visit	10.8 <u>+</u> 7.2	11.4 <u>+</u> 8.2	12.4 <u>+</u> 10.3	11.7 <u>+</u> 6.8	14 <u>+</u> 10	-	11 <u>+</u> 7.1	12.5 <u>+</u> 9	12.4 <u>+</u> 10.3
	10(1- 40)	10(0-30)	10(2-60)	10(2-30)	10(0-35)	-	10(1-40)	10(0- 35)	10(2-60)

Table 6.2.8.b: Use of BRAC services by Household (Purposive Sample)

				Purp	posive Samp	ole			
		A&T area		N	on-A&T Are	а		All	
	SS/PS	SK	РК	SS/PS	SK	РК	SS/PS	SK	РК
	N=183	N=183	N=183	N=151	N=152	N=92	N=334	N=335	N=275
		Percent			Percent			Percent	
Ever been visited at home by a BRAC	65.03	32.24	63.93	48.34	50.66	0	57.5	40.6	42.6
Home visit from BRAC that gives advice on	79.23			48.34			65.27		
Home visit from BRAC to conduct pregnancy									
tests, check-ups with pregnant mothers & health		40.44			48.68			44.18	
forums									
Home visit from BRAC to give advice on nutrition & child feeding			83.61			0			55.64
Know about BRAC worker in your area	64.48	32.79	60.66	47.02	50	0	56.59	40.6	40.36
	N=151	N=86	N=154	N=112	N=104	N=0	N=263	N=190	N=154
Kind of job these woman (BRAC worker) do									
Gives nutrition or child feeding advice	69.54	19.77	92.21	18.75	19.23	-	47.91	19.47	92.21
Gives health advice	34.44	50	48.05	12.5	15.38	-	25.1	31.05	48.05
Sells medicines	19.87	9.3	1.95	47.32	32.69	-	31.56	22.11	1.95
Sells Pushtikona	51.66	4.65	20.78	50	29.81	-	50.95	18.42	20.78
Check up on pregnant women	8.61	76.74	4.55	9.82	67.31	-	9.13	71.58	4.55
Checks up on children	1.99	15.12	6.49	3.57	22.12	-	2.66	18.95	6.49
Conducts Shasto Forum	1.32	3.49	0	0	1.92	-	0.76	2.63	0
Others	0	1.16	0.65	8.93	0	-	3.8	0.53	0.65
Don't know	3.31	3.49	1.3	18.75	4.81	-	9.89	4.21	1.3
Where seen these woman (BRAC workers)									
Visiting my home	88.08	93.02	96.75	64.29	75.96	-	77.95	83.68	96.75
In the para/village	11.92	6.98	3.25	34.82	24.04	-	21.67	16.32	3.25
Other	0	0	0	0.89	0	-	0.38	0	0

Ever been visited at home by these woman	94.7	90.7	97.4	64.29	80.77	-	81.75	85.26	97.4
	N=143	N=78	N=150	N=72	N=84)	N=0	N=215	N=162	N=150
Received advice from BRAC worker on child feeding during last visit	89.51	69.23	96.67	79.17	72.62	-	86.05	70.99	96.67
	N=128	N=54	N=145	N=57	N=61	N=0	N=185	N=115	N=145
Advise received from BRAC worker on child feeding									
Feeding animal source foods	33.59	44.44	49.66	14.04	26.23	-	27.57	34.78	49.66
Adding MNP to child's food	64.84	42.59	65.52	87.72	73.77	-	71.89	59.13	65.52
Feeding mashed family food after 6 months	39.84	40.74	48.28	14.04	16.39	-	31.89	27.83	48.28
Washing hands with water and soap before prep/feeding child	19.53	16.67	14.48	10.53	9.84	-	16.76	13.04	14.48
Feed only breast milk up to six months	12.5	18.52	5.52	7.02	16.39	-	10.81	17.39	5.52
Cooking/adding with oil	5.47	5.56	16.55	10.53	11.48	-	7.03	8.7	16.55
Positioning & attachment for breastfeeding	5.47	7.41	6.21	0	0	-	3.78	3.48	6.21
Giving only colostrum	4.69	9.26	2.07	1.75	8.2	-	3.78	8.7	2.07
No pre- or post-lacteals (honey/mustard oil/glucose water)	4.69	3.7	0.69	0	1.64	-	3.24	2.61	0.69
Putting baby to breast immediately after birth	1.56	1.85	1.38	3.51	0	-	2.16	0.87	1.38
Feeding during illness/extra after illness	3.91	5.56	3.45	3.51	8.2	-	3.78	6.96	3.45
Other	0.78	1.85	0.69	1.75	3.28	-	1.08	2.61	0.69
Don't know	0	0	0.69	1.75	1.64	-	0.54	0.87	0.69
		Mean <u>+</u> SD		1	Mean <u>+</u> SD			Mean <u>+</u> SD	
	N	/ledian(min;ma	x)	Med	lian(min;ma	x)	Me	dian(min;m	ax)
	N=143	N=78	N=150	N=72	N=84)	N=0	N=215	N=162	N=150
	34.2 <u>+</u>	114.4 +	32.8 +	39 + 71 2	103.8 +	_	35.8 <u>+</u>	108.9 <u>+</u>	32.8 +
Last visit by BRAC (days ago)	65.3	168.8	55.4	<u> </u>	146.7		67.2	157.3	55.4
	12(0- 390)	30(3-720)	15(1- 450)	10(1-390)	30(1- 570)	-	11(0-390)	30(1- 720)	15(1-450)
Time spent by BRAC worker during last home visit	18 <u>+</u> 14.5	19.2 <u>+</u> 15.8	17.2 <u>+</u> 10.8	15.9 <u>+</u> 11.4	20.5 <u>+</u> 24.3	-	17.3 <u>+</u> 13.6	19.9 <u>+</u> 20.6	17.2 <u>+</u> 10.8
	15(0-80)	15(1-60)	15(1-60)	10(2-60)	15(2- 210)	-	10(0-80)	15(1- 210)	15(1-60)
	N=128	N=54	N=145	N=56	N=60	N=0	N=184	N=114	N=145
Time spent talking about nutrition & child	11.1 <u>+</u> 8	11 <u>+</u> 8.2	11.2 <u>+</u>	11.5 <u>+</u> 7.4	13.6 <u>+</u>	-	11.2 <u>+</u> 7.8	12.4 <u>+</u>	11.2 <u>+</u> 7.8

feeding during last home visit			7.8		8.3			8.3	
	10(2-50)	10(0-30)	10(1-50)	10(3-40)	10(2-30)	-	10(2-50)	10(0-30)	10(1-50)

Table 6.2.9 Number of vis	sits by BRAC PK, by age
---------------------------	-------------------------

	Random Sample	Purposive Sample
	Mean + SD	Mean + SD
	Median(min;max)	Median(min;max)
Birth to 8 months	3.9 <u>+</u> 3.8	3.9 <u>+</u> 3.6
	3 (0-20)	3 (0-25)
9-10 months	2.7 <u>+</u> 3.3	2.5 <u>+</u> 2.9
	1.5 (0-9)	2 (0-10)
11-12 months	3.9 <u>+</u> 3.9	3.5 <u>+</u> 3.6
	2 (0-9)	2 (0-10)
15-18 months	5.8 <u>+</u> 3.8	5.2 <u>+</u> 3.8
	9 (0-9)	4 (0-13)
23-24 months	9.3 <u>+</u> 7.4	8.4 <u>+</u> 2.1
	9 (0-99)	9 (0-9)

6.3 Household contact with program staff

Table 6.3.1: Household contact with Pushti Kormi

	Random Sample	Purposive Sample
	All	All
	N=166	N=154
Contacted the PK to help you address a child feeding problem	10.84	20.78
	N=18	N=32
Contacted PK by		
By phone	22.22	18.75
By word of mouth	22.22	37.5
On a regular household visit	55.56	46.88
	N=166	N=154
Sticker in home that has the PK's mobile number on it	60.24	66.88
	N=100	N=103
Ever called the number on the sticker when facing an IYCF problem	5	5.83
	Mean + SD	Mean + SD
	Median(min;max)	Median(min;max)
	N=156	N=150
Time age first visited by the DK (ne. of days)	257.5 <u>+</u> 176.5	291.7 <u>+</u> 187.9
Time ago first visited by the PK (no. of days)	210(1-720)	300(3-750)
Age of a index child at DK first visit (months)	5 <u>+</u> 4.6	5.4 <u>+</u> 5.4
אפר טו מ ווועבא נוווע מג דא ווואג אואג (ווטוונווא)	4(0-21)	4(0-30)
No. of times BK visited from the first visit till now	6.4 <u>+</u> 5.1	7.5 <u>+</u> 5.6
	5(1-30)	6(1-30)

Table 6.3.2 Household (by age group of children) contact with Pushti Kormi

	Random Sample	Purposive Sample
	All	All
	Mean ± SD	Mean ± SD
	Median(min;max)	Median(min;max)
	N=156	N=150
	5(1-30)	6(1-30)
No. of times PK visited when child was born until he/she was 8	3.9 <u>+</u> 3.8	3.9 + 3.6
months old	3(0-20)	3(0-25)
No. of times PK visited when child was 9-10 months old	2.7 <u>+</u> 3.3	2.5 <u>+</u> 2.9
No. of times PR visited when time was 3-10 months old	1.5(0-9)	2(0-10)
No. of times PK visited when child was 11-12 months old	3.9 <u>+</u> 3.9	3.5 <u>+</u> 3.6
No. of times FR visited when time was 11-12 months of	2(0-9)	2(0-10)
No. of times PK visited when child was 15-18 months old	5.8 <u>+</u> 3.8	5.2 <u>+</u> 3.8

	9(0-9)	4(0-13)
No. of times PK visited when child was 23-24 months old	8.7 <u>+</u> 1.6	8.4 <u>+</u> 2.1
	9(0-9)	9(0-9)

Table 6.3.3: Household contact with Shasthya Kormi

	Random Sample				Purposive Sample	
	A&T area	Non-A&T Area	All	A&T area	Non-A&T Area	All
		Percent			Percent	
	N=66	N=65	N=131	N=78	N=84	N=162
Gave advice about your health	57.58	64.6	61.07	66.67	63.1	64.8
Kind of health services/information received in the last six mont	hs					
Advice about family planning	15.15	10.77	12.98	10.26	26.19	18.52
Advice about pregnancy	6.06	9.23	7.63	2.56	3.57	3.09
Measurement of weight when pregnant	1.52	1.54	1.53	2.56	1.19	1.85
Checked blood pressure	0	0	0	3.85	1.19	2.47
Tested for pregnancy	1.52	6.15	3.82	3.85	1.19	2.47
Information maternal nutrition	25.76	7.69	16.79	25.64	19.05	22.22
Information about EIBF after delivery	1.52	6.15	3.82	3.85	1.19	2.47
Information about EBF for 6 months	1.52	1.54	1.53	8.97	3.57	6.17
Advice regarding mother should eat well	24.24	13.85	19.08	30.77	20.24	25.31
Received no service in the last six months	51.52	53.85	52.67	37.18	41.67	39.51
Other	1.52	7.69	4.58	5.13	2.38	3.7
Don't know	1.52	0	0.76	2.56	2.38	2.47
	N=78	N=92	N=170	N=86	N=104	N=190
Attended a health education forum (Shasto Forum) organized by SK	11.54	5.43	8.24	23.26	10.58	16.32
	N=9	N=5	N=14	N=20	N=11	N=31
List of things SK talked about during last health forum						
Maternal nutrition	77.78	60	71.43	70	27.27	54.84
Breastfeeding	22.22	60	35.71	40	9.09	29.03
Adding MNP	22.22	40	28.57	40	54.55	45.16
Family planning	11.11	40	21.43	30	45.45	35.48
Water and sanitation	0	40	14.29	5	0	3.23
Immunization	11.11	20	14.29	5	27.27	12.9
Complementary feeding	22.22	0	14.29	30	18.18	25.81

Washing hands with water and soap before prep/feeding child	22.22	0	14.29	30	9.09	22.58
Tuberculosis	11.11	0	7.14	5	9.09	6.45
Feeding during illness/extra after illness	11.11	0	7.14	5	0	3.23
Encouraging child to eat enough	0	0	0	5	45.45	19.35
Other	11.11	0	7.14	5	0	3.23
Don't know	11.11	0	7.14	0	0	0
		Mean <u>+</u> SD			Mean <u>+</u> SD	
	Ν	/ledian(min;max)		ľ	/ledian(min;max)	
	N=9	N=5	N=14	N=20	N=11	N=31
Time spent by SK during your last Health forum	29.4 <u>+</u> 19.4	59 <u>+</u> 37.8	40 <u>+</u> 29.8	41 <u>+</u> 19.1	45.5 <u>+</u> 31.1	42.6 <u>+</u> 23.6
	30(5-60)	60(25-120)	30(5-120)	37.5 (10-60)	30(10-120)	30(10-120)

Table 6.3.4 Ever been visited at home by SK, by age group of children

		Random Sample			Purposive Sample		
	A&T area	Non-A&T Area	All	A&T area	Non-A&T Area	All	
	P	ercent (frequency)	Р	ercent (frequency	y)	
Age group							
6-11 months	92.3 (24)	61.5 (24)	73.9 (48)	95.8 (23)	89.5 (17)	93.0 (40)	
12-17 months	80.8 (21)	80.8 (21)	80.8 (42)	100.0 (20)	80.0 (24)	88.0 (44)	
18-23 months	81.0 (17)	75.0 (15)	78.0 (32)	81.6 (31)	77.6 (38)	79.3 (69)	

Table 6.3.5 Ever been visited at home by SS, by age group of children

	Random Sample			Purposive Sample		
	A&T area	Non-A&T Area	All	A&T area	Non-A&T Area	All
	Percent (frequency)			Percent (frequency)		
Age group						
6-11 months	90.4 (47)	31.0 (31)	63.8 (60)	97.0 (33)	54.6 (12)	80.4 (45)
12-17 months	80.4 (37)	35.0 (14)	59.3 (51)	100.0 (43)	80.0 (24)	91.8 (67)
18-23 months	80.9 (38)	28.6 (8)	61.3 (46)	88.9 (56)	58.2 (32)	74.6 (88)

Table 6.3.6 Ever been visited by SS, by SES

	Random Sample	
	Percent (frequency)	
	N=269	
SES Status		
Poorer	47.9 (34)	
Poor	67.7 (44)	
Rich	62.7 (42)	
Richer	72.4 (42)	

Table 6.3.7 BRAC SS's last visit (days ago) to Household, by upazila

	Random Sample	Purposive Sample	
	Mean <u>+</u> SD	Mean <u>+</u> SD Median(min;max)	
	Median(min;max)		
Upazila			
Alamdanga	55.3 <u>+</u> 74.3	41.3 <u>+</u> 95.2	
	30 (1-330)	4 (1-390)	
Araihazar	40.7 <u>+</u> 62.5	29.1 <u>+</u> 45.1	
	24 (1-180)	5 (2-120)	
Chirirbandar	105.5 <u>+</u> 110.5	80.6 <u>+</u> 120.9	
	90 (3-330)	15 (3-390)	
Daulatpur	47.5 <u>+</u> 54.9	27.6 <u>+</u> 44.3	
	33.5 (3-120)	12 (1-180)	
Jaintiapur	85.8 <u>+</u> 89.4	38.7 <u>+</u> 50.4	
	60 (1-275)	10 (7-150)	
Lakhai	36.6 <u>+</u> 36.3	75.8 <u>+</u> 97.3	
	30 (2-150)	37.5 (0-360)	
Nandigram	34.8 <u>+</u> 45.9	29.9 <u>+</u> 40.4	
	19 (1-210)	12 (1-150)	
Pakundia	14 <u>+</u> 11.9	18.0 <u>+</u> 30.6	
	12 (2-60)	10 (2-180)	
Sonagazi	12.8 <u>+</u> 10.9	11.1 <u>+</u> 8.8	
	11 (2-30)	9 (2-30)	
Sonaimuri	34.8 <u>+</u> 37.6	23.8 <u>+</u> 28.3	
	22.5 (1-150)	15 (4-120)	
All	42.5+60.1	35.8 <u>+</u> 67.2	
	18 (1-330)	11 (0-390)	

	Random Sample
	Percent (frequency)
Among households that purchase Pushtikona:	
Knows someone who uses MNPs	69.8 (74)
The person is a relative	55.4 (41)
The person is female	91.9 (68)
Among households that give Pushtikona to child:	
Knows someone who uses MNPs	74.4 (64)
The person is a relative	51.6 (33)
The person is female	92.2 (59)
—	Mean <u>+</u> SD
	Median(min;max)
Number of Pushtikona sachets purchased among:	
HHs that know someone who uses MNPs	19.5 <u>+</u> 16.7
	15 (0-70)
HHs that do not know someone who uses MNPs	11.9+15.3
	4 (0-60)

Table 6.3.8 Social Networks and MNPs (Random Sample)

7. REFERENCES

Cogill, B. 2003. Anthropometric Indicators Measurement Guide. Food and Nutrition Technical Assistance Project, Academy for Educational Development, Washington, D.C., 2003.

Jefferds, M.E., Ogange, L., Owuor, M., Cruz, K., Person, B., Obure, A., Suchdev, P.S., & Ruth, L.J. 2010. Formative research exploring acceptability, utilization, and promotion in order to develop a micronutrient powder (Sprinkles) intervention among Luo families in western Kenya. *Food Nutr.Bull.*, 31, (2 Suppl) S179-S185 available from: PM:20715602

Loechl, C.U., Menon, P., Arimond, M., Ruel, M.T., Pelto, G., Habicht, J.P., & Michaud, L. 2009. Using programme theory to assess the feasibility of delivering micronutrient Sprinkles through a food-assisted maternal and child health and nutrition programme in rural Haiti. *Matern.Child Nutr.*, 5, (1) 33-48 available from: PM:19161543

Menon, P., Ruel, M.T., Loechl, C., & Pelto, G. 2005. From research to program design: use of formative research in Haiti to develop a behavior change communication program to prevent malnutrition. *Food Nutr.Bull.*, 26, (2) 241-242 available from: PM:16060227

Olney, D.K., Rawat, R., & Ruel, M.T. 2012. Identifying potential programs and platforms to deliver multiple micronutrient interventions. *J.Nutr.*, 142, (1) 178S-185S available from: PM:22131548

Pelletier, D.L., Frongillo, E.A., Gervais, S., Hoey, L., Menon, P., Ngo, T., Stoltzfus, R.J., Ahmed, A.M., & Ahmed, T. 2011. Nutrition agenda setting, policy formulation and implementation: lessons from the Mainstreaming Nutrition Initiative. *Health Policy Plan.* available from: PM:21292709

Pelto, G.H. 1991. The role of behavioral research in the prevention and management of invasive diarrheas. *Rev.Infect.Dis.*, 13 Suppl 4, S255-S258 available from: PM:2047647

Stead, M., Hastings, G., & Eadie, D. 2002. The challenge of evaluating complex interventions: a framework for evaluating media advocacy. *Health Educ.Res.*, 17, (3) 351-364 available from: PM:12120850

Suchdev, P.S., Ruth, L., Obure, A., Were, V., Ochieng, C., Ogange, L., Owuor, M., Ngure, F., Quick, R., Juliao, P., Jung, C., Teates, K., Cruz, K., & Jefferds, M.E. 2010. Monitoring the marketing, distribution, and use of Sprinkles micronutrient powders in rural western Kenya. *Food Nutr.Bull.*, 31, (2 Suppl) S168-S178 available from: PM:20715601

WHO 2010. Indicators for assessing infant and young child feeding practices part 3: country profiles. World Health Organization. Dept. of Child and Adolescent Health and Development. Geneva; 2010.

WHO. 2006. Multicentre Growth Reference Study Group. WHO Child Growth Standards: methods and development: length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age. Geneva; 2006.

8. ANNEXES

Table A.1: List of modules of in the HH questionnaire – mother, father and grandmother

Mother's questionnaire			
Module list	Module name	Type of data collected	
Module A	Identification	\rightarrow Administrative information	
Module B	HH composition	ightarrow Basic demographic and socioeconomic data of the HH	
		members (HH roster can be streamlined/shortened)	
Module C	Pregnancy and postnatal	\rightarrow Antenatal care seeking	
	care (youngest child)	→ Nutrition/IYCF counseling during ANC	
		\rightarrow Place of birth	
		\rightarrow Mode of delivery (C/S)	
		ightarrow BF advice/help immediately after delivery	
Module D	IYCF practices	ightarrow Data on core WHO indicators (very short module)	
		\rightarrow Early initiation of breast milk	
		→ Feeding immediately and 3 days after birth	
		→ Continuation/current status of BF	
		\rightarrow Age of introduction of liquids/foods	
		\rightarrow Feeding practices from 24-hours recall	
		→ Current feeding problems and care seeking	
Module E	Mother's IYCF	\rightarrow BF: Initiation/Exclusivity/Continuation	
	knowledge, attitudes and	\rightarrow CF: Timing of introduction/Frequency/Quantity	
	practices	→ Feeding during and after illness	
		\rightarrow Hand washing	
Module F	Hand washing	\rightarrow Knowledge	
		\rightarrow Practice	
		\rightarrow Observation	
Module G	Sprinkles knowledge,	\rightarrow Knowledge: Benefits/Dosage/How to feed	
	purchase and use	\rightarrow Source of information on Pushtikona	
		\rightarrow Purchase information (SS and/or other retail sources)	
		\rightarrow Use of Pushtikona	
Module H	Use of A&T and BRAC	\rightarrow Contacts with FHWs	
	program services	\rightarrow Advice received from FHWs	
		\rightarrow Purchase of products from FHWs	
Module I	Market access and use of	\rightarrow Type of market	
	information	\rightarrow Distance to nearest market	
		\rightarrow Type of food/special food purchase	
		→ Decision making for food purchase	
Module J	Woman's decision	\rightarrow HH decision-making (selected decisions)	
	making, & other	\rightarrow Self-perceived health (expanded module)	
	behavioral	\rightarrow Maternal stress	
	determinants/capacities	$ \rightarrow$ Social support for use of MNPs and IYCF/child care	

Mother's questionnaire			
Module list	Module name	Type of data collected	
	that could influence	\rightarrow Self-Efficacy	
	adoption of	ightarrow Roles, priorities and time	
	recommended IYCF and	ightarrow Perceived social norms related to IYCF behaviors	
	MNP practices	ightarrow Social networks for health and IYCF information	
Module K	HH food security and diet	\rightarrow HFIAS	
	diversity	\rightarrow HDDS questions	
Module L	Socioeconomic status and	\rightarrow HH construction	
	assets	ightarrow List of assets and control over assets	
Module M	Media exposure	→ TV/Radio viewing habits	
		ightarrow Type of programs viewed	
		→ Viewing of advertisements on child feeding	
		ightarrow Recall from memory (unaided)	
		\rightarrow TVC questions	
		 If viewed/Recall story (Aided recall) 	
		 Main message/Use of message 	
Module N	Anthropometry	\rightarrow Height	
		\rightarrow Weight	
Father's que	estionnaire		
Module A	Identification		
Module B	IYCF knowledge, attitudes and practices		
Module C	Hand washing		
Module D	MNP knowledge, purchase and use		
Module E	Use of A&T and BRAC program services		
Module F	Market access and use of information		
Module G	Social Mobilization and Media Exposure		
Grandmother's questionnaire			
Module A	Identification		
Module B	IYCF knowledge, attitudes and practices		
Module C	Hand washing		
Module D	MNP knowledge, purchase and use		
Module E	Use of A&T and BRAC program services		
Module F	Media Exposure		

Table A.2: List of modules in the frontline health worker (SS/PS and PK) questionnaires

SS Modules	Module Name/Type of Data Collected
Module A	Identification
Module B	Technical knowledge and skills
Module C	Training
Module D	Sales of Pushtikona
Module E	Basic demographics

PK Modules	Module Name/Type of Data Collected
Module A	Identification
Module B	Training of Pushtikona
Module C	Knowledge and skills
Module D	Sales of Pushtikona

Table A.3: List of modules in the BRAC office staff questionnaire