Impact Evaluation of the Save the Children Early Childhood Stimulation Program in Bangladesh: Final Report

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Marjorie Chinen, Ph.D.

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Acronyms

AHI	Assistant health inspector
AIR	American Institutes for Research
ANCOVA	Analysis of covariance
BMRC	Bangladesh Medical Research Council
CC	Community clinic
CES-D	Centre for Epidemiological Studies–Depression
CHCP	Community health care provider
DC	Data collector
BDHS	Bangladesh Demographic and Health Survey
DI	Data International Ltd.
ECS	Early childhood stimulation
ECSP	Early Childhood Stimulation Program
ECD	Early childhood development
EPI	Expand program of immunization
ES	Effect size
FCI	Family Care Indicators
FGD	Focus group discussion
FPI	Family planning inspector
FS	Field supervisor
FWA	Family welfare assistant
GPS	Global Positioning System
HA	Health assistant
HAZ	Height for age
HI	Health inspector
HOME	Home Observation for Measurement of the Environment
ICDDR,B	International Centre for Diarrhoeal Disease Research, Bangladesh
ICHD	Institute of Child and Human Development
IPHN	Institute of Public Health Nutrition Bangladesh
IRB	Institutional Review Board
ITT	Intent to treat
KIDI	Knowledge of Infant Development Inventory
MICS	Multi-Indicator Cluster Survey
MOHFW	Ministry of Health and Family Welfare
MTEPI	Medical Technologist Expanded Program on Immunization
NNS	National Nutrition Services
OLS	Ordinary least squares
PLW	Pregnant and lactating women
RCHCIB	Revitalization of Community Health Care Initiatives in Bangladesh
RCT	Randomized controlled trial

RF	Responsive feeding
SE	Standard error
SS	Scale score
SIEF	Strategic Impact Evaluation Fund
TCM	Tackling Childhood Malnutrition
TOT	Treatment on the treated
UFPO	Upazila family planning officer
UH&FPO	Upazila health and family planning officer
USD	United States dollar
WAZ	Weight for age
WHO	World Health Organization
WHZ	Weight for height

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Executive Summary

Introduction

This is the final (endline) report of a three-year evaluation of Save the Children's Early Childhood Stimulation (ECS) program, which Save the Children implemented using government service providers in three upazilas of three different districts in Bangladesh. The ECS program targeted parents of infants and toddlers and taught them about the importance of positive early stimulation and maternal responsiveness to support and enhance the development of these young children. In doing so, the program was integrated into the National Nutrition Services (NNS), which aimed to increase access to key nutrition services for pregnant and lactating women and children under the age of five to reduce malnutrition in the community.

There is considerable evidence that early stimulation programs benefit the families and children they serve (see Bake & Lopez, 2010 for an extensive review). However, because these programs typically include repeated visits to individual parents they tend to be relatively expensive and difficult to scale up with fidelity, especially in low and middle-income countries that can devote only limited government resources to early childhood development. Thus, most of the successful programs identified by Bake & Lopez and others were not widely adopted or replicated beyond the settings in which they were originally tested.

Save the Children responded to this challenge by creating an early stimulation program in Bangladesh that uses the existing government infrastructure—community clinics and community health care and family planning providers—as its primary delivery mechanism. Rather than training and deploying separate ECS workers to implement the program, Save the Children supplemented the training of NNS workers to incorporate the program's early stimulation message and integrate it with the nutritional and family planning messages they already deliver to families. In addition, Save the Children provided specially designed ECS program materials and trained service providers to deliver early stimulation messages and program materials during their routine home visits, and in Expanded Program of Immunization (EPI) events, community clinics, and Growth Monitoring Campaigns. During the counseling, service providers were expected to show mothers and other caregivers how to use a child development card and books handed out to the families to provide children with a variety of early learning opportunities.

The American Institutes for Research (AIR) worked with Save the Children and the Bangladesh office of the World Bank to apply for a research grant from the World Bank's Strategic Impact Evaluation Fund (SIEF). We received this grant in 2013 to implement a randomized control trial of Save the Children's ECS program in 78 community clinics in Bangladesh. This impact evaluation aimed to investigate whether an ECS program that used community clinics' government service providers who did not receive additional incentives (monetary or in-kind), could successfully deliver an early stimulation program, and ultimately improve children's child development outcomes. This report presents the results of this trial.

Study Design and Data Collection

Working with our partners in Bangladesh, we recruited 78 community clinics in Muladi (N=10), Satkania (N=37), and Kulaura (N=31) upazilas. Half of these community clinics were randomly assigned to a treatment group that received both the NNS and the ECS programs, and half to a control group that received only the NNS program. We sampled 33 families in each of community clinics' catchment areas and surveyed these families about their parenting and feeding practices at baseline (November 2013-January 2014) and at endline (September-December of 2015). In addition to these surveys, we assessed the children's cognitive, language, and physical development at both baseline and endline. We also monitored program implementation and conducted focus group discussions with samples of ECS program participants and control group families.

In randomized control trials like these it is critical that (a) the baseline characteristics of the treatment and control groups are balanced (indicating successful randomization), and (b) that attrition between random assignment and endline is minimal. (The latter prevents differential attrition from biasing the impact estimates). As detailed in Chapters 2 and 4 of this report, both of these conditions were met. The impact estimates we present in this report are therefore valid estimates of the effect of the ECS program as it was implemented in this evaluation.

Figure 3.1 in the body of the report shows the theoretical model underlying the ECS program and its expected outcomes. It describes four steps on the way from assignment to the ECS program to improvement in child outcomes. The first step is exposure to program services. To benefit from the program, treatment group parents and their children must be exposed to program messages and must have access to program materials, books and other resources. The second step is changes in parental knowledge and behavior. The mothers who are targeted by program messages and materials must remember these messages and act accordingly (and act differently from their counterparts in the control group). The third step requires changes in the child's experience. That is, the home environment must change to be more stimulating and supportive of the children's cognitive and language development. And the final step is that these changes must translate into actual improvements in child development.

In addition to the step-by-step sequence introduced above, there are several indirect pathways through which the program could have an effect as well. These pathways include interactions with the NNS program, indirect program influence through community members and extended family, and indirect pathways from one child-level outcome to another (e.g., better-nourished children developing better cognitively).

To measure the impact of the ECS program on child development outcomes, we administered several high-quality child assessments to the children in our sample. These included the cognitive and language domains of the Bayley Scales of Infant and Toddler Development (Bayley–III), The Wolke behavioral rating scale, and common anthropomorphic measures of physical development: height for age (HAZ), weight for height (WHZ), and weight for age (WAZ).

Baseline Characteristics

Table 1 summarizes the baseline characteristics of our study sample of 2574 children and their mothers. The gender distribution of the children was approximately 50/50 male/female and the children were on average 11.6 months old at baseline (ranging between 3 and 18 months). The large majority of children lived in two-parent households (83 percent) and most of the families were Muslim (86 percent). The average age of the mother in the household was 25 years and she had 6.6 years of education on average. Only about 5 percent of the mothers were employed, and approximately 42 percent of the mothers lived with their mother in law.

Table 1. Baseline Characteristics of the Children and Households

	Control	Treatment
Children Characteristics		
Age in months	11.81	11.34
Gender (Female)	0.49	0.47
Household Characteristics		
Single parent household	0.17	0.17
Percent Muslim	0.85	0.87
Mother education (years)	6.60	6.62
Mother age (years)	25.70	25.74
Mother employed	0.06	0.05
Household size (persons)	5.94	6.04
Percent with mother-in-law in the household	0.43	0.42

Source: AIR calculations from household survey data.
Note: None of the treatment-control differences in the baseline variables shown were statistically significant.

Program Design, Program Implementation, and Cost

The implementation of the ECS program encountered a number of operational challenges that reduced its fidelity to Save the Children's program model. First, the program was delayed by 4-6 months, which meant that mothers were not exposed to program messages and did not have access to program materials for the full 20 months between baseline and endline. Overall, we found that on average the potential level of exposure to program materials was 12.3 months. Second, as shown in Table 2, almost half of the parents who were assigned to the treatment group did not report receiving the program materials in their home when surveyed at endline. Many of these parents did receive the program materials by visiting the community clinics or were exposed to the program messages at the community clinics or EPI centers or community meetings. However, not all parents visit these clinics or attend such meetings and, as a result, parents in the treatment group who live more remotely or are less connected to their communities were less likely to be exposed to the program at all if they did not receive it through a home visit. Third, and as discussed in Chapter 3, households in the treatment group only recalled receiving on average fewer than 2 sessions identified as "Early Childhood Stimulation." Nonetheless, service providers were trained to deliver the ECS messages as part of their regular activities, so it is plausible that some households may have received ECS counseling without identifying the message as ECS.

Table 2. Program Implementation Summary

	%
Households received…	
Any of the four materials	53%
Households were potentially exposed…	
To program materials (in months)[1]	12.3
Materials were received…	
In a community clinic	51%
In an EPI centre	17%
At home, delivered by FWA	10%
At home, delivered by HA	7%
During growth monitoring checkups	3%
Through a village ECD Campaign	21%
Households used …[1]	
Any of the program materials	97%
Program materials with siblings[2]	54%
Program materials three to seven days a week	95%
Program materials on average (in minutes)[3]	23
Sample size	1250

1. This value was calculated among treatment households that received the program materials.
2. This percentage was calculated among households where the target child had a brother or sister aged 0–60 months.
3. This value represents the number of minutes treatment households spent with the materials each time they used them.
Source: AIR calculations from household survey data.

These implementation problems reflect the challenge of adding a supplemental component onto an existing government infrastructure with no additional incentives, especially considering that the community clinics themselves may have been overstretched and under-resourced in many of the communities in our evaluation. Moreover, lack of coordination among the three service providers, limited supervision of these service providers, and lack of staff compliance with clinics' schedules and household visit expectations also contributed to the observed implementation challenges. Taking advantage of such an existing infrastructure is a cost-effective way to deliver a program like this and may make it feasible in situations where it otherwise would not be, but the lack of a dedicated program infrastructure also threatens implementation fidelity.

However, and as discussed in Chapter 3, treatment group members who did receive the program messages and program materials reported using them extensively. About 97% of the households that received the program materials used them, and approximately 95% reported using them very frequently (3 to 7 days a week). The ECS materials were also used by sample members' spouses and mothers in law, and with other siblings in the household, which may have helped infuse the ECS program into the extended families and communities of sample members.
A detailed analysis of the program cost (using a "cost-ingredient" approach) found that this program was inexpensive to implement. On average, the program costs amounted to $6.84 USD

per child (which translated into 538 Bangladeshi Taka in 2014). Even if we doubled this amount to account for the fact that half the sample did not receive program services at home, the cost would still be less than $14 (or 1,076 Taka) per child for households reporting receiving those home-based services.

Impacts on Parental Knowledge and Parenting Behavior

Table 3 summarizes the ECS program impacts on a knowledge index and a number of parenting behavior outcomes measured at endline. As the table shows, only two of these impact estimates were statistically significant at the 0.05 level. The point estimates for the program effects and the accompanying effect sizes generally favored the treatment group and we found statistically significant effects for the composite indicator that captured the variety of play materials and learning activities and the number of picture books available at home. Hence, while there is no solid evidence that the ECS program affected parental knowledge, there is evidence suggesting that parents in the treatment group engaged in more supportive and stimulating interactions with their children than parents in the control group.

Table 3. Intent-to-Treat Impacts on Early Childhood Stimulation Knowledge and Practices

Intermediate Outcome	Treatment Mean	Control Mean	Program Impact	Std. Error	p-value	Effect Size
Stimulation knowledge scale	29.062	29.105	-0.043	0.217	0.844	-0.007
HOME inventory scale	2.823	2.801	0.022	0.103	0.834	0.016
Family Care Indicators:						
Variety of play materials and learning activities	6.807	6.558	0.249*	0.116	0.035	0.086
Variety of play materials	4.046	3.950	0.096	0.067	0.158	0.064
Variety of learning activities	2.748	2.595	0.153†	0.083	0.070	0.090
Number of picture books	0.755	0.632	0.123*	0.055	0.029	0.102
Number of books	9.206	9.181	0.025	0.293	0.932	0.002
Number of magazines	0.811	0.776	0.035	0.132	0.791	0.009
Sample size	1221	1204				

Source: AIR calculations from AIR-administered household surveys.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.

We used several widely used outcome measures to capture variation in the home environment experienced by children in the treatment and control groups. These measures include a number of parental engagement variables observed during the home visit to collect outcome data and several variables describing the availability of toys and reading materials in the home.

Impacts on Child Development and Anthropometric Measures

Table 4 presents estimates of the impacts of the ECS program on child outcomes. The table is divided into two panels. The top panel includes cognitive and language development outcomes measured by the Bayley test score and the bottom panel includes anthropomorphic outcomes. The pattern of impacts across these two groups of outcomes consistently shows small to modest positive impacts on child development, with effect sizes ranging from 0.08 to 0.14 for the Bayley outcomes, and from 0 to 0.18 for the anthropometric outcomes. Thus, it appears that in spite of the lack of substantial impacts on parental knowledge and other parenting outcomes, the ECS program benefited children and positively impacted their development outcomes across all the domains we measured, including the children's physical development. The effect sizes we found are modest and they were smaller than those typically found in other early stimulation program evaluations (Baker-Henningham & Boo, 2010). However, most of the programs found in the literature were implemented on a smaller scale with greater fidelity and higher cost per child.

Table 4. Intent-to-Treat Impacts on Child Development Outcomes and Anthropometric Measures

	Treatment Mean	Control Mean	Program Impact	Std. Error	p-value	Effect Size
Child Development Outcome						
Cognitive	85.531	84.394	1.137**	0.379	0.004	0.076
Language	90.505	88.307	2.198**	0.509	0.000	0.137
Anthropometric Outcome						
Weight for age, WAZ (***z***-score)	-1.504	-1.638	0.134*	0.024	0.000	0.108
Percent underweight (2 ***z***-scores)	0.295	0.321	-0.026*	0.015	0.072	-0.067
Percent severely underweight	0.049	0.078	-0.029**	0.007	0.000	-0.141
Weight for height, WHZ (***z***-score)	-0.499	-0.726	0.227**	0.042	0.000	0.180
Percent wasted (2 ***z***-scores)	0.062	0.106	-0.044**	0.008	0.000	-0.174
Percent severely wasted (3 ***z***-scores)	0.001	0.015	-0.014**	0.004	0.003	-0.104
Height for age, HAZ (***z***-score)	-2.058	-2.032	-0.026	0.032	0.415	-0.022
Percent stunted (2 ***z***-scores)	0.541	0.521	0.020	0.015	0.184	0.045
Percent severely stunted (3 ***z***-scores)	0.204	0.196	0.008	0.012	0.507	0.028
Sample size[a]	1221	1204				

Source: AIR calculations from AIR-administered anthropometric measurement.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] The sample size varies slightly between outcomes.

In addition to these program effects on children's language and cognitive development, we found modest favorable impacts on several of the subscales of the Wolke Behavioral Rating Scale (Approach, Emotion and Activity).

Table 5. Impacts on Wolke Behavioral Rating Scales

Wolke Scale	Treatment Mean	Control Mean	Program Impact	Std. Error	p-value	Effect Size
Approach	5.014	4.822	0.192**	0.070	0.007	0.129
Emotion	5.309	5.151	0.158**	0.075	0.037	0.112
Activity	3.538	3.349	0.189**	0.079	0.019	0.126
Cooperation	5.241	5.184	0.057	0.072	0.426	0.042
Vocalization	4.442	4.354	0.088	0.083	0.290	0.050
Sample size	1220	1204				

Source: AIR calculations from AIR-administered household surveys and Wolke behavioral rating tests.

In addition to the ITT impacts presented thus far, we also estimated treatment-on-the-treated (TOT) impacts, which examined how the program affected families who reported actually receiving program services. The results of these TOT analyses, which are detailed in Chapter 5, are consistent with the results presented in Tables 3-5 above, except that both the point estimates and the effect sizes were almost twice as large (as expected, given that only half of the sample reported substantial program participation).

Discussion and Conclusions

This evaluation assessed both the feasibility and the impacts of scaling up Save the Children's early stimulation and parent education program in three different areas in Bangladesh. Building on the existing government infrastructure, the program was able to reach a large number of families at relatively low cost. This approach carried great promise, both in terms of improving child and family outcomes and in terms of scalability beyond these sites.

The evaluation examined both the implementation and the outcomes of the ECS program in detail. It included a large sample of families and a robust set of parent and child outcomes. Its implementation component included six rounds of monitoring visits and a variety of interviews and focus groups with families and other stakeholders. Randomization was successful and sample retention was high. Because of this, we are confident of the following findings:

1. Implementation of the program did not fully adhere to Save the Children's program model. Delays and logistical challenges that arose in part from working with government workers who did not receive supplemental compensation made the program experience less intensive for many of the families who were assigned to receive it. However, many of those who did not receive program messages or materials from home visitors did manage to access them in other ways. Also, families who did receive the program intervention as intended,

remembered it, and used the materials frequently.

2. The program did not meaningfully change the parenting knowledge and home environment outcomes we measured. This may reflect the implementation challenges we observed or it may reflect the evaluation's failure to measure these outcomes precisely enough using self-reported surveys. However, we found some evidence that the program helped parents engage in more supportive and stimulating interactions with their children.

3. The program improved child outcomes across a broad range of developmental categories. Impacts on anthropomorphic outcomes were similar in size and direction as those found for the cognitive and social-emotional measures the program targeted. This, combined with the modest impacts on parenting practices, suggests that at least part of the effect may be due to the program enhancing the effectiveness of the NNS program to which it was connected. The NNS addressed malnutrition and mainstream nutrition by promoting appropriate complementary feeding practices, nutrition counseling, screening for malnutrition, and referral to healthcare facilities for treatment. We found that households in the treatment group were more likely to take up the NNS program than households in the control group, as demonstrated by the availability of the Growth Development Card and the number of growth monitoring checkups. Households in the treatment group also were more likely to give animal protein to their child than households in the control group. This evidence suggests that the add-on early stimulation program strengthened the uptake of the National Nutrition Program, rather than competing with the program for parents' attention.

In conclusion, the Save the Children program significantly improved child development outcomes across several dimensions even though its implementation did not fully adhere to the original program design. Combined with the low implementation cost of less than $7 USD per child, this makes the program a good bet for further development and adoption, especially if the implementation challenges can be overcome. The apparent positive interaction between the ECS and NNS programs suggests that nutritional programs should be encouraged to focus more broadly on all aspects of child development.

1. Introduction

This report describes our findings from a three-year evaluation of Save the Children's Early Childhood Stimulation Program (ECS). Save the Children designed this program to supplement Bangladesh's National Nutrition Services (NNS) Program in order to support parents of young children in their parenting practices; increase parents' and children's access to materials to stimulate their development; and increase awareness among parents, families, and communities about the importance of early stimulation for young children.

Our evaluation—which was funded by the World Bank's Strategic Impact Evaluation Fund (SIEF)—is a randomized control trial, in which 78 community clinics in the regions of Satkania, Muladi, and Kulaura in Bangladesh were randomly assigned to either receive the ECS program (the treatment group) or participate in a "business as usual" control group. As demonstrated later in this report, randomization was successful, and the only systematic difference between treatment and control communities was access to the program. As a result, the impact estimates presented in this report are unbiased estimates of the effects of the ECS program (as implemented in Bangladesh) on the families and children in our evaluation.

The findings presented in this report are based on two waves of outcome data collected directly from participating families (20 months apart on average) and detailed implementation data collected from service providers, community stakeholders, and participating families. Key outcomes include a range of outcomes measuring parenting practices and the home environment, as well as direct assessments of children's cognitive development and a range of anthropomorphic outcomes. Baseline data were collected between November 2013 and January 2014 from 2,574 households and children. The Early Childhood Stimulation Program commenced implementation activities in June 2014, almost five months after baseline data had been collected. Endline data collection occurred between September and December of 2015. We found 2,486 (96.6 percent) of the baseline participants at follow-up.

As detailed below, our evaluation found that the ECS program improved language, social-emotional, and anthropomorphic outcomes for the children in our study. These impacts were modest in size but statistically and economically significant. Given the low net cost of delivering the program (detailed below), we conclude that this is a cost-effective intervention that holds promise for scale-up and replication.

Background

Improving children's early cognitive skills has become a major focus of social services and international development agencies all over the world, and widely cited research published in the past 20 years has demonstrated that programs that support the early cognitive development of infants and toddlers deliver sustained benefits. Even modest impacts on children's cognitive development in the early years have been shown to result in long-term educational and economic benefits. Longitudinal research studies—along with research on the rapid development of young children's brains—have highlighted the critical importance of cognitive development in the first

five years of life for future educational and socioeconomic achievement (Barnett, 1995; Duncan et al., 2007; Nores & Barnett, 2010; Engle et al., 2011).

Initially, most evaluation research in this area focused on interventions designed to improve children's physical health and development, mainly by improving child nutrition (e.g., support for breastfeeding) and minimizing children's exposure to preventable disease (e.g., mosquito nets). These health and nutrition-focused interventions can often be delivered at relatively low cost, and they continue to be among the most effective, impactful, and efficient vehicles for improving long-term child and family well-being, especially in low-income countries (Baker-Henningham & Boo, 2010; Engle et al., 2011).

A path-breaking study of an early stimulation intervention in Jamaica demonstrated that it was possible to further improve the developmental outcomes of young children by explicitly targeting the mother's parenting practices and the child's access to cognitively stimulating toys and materials (Grantham-McGregor et al., 1997). Recent long-term, follow-up research on sample members in this Jamaica evaluation found that the positive impacts on early cognitive development persisted, multiplied over time, and translated into better educational and labor market outcomes for participating children, which were evident up to 15–20 years after the initial program ended (Gertler et al., 2014). These positive results have spurred policymakers to invest more resources in supporting parenting and early stimulation, and to replicate some of the key features of the Jamaica program in other settings (Velez et al., 2014). Unfortunately, intensive parent education programs like the exemplary Jamaica program are difficult to scale up in countries with limited budgets for education and child development. This is especially true in countries like Bangladesh, where many young children continue to suffer from chronic malnutrition and exposure to preventable diseases. Save the Children's program was designed to address this challenge.

In light of the limited program resources in countries such as Bangladesh, a popular policy response to these promising findings has been to incorporate parenting advice and resources into existing programs serving low-income and rural communities (Aboud & Singla, 2012). Many countries, including Bangladesh, have well-developed child health and nutrition programs that include extensive infrastructures of community health care centers and community outreach workers. Typically, these community outreach workers make regular visits to the mothers of infants and toddlers to monitor their children's physical health and growth, and to provide nutritional advice. If these workers can be trained and encouraged to also provide advice about cognitively stimulating parenting, the added costs of providing such services will be relatively low, allowing such beneficial services to be scaled up considerably.

Although theoretically promising, many researchers and policymakers have expressed concerns about extending existing nutritional and health programs in this manner. As discussed below, the research evidence about "add-on" early stimulation interventions has been mixed, and there are concerns that messages encouraging stimulating parenting may detract from the nutritional and health messages that are the first priorities of these workers. (That is, even if the parenting advice benefits the children, those benefits could be cancelled out if the underlying nutritional message is compromised as a result.) To capture these potential "opportunity costs" of the program, we included a number of widely used anthropomorphic measures in our outcome analysis, which are carefully documented in this report.

Nutrition interventions in low-income countries. A large body of research in low- and middle-income countries has found that adequate nutrition in infancy and early childhood is a critical foundation for child physical and cognitive development (Black et al., 2008; Engle & Huffman, 2010; Grantham-McGregor, 1995; Grantham-McGregor & Ani, 2001; Khanam, Nghiem, & Rahman, 2011; Victora et al., 2008). Interventions designed to improve family nutrition and dietary diversity are widespread in low-income countries, and there is strong evidence that they improve both children's physical growth outcomes and their cognitive skills (Bhutta et al., 2008). Studies of nutrition programs in Bangladesh have also found positive effects on children's physical and cognitive development (Roy et al., 2005, 2007).

Evidence on child-stimulation interventions. Although adequate nutrition is a necessary precondition for healthy physical and cognitive development in young children, stimulation in infancy and early childhood is important for optimal brain development (Avants et al., 2012; Farah et al., 2008; Shonkoff & Phillips, 2000; Walker et al., 2011; Walker, 2010). A review of child development risk factors for children in developing countries identified low levels of cognitive stimulation in infancy as one of the most salient risk factors (Walker et al., 2007a). Observational studies conducted in the United States and in low-income countries found that parent stimulation is strongly associated with children's later cognitive skills (Barros, Matijasevich, Santos, & Halpern, 2010; Bradley, Corwyn, Burchinal, McAdoo, & Coll, 2001; Lugo-Gil & Tamis-LeMonda, 2008; McLoyd, 1998; Shonkoff & Phillips, 2000; Zaslow et al., 2006).

Several parenting interventions have been implemented in low-income countries, including Bangladesh, to encourage parents to engage in supportive and stimulating interactions with their children. Baker-Henningham and Boo (2010) conducted a systematic review of 26 rigorous efficacy studies of parenting interventions in low- and middle-income countries that were designed to promote development of children under the age of four through stimulation. Almost all of the reviewed studies found that early stimulation programs had positive effects on child developmental outcomes (20 out of the 21 studies that measured this outcome), and most found that the programs had positive effects on parenting practices as well (14 out of the 16 that measured this outcome). The review found that the most disadvantaged children tended to benefit most from these interventions. The effect sizes documented in this review ranged from 0.26 to 0.39. A review by Walker et al. (2011) also found evidence that stimulation interventions had positive effects on child developmental outcomes across a number of studies. It should be noted, however, that Baker-Henningham and Boo (2010) cautioned that the studies they reviewed were small-scale efficacy studies with intensive training and implementation support, and that the findings from such studies might not generalize to scaled-up programs.

A number of Bangladeshi parenting interventions (including two that were included in the 2010 Baker-Henningham and Boo review) have had positive effects on child development. For instance, Hamadani et al. (2006) randomly assigned communities to receive a stimulation-focused parenting intervention with regular group meetings and regular home visits to mothers, and found positive effects on children's cognitive skills and mothers' knowledge about parenting. Another study of similar parenting programs targeted at severely malnourished Bangladeshi children found that the parenting intervention had positive effects on both child cognitive outcomes and child weight for age, compared to a time-lagged control group of malnourished children in the same location the year before the intervention (Nahar et al., 2009).

Nahar et al. (2012b) also found positive impacts on child-rearing practices and the home environment in a randomized controlled trial.

Another recent study in Bangladesh focused directly on a version of the program evaluated in our study (Aboud & Singla, 2012). It randomly assigned four unions (communities) to one of three intervention groups or a control group. In the intervention groups, home visitors with different types of training and qualifications (peer educators, government-trained assistants, or government-trained assistants with enhanced training) delivered Save the Children's parenting messages to mothers of young children. Save the Children collected outcome data related to parenting practices, child health and nutrition, and child developmental status, and reported that the parenting program had positive effects on child cognitive and language outcomes, as well as a variety of parenting practices. However, the study was statistically underpowered, so its results were not conclusive. Our evaluation examines a scaled-up version of this program (with one treatment group and one control group) and a much larger sample of communities to ensure adequate statistical power.

The potential benefits of combining nutritional and parental stimulation interventions. As discussed, there is evidence to suggest that both nutrition interventions and child stimulation interventions can have positive effects on child development, and implementing these two types of interventions together seems like a logical next step (Black et al., 2008; Engle & Huffman, 2010; Naudeau, 2009). Separately, these two types of intervention target separate risk factors: Nutrition interventions aim to ensure that children experience optimal biological conditions for both physical and cognitive development; and stimulation interventions aim to ensure that children develop neurological pathways and learn skills to support their cognitive development and language. The potential value of combining the two interventions is likely to be large, give that they target separate risk factors. Indeed, a number of efficacy studies of combined nutrition and stimulation interventions in developing countries found that stimulation and nutrition interventions had significant positive effects on child developmental outcomes (Aboud & Akhter, 2011; Grantham-McGregor, Walker, Chang, & Powell, 1997; Vazir et al., 2013; Watanabe, Flores, Fujiwara, & Thi Huong Tran, 2005). However, none of these programs have been implemented at the scale (and with the low per-participant cost) of Save the Children's program in Bangladesh.

Child development in Bangladesh. Two influential Lancet series—published in 2007 (Grantham-McGregor et al., 2007; Walker et al., 2007; Engle et al., 2007) and 2011 (Walker et al., 2011; Engle et al., 2011)—identified factors that prevented over 200 million children under the age of five in low- and middle-income countries from attaining their full potential. Among these, the authors identified early stimulation as one of the most important factors. In Bangladesh, like other low-income countries, most children receive little maternal stimulation, and a majority of children in poorer communities do not have any toys or stimulation activities (Hamadani et al., 2010). Policymakers and advocates in Bangladesh are increasingly aware of this situation, and ECD has attracted a lot of attention in Bangladesh in recent decades. Several organizations in the country, as well as the government, have actively taken up the issue and are working to promote ECD throughout the country.[1]

[1] Appendix A includes a comprehensive overview of ECD programs that are currently operating in Bangladesh.

A recent Save the Children effort in Bangladesh involved a 10-month parenting program for mothers and children in rural districts, where a combination of group meetings and home visits was used to deliver messages on hygiene, responsive feeding, play, communication, gentle discipline, and nutritious foods using an illustrative card. Children between 4 and 14 months were enrolled and assessed for their growth and development before and after the intervention. Mothers were interviewed about their parenting practices, including preventive health practices, dietary diversity, home stimulation, and knowledge of developmental milestones. Maternal depressive symptoms were also assessed. The evaluation found that the program had positive effects on the Bayley subtests of child development (introduced in more detail below), and on parenting practices related to stimulation and knowledge of developmental milestones.

Save the Children also developed the predecessor of the Early Childhood Stimulation Program. Local paraprofessionals operated this rural parenting program, which included group meetings and home visits that addressed nutrition, hygiene, responsive feeding, discipline, play, and communication. The evaluation included 463 children aged between 4 and 14 months at enrollment. The program improved parenting practices related to stimulation and knowledge of development milestones, as well as child development outcomes (Aboud et al., 2013). The benefits observed in this study led Save the Children to launch the Early Childhood Stimulation Program (and its evaluation), with some modifications designed to make the program scalable to more communities and larger numbers of families.

The National Nutrition Services. The Early Childhood Stimulation Program evaluated in this study supplemented Bangladesh's NNS Program, which attempts to address malnutrition and mainstream nutrition in government services through the development of a package of interventions. A key component is the community-based promotion of positive nutrition practices, delivered through various service delivery points such as community clinics, family welfare centers, satellite clinics, Expanded Program of Immunization (EPI) centers, and upazila health complexes. The nutrition practices that are promoted include exclusive breastfeeding for children up to six months, appropriate complementary feeding practices for children from six months to two years of age, screening for malnutrition, and appropriate referral to healthcare facilities for treatment. Health workers are also expected to provide micro-nutrient supplements (vitamin A, iron, folate, zinc, and calcium) and de-worming medication to prevent malnutrition. Complicated cases of severe acute malnutrition are to be treated in upazila hospitals. Every month, community clinics host growth-monitoring sessions for children under five and facilitate referrals to union facilities (and, if needed, upazila facilities), where trained health workers screen for malnutrition for all children under the age of five and provide mothers with nutrition counseling (primarily infant young child feeding counseling). An important aim of the package is to establish an effective referral system for the prevention and treatment of maternal and child malnutrition. For more detail about NNS messages, see Appendix A.

The Health Division of Save the Children signed a memorandum of understanding (MOU) with the NNS Program and the Revitalization of Community Health Care Initiative in Bangladesh (RCHCIB) to implement the Tackling Childhood Malnutrition (TCM) Project in Muladi, Satkania, and Kulaura upazilas from November 2012. The TCM project aimed to facilitate the scale-up of the NNS Program through several approaches, including training service providers and health workers and providing support to community volunteers for increasing access to key

nutrition services for pregnant and lactating women (PLW) and children under the age of five. The project ended in December 2015.

A study conducted to assess the effectiveness of the TCM approaches used to reduce malnutrition in pilot communities found that the program was successful at encouraging the community to participate, making the NNS Program more accessible in community clinics, and decentralizing key nutrition services at the community level. The study also suggested that the TCM Program provided advocacy support for including project activities in the NNS Program for the promotion of nutrition nationally (forthcoming, personal communication). Moreover, the study suggested that in pilot areas, screening for childhood malnutrition, distributing micronutrients to pregnant women and lactating mothers, and providing counseling on malnutrition (as well as on infant and young child feeding) increased as a result of the project.

Study Location and Context

Bangladesh is divided into seven major administrative regions or divisions. These divisions are divided into districts, which are subdivided into subdistricts or upazilas. Upazilas are subdivided into unions, and community clinics are located within these unions. The study took place in three divisions, three districts, and three upazilas in Bangladesh:

- Division of Barisal, district of Barisal, upazila of Muladi: 4 unions, 10 community clinics.
- Division of Chittagong, district of Chittagong, upazila of Satkania: 16 unions, 37 community clinics.
- Division of Sylhet, district of Moulvibazar, upazila of Kulaura: 10 unions, 31 community clinics.

Within these three upazilas, the study was carried out in 30 unions with at least two community clinics, totaling 78 community clinics.[2] These upazilas were selected to overlap with the NNS program which was already planned to be piloted in these regions.

The division of Sylhet lags behind the other two divisions (as well as the country's average) in terms of child mortality, and severe wasting and severe stunting prevalence is higher in Sylhet's district of Moulvibazar than in the other two study districts and the country in general. The overall nutrition situation is also worst in the Moulvibazar district. According to an early childhood development (ECD) indicator that monitors a child's progress in several domains (including physical movement and numeracy and literacy), 63.9 percent of children age 36-59 months are developmentally on track in Bangladesh[3] (MICS, 2015). The Barisal division is performing better than the national average (72 percent), but the two other divisions fall short of this national average. The following section provides context for the study using indicators relevant to the evaluation.

[2] The analytical sample of households and children is distributed as followed across the three upazilas: 330 households in Muladi, 1023 in Satkania, and 1221 in Kulaura.
[3] Percentage of children age 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning.

Mothers' education and socioeconomic status. Positive parenting practices are closely associated with mothers' education and socioeconomic status, as evidenced in the Multi-Indicator Cluster Survey (MICS, 2015). Across the three study divisions, mothers' education and socioeconomic status varies. For instance, the average literacy of young women is considerably better in the Barisal division, and the primary school completion rate is roughly similar in all divisions (and is similar to the national average). In terms of both male and female secondary school completion rates, the Sylhet division lags behind the national average and the other study divisions, while the Barisal division performs above the national average in both areas. Female empowerment—measured by the women empowerment index, which assesses the extent to which women make their own or joint decisions regarding their own health care, household purchases, child health care, and visits to family or relatives—is lower in the Sylhet division than the Barisal and Chittagong divisions, and lower than the national average.

Birth registration of children under five years of age. Registering children at birth (through service providers at the local level) has been a legal requirement in Bangladesh since 2004. However, according to UNICEF's 2012–13 Multi-Indicator Cluster Survey (MICS, 2015), only 37 percent of children under the age of five are registered with a local authority. Children under the age of five who live in urban areas are more likely to be registered (42.9 percent) than their peers in rural areas (35.5 percent). Birth registration is strongly correlated with mothers' education and household living standards, and knowledge of birth registration requirements varies significantly between urban populations (72 percent) and rural populations (57.9 percent), as well as between divisions (35 percent in Sylhet, 42 percent in Chittagong, and 33 percent in Barisal, all of which are below the national average). In the three study districts, the percentages of children under the age of five whose births have been registered are 29.5 percent in Barisal, 34.1 percent in Chittagong, and 27.4 percent in Moulvibazar. The survey also found that registration becomes more likely as children grow older: Birth registration is lowest among children aged 0–11 months (23.8%), and highest among children aged 48–59 months (50.5%). The presence of a skilled attendant at birth is important contextual information. Across Bangladesh, 43.5 percent of deliveries occur in the presence of a skilled attendant at child delivery, compared to 32.0 percent of deliveries in the district of Barisal, 57.3 percent in the district of Chittagong, and 29.5 percent of deliveries in the district of Moulvibazar.

Infant and child mortality. According to the 2012–13 MICS, last updated in 2015, the infant mortality rate in Bangladesh is 46, with some regional variation. In the Barisal division and the Chittagong division, infant mortality rates are below the national rate (38 and 36, respectively). In the Sylhet division, the infant mortality rate is above the national rate (59). Bangladesh's under-five mortality rate is 58, and the corresponding rates in the divisions of Barisal, Chittagong, and Sylhet are 47, 45, and 80, respectively. As these figures demonstrate, Sylhet lags far behind the other divisions in this area. Both the infant mortality rate and the under-five mortality rate are inversely associated with the mother's level of education and household wealth. For example, the under-five mortality rate is 35 if mothers have completed secondary education or above, 71 if mothers have completed primary education, and 80 if mothers have no education. The richer a household is, the lower the mortality rate.

Nutrition indicators. New-born weight can be a good indicator of the mother's health and nutritional status, but it is also a predictor of a child's survival, growth, and long-term health and psychosocial development. According to the 2012–13 MICS, 26 percent of infants in the country

have a low birth weight (below 2,500 grams). Across the three study districts, the percentages of infants with low birth rates vary. The districts of Barisal and Moulvibazar have percentages similar to the national average: 28.6 percent of infants in Barisal, and 28.9 percent in Moulvibazar. The percentage is higher in the district of Chittagong (36.9 percent).

At the national level, 56 percent of infants under the age of six months are exclusively breastfed in Bangladesh. The study districts exceed this: 63.3 percent of infants under the age of six months are exclusively breastfed in the district of Barisal, as are 75.5 percent of infants under six months in the district of Chittagong and 61.7 percent of infants under six months in the district of Moulvibazar.

Approximately 32 percent of children in Bangladesh are moderately or severely underweight, compared with 35.2 percent in the division of Barisal, 32.2 percent in the division of Chittagong, and 39.7 percent in the division Sylhet. In the study districts, the percent of children who are underweight is 32.3 (6.6 severely) in Barisal, 28.5 (7.3) in Chittagong, and 44.1 (14.5) in Moulvibazar. The prevalence of moderate (and severe) stunting in Bangladesh is 42.0 (16.4), compared to 36.2 (10.1) in the division of Barisal, 37.4 (13.9) in the division of Chittagong, and 47.0 (15.8) in the division of Sylhet. The prevalence of wasting (severe wasting) in the country is 9.6 (1.6), compared to 13.1 (1.7) in the district of Barisal, 10.3 (2.5) in the district of Chittagong, and 19.8 (4.4) in the district of Moulvibazar. The prevalence of severe wasting and severe stunting is higher in Moulvibazar than in the other districts and the country-level prevalence. Overall nutrition is also worst in the Moulvibazar district.

Child development. The 2015 MICS constructed an early childhood development index (using 2012–13 survey data) that reflects selected milestones children are expected to achieve by the age of three or four if they are developmentally on track. The index measures four domains: literacy numeracy (e.g., the child can identify ten letters of the alphabet); physical development (e.g., the child is well enough to play, and he or she can pick up a small object with two fingers); social emotional development (e.g., the child gets along with other children, does not get distracted easily, does not become aggressive toward other children); and learning (e.g., the child recognizes the numbers 1–10, can read four popular words, can follow simple direction to do something correctly). According to this index, 63.9 percent of children age 36-59 months are developmentally on track in Bangladesh. In Moulvibazar, the early childhood developmental index is 53.0, which is close to Sylhet's division average of 54.0. The Barisal district is doing much better, with an early childhood development index of 77.2, compared to the Barisal division, other divisions (e.g., Chittagong, which has an index of 54.4), and the rest of the country.

As reported in the 2015 MICS, only 13.4 percent of children aged 36–59 months receive early childhood education in Bangladesh. There is no rural–urban difference, but regional variation does exist: in the Barisal division, 18.4 percentage of children aged 36–59 months receive early childhood education (higher than national average); in Chittagong, 11.7 percent receive early childhood education; and in Sylhet, 10.5 percent receive early childhood education. Of the study districts, Barisal has the highest percentage of children aged 36 to 59 months receiving early childhood education (35.3), compared to 20.1 percent in Chittagong and 11 percent in Moulvibazar.

In Bangladesh, 10.1 percent of children receive support from their fathers and 40.8 percent receive support from their mothers for learning activities, which includes father/mother involvement in at least four of the following activities: reading books to the child or looking at picture books together; telling stories; singing songs to the child; taking the child outside the home, compound, or yard; playing with the child; and spending time with the child naming, counting, or drawing things (MICS 2015). In the district of Chittagong, 59.8 percent of children receive support from their mothers for learning activities, and 13.4 percent receive support from their fathers. In the district of Barisal, children receive less parental support for learning: 28.7 percent receive support from their mothers, and close to zero receive support from their fathers. (Barisal does perform better on the early childhood development index and access to playthings, as 72.3 percent of children in the district have access to playthings). In the district of Moulvibazar, 28.9 percent of children receive support from their mothers in learning activities, and 4.6 percent receive support from their fathers.

Positive parenting practice is also important for a child's emotional development. Disciplining a child often relies on physical and verbal intimidation, which may have harmful consequences and a long-term impact on a child's life. According to the 2015 MICS, approximately 71 percent of children aged one to two years old and 85 percent of children aged three to four years old have experienced some form of violent disciplining method. Among children aged one to two years old, 61 percent have experienced psychological aggression and 58 percent have experienced physical punishment. Among children aged three to four years old, 77.3 percent have experienced psychological aggression and 73.6 percent have experienced physical punishment. Approximately 33 percent of MICS respondents believed that children need to be physically punished, with some regional variation: 51.3 percent believed in the need for physical punishment in Barisal, 35.2 percent in Chittagong, and 37.3 percent in Sylhet. This attitude is associated with the respondent's level of education and economic condition.

Socioeconomic status and education. In the division of Barisal, 21.1 percent of the population fall in the lowest wealth quintile, compared to 14.5 percent in Chittagong and 29.4 percent in Sylhet. Bangladesh's Gini coefficient (which measures inequality) is 24.32 in urban areas and 37.8 percent in rural areas. The Gini coefficients for the study divisions are 28.55 for Barisal, 35.93 for Chittagong, and 31.04 for Sylhet (BDHS 2014).

At the national level, 82 percent of young women aged 15–24 years are literate. This percentage is higher in the study districts: 95 percent in Barisal, 83.7 percent in Chittagong, and 74.4 percent in Moulvibazar. The national primary school completion rate is 79.5 percent, with variations across divisions: 79.5 percent in Barisal, 80.2 percent in Chittagong, 71.2 percent in Dhaka, 82.4 percent in Khulna, 92.5 percent in Rajshahi, 87.4 percent in Rangpur, and 78.5 percent in Sylhet. The primary school completion rates in the study districts are close to their respective divisional averages: 78.1 percent in Barisal, 80.2 percent in Chittagong, and 103.9 percent in Moulvibazar. According to the BDHS (2014), 2.7 percent of males complete secondary education in the division of Sylhet, which lags behind the national average (6 percent) and the percentages in the divisions of Barisal (7.4 percent) and Chittagong (5.7 percent). The situation is similar in terms of female educational achievement, with 2.9 percent of females completing secondary education in Sylhet, compared to 8.8 percent in Barisal, 6.3 percent in Chittagong, and a national average of 5.8 percent.

The percentage of households using improved drinking water sources—another indicator of socioeconomic status—is much higher in the district of Moulvibazar (98.9 percent) than Barisal (41.8 percent), Chittagong (50.3 percent), and the national average (55.9 percent).

Women's health and empowerment. In the three study divisions, the percentage of women aged 15–49 with a healthy body mass index—57.9 percent, 56.7 percent, and 55 percent—is similar to the national average (51.4 percent in urban areas and 60.1 percent in rural areas). The percentage of women who give birth before the age of 18 is higher in the division of Barisal (26 percent) than the national average (24.4 percent) and the averages in Chittagong (9.3 percent) and Sylhet (15.3 percent). The women empowerment index—which measures the extent to which women make their own or joint decisions about their own health care, household purchases, child health care, and visits to family or relatives—is lower in the division of Sylhet (32.7) than in Barisal (36.3) and Chittagong (48.2), and is lower than the national average (46.8 and 42.3, respectively, in urban and rural areas).

Objectives of This Evaluation

This evaluation has four main objectives. The first objective is to document the impact of the Early Childhood Stimulation Program on children's cognitive and language development, children's anthropometric outcomes, and mothers' parenting knowledge and behaviors.

The second objective is to build understanding about the intervention process by describing the mechanism through which the program affects child outcomes—that is, to describe the dynamic relationships between mothers' knowledge, mothers' behaviors, and child development outcomes, and to examine the fidelity with which the program can be implemented (namely the delivery of services and outreach by health workers).

The third objective is to provide information to the Bangladesh government about the scalability of the program (if it is found to be effective). This includes estimating the benefits of the intervention relative to its costs in order to inform national and international policy and program development, and investigating the potential of scaling the program using the NNS platform.

The fourth objective is to build local capacity and inform policy by using impact evaluation techniques in close collaboration with the government of Bangladesh, Save the Children, and national-level research and program institutions. Our goal throughout this project has been to reach local networks of subject matter experts through our technical advisory board to inform national-level policy and program changes affecting young children in Bangladesh. The study also included outreach activities, such as producing and disseminating newsletters in both English and Bengali and setting up a project website.[4]

Organization of This Report

Following this introduction, Chapter 2 briefly describes the evaluation methodology and outcome measures. Chapter 3 describes the intervention and its implementation, and Chapter 4 describes the study sample and demonstrates the baseline equivalence of the research groups.

[4] http://www.air.org/project/evaluating-early-childhood-stimulation-program-bangladesh

Chapter 5 presents the impacts of the program (including a cost-effectiveness analysis), and Chapter 6 concludes with policy lessons and recommendations.

2. Impact Evaluation Methodology

Research Questions

Five research questions guided the evaluation:

1. What is the impact of the Early Childhood Stimulation Program (delivered with the National Nutrition Program) on children's cognitive development outcomes?
2. What is the impact of the Early Childhood Stimulation Program on children's anthropometric outcomes?
3. What is the impact of the Early Childhood Stimulation Program on mothers' parenting behaviors?
4. What are the benefits of the Early Childhood Stimulation Program relative to the program's cost?
5. What is the mechanism through which the Early Childhood Stimulation Program appears to affect the outcomes of interest?
    a. What is the impact of Save the Children's training on the service delivery and outreach of health workers?
    b. Did service providers deliver the program as intended?
    c. What is the impact of the Early Childhood Stimulation Program on mothers' knowledge of early childhood practices?

Research Design

This evaluation used a mixed-methods, cluster-randomized control trial (RCT), in which community clinics and their catchment areas were randomly assigned to either receive the Early Childhood Stimulation Program or not. To increase geographical comparability, randomization was conducted within the same union (or administrative unit). Therefore, within a union, at least two community clinics were included in the study sample. In total, 78 community clinics were randomized to the treatment or control condition (with 39 allocated to each condition).[5]

We measured impacts by collecting endline data on individual children and their families approximately two years after random assignment. To maximize statistical precision, we included baseline versions of the outcome data and other baseline covariates as control variables in the impact analysis.

Randomization of Community Clinics

AIR performed the randomization of the community clinics on January 31, 2014, after baseline data had been collected. AIR and its partners decided that it would be most efficient for AIR to

[5] Appendix C presents the randomization procedure by upazila and union.

perform the random assignment of treatment and control status using Stata software. In the interest of transparency (and to familiarize officials and field-level health workers with the process), a brief description of the randomization rules and procedures was provided at the launch ceremony on March 10, 2014, when Save the Children introduced the program to key stakeholders. Save the Children was provided with the Stata syntax file, as well as the resulting data file with the assignments in Excel. Appendix B presents the randomization results.

Sampling of Households

The study sample frame was generated from community clinic health assistant records, which had the advantage of being the centralized government document of record containing the population frame for all households with children under five years of age. The health assistant dataset included data for all three upazilas of interest. Of a total of 41 unions located in the three upazilas, 11 unions were excluded from the sampling frame. Six of these had incomplete data,[6] and five were excluded because they had only one community clinic and the study design required each union to have at least two clinics. The final sample included 78 community clinics, located in 30 unions.[7]

Within the selected unions and community clinics, eligible households included those with children aged between 3 and 18 months who resided in selected community clinics' catchment areas during the baseline data collection period (November 2013–January 2014).[8] We randomly sampled 33 households from each community clinic's catchment area to participate in the study. The sample was restricted to households with children aged three months or older because the main developmental assessment tool chosen for the evaluation (the Bayley–III; Bayley, 2006) had not been previously validated on children under the age of three months in Bangladesh. Furthermore, because the Bayley–III test is only valid for children up to the age of 42 months, we restricted the upper age limit of participating children to 18 months or younger at the time of baseline data collection in order to collect valid endline data 24 months later.

Replacement

The community clinic health assistant records were not up to date, so the team developed rules for replacing households that were found to be ineligible or "out-of-scope," as well as households that refused to participate. We randomly selected 20 additional replacement households from within each community clinic and included them in a separate list, with each household randomly sorted from 1 to 20. If one of the 33 households originally selected was found to be ineligible or refused to participate, the field interviewer replaced it with the first household from the 20-household replacement list, and continued replacing households in order thereafter.

Overall, the majority of replacements were required because households were identified as ineligible, and only a few replacements were needed for households that refused to participate in

[6] The upazila of Muladi included six of seven unions; the upazila of Satkania included 17 of 17 unions; and the upazila of Kalaura included 13 of 17 unions.
[7] The following five unions were removed from the sample: Bhakshimoil, Bhatara, Sharifpur, Batamara, and Dhemsha.
[8] The team used a reference date of October 21, 2013, to calculate the age (in months) of the target children.

the study (N = 39, or 1.5 percent of the sample). Households were ineligible if they did not fit the target sample description: "Households with children from 3–18 months of age that live in the selected community clinics' catchment areas during the period of the baseline data collection." This included: (a) households that had permanently left the catchment area (N = 300); (b) households with incorrect location information in the birth records (N = 291); (c) households with children who were ineligible due to inaccurate birth dates (N =173); and (d) households that were temporarily absent from the catchment area (N =159). For all 39 cases of refusal, the data collectors completed a non-complier questionnaire that captured some basic characteristics of this group to compare with the compliers.

Table 2.1. Design of the Impact Evaluation

	Treatment	Control	Total
Number of community clinics	39	39	78
Number of households	1287	1287	2574

Outcomes of Interest

The study examined three types of outcome data aligned with the theory of change (described below). We collected data on intermediate outcomes related to parenting knowledge about early childhood stimulation and parenting stimulation practices. These items largely targeted mothers, although other caregivers in the household may have also adopted some of the behaviors promoted by the program. We also collected data on three impact outcomes related to child development and child nutrition. In addition to these key outcomes, we collected data on other outcomes such as dietary diversity and maternal depression.

Intermediate Parenting Outcomes

Parenting stimulation knowledge. To capture information on parenting stimulation knowledge, we adapted and modified some items from the Knowledge of Infant Development Inventory (KIDI; MacPhee, 1981) to suit the local context. Since the sample reliability of this index at baseline was low, we increased the number of knowledge items and replaced items that showed ceiling effects. These changes increased Chronbach's alpha from 0.385 at baseline to 0.677 at endline.

The knowledge questions included in the endline survey asked parents their level of agreement with the following 14 statements: 1) "Fathers are naturally clumsy when it comes to taking care of children", 2) "Parents can teach things to their children by playing with them", 3) "Children understand only words they can say", 4) Singing to child is good for him/her development, 5) "Talking to young children (under 3 years old) is NOT important because they do not understand words yet", 6) "Teaching your child the names of simple objects is good for him/her development, 7) "Children should only play with toys not with household utensils, 8) "Parents can teach things to their children by reading to them, 9) "The more you soothe your crying child by talking to him/her, the more you spoil him/her", 10) "Mothers can teach things to the child while doing household chores, 11) "Young children (under 3 years old) can learn things from

picture books", 12) "Children can learn several things while playing, 13) "Children benefit from books only when they learn how to read, and 14) "Children learn more from the TV than from parents".

Parenting stimulation practices. The household survey included a modified, shortened form of the Home Observation for Measurement of the Environment (HOME) instrument (Caldwell & Bradley, 1984, 2003). This instrument has been used as a proximal outcome measure in a number of other studies, both in the United States and internationally. Items that were not aligned with the program or did not fit the Bangladesh context were excluded from the instrument, along with items for which it was difficult to get close agreement among field interviewers.

At baseline, we included ten HOME questions to capture caregivers' behaviors in terms of promoting child development, organizing a physical and temporal environment at home, and providing opportunities for variety in daily stimulation. We expanded the number of HOME items for the endline survey due to the low reliability of the baseline index. This was only partially successful: the reliability coefficients were 0.339 and 0.579 for the baseline and endline, respectively. The HOME questions included in the endline survey observed parents' level of responsivity and acceptance throughout the household data collection. The HOME gathered the following dimensions for responsivity: 1) "The mother responds verbally to child's talk", 2) "The mother begins talking to interviewer about anything (not only responds to the questions)", 3) "The mother permits child to play freely (includes mess, noise)", 4) "The mother spontaneously praises child without prompt", 5) "After visitor praises child, mother responds positively (e.g. mother nods, smiles, thanks, agrees)". Moreover, the module gathered the following dimensions for mothers' acceptance: 1) "The mother shouts at child", 2) "The mother complains about child, or says child is bad", 3) "The mother hits, pushes, or shakes child during visit", 4) "The mother threatens punishment or criticizes child during visit". Finally, the module inquired whether the mother had to hit or shake the child in the past week to discipline.

The early stimulation program emphasized the importance of playing, which (according to the literature) promotes cognitive development and contributes to a child's ability to understand and develop symbols (Piaget, 1952; Vigotsky, 1978). For this reason, we complemented the HOME index with measures from the Family Care Indicators (FCI). The FCI were developed to measure the quality of children's home environment in large populations and were derived from the HOME instrument. These indicators were piloted with 801 rural Bangladeshi mothers in previous research (Hamadani, 2010).[9] The FCI include items related to the "variety of play and learning activities", which measured whether household members (mother, father or any elder household member over 15 years of age) engaged in playing and learning activities with the participant child in the three days prior to endline data collection. This index includes stimulation activities such as reading books or showing pictured books to the child; telling stories or nursery rhymes; singing songs; playing with toys; and naming, counting, or drawing things with the

[9] In their 2010 study, Hamadani et al. found supporting evidence that FCI were easy to administer to—and could be understood by—Bangladeshi mothers living in extreme poverty, and that they were predictive of child development (as measured by the Bayley test). The indicators were developed by the United Nations Children's Fund (UNICEF) to measure the home environment of young children in developing countries in large population surveys, with an emphasis on items likely to be related to cognitive and language development. Items were adapted from several sources, including the HOME instrument.

child. The FCI also include items related to the "variety of play materials", which measured the variety of play materials the participant child was exposed to in the 30 days prior to endline data collection. This index included toys to make or play music, materials for drawing and writing, toys for pretending games, toys that encourage gross motor movement (e.g., balls, skipping rope), homemade toys (e.g., dolls, cars), and household objects such as bowls or pots. The Cronbach alpha reliability coefficients for the overall FCI index were 0.72 and 0.75 for baseline and endline, respectively. In addition to the FCI, we also created three other variables to capture the availability of reading materials in the house: number of books, number of magazines, and number of picture books in the house.

Child Outcomes

***Bayley outcomes*.** The study collected direct measures of children's cognitive and language development using the adapted Bayley Scales of Infant and Toddler Development, Third Edition (Bayley–III), translated into Bengali. The Bayley instrument is a standardized assessment of infant development that captures a child's level of development in different domains (Bayley, 2006). The Bayley–III is an individually administered instrument that assesses the developmental functioning of infants and young children between the ages of one month and 42 months. The main purpose of the test is to identify children with developmental delay and provide information for intervention planning. The Bayley test has been adapted for Bangladesh and used by our early child development (ECD) experts, who have found plausible and encouraging correlations between the Bayley and children's nutrition, the level of home stimulation, and families' socioeconomic status (e.g., Hamadani et al., 2001). The Bayley test also appears to capture the effects of nutritional and psychosocial interventions in young children in Bangladesh (e.g., Hamadani et al., 2006; Tofail et al., 2013; Nahar et al., 2012). Few standardized developmental assessments have been used with Bangladeshi children, and no published results were located that indicated that assessments other than the Bayley test have been used with this age range. As a result, and on the advice of our ECD experts, the Bayley test was selected as a principal outcome for this study (Frongillo et al., 2014).

We used the following two Bayley domains in our evaluation:

- *Bayley Cognitive Scale*. The cognitive scale includes items that assess sensorimotor development, exploration and manipulation, object relatedness, concept information, memory, and other aspects of cognitive processing.
- *Bayley Language Scale*. The language scale consists of receptive communication and expressive communication subtests. (Receptive and expressive language require different abilities and can develop independently.) The receptive communication subtest includes items that assess preverbal behaviors, vocabulary development, vocabulary related to morphological development, and understanding of morphological markers. This subscale also includes items that measure children's social referencing and verbal comprehension. The expressive communication subscale includes items that assess preverbal communication (such as babbling, gesturing, joint referencing, and turn taking); vocabulary development (such as naming objects, pictures, and attributes); and morpho-syntactic development (such as using two-word utterances, plurals, and the appropriate verb tense).

Raw scores of successfully completed tests were converted to scaled scores according to the child's age, and the latter were converted to composite scores, which represented the "developmental quotient." These norm-referenced scores are used to determine a child's performance relative to typically developing children of the same age (in months). The scaled scores are scaled to a metric with a range of 1 to 19, a mean of 10, and a standard deviation of three. The composite scores are scaled to a metric with a range of 40 to 160, a mean of 100, and a standard deviation of 15.

Around 80 percent of the children were tested at the local community clinic, satellite clinic, or family welfare center. The remaining 20 percent were tested in another suitable private place or at a primary school. We did not test children at their homes because our pilot testing revealed that they typically had insufficient light, lacked suitable testing space, or had too much distracting noise. Since the test must be performed in a quiet and consistent environment with no distractions for the child, the research team (after consulting the advisory group) decided to bring the mother and child to a nearby place where the child could be tested properly.

The Wolke Behavioral Rating Scale. The behavioral rating scale (Wolke et al., 1990) assessed the children's behavior in five areas of behavior: (a) approach, which captured the response of the child to the tester during the first 10 minutes of the test, (b) emotional tone captured how unhappy, happy, fussy or cheerful the child appeared throughout the Bayley testing, (c) activity which looked at how physically active the child was during the testing (gross motor activity), (d) cooperation measured how well the child cooperated and complied with the tester's requests, and (e) vocalization captured non-crying utterances or recognisable utterances embedded in crying e.g. cooing, babbling, consonant sounds or words. After the Bayley test was completed, the tester rated the child's behavior during the Bayley test on those behaviors except for "approach" which was rated immediately after the test. The rating took approximately five minutes to complete. The Wolke ratings have been used in Bangladeshi children (e.g. Tofail et al., 2006, Hamadani et al., 2001) and have shown significant correlation with children's temperament (Baker-Henningham et al. 2009), and Bayley test scores (Hamadani, personal communication). Additionally, the rating have shown to pick up differences in nutritional groups such as low and normal birth weight children (Tofail et al., 2011).

Anthropometric outcomes. To capture the health and nutritional status of the children, we collected the height, weight, and age of all the children in the study to create the anthropometric indices of height for age, weight for height, and weight for age. These anthropometric measures are expressed in terms of *z*-scores or standard deviation scores,[10] which are used to compare the indices with the National Center for Health Statistics and World Health Organization (WHO) International Growth reference population. We present three indicators for each of the anthropometric measures described below: the continuous version were the closer to zero the better the nutrition status, a two dummy indicators that capture the proportion of malnourish and very malnourish children.

[10] The deviation of an individual's value from the median value of a reference population, divided by the standard deviation of the reference population.

- *Height for age (HAZ)*. A child whose HAZ score is more than two standard deviations below the median (-2 SD) of a reference population is considered short for his or her age (or stunted). Stunting reflects the cumulative effect of chronic malnutrition.
- *Weight for height (WHZ).* A child whose WHZ score is more than two standard deviations below (-2 SD) the median value of the National Center for Health Statistics and WHO International Growth reference population for weight for height is considered too thin for his or her height (or wasted). Wasting is a condition that reflects acute or recent nutritional deficit caused by a relatively recent illness or food shortage that induces acute and severe weight loss. Chronic undernutrition or illness can also cause this condition.
- *Weight for age (WAZ)*. A child whose WAZ score is more than two standard deviations below the median value of the National Center for Health Statistics and WHO International Growth reference population for weight for age is considered too thin or short for his or her age (or underweight). WAZ is a composite index of stunting and wasting that is commonly used to monitor nutritional status over time. During early childhood, frequent or prolonged infections and inadequate intake of nutrients (particularly energy, iron, protein, vitamin A, and zinc) may contribute to a child being underweight.

Secondary Outcomes

Mothers' depression. Depression is reported to be a leading cause of women's disease burden, and approximately one third of Bangladeshi mothers suffer from some form of depression. Prevalence of anxiety and depressive symptoms among pregnant women is 18-33 percent (Gausia et al., 2009; Nasreen et al., 2011). Depressed mothers often fail to provide sufficient stimulation and care for their children, and, as such, could compromise the benefits of early stimulation programs. Maternal mental health is identified as an important predictor of child development, particularly in low- and middle-income countries (Patel et al., 2004; Walker et al., 2011; Murray & Cooper, 1997; Black et al., 2007). Mothers' depression was collected through the household questionnaire, using a short version (Andresen et al. 1994) of the Centre for Epidemiological Studies–Depression (CES–D) questionnaire (Radloff, 1977). The Cronbach's alpha reliability coefficients for both the baseline and endline index was very high and equal to 0.86.

Dietary diversity, incidences of illness, hand-washing practices, availability of the growth-development card, and number of growth monitoring check-ups. These are the dimensions that the National Nutrition Program expected to change through its comprehensive nutrition interventions. The collection of data relating to these questions allowed us to assess whether NNS Program interventions affected households in the treatment and control groups in the same way. The household survey included questions about child-feeding practices during the 24 hours preceding the endline data collection, incidences of illness, and hand-washing practices at critical times. We also included questions to approximate household take-up of the NNS Program. The first question asked whether the household had the growth-monitoring card, and the second question asked how many times the child had received a growth-monitoring checkup.

Responsive feeding (RF). Responsive feeding (RF) refers to a reciprocal relationship between the child and his or her mother characterized by the child communicating feelings of hunger and

satiety through verbal or nonverbal cues, followed by an immediate response from the caregiver. The response includes the provision of appropriate and nutritious food in a supportive manner, while maintaining an appropriate feeding environment (Harbron, et al., 2013). The household survey included a battery of questions to capture positive and negative feeding practices.

Appendix C presents a complete list of all the indicators created for this study.

Instruments

AIR, ICDDR,B, and Data International Ltd. worked with Save the Children, the World Bank, and the evaluation advisory board to develop the study instruments. The team developed the data collection instruments by drawing from existing national and international tools aligned with the evaluation's outcomes of interest. The core indicators included child development outcomes, anthropometric measures, and parenting stimulation questions, although the final instrument contained many more relevant indicators. Where possible, indicators were measured using questions and approaches that had already been field tested in Bangladesh to ensure that they were appropriate for the local context and the target populations. We also designed the instruments to be of a manageable length in order to avoid interviewer or respondent fatigue and ensure high-quality data. On average, the final survey instruments took 30 minutes to complete.

Endline data collection tools resembled the instruments used at baseline. As discussed above, some instruments or sections of the instruments were modified based on lessons learned during baseline data collection and through the multiple rounds of monitoring data collection. These modifications intended to increase the contextual validity of the instruments and enrich the knowledge gained with these instruments. Moreover, we added a new section on the household survey to capture program implementation. The non-compliance survey was not administered at endline. Two new measures were added during endline: the Wolke Behavioral Rating Scale, which captures children's behavior during administration of the Bayley–III; and a focus group protocol, with fathers and mothers grouped separately. All the instruments are briefly described below.

Bayley and anthropometric scoring sheet. This scoring sheet collected the cognitive and the receptive and expressive language scales of the Bayley Scales of Infant and Toddler Development (Bayley–III test). After the children completed the Bayley test, their weight and length were recorded in the scoring sheet. The Wolke Behavioral Rating Scale, which was collected only during endline, was recorded immediately after the child finished the Bayley test.

Household survey. The household survey was administered to mothers in every eligible household. The instrument collected information about the household profile (family size, family composition, education, religion, ethnicity, marital status, and employment status of all household members); a module on deaths and household shocks; housing characteristics; and socioeconomic status. The survey also included modules that collected data on the intermediate outcomes of interest (such as parenting stimulation knowledge and parenting stimulation practices), as well as modules on dietary diversity, incidences of illness, hygiene practices, responsive feeding, and questions on intra-household decision making. Finally, the endline survey included modules that collected data about the implementation of the early childhood stimulation program (availability of program materials, use of the materials, number of ECD

counseling sessions received, and questions related to when and how households acquired the materials).

Service provider survey. The service provider survey was administered to health assistants (HA), family welfare assistants (FWA), and community health care providers operating in the selected community clinics (CHCP). (More information about these different provider types is provided in Chapter 3.) These service providers completed a survey that requested information about their demographic characteristics, education, work experience, primary tasks, training experience, job satisfaction, and detailed information about their workload (number of days and hours they worked, number of households they served, number of minutes spent with each household). The endline survey also included questions about the Early Childhood Stimulation Program, including when the service provider received the program materials, how they distributed the materials, what type of messages they most likely delivered to households, and their perceptions about early childhood development. The information collected in this survey was intended to help evaluators understand how key personnel in charge of delivering the program operated, and to identify potential challenges they encountered.

Community leader survey. The community leader survey targeted at least three knowledgeable resource persons in the community clinics' catchment areas, which could include senior school teachers, mosque imams, village elders (over 50 years of age) who have lived in the village for a considerable period of time, union parishad chairman/members, representative officers of local health facilities, and any elder public official identified as a community leader. The community leaders were requested to reflect on the basic infrastructure of the community, major economic activities, migration, and any external shocks (e.g., droughts, floods, storms) that influence the community and livelihood. The survey also inquired about the functioning of local community clinic and Save the Children's Early Childhood Stimulation Program.

Focus group discussion (FGD) guidelines. Focus group discussions gathered data from mothers and fathers separately. The purpose of these focus groups was to understand parents' perceptions and opinions regarding the program's messages, the program materials, and the program delivery mechanism. They also sought to identify what was working and what could be improved, as well as factors facilitating or inhibiting program implementation. This qualitative information helped us to understand how and why the program showed an impact and provided qualitative evidence of the intervention's theory of change.

Monitoring surveys. Between baseline and endline data collection, the impact evaluation team collected monitoring data from a random subset of service providers and households from the treatment and control groups. These structured surveys were adapted over time to increase the quality and relevance of the data collected. The surveys collected data on whether program inputs were delivered, as well as data on intermediate outcomes, such as use of early childhood materials, intensity with which the materials were used, and behavioral changes of caregiver and child. Through these surveys, the impact evaluation gained an in-depth understanding of how the program was being implemented, and what was happening in households and communities as a result of the program activities.

In addition to the tools described above, we also distributed a survey to "administrators" or district-level health personnel during baseline, as well as a "non-compliance survey" collecting basic household characteristics from the 39 households that refused to participate in the study.[11]

The instruments described above were used during baseline data collection, endline data collection, or during the monitoring visits. Baseline data collection occurred between November 2013 and January 2014, and endline data collection occurred between September and December 2015. The monitoring visits occurred in September, October, and December 2014, and during March, May, and July 2015. Figure 2.1 summarizes the timing of the different data collection activities, the instruments used in each of these rounds, the timing for the implementation activities, and the monitoring activities conducted by the impact evaluation team.

[11] The "administrator" survey for district-level health personnel was created to gain a better understanding of how community clinics operate and who supervises their service providers. We conducted interviews with three upazila health and family planning officers, four assistant health inspectors, five health inspectors, one family planning inspector, and one medical technologist. The "non-compliance survey" sought insights regarding the level of comparability among complier and non-complier households.

Figure 2.1. Timeline of the Impact Evaluation Activities

	2013		2014												2015											
	Baseline																						Endline			
Activities	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1. Baseline and endline data collection activities																										
Bayley and anthropometric measures	X	X	X																				X	X	X	
Wolke behavioral rating scale																							X	X	X	
Household survey	X	X	X																				X	X	X	
Service provider survey	X	X	X																				X	X	X	
Community leader survey																							X	X	X	
Focus group discussions																							X	X	X	
2. Monitoring Activities																										
Data collection											X	X		X			X		X		X					

Appendix D presents the final instruments used during baseline and endline data collections (with the exception of the Bayley–III, due to copyright limitations). Table 2.2 describes the samples collected during baseline and endline by type of participant.

Table 2.2. Sample Sizes for Baseline and Endline Data Collection, by Treatment Condition

Type of Participant	Baseline		Endline	
	Treatment	Control	Treatment	Control
Children	1287	1287	1250	1236
Households	1287	1287	1250	1236
Service providers	100	90	110	91
Family welfare assistants	37	27	36	22
Health assistants	34	36	34	30
CHCPs	29	27	40	39
Community leaders	36	32	117	117

Note. During endline, we found more vacant positions for service providers in the control group (n=28) than in the treatment group (n=10).

Training and Ethical Considerations

The evaluation underwent two rigorous ethics reviews. The first review was conducted through AIR's Institutional Review Board (IRB), and the second review was conducted through the Bangladesh Medical Research Council's IRB. Both institutions approved the evaluation and baseline data collection in July 2013. The team developed consent forms for the participants that were read out loud before collecting the data. The consent forms included general description of the study and are included in Appendix D.

Training and Quality Control

Intensive training and piloting took place before data collection at both baseline and endline. The data collection team was divided in two groups: Group 1 focused on the Bayley test, Wolke, and anthropometric measures; while Group 2 focused on household surveys, service providers, and community leaders.

The training for Bayley, anthropometrics, and stimulation practices took approximately six weeks in a centralized location in Dhaka and was led by Dr. Hamadani and her team from ICDDR,B. The training consisted of lectures and discussions, as well as descriptions of the Bayley's manuals and test kits. Participants were divided into groups to perform the tests and observations jointly with the trainers. While a trainee (tester) was administrating the Bayley test, both the trainee and a trainer recorded the observation and the scores. This approach sought to

assess and correct scoring gaps between trainers and trainees. Practice sessions continued until enumerators were able to administer the test and observe a child in the presence of a trainer. Five days of training were spent establishing high inter-observer reliability for the Bayley test. Each of the testers took 10 tests to achieve a high degree of reliability between test administrators and trainers. Intra-observer reliability was also assessed through 10 tests of each data collector over another period of five days. For both inter- and intra-observer reliability checks, children from the nearby area were brought to the training venue. In three shifts of testing per day, children were tested in different corners of the training room while trainers observed testers for inter- and intra-observer reliability.

All instruments were piloted prior to both baseline and endline data collection. The team conducted two rounds of pilot testing in order to check the data collection process, protocols, and instruments. The pilot tests helped the team identify and address potential challenges and gave data collectors an opportunity to practice the procedures. The results of the pilot testing led to revised procedures for administering the Bayley–III and anthropometric measures, and revisions to the instruments.

Quality Control During Data Collection

Similar efforts were undertaken to ensure quality during data collection. Several field supervisors ensured that the field enumerators collected reliable and consistent data. They were experienced and familiar with the survey objectives, sampling, and technical and administrative responsibilities. All supervisors remained in the field for the duration of data collection and were responsible for confirming household identities, undertaking spot checks of questionnaires, arranging for suitable testing venues, building rapport with local elected officials, and communicating with the upazila health officer and health assistant before starting the field work.

Estimation Strategy

We used an ANCOVA model to estimate the impact of the Early Childhood Stimulation Program on child development and nutrition outcomes. The ANCOVA is a statistical model that estimates the causal effect of a program by comparing outcomes in the treatment group with outcomes in the control group, controlling for the value of the outcome variable and other relevant predictors at baseline. Such statistical controls minimize potential sampling error in the impact estimates and maximize the statistical power of the analyses. An important advantage of using ANCOVA—instead of a difference-in-difference analysis, which estimates program effects on the within-sample member change between endline and baseline outcomes—is that ANCOVA analyses are less sensitive to natural within-person variation in the baseline and endline variables, which can cause the resulting within-person differences to be quite unreliable. As a result, use of ANCOVA models increases statistical power, particularly when outcomes are not strongly autocorrelated, as is the case with the young children in this study (McKenzie, 2012).[12] The ANCOVA model used cluster robust standard errors at the community clinic to account for the nested structure of the data. We used ANCOVA to estimate "intent-to-treat"

[12] The autocorrelation scores between baseline and endline outcomes were as follows: 0.12 for cognitive development, 0.15 for language development, and 0.15 and 0.09 for expressive and receptive communication respectively. For HAZ, WHZ, and WAZ, the scores were 0.6, 0.39, and 0.63.

(ITT) which captures the effect of offering the program to all households that were randomly assigned to the treatment group. We supplemented these ITT impact analyses with so-called "treatment-on-the-treated" (TOT) analyses, which estimate how large the impacts would have been if every sample member received the full dosage of the intervention. To estimate the TOT we used the intent-to-treat, or a household's randomization status, as an instrumental variable for the treatment-on the-treated, or actual program receipt.

We checked the robustness of the treatment estimates by specifying different regression models, and we found that in general impact estimates were robust to the alternative specification of the regression. Overall, the additional covariates help to improve the precision of the impact estimates. The different model specifications included the following covariates:

- Model 1: This model includes only the treatment indicator and the outcome variable at baseline.
- Model 2: This model includes Model 1 covariates, as well as 29 Union dummies which were used for stratification of random assignments.
- Model 3: This model includes Model 2 covariates and some additional covariates at the individual and household level. These variables includes the child's gender, age in months and weight for age; mother's age, religion, education, and employment status; household composition (single household or not, household size, number of people in the households aged between 0 to 18 years old); whether the father was present 8 months or more; the asset index; shocks in the household (deaths in the household, and natural disasters that affected the household); finally we also included time in minutes to the nearest community clinic.

To check the heterogeneity of the program impact, we conducted exploratory subgroup analyses by the child's gender, by geographical region, and by an indicator of the classification of the child's baseline Bayley score ("at risk and emerging" compared to "competent").[13] These analyses were conducted by adding interaction effects between the treatment indicator and these indicator covariates.

Attrition from baseline to endline was very low (3.4 percent; 88 children). The main reasons for attrition were: (a) The family left the area (N = 68); (b) the child died (N=12); (c) the household refused to participate in endline (N = 3); and (d) other reasons (N=5 cases). Contamination of the control group was also limited. Of the 1,287 control households, only 32 reported receiving any of the early stimulation materials (2.5 percent). As described in the next section, the majority of these control households received the program materials during a visit to their community clinic.

Qualitative Analysis

During endline data collection, we conducted 10 focus group discussions (FGDs) in both treatment and control arms of each upazila, with fathers and mothers grouped separately. In the

[13] The subtest cut scores are age specific, using raw scores from Bayley scores. For example, for children aged from six months and 16 days to nine months and 15 days, the subtest cut scores for cognitive are: "at risk" if the score is 0–6, "emerging" if the score is 7–9, and "competent" if the score is 10–33. "At risk" and "emerging" are indicators that the child is underdeveloped, and "competent" captures whether the child is developed enough.

treatment communities, parents who had received the intervention materials were preferentially selected. Where possible, the data collection team sought to invite parents who were not previously familiar with each other to foster frank discussion. After fulfilling these two conditions, parents were randomly invited to participate in a 90-minute focus group discussion.

Table 2.3: Focus Group Discussions (FGDs), by Group and Location

Group/Location	Satkania	Kulaura	Muladi	Total
Mother (Treatment)	1	1	1	3
Mother (Control)	1	0	1	2
Father (Treatment)	1	1	1	3
Father (Control)	1	1	0	2
Total	4	3	3	10

The FGDs sought to generate general understanding about how, why, and under what conditions the program functioned. Respondents were asked for their perceptions and opinions about the program's messages, the delivery mechanisms, and program implementation. In particular, focus groups sought to identify ways in which the program was or was not working well, including factors facilitating or inhibiting implementation. Parents in the treatment arm were also asked for suggestions about how to improve the program.

The focus groups also attempted to discern the different roles, attitudes, and perceptions of fathers and mothers. In many environments, fathers have considerable influence, not only on the parenting practices of both parents, but also on overall household-level decisions related to the well-being of children, such as nutrition and schooling. This is particularly true in Bangladesh, where women have limited influence on household decision making because fathers manage the household budget and resource allocation decisions, although small children are primarily cared for by their mothers. Given that fathers' level of direct involvement with children is typically low, there may be a substantial benefit to targeting them for parental stimulation messages and developing their parenting skills. One important goal of the focus groups was therefore to examine outreach mechanisms that might help to target fathers, particularly the value of community clinic service providers and religious leaders.

Cost-Effectiveness Analysis

This evaluation includes a cost-effectiveness component to inform Objective 3: Determine the scalability of the program approach. The analysis estimated the benefits of the intervention relative to the costs by combining quantitative program impacts with the per-child cost of the resources spent on the average household reached by the program. The cost of the average child served under the intervention program divided by the expected gain in outcome from the impact analysis serves as the cost-effectiveness measure of the intervention.

We used an "ingredients" approach to costing. This approach lists the specific resources used in the delivery of the program and attaches a unit cost to each resource (Levin & McEwan, 2001). Personnel resources are delineated by job titles and the amount of time spent by each specific person on each activity. Other resources are delineated by the amounts and frequency used. This process creates an exhaustive list of resources used to implement the intervention.

We collected costs from Save the Children's administrative records, critically reviewed the available data, and worked with accounting staff at Save the Children to ensure that the reported cost data were accurate. We collected the following categories of cost data, which are based on the World Bank's *Stepping Up Early Childhood Development* (Denboba et al. 2014):

- **Personnel costs.** This includes the salaries of project officers and administrative and logistic support costs, among others. Only the proportion of time spent on the intervention is included.
- **Training costs.** This category includes training the trainers on the intervention, as well as training costs for MOHFW service providers at the community clinic level.
- **Knowledge-sharing costs.** These costs are associated with the key messaging of the intervention, including production of the materials provided to households and additional materials not originally planned by the intervention, such as posters at community clinics. Also included in this category are costs related to advocacy, communication, and supporting materials for communities receiving the intervention.
- **Administration costs.** This category includes overhead costs associated with the intervention, such as office rent, utilities, communications, and equipment such as laptops and motorcycles.
- **Travel and accommodation.** Travel costs include the cost of monitoring visits performed by project staff. They do not include the cost of bringing training participants to the training venue, which is included under training costs.

We used the costs provided by Save the Children to populate a cost database template for early childhood development and nutrition programs developed by Barberton and Carter from Cornerstone Economic Research for the World Bank. The database, included in Appendix E, contains descriptions of the resources and costs used to implement the intervention.

The cost analysis presents the costs for the program as implemented. The intervention did not change significantly from the plan, but the few unanticipated changes during implementation—such as additional printing of ECD messaging posters to be hung in community clinics—are captured in the cost database. This analysis captures the costs that occurred over two years (2014 and 2015), when the intervention was implemented. The costing database adjusts all costs for inflation to report values in 2014 U.S. dollars. As described above, the intervention was delayed in its timing. If this delay resulted in impact estimates that were biased downward, the costs per outcome would be biased upwards. Delayed implementation did not affect the absolute costs of the program, however, other than the cost of those additional supports (such as the posters included in the program description).

The cost per child was found by dividing the total cost of the intervention by the number of beneficiary children (children under three) in the treatment areas. To obtain measures of the cost-

effectiveness of the intervention in terms of gains in children's outcomes of interest, the team divided the cost of the average child served under the intervention program by the expected gain in outcome from the impact analysis. Expected gains were reported in the units used in the impact analysis (e.g., a one-point increase in language scores).

3.The Early Childhood Stimulation Program Description

Save the Children's Early Childhood Stimulation Program seeks to improve child development by promoting positive early stimulation practices and maternal responsiveness to the emotional and physical needs of children up to three years old. The program was built on an existing delivery platform—household visits and community clinics—with trained community health care and family planning providers counseling families on early childhood stimulation practices and delivering early childhood materials. The main messages of the program for mothers and caregivers are outlined in Table 3.1.

Table 3.1. Key Messages for Mothers and Caregivers

Key messages	Description
1. Care during pregnancy	Your baby's brain is already developing—eat nutritious food and take good care of yourself to help your baby grow well. Prepare for baby's arrival by making a rattle or other appropriate toys.
2. Love and affection	Give your child affection every day and show your love to your child by smiling, hugging, and praising him or her.
3. Play and games	Play games with your child every day, and let him or her play with different playthings around the house.
4. Talk and communication	Talk with your child while doing household work every day, and respond to your child's sounds and attempts to talk. Teach him or her new words, songs, and stories.
5. Positive discipline	Practice gentle discipline and praise your child for good behaviors.
6. Responsive feeding	Feed your child with patience and good humor—talk with your child during a meal, keep eye contact, and follow the child's cues.
7. Health and hygiene	Wash your hands and help your child practice hand washing with soap.
8. Share messages	Share your knowledge with others in the household and the community as often as possible.

These key messages and recommendations take into consideration all the relevant guidelines (e.g., WHO–UNICEF's 2007 guidelines, and documents of various interventions in Bangladesh). In addition, an advisory committee of experts from Bangladesh, including representatives from the Ministry of Health and Family Welfare (MoHFW), was consulted in the development of the messages, and consensus was sought among all committee members to develop the most effective messages in the Bangla language. Messages were also pilot tested in Save the Children's pilot early-stimulation program in Meherpur in 2010—2011, with encouraging results. Of the eight messages described above, three (numbers 2, 3, and 4 in Table 3.1) are centered on early stimulation and received more focused attention and age-specific recommendations in accompanying job aids or program materials.

Program materials. Each intervention household was expected to receive a child development card, two picture books, and a booklet with key messages, all of which are described below.

- **Child development card.** The child development card was designed to foster the mother's ability to remember key behavioral messages, and to provide ideas for ways she could interact with her child. The card was a trifold, with age-specific recommendations relevant to two of the key messages: play and communication. The child development card was divided into five sections by age group: pregnancy, birth to six months, 7 to 12 months, one to two years, and two to three years. Key recommendations (with appropriate illustrations) were included for each age group, focusing on what games mothers could play with children and what play materials they could provide, and how mothers could to respond to the child's cues and support language development and communication. The recommendations were simple and easy for mothers to practice with their children at home, and were illustrated with pictures (as many women in rural Bangladesh are illiterate).[14,15]
- **Picture books.** Books are critical for children's cognitive, language, and overall development. Mothers and caregivers were expected to use these books to help them teach their children new words and provide topics for communication and play. Two picture books were distributed as part of the program:
    - A household picture book *(Amar Bari).* This small book contained pictures and names of 15 available goods in the household, such as doors, windows, glass, plates, and chairs.
    - A nature picture book *(Amar Jogot).* This small book contained pictures and names of 15 objects in nature, such as trees, cows, dogs, birds, flowers, and clouds.
- **Key message picture booklet.** This picture book is a smaller version of the booklet developed for the service providers. The booklet delivered each key message using illustrations and was designed for mothers and caregivers.

Appendix F contains the images of all the program materials, as well as the home visit and clinic visits guidelines.

Delivery mechanism. Service providers working within community clinics were expected to deliver early stimulation counseling and distribute program materials during routine household visits, sick or well-baby visits to community clinics, and EPI events. During the counseling, service providers were expected to show mothers and other caregivers how to use the child development card and the books to provide children with a variety of early learning opportunities. Save the Children intended mothers who started from pregnancy to have at least 15 counseling visits, and mothers with older children to have at least three visits.

[14] The illiteracy rate in Bangladesh is about 58% for women overall, but it is higher in rural areas. http://www.foodsecurityatlas.org/bgd/country/education/literacy

[15] The illustrations on the child development card meant that it could also serve as a picture book. In a context where hardly any families have access to picture books for their children (which is an important predictor of language and cognitive outcomes), the child development card was expected to be used by families in such a manner. Caregivers could show pictures from the cards to their children, while at the same time being reminded of the key recommendations included in the card.

Training and integration with nutrition program. The Early Childhood Stimulation Program was integrated into the NNS platform. Through the TCM project, the NNS Program trained health service providers and community volunteers to increase access to key nutrition services for pregnant and lactating women and children under the age of five to reduce malnutrition in the community. Save the Children complemented the NNS Program training by providing an additional four-day training on early stimulation and responsive care. The training included an orientation on how children develop and learn, which explained why it is critical to focus on early stimulation in addition to nutrition and health. The core of the training covered eight main areas, which corresponded with the behavioral messages described above. Program materials accompanied the training curriculum. Save the Children ran the program from early 2014 through the end of 2015—when the NNS pilot program also ended—and it is expected that the lessons learned will be incorporated into a broader national rollout of the NNS package. The program leveraged the institutional infrastructure provided by the NNS Program, and it was developed and implemented in collaboration with the Ministry of Health and Family Welfare in response to its interest in developing an effective integrated model that supports nutrition and stimulation.

The Save the Children program trained the three types of service providers operating within community clinics (CCs): community health care providers (CHCPs), health assistants (HAs), and family welfare assistants (FWAs). The community health care providers are stationed in the community clinic and provide nutrition and health services to children under the age of five. Health assistants are in charge of providing health services to children under the age of five, and they are expected to visit households to care for young children who are malnourished, take care of immunization, and care for diarrhea and fever problems. Family welfare assistants are in charge of delivering family planning services and looking after the general well-being of pregnant mothers and children under the age of three, and they are expected to visit households at least once per month.

In addition to the training provided to the service providers, Save the Children also offered orientation for the program activities to health inspectors (HIs), assistant health inspectors (AHI), family planning visitors (FPVs), and family planning inspectors (FPIs), although they did not participate in program delivery. The health inspectors, assistant health inspectors, and family planning visitors monitor and supervise, respectively, the activities of the health assistants and family welfare assistants in community clinics and in the field. While doing their routine monitoring work, the health inspectors and family planning inspectors were also expected to monitor the stimulation services in the treatment areas. In the control areas, the health inspectors, assistant health inspectors, and family planning inspectors did not carry out these additional responsibilities.

Additional program activities. In addition to the core program activities described above, Save the Children introduced four more components to the original intended program during the study. These new components aimed to boost awareness about the importance of ECD in the community, increase take-up of the Early Childhood Stimulation Program, and boost accessibility to program materials. These components were introduced in light of some implementation challenges, particularly delays in distributing the program materials to households.

First, Save the Children introduced community motivation orientations. These orientations were provided to one mother and one father from each treatment village, who were selected by the community health care providers and family welfare assistants as "community motivators." Project officers and health supervisors provided a two-hour orientation to these motivators on the importance of ECD, brain development, and the Early Childhood Stimulation Program and its materials. Community motivators were tasked with helping the ECD dissemination campaigns (described below).

Second, the implementation teams from the Early Childhood Stimulation Program and the NNS Program developed a joint plan to provide ECD counseling during Growth Monitoring Promotion, which took place (as part of NNS activities) one day every month in each community clinic. During Growth Monitoring Promotion, community motivators supported community health care providers and delivered early stimulation messages to mothers.

Third, Save the Children distributed two poster-size versions of the child development cards to treatment community clinics. The goal of the poster was to increase the visibility of the early stimulation messages and promote discussion among mothers and service providers while they waited in the community clinic. The posters were located inside the community clinic: one in the waiting room, and one in the community health care provider's room.

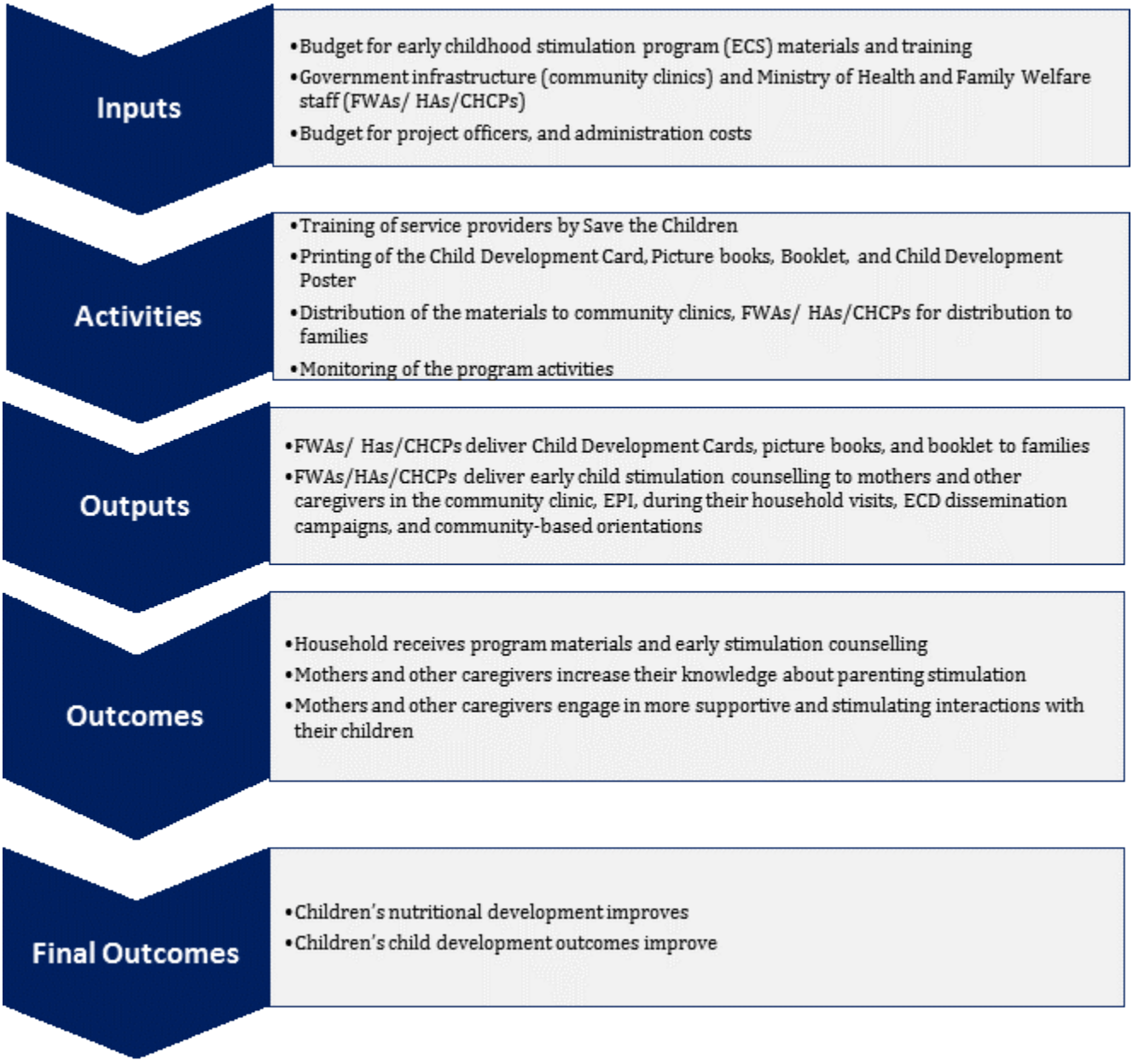
Fourth, Save the Children introduced another community-based orientation for community groups and community support groups in order to increase buy-in for the Early Childhood Stimulation Program. Save the Children provided a half-day orientation on the importance of early childhood stimulation and the program, where the training facilitator explained the program's delivery mechanism, the challenges, and the progress of the program, and explicitly requested community support. The orientation was provided once and to approximately 216 participants.

Theory of Change

Figure 3.1 outlines the theory of change for the Early Childhood Stimulation Program. The impact evaluation tests the effectiveness of the program and investigates whether it increases parental stimulation knowledge and parental practices, and subsequently child development outcomes in beneficiary households.

The Early Childhood Stimulation Program used government service providers operating in community clinics to deliver the intervention as part of their regular work routines. Service providers received an initial training and two refresher trainings to learn about the importance of early childhood stimulation. They were also tasked with distributing child development materials to households and providing early child stimulation counseling. However, service providers did not receive any additional incentive (monetary or in-kind) to deliver the program.

Figure 3.1. Theory of Change for the Early Childhood Stimulation Program



The program targeted mothers and caregivers in households with children under three years old, with the expectation that the materials and ECD counseling would improve child development outcomes. The parenting counseling and program materials sought to encourage behavioral changes among parents to further increase the development of their children. The counseling was expected to inform the parents about the importance of early childhood stimulation to encourage adoption of a range of practices. However, it was unclear whether a program that used government infrastructure and service providers who have no direct incentives to deliver the program was sufficient to trigger behavioral changes within households and improve child development outcomes.

Program Implementation Results

Overall, we found that the Early Childhood Stimulation Program was not fully implemented as intended: Only 50 percent of the households (approximately) in the treatment group received the program materials, and mothers in the treatment group remembered receiving only 1.7 counseling sessions on early child stimulation, on average.[16] These implementation problems may be a typical result of the challenges faced by a program being implemented for the first time. However, they also reflect the challenge of adding a supplemental component onto an existing program infrastructure without additional incentives, especially given that the existing infrastructure itself may have been overstretched and under-resourced in many of the communities in our evaluation. Moreover, lack of coordination among the three service providers, limited supervision of these service providers, and lack of compliance with clinics' schedules and household visits also contributed to the observed implementation challenges. However, despite these results, usage of the program materials within treatment households that received them was quite high: The majority of these households reported using the early stimulation materials with their child (98 percent). Ninety-five percent reported using them three to seven times a week, for 23 minutes each time (on average). The remainder of this section describes our findings related to program implementation in more detail.

Program Starting Date and Training Activities

The program commenced implementation in June 2014, almost five months after the completion of baseline data collection. The implementation delays were in part explained by delays in obtaining government approval for the program materials, and government permission to operate in selected areas.

In March and April 2014, Save the Children held trainings and local launchings for the program in the three different districts. Save the Children first delivered "training to trainers," and trainers then trained community clinic workers in the treatment areas. The first training was offered for four days. Save the Children also delivered three refresher trainings. The first took place in October 2014 and lasted for two days, the second occurred in February–March 2015 and lasted for two days, and the third took place in August 2015 and lasted for one day. Distribution of the child development cards and picture books began in June 2014. The ECD poster was distributed to community clinics in January 2015, and the key message booklet was delivered in March 2015. Finally, Save the Children organized a community motivator orientation and ECD campaign in June and July 2015. Figure 3.2 illustrates the timeline for all the program activities.

Almost all the treatment service providers interviewed during the endline interviews received the early childhood stimulation training. None of the control service providers reported receiving such training. Almost all service providers from treatment and control groups reported receiving training on child feeding and nutrition. Table 3.2 presents these results.

[16] In the household survey we asked: How many times did you receive counseling on early childhood stimulation?

Figure 3.2. Timeline of Program Implementation Activities

	2013		2014												2015											
	Baseline																						Endline			
Activities	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Program implementation Activities (Save the Children)																										
National level launching of the program					X																					
Local level launching of the program					X	X																				
Training of trainers				X	X																					
Training of service providers (4 days)					X	X																				
Program started implementation activities								X																		
Delivery of ECD card and picture books								X																		
First refresher training (2 days)												X														
Distribution of ECD poster to CCs															X											
Delivery of message booklet																	X									
Second refresher training (2 days)																X	X									
Community motivator orientation and ECD campaign																				X	X					
Third refresher (1 day)																						X				
Community support group orientation														X	X	X										

Table 3.2. Trainings Received by Community Clinics' Service Providers

Service Providers attended training on…	Treatment		Control	
	%	N	%	N
Early childhood stimulation	98.2	108	0.0	0
Child health	0.0	0	5.5	5
Child feeding and nutrition	100.0	110	98.9	90
Other child-related training	0.0	0	1.1	1
Sample size		110		91

Source: 2015 Endline Service Provider Survey.

Delivery of Program Materials to Service Providers

As described above, Save the Children delivered the materials in two waves: Delivery of the child development cards and two picture books began in June 2014, and delivery of the booklet began in March 2015. The vast majority of treatment service providers received the child development card and picture books (108 out of 110) and the key message booklet (107 out of 110).

Delivery of Program Materials to Households

By the time of endline data collection, approximately 52 percent of households in the treatment group remembered receiving three out of four program materials, and only 18.5 percent reported receiving the key message picture booklet. These results align with the findings obtained during the monitoring visits (conducted by the impact evaluation team), which revealed that the program was experiencing significant delays in the distribution of ECD materials. We also found that 32 control households (2.5 percent) received the program materials. Table 3.3 presents the percentage of treatment households that received each of the program materials.

Table 3.3. Percentage of Treatment Households That Received the Different Program Materials

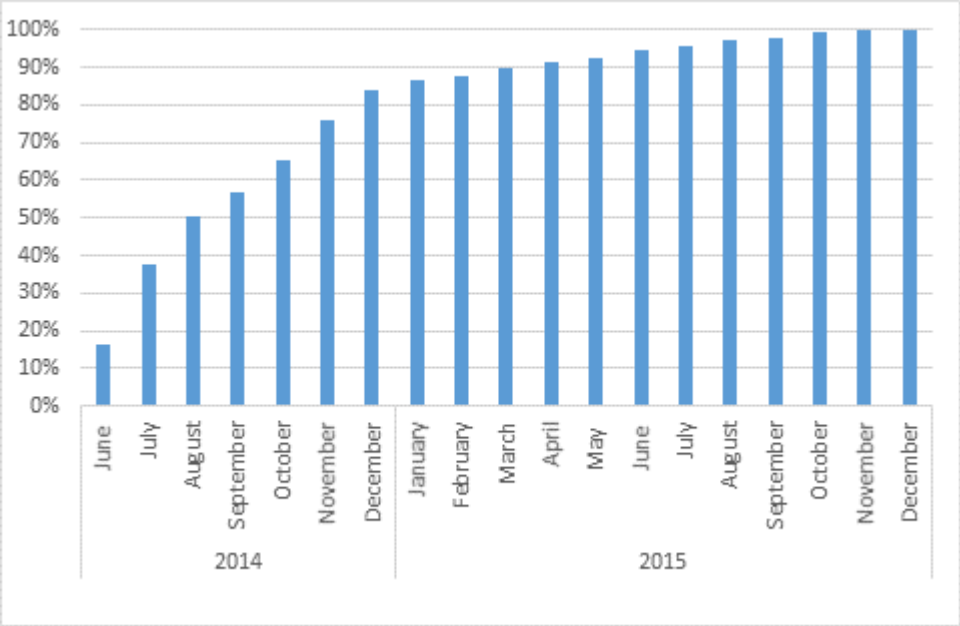
Household received…	N	%
1. Child development card	648	51.92
2. Household picture book	649	52.00
3. Nature picture book	643	51.52
4. Key message picture booklet	231	18.51
Any of the four materials	660	53%
Sample size	1,250	

Source: 2015 Endline Household Survey.

Exposure to program materials. Among treatment households that received the program materials, the potential average level of exposure to program materials was 12.3 months, ranging from as low as 0 months

to as high as 18 months (as calculated by the date the child took the Bayley test).[17] A large proportion of these households (49 percent) received the materials during the first three months: 16 percent received them in June, 20 percent in July, and 13 percent in August. Thirty-five percent of the treatment households received them between September and December 2014, and the remaining households received them between January and October 2015. These percentages are broken down by month in Figure 3.3.

Figure 3.3. Cumulative Percentages of Treatment Households That Received the Child Development Card and Picture Books, by Month



Source: 2015 Endline Household Survey.

How households received the program materials. The majority of households in the treatment group received the program materials during routine health visits to the community clinic (51 percent) and the EPI centers (17 percent). Only 17 percent of households in the treatment group received the materials in their home as originally intended, delivered by family welfare assistants (10 percent) or health assistants (7 percent). Three percent reported receiving the materials during a growth-monitoring checkup, and 21 percent received them during Save the Children's special ECD campaign. Similarly, the majority of the 32 households in the control group that benefited from the program materials received the materials in the community clinic (20 cases). The rest of control households received it from EPI centers (2 cases), growth-monitoring checkup (1 case), and during the ECD campaign (8 cases).[18]

In qualitative focus group discussions with mothers and fathers, parents reported learning about the program through multiple methods, including: (a) taking their children to the vaccination centers; (b) receiving services from the community clinics; and (c) from household visits by service providers (health assistants or family welfare assistants).

[17] Exposure was calculated as the number of months between the date the card was received and the date the Bayley test was taken. So, exposure is 0 if the material was received in the same month as the Bayley test, or if the material was received after the Bayley test (if the HH survey was after the test as well).
[18] For one case we did not have the information on how they received the program materials.

Delivery of Early Childhood Counseling to Households

Among the treatment households that received the child development card and the picture books, almost all households indicated that the service provider discussed the materials when they were delivered. Qualitative data support these results. All of the mothers participating in the focus group discussions reported that service providers discussed ECS program messages and how to use the materials with children. Community health care providers discussed the early childhood stimulation messages with participant mothers in the community clinics; health assistants did so in home visits and in EPI centers; and family welfare assistants consulted with mother participants regarding such matters during their home visits.

However, the average number of counseling sessions identified as related to "early childhood stimulation" was only 1.73.[19] (The intended exposure was at least three sessions.) Forty-four percent of households in the treatment group received only one counseling session on early child stimulation, 41 percent received two sessions, 11.7 percent received three sessions, and the remaining 3 percent received between four and six sessions. It is unclear whether treatment households included the discussions they had with service providers when they received the materials as of one of their ECD counseling sessions. These results are illustrated in Table 3.4.

Table 3.4. Number of Counseling Sessions identified as "Early Child Stimulation"

Number of Counseling Sessions on Early Child Stimulation	N	% of households that received the intervention	% of the treatment households
1	292	44.44	23.36
2	268	40.79	21.44
3	77	11.72	11.72
4	14	2.11	1.12
5	5	0.75	0.75
6	1	0.15	0.15
Sample size	663	100	1250
Mean	1.73		
Standard deviation	0.78		

Source: 2015 Endline Household Survey.

Nonetheless, it is important to note that service providers were trained to deliver the ECS messages as part of their regular activities, so it is plausible that some households may have received ECS counseling without identifying the message as ECS.

Visits from service providers. Overall, the data suggest that in the six months preceding endline data collection, households in the treatment group received more visits from both family welfare assistants and health assistants than households in the control group. However, as indicated in Table 3.5 these differences were not statistically significant. Similarly, although treatment and control households visited the community clinics a similar number of times, treatment households appeared to spend more time in the clinics during their last visit (16.5 minutes versus 14.9 minutes).

[19] The question in the household survey inquired: How many times did you receive counseling on early childhood stimulation?

Although treatment-control differences in exposure to family welfare assistants and health assistants or time spent in the community clinics were not statistically significant, family welfare assistants and health assistants in the treatment group were reported to be significantly more likely to speak about ECD topics—such as how to play with the child and how to talk to the child—than those serving the control group. As expected, family welfare assistants in the treatment group were also more likely to speak about the child development card, the picture books, and the key message booklet than those in the control group. Appendix G presents these analyses.

The community clinics made up for some of the lack of implementation fidelity in the home visits by family welfare assistants and health assistants. During the last visit to the community clinic, treatment households were as likely as control households to report visiting the clinic because "their child was sick," "for immunization," or "because the mother was sick." However, households in the treatment group that visited these clinics were significantly less likely to go because the child's sibling was sick,[20] and were significantly more likely to receive ECD counseling (on how to play and how talk to the child) or to get the child development card, picture books, or the booklet than control households (see Appendix G).

Table 3.5. Visits Received by Service Providers, by Treatment Condition

	Treatment			Control		
	N	**Mean**	**SD**	**N**	**Mean**	**SD**
Household visit from family welfare assistant						
Number of visits received in the last 6 months	1250	0.77	1.75	1236	0.56	1.52
Number of minutes spent in the last visit	272	9.64	4.03	176	9.65	3.38
Household visit from health assistant						
Number of visits received in the last 6 months	1250	0.48	1.26	1236	0.36	1.31
Number of minutes spent in the last visit	219	8.21	3.93	123	7.70	4.03
Visits to the community clinic						
Number of visits done in the last 6 months	1250	1.06	1.93	1236	0.98	1.98
Number of minutes spent in the last visit	431	16.53	10.96	377	14.87	7.95

Source: 2015 Endline Household Survey.

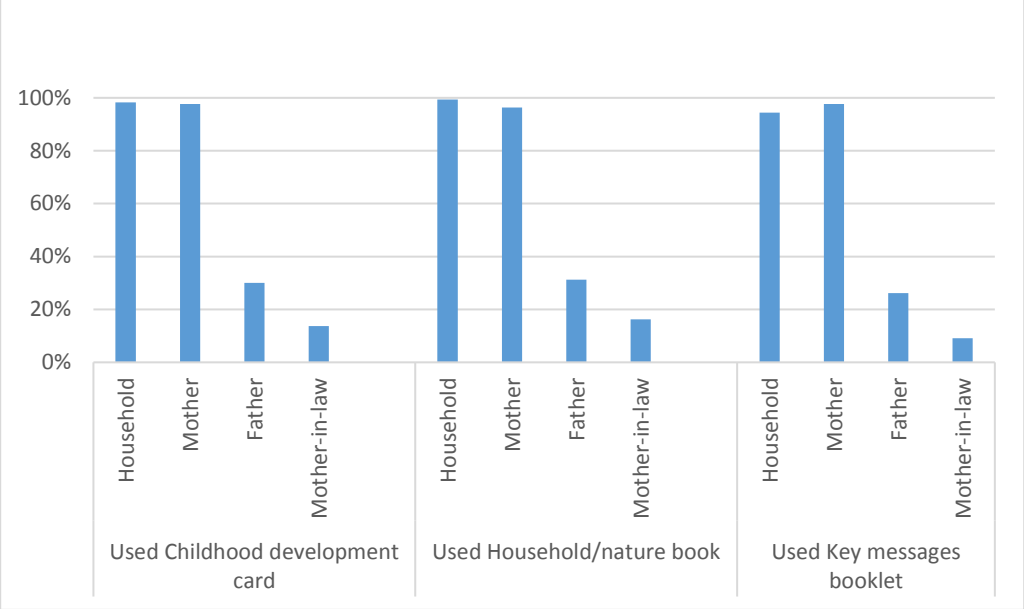
Note: Differences presented in the table are not statistically significant. When interpreting these results, it is important to note that the number of service providers is slightly higher in the treatment group than in the control group, especially at endline (110 versus 91). We found more vacant positions for service providers in the control group (n=28) than in the treatment group (n=10).

Household Use of Program Materials

Most of the treatment households that received the program materials reported using them quite extensively. Approximately 98 percent of households in the treatment group that received these materials reported that they used the child development card or picture books with the child, and 94 percent reported using the booklet. Mothers were the primary users of the materials (97 percent), but they were also used by fathers (30 percent) and, to a lesser extent, mothers-in-law (about 15 percent). A large proportion of mothers (90 percent) also reported that they were still using the early childhood materials at the time of the endline survey. Figure 3.4 illustrates these percentages by household member.

[20] On average, children in the treatment group had a similar number of siblings living in the household (1.5), compared to the control group (1.4).

Figure 3.4. Percentage of Household Members Using the Program Materials With the Child

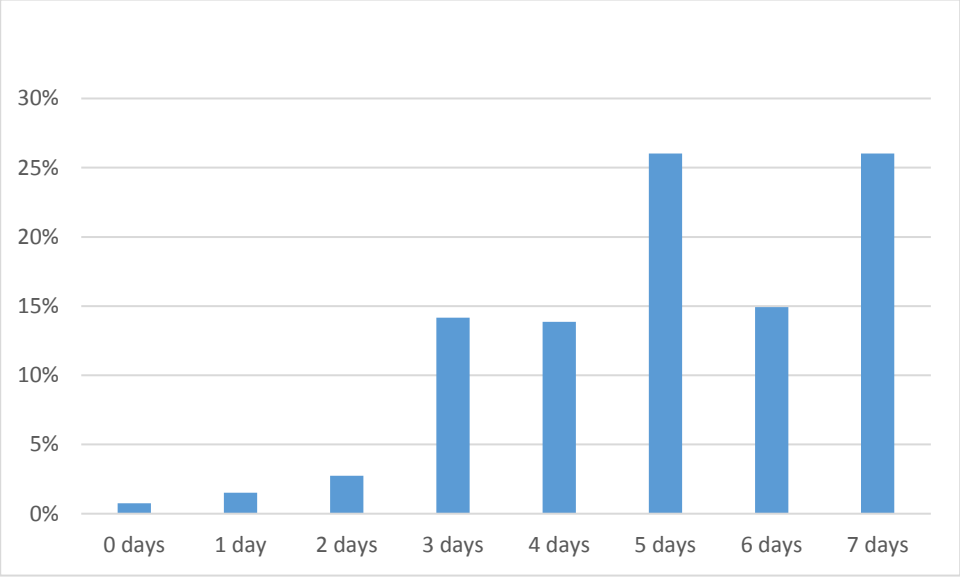


Source: 2015 Endline Household Survey.

Treatment households that received the program materials not only used them with the participant children, but also with their siblings. Approximately 54 percent of the mothers who were living in a household where the child had a brother or sister aged 0–60 months indicated that they used the materials with the siblings. Moreover, the majority of treatment households that received the materials reported using them very often: 95 percent reported using the materials three to seven days a week (see Figure 3.5).

Households in the treatment group reported using the program materials for around 23 minutes on average each time they used them. Around 28.5 percent reported using the materials for between 30 and 100 minutes, 39 percent reported using them for between 15 and 25 minutes, and 22.5 percent reported using them for between 4 and 14 minutes. These results are shown in Table 3.6.

Figure 3.5. Number of Days per Week Treatment Households Used Program Materials



Source: 2015 Endline Household Survey.

Table 3.6. When Households That Received the Program Materials Used the Materials, Number of Minutes

Number of Minutes Materials Were Used	N	%
Between 4 and 14 minutes	147	22.48
Between 15 and 25 minutes	255	38.99
Between 30 and 100 minutes	252	38.53
Sample size	654	100
Mean	23.04	
Standard deviation	12.58	

Source: 2015 Endline Household Survey.
Note: The question asked households: When you use the materials, for how long on average do you use them?

4. Baseline Results

Baseline data collection completed in 2013 measured the starting point for everyone in the sample and confirmed that the randomization was successful in terms of creating equivalent groups at baseline. The evaluation team tested three types of outcome measures and more than 50 background variables for statistical differences between the two groups.[21] This section briefly summarizes comparisons of primary outcomes and key background variables between the treatment group and the control group, captured with the household and service provider surveys. We also describe the study sample, breaking it down into four categories: child characteristics, household demographics, socioeconomic status, and maternal depression.

The first part of this section describes the overall results for the validation tables for the key outcome measures. The second part describes the sample at baseline, providing a snapshot of the child and family demographics and socioeconomic characteristics. We describe the entire sample because the treatment and control groups were statistically equivalent at baseline. The third part of this section describes the characteristics of the service providers and administrators.

Equivalence on Intermediate and Final Outcomes

The following tables focus on indicators from the baseline survey. The tables show the mean and sample size for the treatment group and the control group, as well as the differences in mean between the two groups. The tables also include the standard error, *p*-value, and effect size of this difference.

Early Stimulation Knowledge

Overall, no differences were found between the treatment and the control group in stimulation knowledge questions. Mothers showed a good understanding of the basic principles of stimulation. Only 23 percent agreed with the following statement: "A baby should not be held when he (she) is crying." Only 6 percent agreed with this statement: "Babies do some things just to make trouble for their parents." Approximately 98 percent agreed with the following statement: "Talking to a child about things he (she) is doing helps its mental development." One area where there is clearly room for improvement, however, concerns the role of the fathers. A large proportion of respondents (approximately 80 percent in both the control and treatment groups) agreed with the following statement: "Fathers are naturally clumsy when it comes to taking care of babies." Moreover, 35 percent of mothers reported that "infants understand only words they can say" (see Table 4.1).

[21] We used OLS regression (for continuous variables) and Probit regression (for binary variables) with cluster robust standard errors to account for the nested nature of the data (where households are clustered within community clinics).

Table 4.1. Stimulation Knowledge: Percentage of Mothers Agreeing With the Following Statements

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
A baby should not be held when he (she) is crying	0.235	1,279	0.225	1,281	-0.011	0.038	0.784	-0.025
Babies do some things just to make trouble for their parents, like crying, pooping	0.058	1,277	0.073	1,283	0.015	0.016	0.355	0.062
Infants understand only words they can say	0.347	1,164	0.341	1,133	-0.006	0.045	0.887	-0.013
It is important to talk and sing to your baby	0.976	1,247	0.979	1,255	0.003	0.009	0.708	0.023
Talking to a child about things he (she) is doing helps its mental development	0.976	1,249	0.983	1,258	0.007	0.008	0.432	0.046
Fathers are naturally clumsy when it comes to taking care of babies	0.803	1,262	0.812	1,254	0.008	0.032	0.795	0.021
Stimulation knowledge scale (0–8)	6.445	1,109	6.449	1,084	0.005	0.084	0.955	0.005

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; and "ES" is the effect size of the estimated impact. All values are in decimal points.

Early Stimulation Practices

Overall, no differences were found in the modified short HOME inventory questions. The results show that relatively small percentages of families took their children outside the house (around 33 percent for both groups); received relatives at home (40 percent and 37 percent of the control and treatment groups, respectively); or received family friends who visited the house (around 18 percent). Approximately 47 percent of families indicated that they did not have a specific place in the house to keep the child's toys (see Table 4.2).

Table 4.2. Stimulation Practice: Modified Short Home Observation for Measurement of the Environment Inventory (Percentage Who Answered "Yes")

Variables	**Control Mean**	**Control N1**	**Treatment Mean**	**Treatment N2**	**T-C Diff**	**Diff SE**	**Diff p-value**	**Diff ES**
Do you talk to your child while doing housework? What do you say to him or her?	0.750	1,286	0.724	1,286	-0.026	0.034	0.438	-0.060
Do you believe the child's behavior can be changed or modified by the parents' behavior?	0.974	1,286	0.977	1,286	0.002	0.009	0.789	0.015
Who usually looks after the child when the mother is not around? Always the same person.	0.738	1,286	0.682	1,285	-0.055	0.033	0.092	-0.122
A person under 12 years of age sometimes looks after the baby.	0.854	1,287	0.815	1,284	-0.039	0.022	0.089	-0.104
Once a week, someone usually takes the child to any store.	0.344	1,284	0.312	1,285	-0.032	0.028	0.243	-0.069
Takes the child regularly to the health clinic to be weighed or immunized.	0.918	1,287	0.946	1,286	0.028	0.015	0.056	0.111
The child has a special specific place to keep his or her toys.	0.455	1,287	0.489	1,284	0.034	0.039	0.382	0.068
In the last 12 months, the family did not move (or moved once)	0.978	1,287	0.965	1,285	-0.013	0.009	0.133	-0.080

from their residing location or house.								
Twice a month or more, the family receive relatives at their home or take their child to relatives' homes.	0.403	1,287	0.366	1,285	-0.038	0.035	0.287	-0.077
Twice a month or more, the family's friends come to their house.	0.171	1,286	0.184	1,285	0.013	0.034	0.710	0.033
HOME inventory scale (0–10)	6.586	1,281	6.458	1,277	-0.128	0.114	0.264	-0.086

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points.

Children in both the control and the treatment group had similar numbers of play materials. Overall, very low percentages reported having toys to make music, materials for drawing and writing, or toys such as dolls or kitchen sets (below 21 percent). Around 29 percent had picture books in the home that were suitable for children, and the average number of play materials used by the children was 1.3 toys.[22]

Table 4.3. Stimulation Practice: Family Care Indicator "Variety of Play Materials"

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Has the child…								
Played with toys that make or play music?	0.106	1,287	0.118	1,286	0.013	0.026	0.635	0.040
Played with materials for drawing and writing?	0.196	1,287	0.194	1,286	-0.001	0.029	0.961	-0.004
Played with toys or objects (e.g., such as dolls, tea-sets or cups, toy kitchen set, etc.)?	0.214	1,287	0.167	1,286	-0.047	0.036	0.188	-0.120
Played with toys that encourage movement (e.g., balls, small car, skipping rope, etc.)?	0.528	1,287	0.479	1,285	-0.049	0.039	0.204	-0.098
One or more picture books in the home that are suitable for the child?	0.289	1,287	0.298	1,287	0.009	0.040	0.814	0.020
Play materials scale (0–5)	1.333	1,287	1.258	1,285	-0.075	0.101	0.459	-0.062

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except for the play materials scale.

Furthermore, a low proportion of parents reported engaging in any play and learning activities with their children in the past three days. For example, only 15 percent reported reading books to their child, and approximately 18 percent of parents reported spending time with their child naming, counting, or drawing things.

[22] The reference period for this question was set to "the last 30 days," based on Dr. Jena Hamadani's experience. She found in previous studies that although mothers reported having some toys earlier, the toys were sometimes broken or unavailable at the time of surveying. For this reason, Hamadani encouraged us to add a reference point of the last 30 days to see if the child had played with those toys during that period.

Table 4.4. Stimulation Practice: Family Care Indicator "Play and Learning Activities"

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Any adult household member has read books to the child	0.153	1,287	0.150	1,286	-0.003	0.024	0.899	-0.008
Any adult household member has told stories or nursery rhymes to the child	0.379	1,287	0.394	1,286	0.015	0.051	0.769	0.031
Any adult household member has sung songs to the child	0.311	1,287	0.341	1,285	0.030	0.038	0.431	0.064
Any adult household member has played with toys with the child	0.574	1,287	0.552	1,286	-0.022	0.046	0.630	-0.045
Any adult household member has spent time naming, counting, or drawing things	0.198	1,287	0.167	1,286	-0.031	0.034	0.365	-0.080
Play and Learning Scale (0–5)	1.615	1,287	1.605	1,285	-0.010	0.145	0.946	-0.007

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; and "ES" is the effect size of the estimated impact. All values are in decimal points except for the scale.

Child Development Outcomes

Treatment and control groups were found to be equivalent on the cognitive and language domains of the Bayley test. The mean and standard deviation of the cognitive composite scores were 99 and 15, meaning that the scores of the Bangladeshi children fell within the normal range of the general population for which the test was developed. This was also observed in other Bangladeshi studies where Bayley–III was used (Jiang et al., 2014; Hamadani et al., personal communication). The mean of the language composite scores was 96 (with a standard deviation of 16). Table 4.5 presents the Bayley scaled scores (which measure a child's performance relative to his or her peers of the same age) and the composite scores (which are a transformation of a distribution of scores with a given mean and standard deviation).

Table 4.5. Child Development Outcomes: Bayley's Cognitive and Language

Outcome Measure	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Cognitive (scale score)	9.590	1,287	9.830	1,287	0.240	0.300	0.430	0.08(
Receptive communication (SS)	8.720	1,287	8.940	1,287	0.220	0.270	0.410	0.07(
Expressive communication (SS)	9.340	1,287	9.650	1,287	0.310	0.270	0.240	0.10(
Cognitive (composite score)	97.960	1,287	99.140	1,287	1.180	1.490	0.430	0.08(
Language (composite score)	94.510	1,287	96.070	1,287	1.560	1.470	0.290	0.10(

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact.

The prevalence of undernutrition, wasting, and stunting was similar between the two groups. The overall rates of wasting, stunting, and being underweight for sampled children aged between three months and 18 months were 7 percent, 28 percent, and 19 percent, respectively. Comparisons with the analytical sample of the Bangladesh Demographic and Health Survey (BDHS, 2014) indicated that the overall rates of wasting and being underweight were lower in the study sample than in the BDHS (which were approximately 14.3 percent and 32.6 percent, respectively). The percentages of stunting and chronic malnutrition in our sample

were also lower than the BDHS analytical sample—28 percent and 36 percent, respectively (BDHS, 2014 dataset). These results are presented in Table 4.6.

Table 4.6. Nutritional and Anthropometric Outcomes

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Age in months	11.810	1,287	11.337	1,287	-0.473	0.325	0.149	-0.123
Height (cm)	70.737	1,285	70.303	1,285	-0.434	0.365	0.238	-0.083
Weight (kg)	8.230	1,287	8.189	1,287	-0.041	0.077	0.596	-0.029
Head circumference (cm)	43.308	1,287	43.268	1,287	-0.040	0.130	0.760	-0.021
Gender (Female)	0.491	1,287	0.474	1,287	-0.017	0.021	0.414	-0.034
Weight for height (z-score)	-0.356	1,275	-0.328	1,266	0.028	0.064	0.660	0.022
Height for age (z-score)	-1.377	1,279	-1.329	1,278	0.047	0.065	0.472	0.039
Weight for age (z-score)	-0.993	1,286	-0.956	1,287	0.038	0.061	0.537	0.030
Head circumference for age (z-score)	-1.374	1,286	-1.293	1,283	0.081	0.081	0.317	0.076
Percent wasted	0.067	1,275	0.069	1,266	0.002	0.010	0.844	0.008
Percent stunted	0.287	1,279	0.272	1,278	-0.015	0.024	0.537	-0.033
Percent underweight	0.199	1,286	0.186	1,287	-0.013	0.017	0.449	-0.032

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; and "ES" is the effect size of the estimated impact.

Appendix H includes additional tables that demonstrate the level of similarity of the treatment and control groups at baseline in terms of other dimensions likely to be affect by the NNS program: dietary diversity of the selected child, morbidity and child health, micronutrient supplementation and hand washing practices. Moreover, this appendix also includes information about mother's responsive feeding practices.

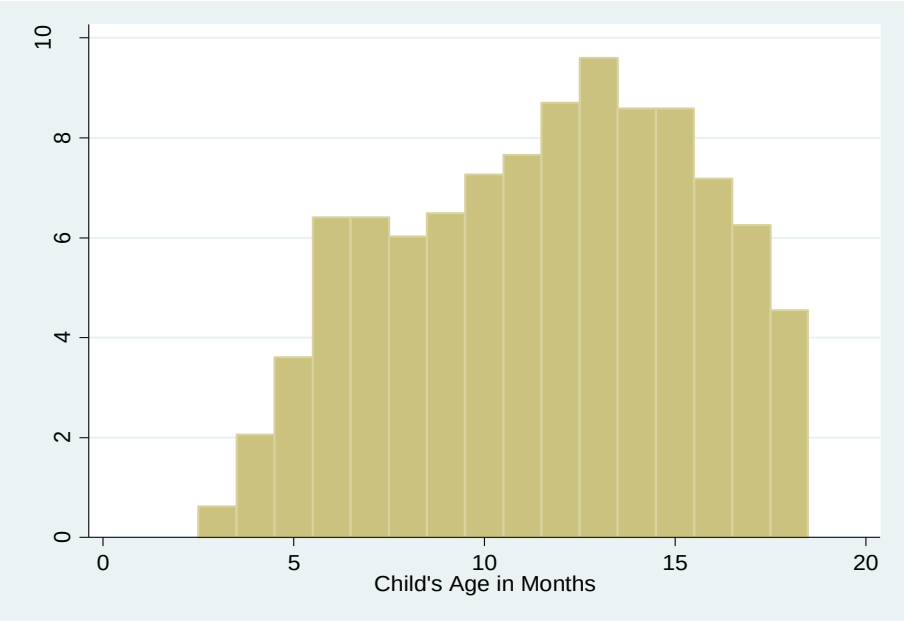
Description of the Children and Households

This section describes the sample at baseline, providing a snapshot of the child characteristics, family demographics, and socioeconomic characteristics of the study sample. We describe the entire sample because the treatment and control groups were statistically equivalent at baseline. However, for transparency purposes, all tables present the results for the treatment and control groups separately.

Child Characteristics

The average age of the children in the sample was 11.6 months. Children aged between three and six months made up fewer than 13 percent of the sample. Overall, the distribution of children in each age category was homogeneous, with slightly fewer children at either end of the age distribution. Figure 4.1 presents the distribution of age for the entire sample.

Figure 4.1. Age Distribution for the Children in the Sample During Baseline



We explored the distribution of age by gender and found that the girls in the sample were slightly older than the boys (11.64 and 11.49 months for girls and boys, respectively). We also explored whether the Bayley results showed any difference by gender, but we found that the distributions for both tests were almost identical for females and males.

Family Demographics and Socioeconomic Characteristics

Only 17 percent of the households were single-parent households. In 40 percent of all households, the mother-in-law—who is known to play an influential role in Bangladeshi households—lived with the sampled families. The average household had six members, and the average number of members per sleeping room was 2.8. In terms of religion, approximately 87 percent of households described themselves as Muslim.

On average, mothers were 26 years old, with 6.5 years of education (completed primary education). In contrast, fathers averaged 5.4 years of education.[23] In terms of employment, 99 percent of fathers reported being employed, compared to only 6 percent of mothers. We also asked mothers a set of questions designed to capture whether they did any job for which they were paid (either in cash or in kind), and we found that approximately 93 percent of mothers did not work for cash or in-kind payment.

In terms of housing characteristics, 34 percent of the sample had houses with finished walls made of cement or brick, 24 percent had finished floors made of concrete, and 14 percent had finished concrete roofs. Fuel for cooking is a measure of economic well-being, and 98 percent of households in the sample reported using very poor fuel for cooking (wood, charcoal, straw, shrubs, grass, or animal dung). Sewage is another measure of economic well-being, and 91 percent of households reported having their own latrine. However,

[23] This discrepancy in education is consistent with results from the Report of the Household Income and Expenditure Survey (2010), which showed that, at the national level, 21 percent of females and 19 percent of males had completed primary schooling. The gender difference in completing primary school is much higher in rural areas: 20.2 percent for females, as opposed to 18.7 percent for males. In Bangladesh, female school enrollment has increased substantially in recent years as a result of many targeted female schooling programs/stipends. However, males continue to complete secondary education at higher rates. Dropout among female students in rural areas might occur due to early marriage or other family constraints.

when asked about the characteristics of that latrine, only 51 percent reported having an "improved" latrine or a latrine with ring-slab/offset latrine (waterseal), pit latrine (covered), or septic latrine. Ninety-six percent of households had a piped water source (tube well, shallow tube well, or tap water supplied through pipes).

Table 4.7. Household-Level Demographics and Socioeconomic Status

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Single parent household	0.172	1,287	0.169	1,287	-0.002	0.021	0.914	-0.006
Percent with mother-in-law in the household	0.433	1,287	0.415	1,287	-0.018	0.025	0.470	-0.036
Percent Muslim	0.845	1,287	0.874	1,287	0.029	0.037	0.439	0.083
Mother education (years)	6.600	1,284	6.616	1,287	0.016	0.256	0.949	0.005
Father education (years)	5.366	1,067	5.421	1,069	0.055	0.287	0.847	0.015
Father employed	0.990	1,067	0.988	1,069	-0.002	0.005	0.702	-0.018
Mother married	0.984	1,285	0.989	1,287	0.005	0.005	0.333	0.041
Mother employed	0.060	1,283	0.050	1,284	-0.010	0.015	0.499	-0.045
Mother works at home	0.924	1,283	0.940	1,284	0.016	0.016	0.296	0.065
Mother age (years)	25.699	1,283	25.738	1,286	0.039	0.199	0.846	0.007
Household size (persons)	5.940	1,287	6.039	1,287	0.099	0.135	0.466	0.041

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community level; and "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated. There is some missing data on fathers' education due to three cases who did not report formal education and 435 who are single parents.

The majority of the households lacked most of the assets listed in the survey, although the majority reported having electricity or a solar panel (69 percent), cellphones (90 percent), and an electric fan (60 percent). At the end of Table 4.8, we present a wealth index. This index is a shortened version of the Bangladesh Demographic and Health Survey Wealth Index, which was revised by the authors to make it more appropriate to the current evaluation's context in rural Bangladesh.[24] The index is a composite of several measures of household wealth, including assets possessed by the household, household members per sleeping room, drinking water supplies, toilet facilities, home building materials, sources of cooking fuel, and land area. The index ranged from -3.16 to 1.42.

[24] http://dhsprogram.com/pubs/pdf/CR6/CR6.pdf

Table 4.8. Housing Characteristics, Assets, and the Wealth Index

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Housing Characteristics								
Finished wall (cement/brick versus other)	0.344	1,286	0.344	1,287	-0.000	0.035	0.994	-0.001
Finished floor (cement/concrete versus other)	0.239	1,286	0.248	1,287	0.009	0.030	0.757	0.021
Finished roof (cement/concrete versus other)	0.144	1,287	0.139	1,287	-0.005	0.028	0.868	-0.013
Fuel used for cooking clean (electricity or gas)	0.008	1,287	0.007	1,287	-0.001	0.009	0.927	-0.009
Fuel used for cooking poor (LPG or Kerosene)	0.008	1,287	0.009	1,287	0.001	0.005	0.870	0.009
Fuel used for cooking very poor (wood, charcoal, straw, shrubs, grass, or animal dung)	0.984	1,287	0.984	1,287	0.000	0.010	1.000	0.000
Latrine type "improved" (ring-slab/offset latrine, pit latrine, or septic latrine)	0.529	1,287	0.504	1,287	-0.025	0.045	0.583	-0.050
Household has own latrine	0.910	1,274	0.923	1,274	0.013	0.015	0.386	0.048
Piped water source (tube well, shallow tube well, or tap water supplied through pipes)	0.963	1,286	0.955	1,287	-0.008	0.026	0.764	-0.039
Members per sleeping room	2.746	1,281	2.777	1,282	0.031	0.080	0.701	0.025
Housing Assets. Does any member of this household own…?								
Auto bike	0.024	1,287	0.023	1,286	-0.002	0.005	0.761	-0.010
Rickshaw	0.037	1,287	0.020	1,287	-0.017	0.009	**0.045**	-0.102
Bicycle	0.137	1,287	0.137	1,287	-0.000	0.022	1.000	-0.000
Motorcycle/scooter	0.086	1,287	0.080	1,287	-0.006	0.014	0.648	-0.023
Electricity/solar panel	0.698	1,287	0.681	1,287	-0.017	0.035	0.628	-0.037
Radio	0.067	1,287	0.074	1,287	0.007	0.015	0.640	0.027
Television	0.385	1,286	0.377	1,287	-0.008	0.037	0.826	-0.017
Mobile/non-mobile phone	0.899	1,287	0.894	1,287	-0.005	0.016	0.776	-0.015
Refrigerator	0.215	1,287	0.205	1,287	-0.010	0.032	0.751	-0.025
Almirah/wardrobe	0.632	1,287	0.646	1,287	0.015	0.035	0.671	0.031
Table	0.789	1,287	0.781	1,287	-0.009	0.027	0.750	-0.021
Chair	0.832	1,287	0.816	1,286	-0.016	0.024	0.504	-0.041
Electric fan	0.597	1,287	0.571	1,287	-0.026	0.048	0.592	-0.052
DVD/VCR	0.103	1,286	0.082	1,287	-0.022	0.017	0.209	-0.075
Water pump	0.097	1,283	0.086	1,284	-0.010	0.021	0.621	-0.035
Wealth Index (scale)	0.000	1,266	-0.000	1,267	-0.000	0.084	0.997	-0.000

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact.

Intra-household decision-making processes could influence the effectiveness of the program. For instance, mothers who have the freedom to influence decisions within the household could be more likely to make changes that align with the program's messages. For this reason, we asked several questions in the household

survey to investigate who made decisions within the household. We asked questions about food preparation (what food is prepared every day and how much money the household spends on food); money use (buying important things for the family and who decides how earnings will be spent); and child health (what to do when a child is seriously sick). In Table 4.9, we present the results for mothers and mothers-in-law separately to document the number of cases where women made important decisions at home (women empowerment variables).

Our results suggest that mothers have some influence when it comes to making important decisions that affect their child's well-being. Most of the mothers indicated that they made decisions about food preparation (approximately 80 percent), and a large proportion indicated that they made decisions about child care during illness (approximately 60 percent). Our results also suggest that mothers-in-law were not influential in terms of making some of the decisions listed in the survey. However, these results should be interpreted carefully as it is plausible that the influence of mothers-in-law is channeled through the fathers.

Finally, we present the results for the maternal depression scale included in the household survey (Table 4.10). We asked mothers six questions to determine whether they showed signs of depression. Scores could range from 0 to 42, and a mean of 7 shows that mothers typically were not depressed.

Table 4.9. Mothers' Labor Force Participation and Intra-Household Decisions

Variables	Control		Treatment		T-C	Diff	Diff	Diff
	Mean	N1	Mean	N2	Diff	SE	p-value	ES
Mother has completed work for money (past week)	0.068	1,287	0.061	1,287	-0.008	0.015	0.616	-0.032
Mother makes decisions on:								
Food preparation	0.789	1,287	0.800	1,286	0.011	0.023	0.637	0.027
Food spending	0.236	1,287	0.229	1,286	-0.008	0.032	0.814	-0.018
Buying important things for the family	0.340	1,287	0.372	1,286	0.032	0.036	0.371	0.067
How her earnings are spent	0.218	1,287	0.211	1,285	-0.007	0.033	0.823	-0.018
Child care during illness	0.614	1,287	0.626	1,285	0.012	0.045	0.792	0.024
Mother-in-law makes decisions on:								
Food preparation	0.152	1,287	0.156	1,286	0.004	0.017	0.814	0.011
Food spending	0.060	1,287	0.051	1,286	-0.009	0.012	0.464	-0.037
Buying important things for the family	0.071	1,287	0.077	1,286	0.006	0.013	0.641	0.024
How respondent's earnings are spent	0.047	1,287	0.045	1,285	-0.002	0.010	0.819	-0.011
Child care during illness	0.044	1,287	0.045	1,285	0.002	0.011	0.886	0.008

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated.

Table 4.10. Maternal Depression

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Last week, number of days the mother…								
Felt sad	1.432	1,286	1.467	1,285	0.035	0.097	0.718	0.022
Felt lonely	0.960	1,280	1.009	1,284	0.049	0.104	0.637	0.035
Felt like crying	0.529	1,281	0.536	1,284	0.007	0.054	0.903	0.006
Felt that she enjoyed life	5.519	1,286	5.430	1,286	-0.089	0.131	0.500	-0.051
Felt depressed	1.122	1,286	1.212	1,285	0.090	0.087	0.305	0.064
Did not feel interest or pleasure in doing things	1.462	1,285	1.491	1,284	0.028	0.105	0.788	0.018
Scale of depression (0–42)	6.996	1,276	7.279	1,279	0.283	0.468	0.547	0.042

Note: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact.

Description of Service Providers

During the baseline data collection period, 190 service providers were surveyed. These service providers included community health care providers (N =56), family welfare assistants (N=64), and health assistants (N=70). Ninety service providers were interviewed in the treatment group, and 100 were interviewed in the control group.

Overall, the vast majority of the service providers were female (74 percent), Muslim (70 percent), and had received secondary education (64 percent). On average, service providers were 35 years old with 13 years of work experience, and 10 years of work experience in the same union. Family welfare assistants' primary tasks were family planning (100 percent); looking after the well-being of pregnant women and children under the age of three (97 percent); and providing health services to children under the age of five (64 percent). Health assistants' primary tasks were looking after the well-being of pregnant women and children under the age of three (91 percent); providing health services to children under the age of five (70 percent); and taking care of immunizations (83 percent). Community health care providers' primary tasks were looking after the well-being of pregnant mothers and children under the age of three; providing health services to children under the age of five; and taking care of diarrhea and fever problems. On average, family welfare assistants reported working 5.7 days per week, for approximately seven hours per day. Health assistants reported working six days a week, for seven hours each day.

When explaining why they usually could not visit all their assigned households, 48 percent of family welfare assistants in the control group and 57 percent of family welfare assistants in the treatment group indicated the following: "I have more households than I can handle." This difference is statistically significant.[25] Family welfare assistants cited other responsibilities in satellite clinics as the main reason for not visiting all their households, while health assistants cited other responsibilities in the EPI center as the main reason for not visiting all their assigned households.

[25] Note that despite this statistically significant difference between the treatment and the control groups, the data do not show large differences between the two groups in terms of workload.

5. Evaluation Results

ITT Impact Results

Impact on Intermediate Outcomes: Early Stimulation Knowledge

We found no impact on the index capturing mothers' early childhood stimulation knowledge. Overall, mothers in the treatment and control groups responded very similarly to the different questions measuring early stimulation knowledge. On a scale of 19 to 36, both groups scored approximately 29 on average, suggesting knowledge of the subject and that there may not have been sufficient room for improvement to find an impact. The regression-adjusted difference between the two groups was essentially 0. Even at the item level, we found no contrast between the treatment and control groups across the 14 knowledge items. Appendix I presents the complete results for the three regression models described in Chapter 3.

Qualitative Evidence

The finding that participants had some pre-existing knowledge was also reflected in the focus group data. All focus group participants from both control and treatment groups demonstrated some familiarity with ECD concepts, and almost all members of the control and treatment groups stated that playing is beneficial for children's physical and mental development. Parents reported that children learn to talk at an earlier age when they participate in more conversations, and that conversations help children's language skills to grow and help them become more capable of expressing their wants and needs to others. All participants recognized that singing songs and reading stories with children is important, and some explained that these activities enhance children's memories and behavior. All participants said that it is important to study and read with children, because this can help to ensure that children want to read when they grow older, allowing them to attain higher education levels. Parents also reported that through education children could learn a lot and increase their intelligence, which is good for their future lives. They also reported that education helps children to be able to interact with other children.

Despite both groups showing a familiarity with ECD concepts, analysis of the focus group data suggested that the program further enhanced parental knowledge related to early child development and pregnancy in the areas assigned to the treatment group. Participants from the treatment areas explicitly reported that regularly conversing with children had increased the children's cognitive intelligence. In the focus groups conducted in communities assigned to the control group, participants did not give much indication that they knew about these issues. Mothers in control areas reported less knowledge of ECD than mothers in treatment areas in the focus groups. Few of the participating mothers from two sub-districts of Satkania and Muladi stated that they sing to their children and tell stories to them, and the majority of mothers in control areas said that they did not have time to sing to their children or tell stories to them. In Satkania, all the mothers in the control area reported the belief that children should not be taught to read before they are old enough to go to school. The majority of mothers in Satkania reported not reading to their children. However, these focus group results are not necessarily representative of the full sample, and the quantitative impact results suggest that parents in the control group had similar levels of ECD knowledge but did not show it during the focus groups. The survey instrument may also have measured different dimensions of ECD knowledge.

Impact on Intermediate Outcomes: Early Stimulation Practices

We found no impacts on early childhood stimulation practices measured by the modified HOME inventory. Overall, mothers in the treatment and control groups showed similar levels of responsivity, acceptance, and

involvement behaviors with their child. The regression-adjusted point estimate of the treatment–control difference was only 0.02 on a scale of 0 to 5, and the effect size was very small (0.016).

There were a few small impacts on a number of Family Care Indicator items that were statistically significant or marginally significant, with p-values between 0.03 and 0.07. These impacts concern the "variety of learning activities" indicator, which measured whether household members engaged in playing and learning activities with the participant child in the three days prior to endline data collection. This index included stimulation activities such as reading books or showing pictured books to the child; telling stories or nursery rhymes; singing songs; playing with toys; and naming, counting, or drawing things with the child. The coefficient of the treatment indicator for this scale was 0.15, which was marginally statistically significant at the 10 percent level ($p<0.1$) and translated into an effect size of 0.09.

We found no program impacts on the "variety of play materials" indicator, which measured the variety of play materials the participant child was exposed to in the 30 days prior to endline data collection, although the coefficient was positive. This index included toys to make or play music, materials for drawing and writing, toys for pretending games, toys that encourage gross motor movement (e.g., balls, skipping rope), homemade toys (e.g., dolls, cars), and household objects such as bowls or pots. The effect size for this measure is 0.06.

When the two FCI indicators—"variety of learning activities" and "variety of play materials"—were combined into one index, the positive and statistically significant impacts observed on the "variety of learning activities" persisted: The coefficient of the treatment indicator was 0.25, which also was statistically significant at the 5 percent level ($p<0.05$). The corresponding effect size was 0.09.

There was also some evidence of program impact on the variable that captured "number of suitable picture books available in the household" for the participant child. The point estimate for the treatment indicator was 0.12, which was significant at the 5 percent level. The effect size was 0.10. Considering the small contrast between the treatment and control groups, it is possible that this small difference was driven by the picture books delivered by the Early Childhood Stimulation Program itself.

We also explored whether the program increased the availability of toys in the household, but we found no program impact on the number of toys. This result was expected, given that the program did not provide any monetary subsidy to treatment households, and that there was no evidence that treatment mothers were more likely to make toys for their children than control mothers.

Table 5.1. Intent to Treat Impacts on Early Childhood Stimulation Knowledge and Practices

Intermediate Outcome	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Stimulation knowledge scale	29.062	29.105	-0.043	0.217	0.844	-0.007
HOME inventory scale	2.823	2,801	0.022	0.103	0.834	0.016
Family Care Indicators:						
Variety of play materials and learning activities	6.807	6.558	0.249*	0.116	0.035	0.086
Variety of play materials	4.046	3.950	0.096	0.067	0.158	0.064
Variety of learning activities	2.748	2.595	0.153†	0.083	0.070	0.090
Number of picture books	0.755	0.632	0.123*	0.055	0.029	0.102
Number of books	9.206	9.181	0.025	0.293	0.932	0.002
Number of magazines	0.811	0.776	0.035	0.132	0.791	0.009
Sample size[b]	1221	1204				

Source: AIR calculations from AIR-administered household surveys.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using ANCOVA OLS controlling for regional, demographic, and household characteristics (Model 3).
[b] The sample size varies slightly between outcomes.

Qualitative Results

All of the focus group discussion (FGD) participants from treatment areas who received the materials reported using them with their children. FGDs suggested that the intervention also resulted in enhanced ECD practices, particularly among mothers. Mothers in treatment areas reported talking to their children, playing with them with toys, reading story books to them, and sometimes singing songs to them. They also reported teaching children the names of different colors and the differences between adjectives (such as small and large). Treatment mothers also reported teaching children the names of vegetables and other foods when cooking. These are some of the activities that service providers suggested participant mothers should focus on.

The control group FGDs showed less evidence of these activities, although it is possible that control group parents simply did not talk as much or as openly about these practices in the focus groups (or that different kinds of parents chose to participate in the treatment and control groups).

Impact on Child Outcomes: Child Development and Nutrition Outcomes

In contrast to the parent and home environment outcomes, we found stronger evidence of program impact on the Bayley language outcome (composite score) and its two subscales of receptive and expressive communication, and on the Bayley cognitive outcome. Table 5.2 presents the Bayley composite scores for cognitive and language and the scale scores for expressive and receptive communication. The composite scores are a transformation of a distribution of scores scaled to a metric with a range of 40 to 60, a mean of 100, and standard deviation of 15. The scaled scores represent the child's performance on a subtest relative

to his or her peers of the same age and are scaled to a metric with a range of 1 to 19, a mean of 10, and a standard deviation of three.

The modest treatment effect on the language outcome had an effect size of 0.137, which was statistically significant at $p<0.01$. The corresponding effect on the cognitive outcome was smaller (effect size of 0.076), but was still statistically significant ($p<0.05$).[26] The effect on the language outcome was reflected in modest impacts on both subscales, with effect sizes of 0.09 and 0.157 for expressive and reflective communication, respectively. These results align with the primary emphasis of the program, which focuses on developing the child's communication.

Table 5.2. Intent to Treat Impacts on Child Development Outcomes

Child Development Outcome	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Cognitive (composite score)	85.531	84.394	1.137**	0.379	0.004	0.076
Language (composite score)	90.505	88.307	2.198**	0.509	0.000	0.137
Expressive communication (SS)	7.966	7.673	0.293**	0.080	0.000	0.090
Receptive communication (SS)	8.725	8.247	0.478**	0.103	0.000	0.157
Sample size	1219	1202				

Source: AIR calculations from AIR-administered Bayley Scales Infant Development tests.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using ANCOVA OLS controlling for regional, demographic, and household characteristics (Model 3).

In addition to these modest program effects on children's language development, we found similarly sized effects on several behavioral outcomes, as measured with the Wolke Behavioral Rating Scale (see Table 5.3.). We found effect sizes ranging from 0.11 to 0.13 for the Approach, Emotion, and Activity subscales of the Wolke, all of which indicate some program effect on children's social-emotional development.

Table 5.3. Intent to Treat Impacts on Wolke Behavioral Rating Scales

Wolke Scale	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Approach	5.014	4.822	0.192**	0.070	0.007	0.129
Emotion	5.309	5.151	0.158*	0.075	0.037	0.112
Activity	3.538	3.349	0.189*	0.079	0.019	0.126
Cooperation	5.241	5.184	0.057	0.072	0.426	0.042
Vocalization	4.442	4.354	0.088	0.083	0.290	0.050
Sample size	1220	1204				

Source: AIR calculations from AIR-administered household surveys and Wolke behavioral rating tests.

[26] Note however, that this impact on the cognitive subscale of the Bayley was somewhat model-dependent. Without union fixed effects in the impact analysis, the impact estimate decreased from 1.14 to 0.89 and the standard error increased from 0.38 to 0.72.

Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using OLS regression at endline controlling for regional, demographic, and household characteristics.

There was also evidence that children in the treatment group had better anthropometric outcomes, as measured by the "weight-for-height" and "weight-for-age" measures. Children in the control group had lower body weight relative to their height (WHZ) than children in the treatment group as captured by the z-scores, and the prevalence of wasting was higher in the control group than in the treatment group as captured by the two malnutrition dummy indicators. (Wasting refers to weight for height that is below two standard deviations of the median value of the World Health Organization International Growth reference population for weight for height.) Wasting is commonly caused by a relatively recent illness or food shortage that induces acute and severe weight loss, but chronic undernutrition or illness can also cause this condition. Chronic dietary deficit or disease can also lead to wasting. The effects were moderate in size—0.18 for WHZ and 0.17 for wasting, and approximately 0.10 for the index that captures the percentage of children who were severely wasted (or below three standard deviations of the median value).

Weight for age (WAZ) is influenced by the height of the child and his or her weight and is considered a composite of stunting and wasting. Similarly, children in the control group had lower body weight relative to their age than children in the treatment group as captured by the z-score scale, and the prevalence of underweight and severely underweight children was higher in the control group than in the treatment group as captured by the two malnutrition dummy indicators. (Underweight refers to low weight for age that is below two standard deviations of the median value of the World Health Organization's International Growth reference population for weight for age.) During early childhood, frequent or prolonged infections and inadequate intake of nutrients (particularly energy, iron, protein, vitamin A, and zinc) may contribute to the incidence of children being underweight. The effect sizes were 0.11 for WAZ, 0.17 for the indicator that captures the percentage underweight, and 0.10 for the indicator that captures the percentage of children severely underweight.

We found no significant differences on height for age (HAZ) or the indicator that captures the degree of stunting of a child. Table 5.4 presents the impact estimates and effect size for the different anthropometric measures.

Table 5.4. Intent to Treat Impacts on Anthropometric Outcomes

Anthropometric Outcome	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Weight for age, WAZ (***z***-score)	-1.504	-1.638	0.134**	0.024	0.000	0.108
Percent underweight (2 ***z***-scores)	0.295	0.321	-0.026†	0.015	0.072	-0.067
Percent severely underweight	0.049	0.078	-0.029**	0.007	0.000	-0.141
Weight for height, WHZ (***z***-score)	-0.499	-0.726	0.227**	0.042	0.000	0.180
Percent wasted (2 ***z***-scores)	0.062	0.106	-0.044**	0.008	0.000	-0.174
Percent severely wasted (3 ***z***-scores)	0.001	0.015	-0.014**	0.004	0.003	-0.104
Height for age, HAZ (***z***-score)	-2.058	-2.032	-0.026	0.032	0.415	-0.022
Percent stunted (2 ***z***-scores)	0.541	0.521	0.020	0.015	0.184	0.045

Percent severely stunted (3 ***z***-scores)	0.204	0.196	0.008	0.012	0.507	0.028
Head circumference (cm)	46.410	46.357	0.053	0.052	0.315	0.028
Sample size[b]	1221	1204				

Source: AIR calculations from AIR-administered anthropometric measurement.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using ANCOVA OLS controlling for regional, demographic, and household characteristics.
[b] The sample size varies slightly between outcomes.

The differences on anthropometric measures between children in the treatment and control groups are probably explained by the differences found in the take-up of the National Nutrition Services: Households in the treatment group were significantly more likely to report having the growth development card (N=845) for the participant child, and were more likely to have the card with them at the endline survey (N=781).[27] Moreover, households in the treatment group had significantly more growth-monitoring check-ups than households in the control group (see Table 5.5). Apparently, mothers in the treatment group took greater advantage of the package of nutrition services provided by the National Nutrition Program, and were more exposed to services such as malnutrition screening, messages on child feeding, guidance on preparing balance meals, and recommendation about hygiene practices while cooking. This suggests that the add-on early stimulation program strengthened National Nutrition Program uptake, rather than competing with the program for parents' attention.

Table 5.5. Impacts on the Uptake of the NNS Program

Outcome	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Had growth development card	0.376	0.278	0.098**	0.032	0.003	0.206
Had and showed growth development card	0.373	0.292	0.081**	0.029	0.007	0.174
Number of growth-monitoring check-ups	0.947	0.682	0.265**	0.096	0.007	0.200
Sample size	1221	1203				

Source: AIR calculations from AIR-administered household surveys.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using OLS regression at endline controlling for regional, demographic, and household characteristics. These variables were not asked during baseline.

In fact, when we explored which type of households in the treatment group were more likely to take up the NNS Program, we found that households that received at least one of the four early stimulation materials were significantly more likely to have the growth development card, and to have more growth-monitoring check-ups, than treatment households that did not receive the ECS materials. Even when we observe households in the control group that received the program materials (N =32), we found that treatment and control households with ECS materials were more likely to use the NNS program than households without the ECS materials (although with this sample we have not enough power for statistical significance). Figures 5.1, 5.2, and 5.3 illustrate these results by comparing NNS Program uptake across four groups: households in the control group without the program materials (N=1,199); households in the control group with at least one of the four program materials (N=1,199); households in the treatment group without program materials

[27] We recorded whether the household had the growth development card and showed it to the interviewer, had the card but did not show it, or did not have the card.

(N=588); and households in the treatment group with at least one of the four program materials (N=660).s

Figure 5.1. NNS Program Uptake: Availability of the Growth-Monitoring Card

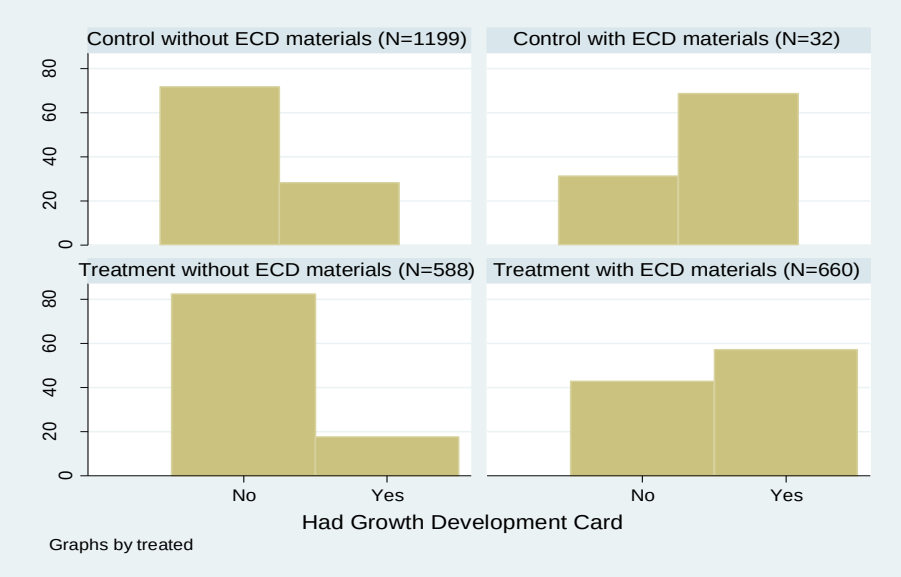


Figure 5.2. NNS Program Uptake: Showed the Growth-Monitoring Card

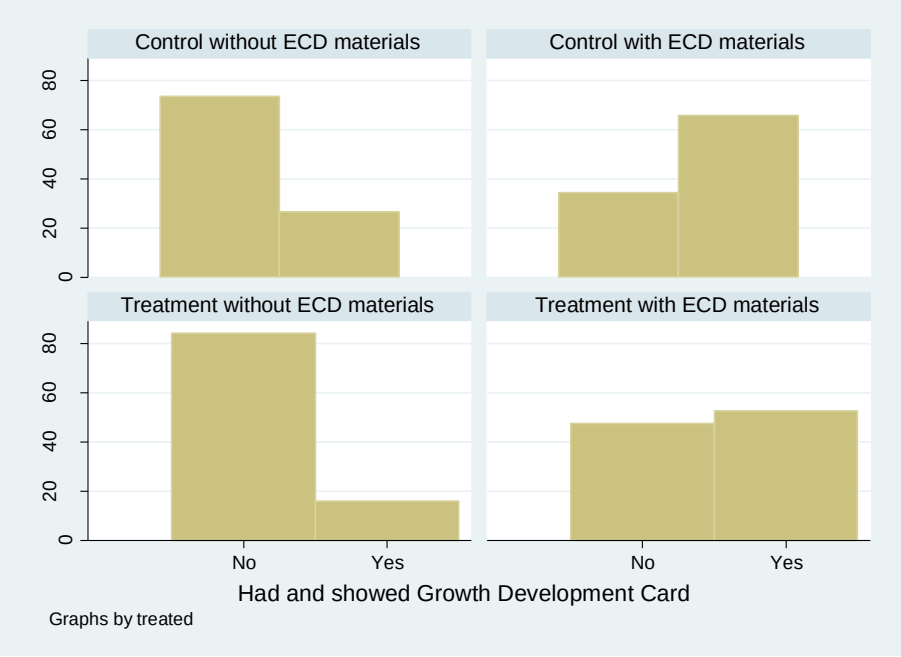
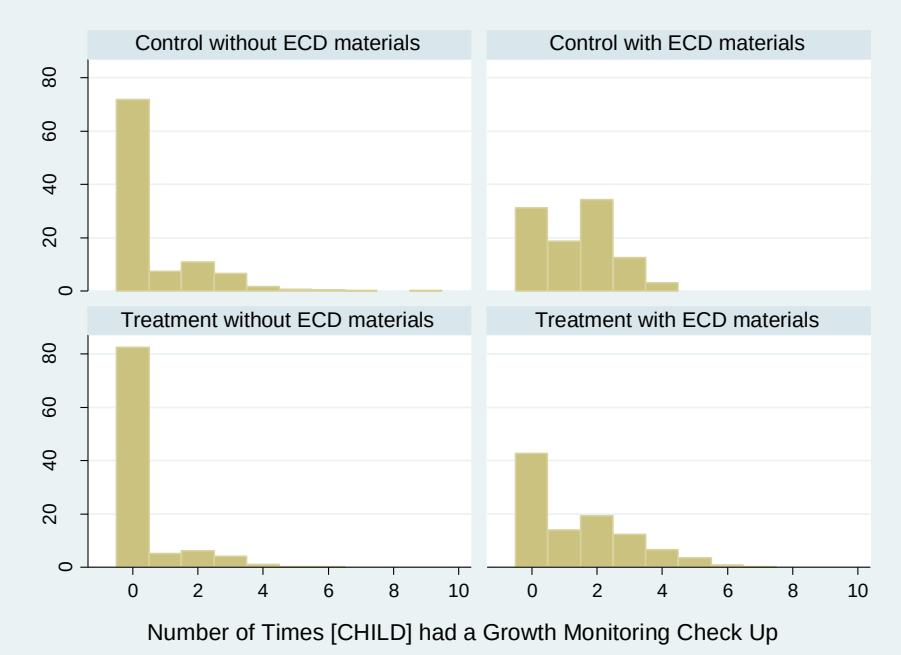


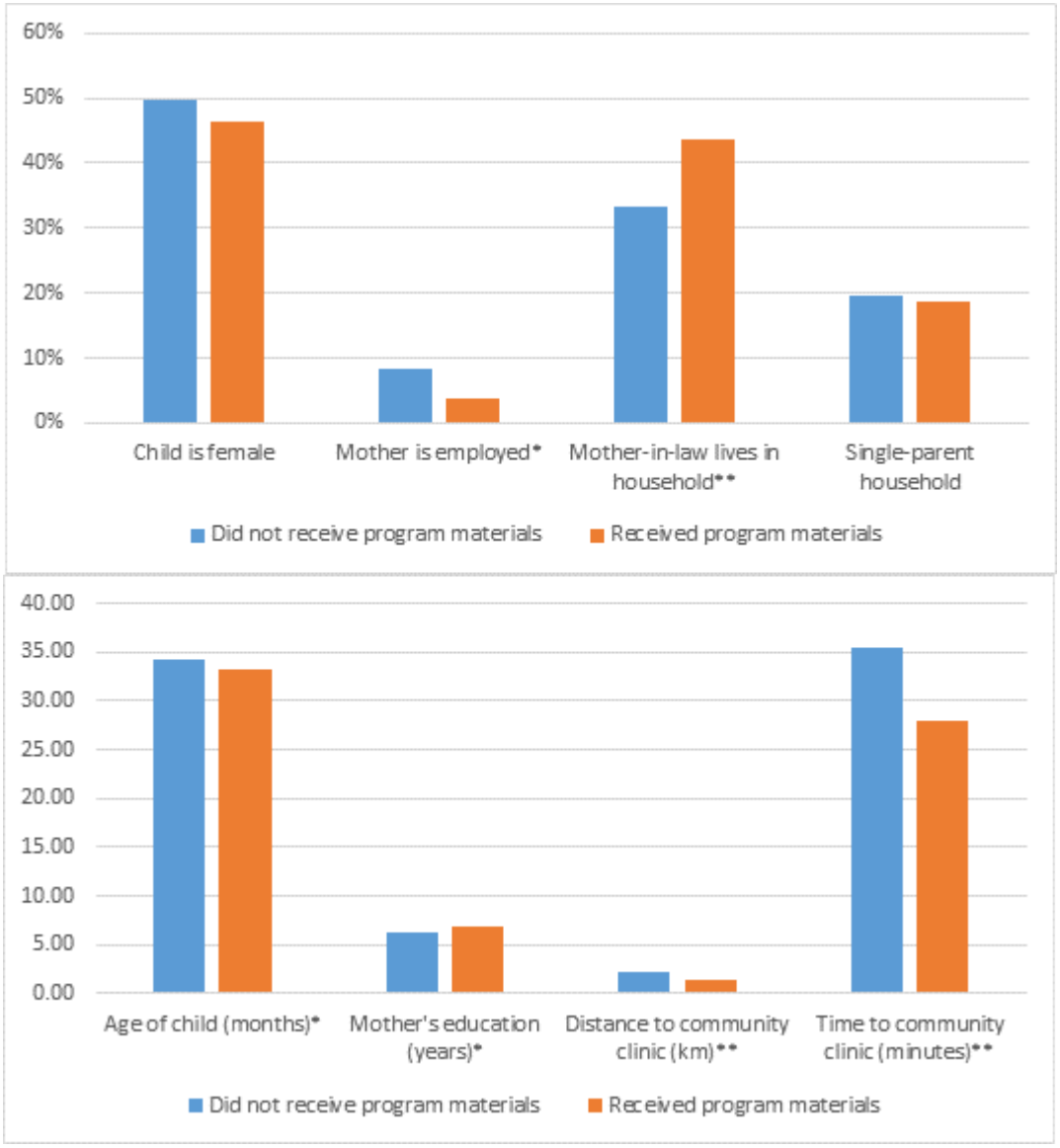
Figure 5.3. Number of Growth-Monitoring Check-Ups



Moreover, we also explored which type of households in the treatment group were more likely to receive the program materials. The following two graphs present these results. These graphs compare the 660 households in the treatment group that received at least one of the four materials with 590 households in the treatment group that did not receive the program materials. Overall we found that households with older children, with employed mothers, with mothers with lower levels of education, and who lived father (in terms of distance and minutes) from the community clinics were significantly less likely to receive the

program materials. Moreover, the data suggests that households that have the mother in law living in the house were significantly more likely to receive the materials.

Figure 5.4. Describing Treated and non-Treated Households



Notes: *=statistically significant at the 0.05 level, ** at the 0.01 level.
OLS regression results with clustered standard errors.

Sub-Group Analysis

We explored whether the program had a differential effect for different subgroups: by gender, Bayley baseline score, and by region (or upazila). We found no differential impact effects by gender or baseline Bayley distribution on Bayley outcomes, anthropometric measures, or the Wolke scale. However, we found some regional differences: children in the region of Kulaura obtained lower Bayley scores and lower anthropometric measures compared to Satkania. Moreover, we found a positive effects on Wolke Approach, Emotion, Cooperation, and Vocalization for the children in Muladi compared to Satkania. These results are presented in Appendix J.

Impact on Secondary Outcomes

We found no impacts on morbidity, hand-washing practices, responsive feeding, dietary diversity, number of feeding times, or the consumption of different types of food. However, we found some modest impact on the types of food that the two groups were consuming: households in the treatment group were more likely to feed their child with eggs, fish, poultry or meat[28] than control households. The effect size for this measure is 0.10. We also found weak evidence that households in the treatment group were eating less fruit and vegetables (such as fruits, green leafy vegetables, orange and yellow vegetables) than households in the control group, but more oils, fats, butter and khichuri. The effect sizes are -0.11, 0.01 and 0.03 for fruits, oils and khichuri respectively (See Tables 5.6 and 5.7).[29]

We also found no evidence of impacts on mothers' depression, but at the time of the endline survey, mothers were generally less depressed than they were at baseline.

Table 5.6. Intent to Treat Impacts on Dietary Outcomes

Feeding Practice	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Child is fed diverse diet (4 or more food groups in last day)	0.880	0.878	0.002	0.012	0.843	0.005
Mother is currently breastfeeding child	0.207	0.186	0.021	0.015	0.165	0.143
Number of times child fed yesterday	5.541	5.666	-0.125	0.101	0.219	-0.072
Number of times the child was fed the following (in the last 24 hours):						
Milk (fresh or tinned)	0.321	0.337	-0.016	0.021	0.448	-0.042
Carbs (rice, porridge, wheat, roots, & tubers)	1.786	1.759	0.027	0.025	0.274	0.037
Oils, fats, butter	0.974	0.968	0.006†	0.003	0.098	0.011
Fruits and vegetables	1.252	1.332	-0.080†	0.047	0.094	-0.108
Egg, fish, poultry, or meat	2.008	1.920	0.088*	0.037	0.020	0.102
Pulse, peanuts, beans & ground nuts	0.577	0.529	0.048	0.041	0.242	0.110
Khichuri (local dish)	0.036	0.023	0.013†	0.006	0.052	0.034
Sum number of times fed each food	6.349	6.310	0.039	0.058	0.502	0.019
Sample size[b]	1221	1204				

Source: AIR calculations from AIR-administered household survey.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using ANCOVA OLS controlling for regional, demographic, and household characteristics.
[b] The sample size varies slightly between outcomes.

[28] These results are robust to the model specification of the regression, but more precise for Models 2 and 3 which include Union dummies and other child and household covariates.
[29] The household survey did not inquired about the consumption of shak or lentils.

Table 5.7. Intent to Treat Impacts on Morbidity, Hand-Washing, Responsive Feeding, and Maternal Depression Outcomes

Secondary Outcome	Treatment Mean	Control Mean	Program Impact[a]	Std. Error	p-value	Effect Size
Morbidity:						
Major illness in the last two weeks	0.015	0.024	-0.009	0.007	0.219	-0.024
Diarrhea in the last two weeks	0.033	0.028	0.005	0.007	0.473	0.015
Hand-washing at critical times:						
Family members use soap to wash hands	0.923	0.911	0.012	0.021	0.568	0.040
Mother washes hands before food preparation	0.203	0.217	-0.014	0.025	0.576	-0.033
Mother washes hands before eating	0.373	0.399	-0.026	0.025	0.299	-0.053
Mother washes hands before feeding children	0.490	0.519	-0.029	0.028	0.316	-0.057
Mother washes hands after defecation	0.977	0.969	0.008	0.011	0.446	0.028
Mother washes hands after cleaning babies' bottoms	0.851	0.861	-0.010	0.023	0.661	-0.025
Responsive Feeding:						
Scale of positive feeding practices (0–4)	2.202	2.188	0.014	0.088	0.873	0.011
Scale of negative feeding practices (0–3)	1.040	1.011	0.029	0.070	0.679	0.040
Maternal depression scale (0–42)	4.952	4.694	0.258	0.373	0.492	0.038
Sample size[b]	1221	1204				

Source: AIR calculations from AIR-administered household survey.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using ANCOVA OLS controlling for regional, demographic, and household characteristics.
[b] The sample size varies slightly between outcomes.

Treatment-on-the-Treated Impact Results

This section presents the treatment-on-the-treated (TOT) impact estimates for the child development outcomes and anthropometric measures. Appendix I presents the three regression models for each of these outcomes. As expected, the magnitude of the point estimates and effect sizes almost doubles in size for the Bayley outcomes. The effect sizes for cognitive and language (Table 5.8) were 0.15 and 0.27 respectively. The effect sizes for the three Wolke subscales that showed ITT impacts (Approach, Emotion, and Activity)

increase to 0.26, 0.22 and 0.24, respectively (Table 5.9). The TOT impacts on anthropometric measures are also still consistent with the ITT estimates and effect sizes almost double in size (Table 5.10).

Table 5.8. Treatment-on-the-Treated Impacts on Child Development Outcomes

Child Development Outcome	Program Impact[a]	Std. Error	p-value	Effect Size
Cognitive (composite score)	2.115**	0.727	0.004	0.148
Language (composite score)	4.261**	0.994	0.000	0.269
Expressive communication (SS)	0.569**	0.156	0.000	0.176
Receptive communication (SS)	0.926**	0.200	0.000	0.307
Sample size	2413			

Source: AIR calculations from AIR-administered Bayley Scales Infant Development tests.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using Two-Stage Least Squares regression controlling for regional, demographic, and household characteristics.

Table 5.9. Treatment-on-the-Treated Impacts on Wolke Behavioral Rating Scales

Wolke Scale	Program Impact[a]	Std. Error	p-value	Effect Size
Approach	0.387**	0.139	0.005	0.260
Emotion	0.318*	0.148	0.032	0.224
Activity	0.360*	0.154	0.020	0.239
Cooperation	0.125	0.142	0.380	0.091
Vocalization	0.164	0.161	0.308	0.092
Sample size	2416			

Source: AIR calculations from AIR-administered household surveys and Wolke behavioral rating tests.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using Two-Stage Least Squares regression controlling for regional, demographic, and household characteristics.

Table 5.10. Treatment-on-the-Treated Impacts on Anthropometric Outcomes

Anthropometric Outcome	Program Impact[a]	Std. Error	p-value	Effect Size
Weight for age, WAZ (***z***-score)	0.264**	0.054	0.000	0.212
Percent underweight (2 ***z***-scores)	-0.052†	0.029	0.070	-0.130
Percent severely underweight	-0.055**	0.016	0.000	-0.273
Weight for height, WHZ (***z***-score)	0.446**	0.086	0.000	0.355
Percent wasted (2 ***z***-scores)	-0.086**	0.016	0.000	-0.342
Percent severely wasted (3 ***z***-scores)	-0.027**	0.009	0.002	-0.208
Height for age, HAZ (***z***-score)	-0.050	0.061	0.412	-0.041
Percent stunted (2 ***z***-scores)	0.038	0.029	0.187	0.084
Percent severely stunted (3 ***z***-scores)	0.017	0.023	0.456	0.061
Sample size[b]	2417			

Source: AIR calculations from AIR-administered anthropometric measurement.
Notes: †=statistically significant at the 0.1 level, * at the 0.05 level, ** at the 0.01 level.
[a] Adjusted regression results using Two-Stage Least Squares regression controlling for regional, demographic, and household characteristics.
[b] The sample size varies slightly between outcomes.

Cost-Effectiveness Results

This section describes the overall costs of the program and by different categories, and presents the cost-effectiveness results for the different outcome of interest.

Breakdown of Costs

As Table 5.8 indicates, the program cost $127,534. Personnel—primarily the three project officers based in the intervention districts, as well as other Save the Children management staff—was the largest cost category, accounting for 35.7% of the total. The second largest cost category, administration costs, included office rent, utilities, communications, and equipment such as laptops and motorcycles. The third largest cost was the training of service providers, which included multiple training sessions over the two years of the program (described above). Materials provided to spread ECD messaging—including the clinic posters and materials provided to households—were the primary drivers of the knowledge-sharing cost category. Travel costs include the costs of monitoring program implementation.

Table 5.8 summarizes the costs of the Early Childhood Stimulation Program for the total program, by community clinic, by service provider, and by child. All costs are reported in 2014 U.S. dollars.

Table 5.8. Cost Categories for the Early Childhood Stimulation Program

Type of Cost	Cost	Per Clinic	Per Service Provider	Per Child	Percentage of Total
Personnel	45,589	1,169	390	2.45	35.7%
Administration	25,237	647	216	1.35	19.8%
Training	24,534	629	210	1.32	19.2%
Knowledge sharing, including program materials	21,312	546	182	1.14	16.7%
Travel and accommodation	10,862	279	93	0.58	8.5%
Total	**127,534**	**3,270**	**1,090**	**6.84**	**100%**

Note: All costs are adjusted for inflation to report values in 2014 U.S. dollars.

Cost-Effectiveness

Dividing the total program cost by the beneficiaries provides an estimate of cost per beneficiary. The intervention treated 39 community clinics and 117 service providers. Assuming costs are distributed equally and there are three service providers per clinic, the intervention cost $3,270 per clinic, or $1,090 per service provider participating in the intervention. Training costs for these personnel were only $210 per service provider, although this figure excludes materials for households and other costs not directly related to training.

The cost-effectiveness of the intervention focuses on gains in children's outcomes, as the ultimate beneficiaries of the Early Childhood Stimulation Program were the children in the treatment areas. The target beneficiaries were the 18,644 children under three years old in treatment areas during the project. As this intervention relies (to a large extent) on existing infrastructure and provides messaging and materials for service providers to convey to households during the course of their work, the intervention cost only $6.84 per child expected to benefit from the intervention. The cost of $6.84 per child is comparable to similar interventions, such as a community-based health and nutrition program in Honduras that used volunteers in communities to spread messaging on early childhood knowledge and practices to mothers of children under two years (Fiedler, 2003).

The cost-effectiveness of an intervention can be measured by determining the funding required to produce an additional unit of outcome. Using the estimated impacts on children's outcomes from Chapter 6 and the cost per child described above, we estimated the costs associated with improving children's outcomes by a given unit. Only statistically significant impacts are included in the cost-effectiveness analysis.

Table 5.9 shows the cost (in 2014 US dollars) required to improve children's language outcomes by one interval for each outcome. The intervention increased children's language outcomes by 2.198 points on the language composite score, which ranges from 40 to 160 with a mean value of 100 and standard deviation of 15. Dividing the cost per child ($6.84) by the outcome gain (2.1 points), we find that a one-point increase in composite language score cost $3.11 per child. Of course, the cost of one point increase represents an average and does not reflect the range of costs to treat all children or the range of improvements in outcomes across children. The cost for this effect size is comparable to other interventions.

The language composite score includes two scaled subscores—expressive and receptive communication—which also saw statistically significant program impacts. It cost $23.35 for a one-point increase in the scaled score of expressive communication, and $14.31 for a one-point increase in the scaled score of receptive communication. These subscores range from 1 to 19, making the cost-effectiveness of the scale scores comparable with each other but not directly comparable with the composite, given the difference in units. Improving receptive communication was more cost-effective than improving expressive communication, which is consistent with the intervention's focus on increasing parents' interaction with their young children.

Table 5.9. Cost of Improving Language Outcomes

Gain in Outcome	Cost (2014 USD)
Cognitive (increase of one point in composite score; range: 40-160)	6.02
Language (increase of one point in composite score, ranging from 40 to 160)	3.11
Expressive communication (increase of one point in scaled score, ranging from 1 to 19)	23.35
Receptive communication (increase of one point in scaled score, ranging from 1 to 19)	14.31

The intervention had statistically significant impacts on both weight for age and weight for height. As Table 5.10 shows, it cost $51.05 per child to increase weight for age by one standard deviation, and $30.13 per child to increase weight for height by one standard deviation. As discussed in the impact results section, the intervention did not directly target anthropometric outcomes, but these impacts may be explained by greater NNS Program take-up among households that received the ECD intervention.

Table 5.10. Cost of Increasing Weight

Gain in Outcome	Cost (2014 USD)
Weight for age, WAZ (increase of one standard deviation)	51.05
Weight for height, WHZ (increase of one standard deviation)	30.13

The intervention also had statistically significant impacts on reducing the percentage of children who were severely underweight and severely wasted. Table 5.11 shows the cost-effectiveness of these impacts. It cost $2.36 per child to decrease the percentage of children who were very underweight by one percentage point (i.e., with a weight for age that was three standard deviations below the median value of the National Center for Health Statistics and World Health Organization International Growth reference population). It cost $4.89 to decrease the percentage of children who were very wasted by one percentage point the (i.e., with a weight for height that was three standard deviations below the median value).

Table 5.11. Cost of Decreasing the Percentage of Children Who Were Severely Underweight and Severely Wasted

Gain in Outcome	Cost (2014 USD)
Percent severely underweight (decrease of one percentage point in the percentage of children who were severe underweight)	2.36

Percent severely wasted (decrease of one percentage point in the percentage of children who were severely wasted)	4.89

The intervention proved to be a low-cost and potentially scalable approach to improving children's outcomes. It cost $6.84 per child to reach 18,644 children under three years old. Increasing the language score on the Bayley test by one point cost the program only $3.11 per child and increasing the cognitive score by one point cost only $6.02 per child. The intervention also improved children's weight outcomes, despite not directly targeting nutrition. The low cost of increasing weight outcomes suggests that the complementary effects of combining the ECD stimulation intervention and the NNS Program rollout resulted in cost-effective solutions for reducing underweight and wasting. These gains in language, cognitive, and anthropometric outcomes may have long-term positive impacts on children's outcomes. Additionally, as the benefit of the intervention is expected to spill over to siblings, the cost-effectiveness may be underestimated. Calculating the possible long-term economic benefits of the intervention is beyond the scope of this impact evaluation, but the importance of ECD suggests large benefits of this relatively low-cost intervention.

6. Discussion

Discussion and Conclusions

This evaluation presented a unique opportunity to assess both the feasibility and the impacts of scaling up a promising early stimulation and parent education program in a wide range of community contexts in Bangladesh. The presence of a strong NNS Program infrastructure created an opportunity to deliver an intensive, hands-on parenting intervention for relatively low cost. By providing supplemental training to community health care providers, health assistants, and family welfare assistants who were already visiting and interacting with families with young children on a regular basis, Save the Children was able to extend its early childhood development messages into remote and rural communities that a dedicated early stimulation intervention might not have been able to reach. This approach carried great promise, both in terms of the potential benefits of the combined nutrition and ECD interventions for families, and in terms of the affordability and scalability of the model.

The primary research objectives addressed by this evaluation were (1) to confirm that it was possible to implement this supplemental Early Childhood Stimulation Program with fidelity in an existing government infrastructure; (2) to describe the extent to which the early stimulation messages were able to change parenting practices and the home environment of the children; and (3) to measure the impacts of Save the Children's Early Childhood Stimulation Program on children under these implementation conditions. Thanks to the generous support of the World Bank's Strategic Impact Evaluation Fund and the efforts and contributions of program staff and families throughout Bangladesh, we were able to address these evaluation objectives.

As the findings in this report demonstrate, using an existing program infrastructure to deliver a supplemental intervention is easier said than done. The fidelity of program implementation in treatment communities was considerably lower than Save the Children anticipated, with almost 50 percent of the sampled households failing to receive the materials and individual messages that should have been delivered to them. Moreover, the additional time spent by service providers in households assigned to the treatment group was minimal, and service providers reported being seriously time constrained in their delivery of both the NNS Program message and the additional ECD messages. Approval delays and other bureaucratic hurdles explain some of these implementation challenges, but a simple lack of available time and resources seems to have been the most important constraint that prevented the program from being implemented as intended. From an implementation perspective, this program did not live up to its potential, and subsequent replication efforts should be more proactive in addressing these concerns.

Relatively weak implementation of a low-intensity program is unlikely to result in robust impacts on parenting and home environment outcomes. Although we did not find impacts on parental knowledge or the overall home environment, we found modest but statistically significant effects for the composite indicator that captured the variety of play materials and learning activities and the number of picture books available at home. Hence, while there is no solid evidence that the ECS program affected parental knowledge, there is evidence suggesting that parents in the treatment group engaged in more supportive and stimulating interactions with their children than parents in the control group.

However, the story changes when we look at impacts on child outcomes. Using precise and well-administered child development measures, we found small to modest but significant effects on children's cognitive development, language development, social-emotional development, and physical development (growth and weight). Effect sizes ranging from 0.06 to 0.18 were consistent with the modest intensity and

low fidelity of the program. When looking only at families who were directly exposed to the treatment (treatment-on-the-treated analyses), these impacts roughly doubled in size, making them comparable to those achieved with more expensive interventions and economically meaningful, in terms of predicting potential impacts on long-term productivity.

However, the impacts on child outcomes were not consistent with the lack of program impacts on parental knowledge and modest impacts on home environment. There are three possible explanations for this (which may co-occur to some extent): (1) The program may have had an impact on child outcomes through a different pathway than parent knowledge and behavior; (2) distal child-level outcomes may be more precisely measured than proximal household-level outcomes; and (3) small and insignificant (undetectable) impacts on parenting and modest effects on home environment may have multiplier effects that emerge in subsequent child outcomes. We discuss each of these possible explanations in turn below.

- **Explanation 1:** When an early stimulation component is added to an existing nutrition program, there are always concerns that the two aspects of the combined program may compete with one another. (That is, the quality and impacts of the NNS Program could be compromised by the early stimulation intervention, even if that intervention is successful in its own right.) To guard against this possibility, we included anthropomorphic measures in our evaluation design, hoping that we would not find negative impacts on these outcomes as service providers' attention shifted to the ECS program message. Instead, we found the opposite: The evidence suggests that the add-on early stimulation program may have increased the effectiveness of the NNS Program rather than competing with the program for parents' attention. We found that households in the treatment group were more likely to take up the NNS program than households in the control group, as demonstrated by the availability of the Growth Development Card and the number of growth monitoring checkups. Households in the treatment group also were more likely to give animal protein to their child than households in the control group. This, in turn, may have directly enhanced children's nutrition outcomes, which could then indirectly contribute to improvement in children's cognitive and language development outcomes.
- **Explanation 2:** As we described in the report, some of our measures of parent practices and the home environment were not very reliable. While it is possible to obtain very precise child outcome measures through intensive training of observers, it is much more challenging to reliably measure the use of toys, reading materials, parenting practices, and home environment when relying on the recall of surveyed parents. For this reason, it is possible that child-level effects materialized despite more proximal parent-level effects because these were imprecisely measured and attenuated to be detectable, especially given that program implementation is weak and effects are modest in size.
- **Explanation 3:** It is possible that the proximal household-level effects were too small to be detectable (even if the outcomes had been more precisely measured), but that small changes in parenting multiply into more robust (and therefore more easily detectable) impacts on children's physical and cognitive development. This hypothesis is consistent with the results of other early stimulation program evaluations, which found that effects grew over time.

In conclusion, Save the Children's Early Childhood Stimulation Program was able to significantly improve child development outcomes across several dimensions, despite being implemented with relatively low fidelity. This finding, coupled with the low implementation cost of less than $7 per child, makes this program an effective use of funds. It is especially noteworthy that, despite increasing the time burden of NNS Program service providers, the Early Childhood Stimulation Program appears to have increased the nutritional benefits of the NNS Program as well. This suggests that it may be advisable to modify nutritional programs to focus more broadly on all aspects of child development, including the need for parents to

directly stimulate their child's cognitive and language development and to provide toys and other resources to support this development.

External Validity

Although the impact evaluation was conducted in only three upazilas (a non-representative population in Bangladesh), it was designed to have sufficient power to estimate impacts that could be generalized to a wider population. The theory of change for the program—which is designed to improve household environmental conditions in order to promote child development—is based on the view that behavioral change messaging needs to be focused and integrated throughout the community. Concerns about external validity should be minimal for the following reasons. First, the intervention leverages on national nutritional program platform, whereas the program is delivered by providing training to government workers on parenting behaviors to support child development, and this information is delivered (along with health, nutrition and family planning messages) through community clinic service providers. All of this suggests that it is feasible to scale up the impacts within target population in the country.

Well-functioning community clinics that are staffed by frontline service providers such as HAs, FWAs, and CHCP is particularly important for scaling up child and mothers nutrition programs in the country. A recent World Bank assessment suggested that the NNS appears to be a worthy and scalable approach to support nutrition outcomes through existing health system using diverse platforms. However, NNS faces critical challenges regarding to coordination and that of embedding interventions into well-matched health system delivery platforms, monitoring and implementation (Saha et al 2015). The World Bank report suggests that adequate technical monitoring and implementation support, and coordinating with potentially higher coverage outreach platforms such as NGO platforms could help support more effective rollout of NNS.

Second, knowledge from this study can be easily replicated in locations with similar socioeconomic characteristics and a similarly supportive policy context, where early childhood stimulation and childhood development messages are delivered by health service providers from within the community health clinic catchment areas. Under the RCHCIB, the government has already built up partnerships with non-governmental organizations in 70 percent of the districts for consolidating community clinic services. The government's ongoing emphasis on improving community clinic facilities and service provider efficiency also suggests that scaling up the ECS program is feasible.

Recommendations

For Implementers

The child development card could be improved in the following ways:

- **Laminate the card.** Many beneficiary mothers stated that the child development card should be laminated. During the rainy season, the cards were easily damaged or destroyed by rain water. Children could also tear the card apart.
- **Amend the child development card so that it can be hung on the wall inside the house.** Materials can easily get lost. Turning the card into a decorative hanging material would make it easier for mothers to locate and check the information.
- **Provide more monitors for large areas.** One monitor was provided in each of the three upazilas, despite having different numbers of community clinics and households (e.g., Kulaura had 31 community clinics, Muladi had 10 community clinics, and Satkania had 37 community clinics).

- **Consider distributing the materials in one round instead of two or more rounds.** Distributing program materials in different rounds created some distribution and tracking challenges and delayed the arrival of the materials.

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Appendix A: Background

ECD Programs Currently Operating in Bangladesh

This appendix describes early childhood development programs implemented in recent decades by several organizations in Bangladesh, including the government. As part of this movement, Save the Children started its Bangladesh ECD program in 1999. Through this program, it conducts training for pre-school teachers and caregivers, develops and supports home-based and school-based preschools, operates parenting and reading development programs for children aged three to five, and operates school readiness programs for children aged five to six. These programs serve more than 40,000 children, mostly from poor, ethnic, disaster-prone and geographically isolated communities. Save the Children evaluated several of the component programs of its Bangladesh ECD strategy itself. For example, it evaluated its preschool program by following preschool pupils into primary school and comparing their outcomes to those of children who did not attend a preschool program. Children who graduated from preschools were followed into Grades 1 and 2, and they performed significantly better in all tests in Grade 1 and in all but reading competencies in Grade 2 (Aboud and Hossain, 2011).

A recent Save the Children effort in Bangladesh was a 10-month parenting program for mothers and children in rural districts, where a combination of group meetings and home visits was used to deliver messages on hygiene, responsive feeding, play, communication, gentle discipline, and nutritious foods, using an illustrative card. In this study, children between 4 and 14 months were enrolled and assessed for their growth and development before and after the intervention. Mothers were interviewed concerning their practices, such as preventive health practices, dietary diversity, home stimulation, and knowledge of developmental milestones. Maternal depressive symptoms were also assessed. The evaluation found positive program effects on the Bayley subtests of child development (introduced in more detail below), and on parenting practices related to stimulation and knowledge of developmental milestones.

Recently, Save the Children conducted a parenting program in rural Bangladesh run by local paraprofessionals and compared it to usual care in the community. Intervention was provided to mothers through group meetings and home visits concerning nutrition, hygiene, responsive feeding, discipline, play, and communication. The study included 463 children between 4 and 14 months of age at enrolment. Significant effects on child development, as well as parenting practices related to stimulation and knowledge of development milestones, were observed after 10 months of intervention (Aboud et al., 2013). The benefits observed in this study led Save the Children to plan the present study, with some modifications.

There are several other ECD programs in Bangladesh, ranging from very small one-room preschools scattered in different areas of the country to countrywide programs covering large populations. There are also many organizations working on ECD programs in the country, with the ECD Network listing over 200 organizations in its 2010 directory. The programs may be classified as follows:

- Government programs, including the NNS
- NGO programs

- Research initiatives

Government-initiated programs

- **Ministry of Women and Children's Affairs Through Bangladesh Shishu (child) Academy.** This ministry is the Bangladesh Government's focal point for overall child development (0–18). It plays a lead role in national policy development, coordination, facilitation, and oversight of government, non-government, and private sector activities. It has established 8,731 preschools in several districts, including preschools in prisons, tea gardens, disaster-affected areas, and so on, covering approximately 800,000 children aged 4–5 yrs. In addition, it trains teachers, undergraduate and postgraduate medical and nursing students, family welfare visitors (FWV), sub-assistant community medical officers (SACMO), and Bangladesh scouts and girl guides, and it includes ECD modules in its syllabus. Bangladesh Shishu Academy has prepared manuals on ECD as well as advocacy programs for government staff.
- **Ministry of Primary and Mass Education.** This also conducts preschools and trains core trainer groups.
- **Ministry of Religious Affairs.** This organizes preschools in mosques and temples targeting children aged 4–6, including 570,000 children in mosques and 80,610 in temples. It trains Muslim imams and Hindu priests on providing preschool education and religious matters to children.
- **Ministry of Health & Family Welfare.** This trains staff working in child care (e.g., those at nutrition centers, EPI centres, and Integrated Management of Childhood Illnesses (IMCI) centers.
- **National Institute of Population Research and Training (NIPORT).** This provides training for FWVs on ECD.
- **Ministry of Education.** This is responsible for curriculum development.
- **Ministry of Chittagong Hill Tracts.** This organizes preschool in 3,500 centers in the Chittagong Hill Tracts.
- **Local Government.** Birth registration has traditionally been their only ECD activity, but they are now involved with a new activity (along with the World Bank) focused on improving the situation of the poorest strata in the community, where health, nutrition and developmental messages are provided to the families.
- **Institute of Child and Mother Health (ICMH).** This trains medical and nursing students and develops child-friendly corners in government medical colleges.
- **Bangladesh Rural Advancement Committee (BRAC).** This committee started an ECD project in 1997. Pre-primary schools run for 2.5 hours a day, six days a week, covering Bangla, mathematics, and science for children over five from poor households or those with special needs. It has 3,553 centers with 22,000 children. It also trains teachers/caregivers in ECD. Post- tests on a stratified random sample of schools found positive effect of pre-primary education on average scores in the primary school completion tests and the probability of getting first division. The pre-primary education benefited children from poor socioeconomic backgrounds, particularly girls. (No reference

was available. This information was extracted from a presentation by Dr. Mahboob Hossain in the South Asia Regional Conference Early Childhood Development, Dhaka, December 7–9, 2010.)

- **BRAC University, Institute of Educational Development (IED).** This offers training courses on different ECD issues, including courses on ECD for policymakers, planners, and managers. It has developed manuals for its pre-primary package, Shishu Bikash Kendra (child development center) package, and day care and parenting package, as well as a pictorial dictionary. The ECD Resource Center (ECDRC) offers postgraduate certificates, diplomas, and master's degree courses in ECD. It also undertakes studies to identify the strength and challenges of ECD programs. The comprehensive child development program is a set of development initiatives including SBK (Shishu Bikash Kendra) and parenting sessions that was started recently. The program includes children at 3–3.5 years and will continue for two years. A baseline survey was conducted before starting the program. This will be followed by a mid-term evaluation and a final evaluation at the end of two years. It also evaluated a community-based stimulation program (Opel et al. Report #5) and mathematics and literacy programs for preschoolers (Opel et al. Report # 1-4, Opel et al. 2007, 2009; 2011) and found positive results of short interventions.
- **Plan-Bangladesh.** This ECD program was started in 1997. The program covers 60,655 children attending ECD aged 0–3 yrs, a reading development program for children aged 3–5 years, a school-readiness program for children aged 5–6 years, and a program for developing learning capacity in children aged 6–8 years. It mostly covers children from poor, ethnic, and geographically isolated communities. Its parenting program was evaluated using a post-test design. Children and their mothers (n=170) who had attended the parenting program for one year were compared with child-mother pairs from other villages who had not attended any parenting program. The mothers in the parenting program had higher scores on their child-rearing knowledge as well as the Home Observation for Measurement of the Environment (HOME) inventory of stimulation. However, they were not significantly different in communicating with their children, nor were there benefits in the nutritional status or language comprehension of their children (Aboud, 2007). An evaluation of its preschool program—using a post-test comparing preschool children with those who did not attend any preschools—revealed that preschool children scored higher on vocabulary, verbal reasoning, nonverbal reasoning, and school readiness. They also had better scores on some indicators of social development during play, but not on the cognitive aspects of play (Moore et al., 2005, Aboud 2006). The quality of preschools was thus improved, and a pre-post design was used to compare the piloted-revised preschool with the regular preschool. After seven months of intervention, the revised program had higher points than the regular program, although the regular program also showed improvement. Children attending the revised preschools had higher points on most outcome measures (Moore et al., 2008).
- **Dhaka Ahsania Mission (DAM).** Its ECD program started in 1992. It conducts integrated programs including woman empowerment and capacity building, raising public awareness, and information sharing and networking. The programs aim at improving the lives of children and their families. The services are early education and care, parenting services, and other welfare activities meant for child health and development. A project named the Comprehensive Basic Education Program (CBEP) was implemented from 1994 to 1997. DAM also provides support to a number of local organizations to

formulate organizational ECD policy and implement ECD programs. No evaluation could be located for this NGO.

- **Phulki.** Its ECD program began in 1991, with 2,785 children attending ECD aged 0–3, a reading development program for children aged 3–5, and a school-readiness program for children aged 5–6. It targets the children of working mothers and establishes day care centers, mostly in garment factories. No evaluation of the whole program could be located, but some researchers conducted a short mathematics program and demonstrated benefits to 3–4 year old children's math skills (Opel et al., 2007).
- **Institute of Education and Research (IER).** It provides training for primary and secondary school teachers and other workers in the field of education and includes a significant portion on ECD. It serves both government and non-government organizations. No evaluation could be located.
- **Grameen Shikhha.** This provides ECD programs for 41,000 children, targeting extremely poor communities, and trains teachers. No evaluation could be located.
- **Nayantara.** This has produced the Bengali version of Sesame Street (Sisimpur) since 2004, which is watched by 74 percent of children aged 3–6 years in Bangladesh. A qualitative study to evaluate the impact of the program found it to be a positive force in the lives of children, as viewed by caregivers and teachers (Kibria and Jain, 2009).
- **Friends in Village Development Bangladesh (FIVDB).** This started in 1985, covering 90,983 children from extremely poor, geographically isolated and socially stigmatized communities in Dhaka and Sylhet. It also targets street children. Its primary education program (PEP) has the following components: ECD (0–3), a reading development program (3–5), a school-readiness program (5–6), and program for developing learning capacity (6–8). It was involved with the SUCCEED project.
- **Aga Khan Foundation Bangladesh.** This runs an ECD support program to strengthen NGOs' institutional capacity, thereby improving quality and access. It works with the established NGOs but also supports smaller NGOs. It has rural and urban programs in the divisions of Dhaka, Chittagong, Sylhet, and Barisal.
- **Care Bangladesh.** Its ECD program started in 2006, targeting poor and extremely poor communities in 18 districts. Its program is called Shouhardo-Education Collaboration Initiatives and covers children aged 0–3 years (n=31,800); 3–5 years (n=31,800); 5–6 years (31,800); 12–18 years (45,600); and parents (n=145,600). No evaluation could be found.
- **Rangpur Dinajpur Rural Service (RDRS) Bangladesh.** RDRS is an NGO that has been working to empower the rural poor in northern Bangladesh for over 34 years. Its ECD program was started in 2005. It conducts an early learning for school success program (SUCCEED), a child empowerment project, and elementary education development for ethnic communities. A total of 174,100 children from poor, ethnic, stigmatized communities receive their services. It implemented SUCCEED in their area and was evaluated as part of Save the Children's evaluation.
- **Village Education Resource Centre (VERC).** In 1989, VERC started its ECD programs, and it has served 99,946 children who have participated in the school readiness program for children 5–6 years old. It also has programs for developing learning capacity in children. Its target groups are children from geographically isolated areas, stigmatized communities, disaster-prone areas and female children. It was involved with the SUCCEED project.

- **Gono Shahajjo Sangstha (GSS).** GGS has had an ECD program since 1996, serving 13,920 children aged 5–6 years in 22 districts of the country. Its components include learning with fun, games, toys, cultural activities, and awareness building for parents. It has also produced supplementary reading materials, books, modules, and toys. It targets poor and extremely poor communities. An evaluation report was not located.

Research Initiatives

- A cluster-randomized evaluation of a responsive stimulation and feeding intervention in Bangladesh by Aboud and Akhter (2011) showed that stimulation and feeding benefited children's nutrition and language development.
- A time-lagged controlled study that delivered psychosocial stimulation for six months to severely malnourished children aged 6–24 months showed that the intervention benefited mental and motor raw scores, as well as weight-for-age *z*-scores of children (Nahar et al., 2009).
- A responsive feeding intervention to mothers and children aged 8–20 months in rural Bangladesh increased maternal responsiveness and children's self-feeding, although there was no weight gain (Aboud et al., 2009). No developmental outcomes were assessed.
- A community-based responsive feeding program provided a six-session educational program to 100 mothers and their children aged 12–24 months in rural Bangladesh. Children's weight gain and self-feeding was significantly higher in the intervention group compared to the control group (Aboud et al., 2008). No developmental assessment was conducted in this study.
- Psychosocial stimulation provided to undernourished children in rural Bangladesh through home visits and group sessions for one year improved the development and behaviors of the children and their mothers' parenting knowledge (Hamadani et al., 2006).
- A cluster randomized controlled trial using a modified curriculum of psychosocial stimulation was conducted with iron-deficient anemic (IDA) and non-anemic (NA) children for nine months. Stimulation improved children's mental development, but the IDA group tended to improve less than the NA group even after their recovery from anaemia (Tofail et al., 2013).
- Another cluster randomized controlled trial of psychosocial stimulation was conducted with severely malnourished children recovering from diarrhea who attended four nutrition clinics in Dhaka. The children were randomized to food, stimulation, food and stimulation, or control groups. Children receiving stimulation with or without food showed significant improvement in their mental development and growth in weight (Nahar et al., 2012a). The home environment and the child-rearing practices of their mothers also improved (Nahar et al., 2012b).

The National Nutrition Services

The National Nutrition Service (NNS) is a key component of the national Health Population Nutrition Sector Development Plan (HPNSDP), which guides government programs from 2011 to 2016. The purpose of the NNS is to address malnutrition and mainstream nutrition in government services, through the development of a package or interventions. The package of interventions is based on global evidence of successful nutrition strategies and was developed with input from nutrition actors in Bangladesh, including NGOs, UN organizations and donors. The Government of Bangladesh is committed to support the scale up of the NNS package over the coming years.

Save the Children supports the government delivering the full package of NNS interventions and monitors the delivery mechanism of the package in three upazilas in Sylhet, Chittagong and Barisal Divisions. Specifically, Save the Children's role is to train government health workers and support community volunteers to identify and treat malnutrition, whilst providing mothers with the skills to prevent it. In these three upzilas, the NNS is expected to improve the nutritional status and behavior of an estimated 110,000 children under five and 18,000 women of reproductive age living. For more detail about the NNS messages see Table A2 in Appendix A.

A key component of the NNS package is the community-based promotion of positive nutrition practices. This includes: exclusive breastfeeding for children up to six months, appropriate complementary feeding practices for children from six months to two years of age, screening for malnutrition, and appropriate referral to healthcare facilities for treatment. Health workers provide micro-nutrient supplements (vitamin A, iron, folate, zinc and calcium) and de-worming medication to prevent malnutrition, whilst complicated cases of severe acute malnutrition are treated in upazila hospitals.

Community clinics host growth monitoring sessions for children under two and facilitate referrals to the union level (and if needed upazila level) facilities, where trained health workers screen for malnutrition for all children under-5, and provide mothers with nutrition counseling (primarily IYCF counseling). An important aim of the package is to establish an effective referral system for the prevention and treatment of maternal and child malnutrition.

Community volunteers also provide household level counseling, support and referral. They run monthly courtyard sessions to generate discussion amongst women on nutrition topics. Courtyard sessions include cooking demonstrations, called 'mother's picnics', to teach mothers how to prepare nutritionally balanced food for their young children and reinforce appropriate complementary feeding messages.

The NNS covers various types of service delivery points and service providers as described in the next table.

Table A1. Service Delivery Point and Service Provides that will benefit from National Nutrition Services

Service Delivery Points	Service Providers
1. Community Clinic	Community Health Care Providers, Health Assistants, Family Welfare Assistant
2. Family Welfare Center	Health Inspector, Health Assistants, Family Welfare Volunteer, Family Welfare Assistant
3. Satellite Clinic	Family Welfare Volunteer, Family Welfare Assistant
4. EPI (Expand Promotion of Immunization) center	Health Inspector, Health Assistants, Family Welfare Assistant
5. Upazila Health Complex	Sub-Assistant Community Medical Officer, Health Inspector, Family Planning Inspector, Family Welfare Volunteer

Note. The only service providers that do regular visits to households are health assistants and family welfare assistants.

Table A2. Description of the NNS Package

NNS package for adolescent girls, pregnant women and children under five
Upazila Health complex
• Treatment of severe acute malnutrition (SAM) • Screening for malnutrition • Promotion of infant and young child feeding (IYCF) practices • Provision of micro-nutrient supplements and de-worming treatments • Nutrition counseling tailored to children under five and adolescent girls (nutrition and hygiene).
Union facilities
• IYCF counseling for children under two years • Provision of micro-nutrient supplements • Nutrition counseling tailored to children under five and adolescent girls • Referral of severe cases to the Upazila Health Complex.
Community Clinics
• Screening for malnutrition • IYCF counseling • Specific breastfeeding counseling • Provision of micro-nutrient supplements • Referral of severe cases to the Upazila Health Complex • Follow-up home visits to ensure parents are complying with treatment and referrals.
Household Level
• Screening for malnutrition • Referral of malnutrition cases to health facilities • Treatment of malnutrition in the home • Provide ongoing nutrition advice for all children • Using Behavior Change Communication (BCC) to promote good IYCF, de-worming, maternal and newborn care practices and encourage visits to healthcare facilities.

Appendix B: Randomization Results

B.1 Randomization Procedure

The following list of steps describes the randomization procedure followed in this study:

- Stratify by Union to ensure that all Unions will have both treated and control clinics.
- In Unions with an even number of clinics, half were randomly assigned to treatment and half to the control condition.
- Eight Unions (three in Kalaura, two in Muladi, and three in Satkania) contain an odd number of clinics. In the eight Unions with odd numbers of clinics, pairs of clinics were randomly assigned with one to treatment and one to control.
- To ensure that the two Muladi Unions with an odd number of CCs had one CC assigned to treatment, we randomly assigned one CC within each odd Union to treatment and the other to control. Then we randomly assigned two of the remaining Kalaura CCs to either treatment or control, and two of the remaining Satkania Community Clinics to treatment or control. Finally, we randomly assigned the two last Community Clinics (one from Satkania and one from Kalaura) to treatment or control. Table 7 reports the results of randomization by Community Clinic.
- The last clinic was paired with another clinic from a Union with an odd number of clinics, and one was randomly assigned to each status.

Table B1: Randomization Procedure by Upazila and Union

	Upazila	Union	N of Community Clinics	Randomization Process
1	Kalaura	Baramchal	2	Completely at Random (CAR)
2		Bhramman Bazar	4	CAR
3		Hajipur	2	CAR
4		Joychandi	3	CAR for 2; third assigned randomly between other odd CCs in Kalaura or Satkania
5		Kadipur	2	CAR
6		Karmadha	4	CAR
7		Kalaura	5	CAR for 4; fifth assigned randomly between other odd CCs in Kalaura or Satkania
8		Prithempasha	3	CAR for 2; third assigned randomly between other odd CCS in Kalaura or Satkania
9		Routhgaon	2	CAR
10		Tilagaon	4	CAR
		Total in Kalaura	31	

11	Muladi	Char Kalekhan	2	CAR
12		Gachhua	2	CAR
13		Kazir char	3	CAR for 2; third assigned randomly between other odd CCs in Muladi
14		Muladi	3	CAR for 2; third assigned randomly between other odd CCs in Muladi
		Total in Muladi	10	
15	Satkania	Amilaish	2	CAR
16		Aochia	2	CAR
17		Bajalia	2	CAR
18		Charati	4	CAR
19		Dharmapur	2	CAR
20		Kaliaish	2	CAR
21		Kanchana	2	CAR
22		Keochia	3	CAR for 2; third assigned randomly between other odd CCs in Kalaura or Satkania
23		Khagoria	3	CAR for 2; third assigned randomly between other odd CCs in Kalaura or Satkania
24		Madarsa	2	CAR
25		Nalua	2	CAR
26		Paschim Dhemsha	2	CAR
27		Purangor	2	CAR
28		Satkania	2	CAR
29		Sodaha	3	CAR for 2; third assigned randomly between other odd CCs in Kalaura or Satkania
30		Sonakania	2	CAR
		Total in Satkania	37	
		Total	78	

B.2 Randomization Results

Table B2: Post-Randomization Status of Community Clinics by Upazila and Union

Upazila	Union	Treatment Status	Clinic Name
Kalaura	Baramchal	T	Ali nagar Community Clinic
		C	Singore Community Clinic
Kalaura	Bhramman Bazar	T	Helapur Community Clinic
		C	Sreepur Community Clinic
		T	Satra Community Clinic
		C	Gurebui Community Clinic
Kalaura	Hajipur	T	Billerpur Community Clinic
		C	Kaukapon Community Clinic
Kalaura	Joychandi	T	Bairab gong Community Clinic
		C	Gagtia Community Clinic
		C	Mitipur Community Clinic
Kalaura	Kadipur	T	Koula Rasi Community Clinic
		C	Chongor Community Clinic
Kalaura	Karmadha	T	Bodpasa Community Clinic
		C	Monsupur Community Clinic
		T	Hasimpur Community Clinic
		C	Tattiuli Community Clinic
Kalaura	Kalaura	T	Ballisree Community Clinic
		C	Lakkipur Community Clinic
		T	Shayedpur Community Clinic
		C	Minarmohol Community Clinic
		T	Protabi Community Clinic
Kalaura	Prithempasha	T	Rajnagar Community Clinic
		C	Gonkia Community Clinic
		C	Gozbhag Community Clinic
Kalaura	Routhgaon	T	Monoraj Community Clinic
		C	Koula Community Clinic
Kalaura	Tilagaon	T	Mobarakpur Community Clinic
		C	Miarepara Community Clinic
		T	Hajipur Community Clinic
		C	Bijli Community Clinic
Muladi	Char Kalekhan	T	Laxmipur Community Clinic
		C	Shologhar Community Clinic

Muladi	Gachhua	T	Padmarhat Community Clinic
		C	S. Gasua Community Clinic
Muladi	Kazir char	T	N. Kazirchar CC
		C	Boroya Community Clinic
		C	Bahadurpur Community Clinic
Muladi	Muladi	T	S. Goloivanga Community Clinic
		C	Dorir char Laxmipur (Kazirhat) Community Clinic
		T	W. Tero char Community Clinic
Satkania	Amilaish	T	Purba Dalu Community Clinic
		C	Hilimilli Community Clinic
Satkania	Aochia	T	Chonkhola (incharge) Community Clinic
		C	W. Ghatia danga Community Clinic
Satkania	Bajalia	T	Barduara Community Clinic
		C	W.Bazalia Community Clinic
Satkania	Charati	T	South charati Community Clinic
		C	Deepcharati Community Clinic
		T	Tulatuly Community Clinic
		C	Uttar brammandanga Community Clinic
Satkania	Dharmapur	T	Dharmapur Community Clinic
		C	Liaquat Ali Community Clinic
Satkania	Kaliaish	T	Kaliaish Community Clinic
		C	Moleyabad Community Clinic
Satkania	Kanchana	T	Soleman Chowdhury Community Clinic
		C	Nandibari Community Clinic
Satkania	Keochia	T	Jalal Ahmed Community Clinic
		C	Keochia Nandibari Community Clinic
		T	Sonamia Community Clinic
Satkania	Khagoria	T	Moisamora Community Clinic
		C	Rasulpur Community Clinic
		C	Charkhagaria Community Clinic
Satkania	Madarsa	T	Babunagar Community Clinic
		C	Samity ghar Community Clinic
Satkania	Nalua	T	E. Ghatiadanga Community Clinic
		C	Morfala Community Clinic
Satkania	Paschim Dhemsha	T	Isamoti Mojahar Ahmed Community Clinic
		C	Isamoti Community Clinic
Satkania	Purangor	T	Purangar Community Clinic
		C	Monyabad Community Clinic(incharge)

Satkania	Satkania	T	Rupkania Community Clinic
		C	Karaianagar Community Clinic
Satkania	Sodaha	T	Azimpur Community Clinic
		C	Mia para Community Clinic
		T	N, Sadaha Community Clinic
Satkania	Sonakania	T	Garangia Community Clinic
		C	Mirzakhil Community Clinic

Appendix C: Definitions of Analytical Variables

Child Outcomes

Bayley Scores of Infant Development (BSID-III)

Bayley cognitive and language composite scores are used as children's development measures. Since the language composite score is calculated using the scaled scores of both expressive and receptive communication subtests, we use the scaled scores of each subtest as well.

Wolke Behavioral Rating Scales

The Wolke Behavioral Rating Scale was collected only during endline, immediately following the Bayley test. Each Wolke Scale—Approach, Emotion, Activity, Cooperation, and Vocalization—ranges from 0 to a highest rating of 9.

Anthropometric Outcomes

We used WHO anthropometric software to calculate a number of standardized physical development scores that can be compared across a number of countries and ages[30]. Mean z-scores for weight-for-height, height-for-age, weight-for-age, and head circumference-for-age are reported as calculated by the WHO software. Using these z-scores we created indicators for children that were underweight (weight-for-age z-score less than negative 2), very underweight (weight-for-age z-score less than negative 3), wasted (weight-for-height z-score less than negative 2), very wasted (weight-for-height z-score less than negative 3), stunted (height-for-age z-score less than negative 2), and very stunted (height-for-age z-score less than negative 3).

Intermediate Parenting Outcomes

Stimulation knowledge scale

Using Section G from the household questionnaire, we report the responses of the mothers for a number of events which would provide information on their stimulation knowledge. During the baseline survey, we created the stimulation knowledge scale by coded questions as "correct" or "incorrect", and then added the total number of correct responses to get a scale from 0 to 8. Questions G004, G005, G007, and G008[31] were coded "correct" if the mother responded "Agree", and "incorrect" if the mother responded "Disagree" or "Not Sure"; whereas G001, G002, G003, and G006 were coded "correct" if the mother responded "Disagree" and "incorrect" if the mother responded "Agree" or "Not Sure". The baseline stimulation knowledge scale is the sum of "correct" responses.

[30] These standards were developed using data collected in the WHO Multicentre Growth Reference Study. The site presents documentation on how the physical growth curves and motor milestone windows of achievement were developed as well as application tools to support implementation of the standards.

[31] Several baseline survey sections were modified for the endline surveys. As a result, baseline and endline survey questions do not always correspond. In this section, question numbers of baseline items correspond to the numbering in the baseline survey, while questions from the endline use numbering from the endline surveys.

In order to increase the reliability of the stimulation knowledge scale, we included additional questions in Section G, and used an agreement scale instead of "Agree" or "Disagree". Endline questions G002, G004, G006, G008, G010, G011, and G012 were coded "Strongly Agree" = 4, "Agree" = 3, "Disagree" = 2, "Strongly Disagree" = 1, whereas questions G005 and G009 were coded "Strongly Disagree" = 4, "Disagree" = 3, "Agree" = 2, "Strongly Agree" = 1. There were very few responses of "Don't Know"; these were recoded as missing values. Endline questions G001, G003, G007, G013, and G014 were omitted to increase the reliability of the stimulation knowledge scale to 0.68. The endline stimulation scale is the sum of the agreement scales above.

Play Materials and Learning Activities Scales

For the play material analysis, we used Section K from the household questionnaire. First, we coded questions in Section K "Yes" = 1 and "No" = 0. We created the baseline play materials scale using questions K001 – K004, and the endline scale using K001 – K004 in addition to two new endline questions, K005 and K006. The baseline learning activities scale was created as the sum of "Yes" responses of questions K008 – K012 in the baseline survey, corresponding to endline questions K010 – K014. A composite scale of play materials and learning activities was created as the sum of these two scales and ranged 0-9.

Modified Short HOME Inventory Index

Using Section J, we recoded baseline questions J001, J002, J006, and J007 to "Yes" = 1, "No" = 0. To create the HOME Inventory Index we added the sum of questions J001 to J009 to get a scale from 0-9. During the endline, Section J was modified to include observational questions in addition to questions for the mother. Endline questions J004, J005, J012, J013, J015 were coded to "Yes" = 1, "No" = 0, and the endline HOME Inventory Index was calculated as the sum of these five responses. Due to the low reliability of this scale at endline (0.58), we also run separate regressions for each of the endline home inventory items J001 to J015.

Number of Books, Picture Books, and Magazines

During the baseline survey, question K006 and K007 on the number of books and magazines in the household were truncated at 11 to avoid outliers in estimates. During the endline survey, this cap was removed because many households responded having more than 10 books in the baseline survey. Since we use ANCOVA OLS regression, we code the variables on the number of books, picture books, and magazines in the household to include the truncation in baseline and the actual number without the truncation at endline.

Secondary Outcomes

Diet Diversity and Feeding Practices

Dietary diversity is a proxy for adequate micronutrient-density of foods. Children that were fed at least four of the seven following food groups were considered to have enough diet diversity, as it meant that the child had a high likelihood of consuming at least one animal-source food and at least one fruit or vegetable, in addition to a staple food.

The 7 foods groups used for calculation of diet diversity indicator are:

- Grains, roots and tubers
- Legumes and nuts
- Dairy products

- Flesh foods
- Eggs
- Vitamin-A rich fruits and vegetables
- Other fruits and vegetables

The variable "diet diverse" was coded 1 if the mother reported feeding the child foods from four or more of these seven food groups, and 0 otherwise.

In addition, baseline question E011 (endline question E002) is analyzed as separate indicators for the number of times the child was given each type of food within the last 24 hours.

Morbidity

The morbidity indicators were created from baseline questions E014 and E016, corresponding to endline questions E005 and E008. Each of the two variables are coded 1 when mothers reported their child having had diarrhea or a major illness in the last two weeks, and 0 otherwise.

Hygiene: Hand Washing

Baseline question E012, corresponding to endline question E020, is coded 1 if the mother reports that family members usually use soap or detergent to wash hands, and 0 if they do not usually wash hands, or use ash, mud, sand, or just water when washing hands. Using baseline question E021 (endline question E013) we create indicators equal to 1 when the mother reports washing her hands with soap at each critical time, and 0 otherwise.

Responsive Feeding

Using Section I from the household questionnaire, we have a percentage of mothers who responded that they usually did something to make the sample child eat if they refuse. From those who responded yes to this question, we coded seven responses provided in the questionnaire for methods of persuasion and have percentages of feeding techniques. Mothers were allowed to answer more than one type of response.

We created two scales: one as the number of the positive feeding practices reported (I00d, I00e, I00f, and I00g, ranging 0-4), the other as the number of negative feeding practices (I00a, I00b, and I00c, ranging 0-3). Mothers that reported doing nothing to make their child eat if they refuse were coded 0 for both scales, since they employed none of the practices.

Maternal Depression scale

Using Section L from the questionnaire, we report the number of days reported by the respondent that they felt a certain way during the past week (0-7). To prepare the maternal depression scale we reverse coded question L004, which is a positive event, and then we added the total number to get a scale from 0-42.

Uptake of the NNS Program

The update of the NNS Program is estimated at endline with questions E015 and E016. From question E015, one indicator was created as the percent of mothers that either showed the enumerator the NNS Growth Development Card for the child or reported having the card but did not show it. The second indicator captures only those mothers who showed the Growth Development Card. Question E016 corresponds to the total number of growth monitoring check-ups the child has had.

Micronutrients

The micronutrient indicators were created from baseline questions E012 and E013, corresponding to endline questions E003 and E004. The percentage of mothers who reported yes to child receiving Vitamin A and anti-helminth in the past 6 months is reported in the table. Mothers who were not sure were not included in the total.

Indicators for Subgroup Analysis

Gender

The variable "Female child" is coded 1 for households where the child of study is a girl, and 0 otherwise.

Region

Two indicators, "Muladi" and "Kulaura" are created for households in Muladi and Kulaura, with Satkania as the base category.

Baseline Bayley Development Score

Children with any subtest scaled score classified as "at-risk" or "emerging", as classified by the BSID-III handbook, are analyzed as a separate subgroup from children who scored at a "competent" or higher level for all three subtests.

Demographic and Household Characteristics

Age

The age of the child and of the mother are recorded in Section B, Question 4. Child's age is measured in months, while mother's age is measured in years.

Mother's Religion

Mother's religion is coded as 1 if the mother is Muslim in Section B, as opposed to Hindu, Christian, or Buddhist. Most mothers that are not Muslim are Hindu; only one percent of mothers are Christian or Buddhist.

Mother's education (number of years)

The mother's education is a numeric variable that includes up to class 12 based on highest class passed. Graduate and Masters Education is included as 12 years for the purpose of this indicator. Pre-primary school, Qawmi madrasa, and Hafezi are not included as formal education for this variable (although no mothers listed these three as highest level of education).

Father's education (number of years)

We first use the father variable calculated from above. The father's education is a numeric variable that includes up to class 12 based on highest level of education achieved. Graduate and Masters education is included as 12 years for the purpose of this indicator. Pre-primary school, Qawmi madrasa, and Hafezi are not included as formal education for this variable.

Mother employed

The variable "Mother employed" is created based on whether the intended respondent was listed as employed, as opposed to "looking for a job", "performing household work", or "do not work".

Single parent household

In order to calculate the number of parents that are part of the household, we first generate a mother variable if the household member listed is the respondent. The enumerators were instructed to interview the mother of the household. Then we calculate father based on the relationship to respondent as spouse. If we only have one parent for the sample child, this household is considered a "single parent household". (See Section B: Q2)

Household size

We count each family member per household to create household size. This includes all members related to the enumerator by the respondent.

Household members 0-18 years old

We count the number of family member per household within the range of 0-18 years of age. This includes members related to the enumerator by the respondent.

Father Present 8+ months

We used endline question B013 to create an indicator that is coded 1 if the father of the child was reported by the mother as away from the house for work for 120 days or less during the last year, and 0 if he was away for work for more than 120 days.

Wealth index

The index is a composite of several measures of household wealth—including assets possessed by the households, household members per sleeping room, drinking water supplies, toilet facilities, home building materials, source of cooking fuel, and land area.

This indicator was validated by using the DHS Bangladesh survey to create a "proxy" wealth index including all types of measurement listed in the household survey (assets, drinking water supplies, sanitation) and correlating with the actual DHS wealth index created by the DHS survey methodologists.

Time to Community Clinic

We calculate the distance of each household from the nearest community clinic using question A009 (endline question A010), reported as the number of minutes required to get to the community clinic using the usual mode of transportation.

Deaths in Household

The indicator "Deaths in household" is equal to 1 if the mother reported in endline that there was a death of one or more of the usual household members since the baseline survey, and 0 otherwise.

Negative Household Shock

We use endline questions B021 and B022 to create two separate indicators for whether a natural disaster affected the household and whether there was a loss from agricultural related activities since the baseline survey.

Mother-in-law in Household

We use Section B, Questions 2 and 3, to create an indicator that is 1 if the mother-in-law of the intended respondent is part of the household, and 0 otherwise.

Household Characteristics

The household characteristics came from Section C in the household survey. They were computed as follows:

- Finished wall (cement/brick): Percentage of households observed having either cement or brick walls in question C014.
- Finished floor (cement/concrete): Percentage of households observed having either cement or concrete floor in question C012.
- Finished roof (cement/concrete): Percentage of households observed having either cement or concrete roof in question C013.
- Fuel used for cooking clean: Percentage of households reporting using electricity or natural gas in question C015.
- Fuel used for cooking poor: Percentage of households reporting using LPG or Kerosene in question C015.
- Fuel used for cooking very poor: Percentage of households reporting using wood, charcoal, straw, shrubs, grass, or animal dung in question C015.
- Latrine type (Improved): Percentage of households reporting either ring-slab/offset latrine (water seal), Pit latrine (covered), or septic latrine in question C002. All other types are considered unimproved.
- Household has own latrine: Percentage of households reporting that the latrine reported in C002 is their own in question C003.
- Piped water source: Percentage of households reporting deep tube well, shallow tube well, or tap water supplied through pipes in question C001. All other types are not considered "piped" water sources.
- Members per sleeping room: First the number of household members are summed up from section B. Then we divide this number by the number of rooms used for sleeping in question C004.

Appendix D: Baseline and Endline Instruments

Baseline Household (Mother) Survey

V001	**Ques. SL**	
V002	**Child ID No.**	

V003	Date of interview	Day:	Month:	Year:	
V004	Name of interviewer			Code	

A. Identification (to be filled by enumerator)

Sl	Area	**Name**	**Code**
A001	Household Number		
A002	Para/sub-village		
A003	Village		
A004	Mauza		
A005	Union		
A006	Upazila		
A007	District		
A008	Distance to the **nearest** Community Clinic (to be filled by enumerator)	Distance in Km ___	
A009	Time (in minutes) required using normal mode of transportation		
A010	Mode of transportation		1 = Walking 2 = Rickshaw/van 3 = Boat 4 = Auto-rickshaw
A011	How long does it take to reach the nearest CC by walking		
A012	How long does it take to reach the nearest CC by using common mode of transport		

B. **Household Profile [Note: Demographic Information]**

										For members age 7 Years and above			
ID	Name of HH Member (Start with the name of HH head)	Relationship to respondent (Use code)	Sex 1=Male 2=Female	Age (months/ years)		Is HH member currently attending school 1=Yes 2=No	Highest class passed (Use code)	Religion (Use code)	Ethnicity (Use code)	Marital Status (Use code)	Can write a letter? 1=Yes 2=No	Activity Status 1= Employed 2=Looking for job 3=Household work 4=Does not work	If employed, field of employment: 1=Agriculture 2=Industries 3=Services
				Years	Months								
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
B001													
B002													
B003													
B004													
B005													
B006													
B007													
B008													
B009													
B010													
B011													
B012													

Relationship to intended respondent	1=Intended respondent; 2=Spouse; 3=Son/Daughter; 4=Sibling; 5=Parent; 6=Daughter-in-law/Son-in-law;7=Sister-in-law/Brother-in-law; 8=Father-in-law/Mother-in-law;; 9 = Grandchild; 10 = Nephew/Niece; 11 = Others (specify); 12 = Grandparent
Marital Status	1=Unmarried; 2=Married; 3=Widowed; 4=Divorced /Separated; 99 = Not Applicable

Religion	1=Muslim, 2=Hindu, 3=Christian, 4=Buddhist, 5= Other
Ethnicity	1=Bengali 2=Tribal, 3=Non-Bengali, 4= Other (specify)
Highest class passed	0=No class, 1=Class 1; 2=Class 2; 3=Class 3; 4=Class 4; 5=Class 5; 6=Class 6; 7=Class 7; 8=Class 8; 9=Class 9; 10=SSC/ Dakhil pass;11=Class 11;, 12=HSC/ Alem pass; 14=Graduate/ Fazil; 16=Masters/Kami; 66=Pre primary school; 67= Qawmi madrasa; 68= Hafezi; 69 = Others (specify)

C. Housing *[Note: SES Information]*

Sl.	Questions and Filters	Coding Categories	Answer
C001	What is the main source of water for drinking for your household?	1=Deep tube well 2=Shallow tube well 3=Tape water supplied through pipes 4=Pond sand filter 5=Rainwater harvesting system 6=Rainwater 7=Pond 8=River/canal 9=Traditional well 10=Other (Specify)	
C002	What type of latrine does your household use? **(Bold type indicates hygienic types)**	**1=Ring-slab/offset latrine (waterseal)** **2=Pit latrine (covered)** 3=Ring-slab/offset latrine (water seal broken) 4=Pit latrine (uncovered) **5=Septic latrine** 6=Hanging/open latrine 7=No toilet facility	
C003	Is it your own latrine? **Interviewer: Observe the latrine**	1= Yes; 2= No	
C004	How many rooms in this household are used for sleeping?	Number	
C005	Does any member of this household own?		
C005a	Auto bike	1= Yes; 2= No	
C005b	Rickshaw	1= Yes; 2= No	
C005c	Bicycle	1= Yes; 2= No	
C005d	Motorcycle/scooter	1= Yes; 2= No	
C005e	Electricity	1= Yes; 2= No	
C005f	Radio	1= Yes; 2= No	
C005g	Television	1= Yes; 2= No	
C005h	Mobile phone	1= Yes; 2= No	
C005i	Non-mobile phone	1= Yes; 2= No	
C005j	Refrigerator	1= Yes; 2= No	
C005k	Almirah/wardrobe	1= Yes; 2= No	
C005l	Table	1= Yes; 2= No	
C005m	Chair	1= Yes; 2= No	
C005n	Electric fan	1= Yes; 2= No	
C005o	DVD/VCR	1= Yes; 2= No	
C005p	Water pump	1= Yes; 2= No	

Sl.	Questions and Filters	Coding Categories	Answer
C006	Does this household own any livestock, herds, other farm animals, or poultry?	1= Yes; 2= No	
C007	How many of the following animals does this household own?		
C007a	Buffaloes	Number	
C007b	Cows	Number	
C007c	Horses/Donkeys/Mules	Number	
C007d	Goat	Number	
C007e	Sheep	Number	
C007f	Chicken	Number	
C008	Does your household own this homestead?	1= Yes; 2= No	
C009	If NO, probe: Does your household own homestead in any other places?	1= Yes; 2= No	
C010	Does your household own any land (other than the homestead land)?	1= Yes; 2= No	
C011	How much land does your household own (other than the homestead land)? (Decimal)	Decimal	
C012	Main material of the floor (record observation)	1=Concrete 2=Brick 3=Wood 4=Clay/Sand 5=Tiles 6=Other (Specify)	
C013	Main material of the roof (record observation)	1=Concrete 2=Wood 3=Talies 4=Bamboo 5= Straw/jute/stick/leaves 6=Thatched/polythene 7=Tin 8=Other (Specify)	
C014	Main material of the wall (record observation)	1=Concrete 2=Brick 3=Wood 4=Mud	

Sl.	Questions and Filters	Coding Categories	Answer
		5=Bamboo 6=Straw/jute/stick/leaves 7=Tin 8=Other (Specify)	
C015	What type of fuel does your household mainly use for cooking?	1=Electricity 2=LPG 3=Natural gas 4=Biogas 5= Kerosene 6=Wood 7=Straw/Shrubs/Grass 8=Animal Dung 9=Wood dust/Char coal 10=Other (Specify)	

D. Private Cost Data Questions for Mother

As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business

Sl.	Questions	Code	Answer
D001	In the last seven days, have you done any of these things or any other work?	1= Yes; 2= No	
D002	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	1= Throughout the year 2= Seasonally/part of the year 3=Once in a while 4=Do not work	
D003	Are you paid in cash or kind for this work or are you not paid at all?	1=Cash only 2=Cash and kind 3=In kind only 4=Not paid	

Now I will ask you about completely different issues.

D004	How easy would you say it is for someone in your household to get 500 Taka in cash by tomorrow?	1=Very easy 2=Somewhat easy 3=Neither easy nor difficult 4=Somewhat difficult 5=Very difficult 6=Impossible 7=Other(Specify	
D005	If you are given an opportunity to decide on "receiving 500 Taka today" versus "waiting to receive 750 taka after exactly 7 days", what would you prefer?	1=Receive 500 Taka today 2= Wait exactly 7 days to receive 750 Taka instead	

E. Child Health and Nutrition

Sl	QUESTIONS AND FILTERS	CODING CATEGORIES	Answer
E001	Age of the youngest child (0-18 months)	Months	
E002	Did you ever breastfeed (NAME)?	1=Yes; 2=No; 3=No comment	
E003	How long did you exclusively breastfeed (Name)?	Number of months	
E004	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS.	HOURS	
E005	Did you give (NAME) the colostrum (the first milk which is yellow sticky fluid secreted the few days after delivery)?	1=Yes 2=No 3=Don't remember 4= No comment	
E006	Are you still breastfeeding (NAME)?	1=Yes 2=No 3=No comment	
E007	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS	
E008	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS	
E009	At any time yesterday or last night, was (NAME) given any liquid or solid food with breastfeeding?	1=Yes 2=No 3=Don't remember 4= No comment	
E010	How many times did you feed (NAME) yesterday or last night	Number of Times	
E011	How many times during last 24 hours (yesterday or last night), was (NAME) given any of the following:		
E011a	Plain water	Number of Times	
E011b	Sugar/honey water	Number of Times	
E011c	Baby formula (Iron)	Number of Times	
E011d	Fresh milk	Number of Times	
E011e	Any other liquid	Number of Times	
E011f	Tinned or powdered milk	Number of Times	
E011g	Rice/Porridge/wheat	Number of Times	
E0011h	Roots/Tubers (potatoes, sweet potatoes, plantains)	Number of Times	
E0011i	Oils, fats and butter (VitA)	Number of Times	

Sl	QUESTIONS AND FILTERS	CODING CATEGORIES	Answer
E011j	Fruits (Mango, Papaya, orange, Jackfruits etc.)-VitA	Number of Times	
E011k	Green leafy vegetables (VitA) Iron	Number of Times	
E011l	Orange and yellow vegetables (Carrots/ pumpkins)-VitA	Number of Times	
E011m	Other fruit/vegetables	Number of Times	
E011n	Egg	Number of Times	
E011o	Fish	Number of Times	
E011p	Poultry	Number of Times	
E011q	Meat/offal/organs	Number of Times	
E011r	Pulse/pea nuts/beans/ground nuts (Iron)	Number of Times	
E011r	Hotchpotch (a preparation of rice and pulses together)	Number of Times	
E011s	Khichuri (a local dish)	Number of Times	
E012	Has (NAME) received a vitamin A capsule like this in the last 6 months? *[avoid if age not 12-23 months, skip to diarrhea]***Interviewer: Show Vitamin A Capsule**	1=Yes 2=No 3= Don't know	
E013	Has (NAME) received ante-helminth (de-worming) within the last 6 months? *[avoid if age not 12-23 months, skip to 14]* **Interviewer: Show de-worming tablet**	1=Yes 2=No 3= Don't know	
E014	Has (NAME) had diarrhea (having loose stool) in the last 2 weeks?	1=Yes; 2=No 3= Don't know	
E015	Has (NAME) had diarrhea AND given Zinc and ORS	1=Yes; 2=No 3= Don't know	
E016	Has [NAME] had major illness in the last 2 weeks?	1=Yes; 2=No 3= Don't know	
E017	Did you seek advice or treatment for this major illness from any source?	1=Yes; 2=No 3= Don't know	
	I will ask about your level of agreement with the following two statements		
E018	Health of my children does not depend on my action but on our fate	1=Strongly disagree 2=Somewhat disagree 3=Neither agree nor disagree 4=Somewhat agree 5=Strongly agree	
E019	Health of my children does not depend on my action but on the wishes of almighty Allah/God	1=Strongly disagree 2=Somewhat disagree **3=Neither agree nor disagree** **4=Somewhat agree**	

Sl	QUESTIONS AND FILTERS	CODING CATEGORIES	Answer
		5=Strongly agree	
E020	What do you and your family members usually use to wash your hands?	1=Soap or detergent (bar, liquid, powder, paste) 2=Ash, mud, sand 3=None / Water 4=Others (specify)	
E021	When do you wash your hands with soap? *Multiple responses possible.* ***(DO NOT read the choices but probe and mark all that)***		
E021a	Before food preparation	1=Yes; 2=No	
E021b	Before eating	1=Yes; 2=No	
E021c	Before feeding children	1=Yes; 2=No	
E021d	After defication	1=Yes; 2=No	
E021e	After cleaning babies bottoms	1=Yes; 2=No	
E021f	Others (specify)	1=Yes; 2=No	
E022	Do you use Iodized salt for cooking and with meals?	1=Yes; 2=No 99= Don't know	

F. Pregnant and lactating mothers

Sl	QUESTIONS AND FILTERS	CODING CATEGORIES	Answer
F001	Are you pregnant now?	1=Yes; 2=No	
F002	If yes, how many months have you been pregnant for?	Month(s)	
F003	Did you have any antenatal check-ups during your **(current/ last)** pregnancy?	1=Yes 2=No	
F004	How many check-ups did you have during your **(current/last)** pregnancy?	Number of visits	
F005	Do you have an antenatal card for your **(current/last)** pregnancy? IF Yes: May I see it please?	1=Yes, Seen 2=Yes, Not Seen 3=No Card	
F006	Place of ANC	1=UHC 2=UH&FWC/FWC 3=CC 4=Satellite clinic 5=NGO facility 6=Others (Specify)	
F007	Have you taken Iron/Iron folate in the last 7 days? **(Interviewer: show her the iron/iron folate tablet or capsule)**	1=Yes 2=No	
F008	Did you receive Vita-A after delivery of the child? **(Interviewer: shows her the Vit-A capsule)**	1=Yes 2=No	
F009	After how many days of the delivery you received Vit-A?	Days	

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G. Stimulation knowledge/ Family influence

Tell us if you “Agree”=1, “Disagree”=2 or “Not Sure”=3.

Sl.	Statement	Answer
G001	A baby should not be held when he (she) is crying because this will make him (her) want to be held all the time	
G002	Babies do some things just to make trouble for their parents, like crying a long time or pooping	
G003	Infants understand only words they can say	
G004	It is important to talk and sing to your baby	
G005	Talking to a child about things he (she) is doing helps its mental development	
G006	Fathers are naturally clumsy when it comes to taking care of babies	
G007	It is important to teach the baby names of simple objects and colors	
G008	It is important to play games with the baby	

H. Decision Making/Influence of Family Members

Sl.	Who usually makes decisions about the following things: (In order of person most responsible for action; up to 3 responses)	1=Mother; 2=Husband/partner; 3=Respondent and partner jointly; 4= Mother and other family member jointly; 5= Husband and other family member jointly; 6=Mother in law; 7=Father in law; 8=Other		
		1	2	3
	FOOD			
H001	What food is prepared every day?			
H002	How much money the household spends on food			
	MONEY			
H003	Buying important things for the family?			
H004	Who decided how your earnings would be spent?			
	HEALTH			
H005	What to do when a child is seriously ill?			

H006	In the past year, how long has the father been away from the house for work?	(enter 0 for none)	Days	

I. Responsive Feeding

Sl.	**Questions**	**Coding Categories**	**Answer**
I001	When you feed (NAME) and he refuses to eat, do you usually do something to make him/her eat?	1= Yes; 2= No	
I002	When (NAME) refuses to eat, what do you usually do to encourage him/ her to eat? Tell me certain things that you usually do? There can be multiple responses here, so each response must have a yes/no category.		
I00a	Force him to eat	1= Yes; 2= No	
I00b	Beat	1= Yes; 2= No	
I00c	Threaten	1= Yes; 2= No	
I00d	Caress	1= Yes; 2= No	
I00e	Play with him	1= Yes; 2= No	
I00f	Entertainment	1= Yes; 2= No	
I00g	Give other types of food	1= Yes; 2= No	

I00h	Other (specify)	1= Yes; 2= No	

J. MODIFIED HOME INVENTORY: INFANT TODDLER VERSION			
If no response for any question, write NA as response.			
Caregiver Promotes Child Development			
J001	Do you talk to your child while doing housework? What do you say to him/her? (Note to interviewer: talking/speaking to child means something is said to the child from which he/she can learn something, speaking does not include 'scolding,' or saying 'do this' or 'don't do that.')	Yes=1, No=2	
J002	Do you believe the child's behavior can be changed/ modified or influenced by the parents' behavior?	Yes=1, No=2	
Organization of Physical and Temporal Environment			
J003	Who usually looks after the child when mother is not around? (note: 'not around' is understood to be away from the home for at least more than two hours)	>2 different people = 0 never leaves/ always the same person or no more than 2 different people=1	
J004	A person under 12 years of age sometimes looks after the baby.	Yes, sometimes left alone or with a child <13yrs =0 No always left with someone >12yrs =1	
J005	How often in a week does someone usually take the child to any store?	Less than once a week =0 Once a week or more =1	
J006	Do you regularly take the child to the health clinic to be weighed or to be immunized? (Note to interviewer: regularly means if the child gets the immunization shots at the appropriate ages.)	Yes=1, No=2	
J007	Does the child have a special specific place to keep his/her toys?	Yes=1, No=2	
Opportunities for Variety in Daily Stimulation			
J008	In the last 12 months how many times did your family move from their residing location or house?	More than once = 0 No/Once = 1	
J009	Do you receive any relatives at your home or take your child to their homes? (Note to interviewer: taking child to relatives' homes means to take them outside for at	None or less than twice a month =0 Twice a month or more =1	

	least 4 hours, it is not about taking them outside the house for a short while.)		
J010	Usually how many times in a month do your friends' come to your house, or how many times do you take them to their houses? (Note to interviewer: taking child to friends' homes means to take them outside for at least 4 hours, it is not about taking them outside the house for a short while.)	None or less than twice a month =0 Twice a month or more =1	

K. Play materials

Interviewer Say: "I am interested in learning about the things that [CHILD] plays with when he is at home. Say to the mother /caretaker: I want to know about the toys that [child] plays with at home. The toys may be home-made (like clay toys, dolls made of cloths, etc.), household materials (like pots and pans, crockeries, pillow, school bag, mobile phone etc.), bought toys, children books/ picture books (can be bought/received from school or someone free of charge) and the child should have access to play with at home during the last month**.**

Can you please bring me all toys that your child plays with?

(Interviewer: Do not include play at playgroup)

Yes=1, No=2

Sl.	**Questions**	**Yes=1, No=2**
K001	In the past 30 days, has [CHILD] played with toys that make or play music (e.g. Instrument, stuffed animals that play melodies or any other toy that make noise, but it should be given to child to play)?	
That makes music like make sound / music, not just noise for example e.g. instruments such as drum, piano, harmonica flute, harmonium,jory, etc. **Interviewer Instruction**: Instruments can be real instruments or toy instruments. Only included things that are played at home)		
K002	In the past 30 days, has the (CHILD) played with materials for drawing and writing (e.g. coloring picture books, crayons, pencils, pens etc.)?	
K003	In the past 30 days, has [CHILD] played at being using toys or objects something or someone else, such as a Mommy, doctor, teacher, hero using toys or objects (e.g. dolls, tea-set/ cups, toy kitchen set and plates for eating)?	
K004	In the past 30 days, has [CHILD] played with toys that (Gross Motor) encourage movement (e.g. balls, small car, skipping rope, bats, rope for swinging, pull-along, push along etc.)?	

K005	How many pictured books are there which are suitable for child? (Please do not include school books).	
K006	How many books are there in the house? (Please include school books but do not include the pictured books of the children).**If there are more than 10 books then record 11.**	
K007	How many magazines and newspaper are in the house? **If there are more than 10 magazines then record 11**	

Interviewer Say: "In the past 3 days did you spend doing the following activities with [CHILD]?" In the past 3 days, did you or any household member (over 15 years of age) engage in any of the following actives with the child (Name).		
If yes who engaged this activity with child?, Mother, Father, or any others adult family members of the household (including the Caregiver).**Scoring : Yes=1, No=2, Don't know=9**		
K008	Have you read books, including poem books to the child or showed pictured books to him or her? If yes, who engaged in this activity?	
K008a	Mother	
K008.b	Father	
K008c	Any elder household member (over 15 years of age)?	
K009	Have you told stories or nursery rhymes to the child? If yes, who engaged in this activity?	
K009a	Mother	
K009b	Father	
K009c	Any elder household member (over 15 years of age)?	
K010	Have you sung songs (including lullabies) to the child? If yes, who engaged is this activity?	
K010a	Mother	
K010b	Father	
K010c	Any elder household member (over 15 years of age)?	
K011	Have you played toys with the child? If yes, who engaged is this activity?	
K011a	Mother	
K011b	Father	
K011c	Any elder household member (over 15 years of age)?	
K012	Have you spent time with the child naming, counting, and/or drawing things? If yes, who engaged in these activities?	
K012a	Mother	
K012b	Father	
K012c	Any elder household member (over 15 years of age)?	

L. Maternal Depression

Sometimes we feel good and unhappy other times we feel only good.
Now I want to ask you some questions about how you've been feeling this last week. We may not remember how we felt a long time ago. But we can remember recent feelings. Therefore, I will ask you about the last7 seven days. Explain about the past week (e.g. today is Monday so I want to you tell me how you have been feeling in the past week, from Monday morning to last Sunday night). Whatever we ask you will be kept confidential and will only be used for research purpose.

Sl.	Question	Scoring 0-7days
L001	How many days did you feel so sad?	
L002	How many days did you feel lonely?	
L003	How many days did you feel like crying?	
L004	How many days did you feel enjoyed life?	
L005	How many days did you feel depressed?	
L006	How many days did you feel interest or pleasure in doing things?	

Sl.	Question	
M001	Household profile serial number	
M002	National ID number	
M003	Telephone number	

Baseline Administrator Survey

Introduction. We are interviewers from Data International. We are currently doing a study together with the American Institutes for Research which aims to understand how community clinics operate in your region and understand your role. For that purposes we have created a small questionnaire. Thank you for your support.

Ques. SL	

			Code Interviewer
	Date of interview	Day: Month: Year:	
	Name of interviewer		

A. Identification (to be filled by enumerator)

Sl	Area	**Name**	**Code**
1	Name of the person		
2	Position		
3	Office Name		
4	District		
5	Upazila		
6	Union		
7	Distance to the **nearest** Community Clinic	Distance in Km _____ Minutes on foot _____ (to be filled by enumerator)	
8	Phone Number	Could we get your phone number to schedule a follow up conversation?	

B. Description of Administrator Position

1. Description of the position and its relation with the regional community clinic. What roles do you play and how that affects the local community clinics?

a) Role [describe]:_____
b) Role [describe]: _____
c) Role [describe]:_____

2. How would you describe the nature of your contact or role with the community clinic in the region?

a) Direct- I have been assigned specific role/responsibility
b) I play a supervisory role of staff involved in the clinic

c) Indirect- no specific role but I am in some way attached to its functioning (e.g. committee)
d) No role at all- I have no contact
e) Other [describe]: _____

3. How many Community Clinics do you supervise? [Skip if answer "c" or "d" in Q2]

Number of CC	Located in How Many Wards?
a)	b)

4. With what personnel do you have direct contact? [Skip if answer "c" or "d" in Q2]

a) Community Health Care Provider (CHCP)
b) Health Assistant (HA)
c) Family Welfare Assistant (FWA)
d) Other [describe]: _____
e) Other [describe]:_____
f) Other [describe]:_____

5. When you have contact with the personnel <u>described in Q3</u> what kind of issues do you usually discuss with them?

a) Administrative issues like staffing
b) Functioning like the matters related to government supply to the clinic
c) Service delivery issues like if community people are getting the benefit they are supposed to get
d) Service delivery issues like number of people served
e) Other [describe]: _____
f) Other [describe]: _____
g) Other [describe]:_____

6. Do you have any mechanism to determine whether Family Welfare Assistants and/or Health Assistants are visiting their assigned households? [Mark all that apply]

a) No [Go to Q8]
b) Yes, for Family Welfare Assistants
c) Yes, for Health Assistant

7. If answer is YES in Q6, please describe the mechanism:

a) _____
_____

b) _____
_____

8. What are the main reasons why <u>Family Welfare Assistants</u> cannot visit all their assigned households? [Mark all that apply]

a) All Family Welfare Assistants visit all their assigned households
b) When the household is located very far from the Community Clinic
c) When distance among households is too long
d) Other [describe]: _____
e) Other [describe]: _____
f) Other [describe]: _____

9. What are the main reasons why <u>Health Assistants</u> cannot visit all their assigned households? [Mark all that apply]

a) All Health Assistants visit all their assigned households
b) When the household is located very far from the Community Clinic
c) When distance among households is too long
d) Other [describe]: _____
e) Other [describe]: _____
f) Other [describe]: _____

10. In this office, are there other government officials that play an important role at the local community clinics?

a) No
b) Yes [Write Position, Name]: _____
c) Yes [Write Position, Name]: _____
d) Yes [Write Position, Name]: _____

NOTE. Please try to interview other government officials that play an important role at the local community clinics.

11. Are there other government offices or government officials (outside this office), that also play an important role at the local community clinics?

a) No
b) Yes [Write Position, Name]: _____
c) Yes [Write Position, Name]: _____
d) Yes [Write Position, Name]: _____

NOTE. Please try to interview other government officials that play an important role at the local community clinics.

Baseline Service Provider Survey

The data collected here will be handled as confidentially as possible. If the results of this study are published or presented, individual names and other personally identifiable information will not be used. Information that could be used to identify villages or community clinic will not be presented.

A. Identification

A001	Service Provider Name	
A002	Gender: 1=Male; 2=Female	
A003	Religion: 1=Islam; 2=Hindu; 3=Christian; 4=Buddhist; 5=Other (specify)	
A004	Age	
A005	Service Provider Position 1=FWA; 2=HA; 3=CHCP	
A006	Service Provider ID number	
A007	Service Provider Mobile/Phone We would like to contact you again to learn more about your work, could you give us your mobile?	
A008	Place of current residence	
A009	Community Clinic where the Service Provider works?	
A010	Name of Union	
A011	Name of Upazila	

B. Education, Experience and Training

B001. Highest class passed (Use code): _____

Highest class passed	0=No class, 1=Class 1, 2=Class 2, 3=Class 3, 4=Class 4, 5=Class 5, 6=Class 6, 7=Class 7, 8=Class 8, 9=Class 9, 10=SSC pass,11=Class 11, 12=HSC pass, 14=Graduate, 16=Masters, 66=Pre primary school

2. Degree and Name of the Degree

		Code	Answer
200a	Do you have any professional degree/diploma?	1=Yes 2=No	
200b	If yes, name the professional degree/diploma?	Name	

3. Working experience

		Year
300a	Total years of working experience as FWA/HA/CHCP?	
300b	Total years of working experience as FWA/HA/CHCP in this Union?	

4. What are your three primary tasks?

	Task	Check box
400a	Provide family planning services	
400b	Supervise the work of other service providers (FWA, HA)	
400c	Look after general well-being of pregnant mothers and children under 3	
400d	Provide health services to children under 5	
400e	Look after malnourished children	
400f	Take care of immunizations	
400g	Take care of diarrhea and fever problems	
400h	Other specify:	
400i	Other specify:	
400j	Other specify:	

5. Have you ever received training on …:

	Training type	1=Yes 2=No
500a	Early Childhood Development?	
500b	Child health?	
500c	Child feeding and nutrition?	
500d	Other child-related training? (specify)	
500e	Other child-related training? (specify)	

C. Workload

1. Now we would like to know more about your workload and the number of Households you are assigned to visit.

I am not assigned to visit households → skip question E.

C100a	How many households are you **assigned** to visit each month?	No. of HH	
C100b	How many households are you supposed to visit each day?	No. of HH	
C100c	How many **days** per week are you **supposed** to work?	Days	
C100d	How many **hours** per day are you **supposed** to work?	Hours	

2. We understand that due to several reasons you may end up visiting less households or working less or more days/hours per week/day if so, please answer:

C200a	Approximately how many households were you able to visit **last month**?	No. of HH	
C200b	Approximately, how many households were you able to visit **in your last day of work**?	No. of HH	
C200c	How many **days** per week do you **normally** work?	Days	

C200d	How many **hours** per day do you **normally** work?	Hours	

3. What are the **main three reasons** that explain why you usually cannot visit all assigned households?

	Reasons	Check box
C300a	I have more households than I can handle	
C300b	Distance among households is too long	
C300c	Households do not cooperate because (specify)	
C300d	Reschedule visit to particular household because (specify)	
C300e	I have other responsibilities in satellite clinics	
C300f	I have other responsibilities in Family Welfare Centers (FWC)	
C300g	I have other responsibilities in Expand Promotion of Immunizations (EPI) Center	
C300h	Other specify:	
C300i	Other specify:	
C300j	Other specify:	

D. Time Spent With Each Household

D001**. Remember your last working day when you had to visit households;** on average how many minutes did you spend with each household?
Average number of minutes: ____

D002. Do you spend more time with certain types of households; if so with which type of households are you likely to spend more time? Mark the three main types of households and the average number of minutes.

	Descriptors of the household	Check Box	Average Number of minutes
		Q1	Q2
D200a	Household with a sick child		
D200b	Household with multiple children		
D200c	Household with depressed mother		
D200d	Poorer households		
D200e	Household with pregnant women		
D200f	More friendly households		
D200g	Other specify:		
D200h	Other specify:		
D200i	Other specify:		

E. Perceptions about the importance of Early Childhood Development (ECD)

For mothers with children under 3 years old, how important do you think is to?

		1=Unimportant 2=Important 3=Not Sure
E001	Teach mothers how to talk with their children and how to respond to children's attempt to talk?	
E002	Teach mothers how to care for their children's health?	
E003	Teach mothers what food they should feed their children?	
E004	Teach mothers how to respond to children's cues?	
E005	Teach mothers how to play games with their children?	

F. Understanding how community clinics operate

Who supervises your job?

		Mark all that apply
F001	Community Health Care Provider (CHCP)	
F002	Family Planning Inspector (FPI)	
F003	Health Inspector (HI)	
F004	Family Welfare Visitor (FWV)	
F005	Sub Assistant Community Medical Officer (SACMO)	
F006	Assistant Health Inspector (AHI)	
F007	Other specify:	

G. Job Satisfaction

	Question	Code	Answer
G001	How satisfied are you with the work you are doing?	1 2 3 4 5 1=Very dissatisfied 5=Very satisfied	
G002	What value do you think the community puts on your service?	1 2 3 4 5 1=None 5=Very great	
G003	In your daily work, how free are you to make decisions and to act on them?	1 2 3 4 5 1=Not at all 2=Very free	
G004	How much recognition does your supervisor show for a job well done?	1 2 3 4 5 1=None 5=Great deal	

V001	Date of interview	Day: Month: Year:		
V002	Name of interviewer		Code	

Baseline Community Leader Questionnaire

V001	Date of interview	Day: Month: Year:		
V002	Name of interviewer		Code	

A. Identification of Area

	Area	Name	Code
A001	Para/sub-village		
A002	Village		
	Mauza		
A003	Union		
A004	Upazila		
A005	District		
A006	Distance to the **nearest** Community Clinic (to be filled by enumerator)	Distance in Km ___	
	Community clinic		

B. Identification of Respondent

B001	Name of respondent		
B002	Age	Years	
B003	Gender	1 = Male; 2 = Female	
B004	Religion	1=Islam; 2=Hindu; 3=Christian; 4=Buddhist; 5=Other (specify)	
B005	Length of time resident in community	Years	
B006	Main occupation		
B007	Terminal degree (education)		
B008	Mobile phone number		

C. Basic infrastructure of the Community

	Question	Code	Answer
C001	What is the main access route to this village/mohalla?	1=all weather road/ pacca road/motor able; 2=seasonal road/earthen; 3=waterway; 4=path; 5=other	
C002	Is electricity available here?	1= Yes; 2=No	
C003	How many hours per day on average is there electricity?	Hours	
C004	How many days is there electricity in an average month?	Days	
C005	Is there mobile service?	1= Yes; 2=No; 3=Don't know	
C006	Is there internet service?	1= Yes; 2=No; 3=Don't know	
C007	What is the primary source of water for the majority of people in this village?	1=Piped 2=Public tap 3=Well 4=Tube well 5=River/stream/lake 6=Rainwater 7=Other	

D. Major Economic Activities

D001. What are the usual main economic activities—that is, the main source of people's livelihoods—in this community? [Circle all mentioned)

a) Agriculture

b) Livestock

c) Fishing

d) Commerce

e) Manufacturing

f) Day labor

g) Service

h) Other

D002. What is the average daily wage for men and women doing casual labor in the community this season? [Emphasize this wage should not include food whilst working, should be for 100% pay-in-cash (not paid in-kind) and be for someone in no debt to the employer.]

a) For Men: _____

b) For Women: _____

E. Community assets

	Facility	Where is xxx located?	What is xxx's operating authority?	How far in miles/km is xxx located from the center of the village?	How many minutes does it take to go to xxx using the most common type of transportation?	What did xxx first open?	Is the xxx location in this union?
		Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**
E001	Hospital						
E002	Upazila Health Center						
E003	Family Welfare Center						
E004	Maternal and Child Welfare Center (MCWC)						
E005	Private clinic						
E006	NGO clinic						
E007	Community Clinic						
E008	Rural dispensary						
E009	Satellite Clinic						
E010	Mosque						

F. Migration Put in RANGE (Test first to get the ranges)

	Question	Answer
F001	How many households moved into this community in the last 2 years? (Number)	
F002	How many households moved into this community in the last 1 year? (Number)	
F003	How many households moved out of this community in the last 2 years? (Number)	
F004	How many households moved out of this community in the last 1 year? (Number)	
F005	How many households currently have a household member working outside of the community? (Number)	
F006	Among those, what percentage has a migrant who left the country? (%)	
F007	In the last two years, were there ever large flows of labor migration – people that left this community to seek economic opportunities elsewhere out of this community? 1=Yes; 2=No; 3=Don't know	
F008	In what month and year did the most important episode of labor migration take place?	Month: Year:
F009	In the year(s) of most important migration episode how many community members left this community to seek economic opportunities elsewhere? (Number)	

Baseline Non-Compliers Survey

The questions below should be asked to households that do not want to participate in this study. This lack of interest could be reflected in different ways:

a) The respondent outright rejects participation in the survey
b) Does not want to participate in the household survey after the initial introduction about the nature of survey
c) The respondent shows disinterest mid- way and or refuse to answer many questions (resulting in an incomplete survey
d) Respondent refuses to answer more than 20 percent of the questions which were not at all of sensitive type(such as income or extremely personal)

e) Other [describe]:_____
f) The actual respondent was not found/home:

Visit 1 Visit 2 Visit 3

Date

V002	**Ques. SL**	

	Date of interview	Day: Month: Year:	**Code Interviewer**
	Name of interviewer		

A. Identification (to be filled by enumerator)

Sl	**Area**	**Name**	**Code**
a1	Unique child ID		
a2	Census Number		
a3	Para/sub-village		
a4	Village (Mauza)		
a5	Union		
a6	Upazila		
a7	District		
a8	Number of minutes it takes on foot to reach the nearest community clinic	Minutes on foot _____	

a9	Number of minutes it takes by rickshaw or the most common means of transportation to reach the nearest community clinic	Minutes on rickshaw/other transportation _____	

B. Characteristics of the Household

1. **What is the reason(s) you do not want to participate in the study/or answer the majority of the questions?** [Mark all that apply]

a) My husband will not approve this participation and I may face trouble
b) I may face trouble in my courtyard/neighborhood if I would participate
c) I am not sure how I will benefit answering the survey
d) I think I cannot afford the time needed to complete the survey as I have other things to do
e) I think it will take longer than and I could not finish my work(household)
f) I have more important thing to do than answering your questions
g) My previous experience with similar survey was not very pleasant
h) I think you might ask questions that are too sensitive for me
i) Surveys are useless as they do not benefit poor
j) Whether anticipate any trouble or criticism for participation
k) Reason not known (respondent did not want to talk at all)
l) Other [describe]: _____

2. Level of Education:
Years of schooling completed by The mother: _____ The father: _____
NOTE. N of years of education counting from the first grade of Primary

3. Are any children in the household suffering from any illness (e.g. diarrhea, fever, cough, rapid breathing, etc.)?

a) Yes
b) No
c) No response
d) Parent does not know

4. Are all children aged 5 above enrolled in school?

a) Yes
b) No
c) No response
d) Parent does not know

5. Have you participated in any kind of survey in the past?

a) Yes
b) No
c) No response

d) Does not know/remember

NOTE. Enumerators should observe/gather the following information without asking the respondent.

6. Was the husband home at the time of the survey?

e) Yes

f) No

g) No response

7. How many household members live in this household? _____

If unknown enter 99

8. Number of rooms in the household: _____

If unknown enter 99

Baseline Anthropometric Measurement

AM001	Mother's and Child weight together	☐☐.☐☐KG
AM002	Mother's weight	☐☐.☐☐KG
AM003	Child's weight (Who stand properly)	☐☐.☐☐KG
AM004	Child's height/length	☐☐.☐☐CM
AM005	Head Circumference	☐☐.☐☐CM

Endline Household (Mother) Survey

V001	Ques. Sl. No.		HH Profile ID	
V002	Child ID No.			
V003	Name of the Child tested in baseline			
V004	Date of interview	Day:	Month:	Year:
V005	Name of interviewer		Code	

A. IDENTIFICATION (to be filled by enumerator)

Sl	Area	Name			Code
A001	Household Number				
A002	Para/sub-village				
A003	Village				
A004	Mauza				
A005	Union				
A006	Upazila				
A007	District				
A008	Community Clinic (based on baseline)				
A008b	Community Clinic that HH frequently go	UHC=1	CC=2	NONE=3	
A009	Distance from the house to the **nearest** Community Clinic *(to be filled by enumerator)*	Distance in Km _____			
A010	Time (in minutes) required to get to the Community Clinic using usual mode of transportation	Time in minutes_____			
A011	Mode of transportation: 1 = Walking 2 = Rickshaw/van 3 = Boat 4 = Auto-rickshaw 5 = Bicycle	Code _____			
A012	GPS Location of the house	Latitude _____ Longitude_____			
A013	Mobile Phone Number	Mother: Father:			

B1. HOUSEHOLD PROFILE

										Q10- Q13 For members age 7 years and above			
ID	**Name of HH Member** (Start with the name of respondent)	**Relationship to respondent** (use code)	**Sex** 1 = Male 2 = Female	**Age**		**Is HH member currently attending school?** 1 = Yes 2 = No	**Highest class passed** (use code)	**Religion** (use code)	**Ethnicity** (use code)	Marital Status (use code)	Can write a letter? 1 = Yes 2 = No	Activity Status 1 = Employed 2 = Looking for job 3 = Household work 4 = Do not work	If employed, field of employment 1 = Agriculture 2 = Industries 3 = Services
				Years	**Months**								
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13
B001													
B002													
B003													
B004													
B005													
B006													
B007													
B008													
B009													
B010													
B011													
B012													

Relationship to intended respondent	1 = Intended respondent (mother) 2 = Spouse 3 = Son/Daughter 4 = Sibling	5 = Parent 6 = Daughter-in-law/Son-in-law 7 = Sister-in-law/Brother-in-law 8 = Father-in-law/Mother-in-law 9 = Grandchild 10 = Nephew/Niece 11 = Others (specify)
Marital Status	1 = Unmarried 2 = Married	3 = Widowed 5 = Divorced /Separated
Religion	1 = Muslim 2 = Hindu 3 = Christian	4 = Buddhist 5 = Other
Ethnicity	1 = Bengali 2 = Tribal	3 = Non-Bengali 4 = Other (specify)

Highest class passed	0 = No class 1 = Class 1 2 = Class 2 3 = Class 3 4 = Class 4 5 = Class 5 6 = Class 6	7 = Class 7 8 = Class 8 9 = Class 9 10 = SSC/Dakhil pass 11 = Class 11 12 = HSC/Alem pass 14 = Graduate/Fazil	16 = Masters/Kami 66 = Pre-primary school 67 = Qawmi madrasa 68 = Hafezi 69 = Others (specify)

		Code	Answer
B013	In the past year, how long has the father of the [**child]** been away from the house for work?	Number of Days (*enter 0 if the father has not been away*)	
B014	Where was the father working? [more than one response allowed]	1= Working in a different country (specify): _____ 2= Working in a different area Bangladesh 3= Other (specify):	

B2. DEATHS IN THE HOUSEHOLD AND SHOCKS

B013	Have there been any deaths in the household (of usual members) since we last spoke with you?		1 = YES 2 = NO >>**NEXT SECTION**		
B014	How many people died since we last spoke?		☐☐ [**ASK QUESTIONS BELOW FOR EACH DECEASED MEMBER]**		
B015	B016	B017	B018	B019	
How old was the deceased when s/he died? (Age in years, if less than a year enter '00')	What was his/her sex? 1 = Male 2 = Female	Had deceased been continuously sick for at least 3 months prior to his/her death? 1 = YES 2 = NO	What was the main cause of death? 01 = Fever/Malaria 02 = Cerebral malaria 03 = Cough/Cold/Chest infection 04 = Bronchitis 05 = Pneumonia/Chest pain 06 = Diarrhea (with or w/o blood) 07 = Liver infection/Side pain 08 = Boils 09 = Suicide 10 = Accident 11 = Diabetes/Sugar disease 12 = Cancer of any kind 13 = Meningitis 14 = Drowning 16 = Maternal death during delivery 17 = Still birth 15 = Other	If the deceased was a household member during baseline data collection, enter the relationship to intended respondent (Use RIR from 2013 listing)	
			|___|___|		
			|___|___|		
			|___|___|		
			|___|___|		

Since we last spoke, was your household or any member of your household affected by any of the following events?		1 = YES 2 = NO >> **NEXT EVENT**	
B021	Natural disaster (Drought/flood/storm)		
B022	Loss from agriculture related activities		
B023	Loss from business /non-farm activities		
B024	Job loss		
B025	Accident		
B026	Illness		
B027	Political unrest		
B028	Others (specify)		

C. HOUSING

Sl.	Questions	Code	Answer
C001	What is the main source of water for drinking for your household?	1 = Deep tube well 2 = Shallow tube well 3 = Tape water supplied through pipes 4 = Pond sand filter 5 = Rainwater harvesting system 6 = Rainwater 7 = Pond 8 = River/canal 9 = Traditional well 10 = Other (Specify)	
C002	What type of latrine does your household use? **(Bold type indicates hygienic types)**	**1 = Ring-slab/offset latrine (water seal)** **2 = Pit latrine (covered)** 3 = Ring-slab/offset latrine (water seal broken) 4 = Pit latrine (uncovered) **5 = Septic latrine** 6 = Hanging/open latrine 7 = No toilet facility *(If 7 skip to C004)*	
C003	Is it your own latrine? (**Interviewer:** Observe the latrine)	1 = Yes 2 = No	
C004	How many rooms in this household are used for sleeping?	Number of rooms	
C005	Does any member of this household own?		
C005a	Auto bike	1 = Yes 2 = No	
C005b	Rickshaw	1 = Yes 2 = No	
C005c	Bicycle	1 = Yes 2 = No	
C005d	Motorcycle/scooter	1 = Yes 2 = No	
C005e	Electricity/Solar Panel	1 = Yes 2 = No	
C005f	Radio	1 = Yes 2 = No	
C005g	Television	1 = Yes 2 = No	
C005h	Mobile phone	1 = Yes 2 = No	
C005i	Non-mobile phone	1 = Yes 2 = No	
C005j	Refrigerator	1 = Yes 2 = No	
C005k	Almirah/wardrobe	1 = Yes 2 = No	
C005l	Table	1 = Yes 2 = No	
C005m	Chair	1 = Yes 2= No	
C005n	Electric fan	1 = Yes 2 = No	
C005o	DVD/VCR	1 = Yes 2 = No	
C005p	Water pump	1 = Yes 2= No	
C006	Does this household own any livestock, herds, other farm animals, or poultry?	1 = Yes 2 = No *(If 2 skip to C008)*	
C007	How many of the following animals does this household own?		

Sl.	Questions	Code	Answer
C007a	Buffaloes	Number	
C007b	Cows	Number	
C007c	Horses/Donkeys/Mules	Number	
C007d	Goats	Number	
C007e	Sheep	Number	
C007f	Chicken	Number	
C008	Does your household own this homestead?	1 = Yes 2 = No	
C009	If NO, probe: Does your household own homestead in any other places?	1 = Yes 2 = No	
C010	Does your household own any land (other than the homestead land)?	1 = Yes 2 = No *(If 2 skip to C012)*	
C011	How much land does your household own (other than the homestead land)? (Decimal)	Decimal	
C012	Main material of the floor (record observation)	1 = Concrete 2 = Brick 3 = Wood 4 = Clay/Sand 5 = Tiles 6 = Other (Specify)	
C013	Main material of the roof (record observation)	1 = Concrete 2 = Wood 3 = Talies 4 = Bamboo 5 = Straw/jute/stick/leaves 6 = Thatched/polythene 7 = Tin 8 = Other (Specify)	
C014	Main material of the wall (record observation)	1 = Concrete 2 = Brick 3 = Wood 4 = Mud 5 = Bamboo 6 = Straw/jute/stick/leaves 7 = Tin 8 = Other (Specify)	
C015	What type of fuel does your household mainly use for cooking?	1 = Electricity 2 = LPG 3 = Natural gas 4 = Biogas 5 = Kerosene 6 = Wood 7 = Straw/Shrubs/Grass 8 = Animal Dung 9 = Wood dust/Char coal 10 = Other (Specify)	

D. PRIVATE COST DATA QUESTIONS FOR MOTHER

As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business.			
Sl.	**Questions**	**Code**	**Answer**
D001	In the last seven days, have you done any of these things or any other work?	1 = Yes 2 = No	
D002	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	1 = Throughout the year 2 = Seasonally/part of the year 3 = Once in a while 4 = Do not work *(If 4 skip to D004)*	
D003	Are you paid in cash or kind for this work or are you not paid at all?	1 = Cash only 2 = Cash and kind 3 = In kind only 4 = Not paid	
Now I will ask you about completely different issues.			
D004	How easy would you say it is for someone in your household to get 500 Taka in cash by tomorrow? (**Interviewer:** Please read answer choices to respondent)	1 = Very easy 2 = Somewhat easy 3 = Neither easy nor difficult 4 = Somewhat difficult 5 = Very difficult 6 = Impossible 7 = Other(Specify)	
D005	If you are given an opportunity to decide on "receiving 500 Taka today" versus "waiting to receive 750 taka after exactly 7 days", which option would you choose?	1 = Receive 500 Taka today 2 = Wait exactly 7 days to receive 750 Taka instead	

E. CHILD HEALTH AND NUTRITION

Sl.	Questions	Code	Answer
E001a	How many times did you feed [CHILD] yesterday or last night?	Number of Times	
E001b	Are you still breast feeding the child?	1 = Yes 2 = No 99 = Don't know	
E002	How many times during last 24 hours (yesterday or last night), was [CHILD] given any of the following:		
E002a	Rice/Porridge/wheat?	Number of Times	
E002b	Roots/Tubers (potatoes, sweet potatoes, plantains)?	Number of Times	
E002c	Oils, fats and butter (VitA)?	Number of Times	
E002d	Fruits (Mango, Papaya, orange, Jackfruits etc.)-VitA?	Number of Times	
E002e	Green leafy vegetables (VitA) Iron?	Number of Times	
E002f	Orange and yellow vegetables (Carrots/ pumpkins)-VitA?	Number of Times	
E002g	Other fruit/vegetables?	Number of Times	
E002h	Egg?	Number of Times	
E002i	Fish?	Number of Times	

Sl.	Questions	Code	Answer
E002j	Poultry?	Number of Times	
E002k	Meat/offal/organs?	Number of Times	
E002l	Pulse/pea nuts/beans/ground nuts (Iron)?	Number of Times	
E002m	Khichuri (a local dish)?	Number of Times	
E002n	Cow milk	Number of Times	
E002o	Powder milk	Number of Times	
E003	Has [CHILD] received a vitamin A capsule like this in the last 6 months? (**Interviewer:** Show Vitamin A Capsule)	1 = Yes 2 = No 99 = Don't know	
E004	Has [CHILD] received ante-helminth (de-worming) within the last 6 months? (**Interviewer:** Show de-worming tablet)	1 = Yes 2 = No 99 = Don't know	
E005	Has [CHILD] had diarrhea (having loose stool) in the last 2 weeks?	1 = Yes 2 = No *(If 2 skip to E008)* 99 = Don't know	
E006	Has [CHILD] had diarrhea AND given Zinc?	1 = Yes 2 = No 99 = Don't know	
E007	Has [CHILD] had diarrhea AND given ORS?	1 = Yes 2 = No 99 = Don't know	
E008	Has [CHILD] had major illness in the last 2 weeks?	1 = Yes 2 = No *(If 2 skip to E010)* 99 = Don't know	
E009	Did you seek advice or treatment for this major illness from any source?	1 = Yes 2 = No 99 = Don't know	
I will ask about your level of agreement or disagreement with the following two statements:			
E010	Health of my children does not depend on my action/ but on our fate (**Interviewer:** Please read answer choices to respondent)	1=Strongly disagree 2=Somewhat disagree 3=Neither agree nor disagree 4=Somewhat agree 5=Strongly agree	
E011	Health of my children does not depend on my action but on the wishes of almighty Allah/God (**Interviewer:** Please read answer choices to respondent)	1=Strongly disagree 2=Somewhat disagree 3=Neither agree nor disagree 4=Somewhat agree 5=Strongly agree	
E012	What do you and your family member usually use to wash hand?	1=Soap or detergent (bar, liquid, powder, paste) 2=Ash, mud, sand 3=None / Water 4=Others (Specify)	
E013	When do you wash your hands with soap: *Multiple responses possible.* **(Interviewer:** DO NOT read the choices but probe and mark all that apply)		
E013a	Before food preparation?	1 = Yes 2 = No	
E013b	Before eating?	1 = Yes 2 = No	
E013c	Before feeding children?	1 = Yes 2 = No	
E013d	After defecation?	1 = Yes 2 = No	
E013e	After cleaning babies bottoms?	1 = Yes 2 = No	
E013f	Others (specify):	1 = Yes 2 = No	

Sl.	Questions	Code	Answer
E014	Do you use Iodized salt for cooking and with meals?	1 = Yes 2 = No 99 = Don't know	
E015	Do you have a GMP/NNS Growth Development Card for [THIS CHILD]? **(Interviewer:** Please ask the mother to show you the Card)	1 = Yes, shown 2 = No 3=yes , not shown 99 = Don't know	
E016	Write Number of Times [CHILD] had a Growth Monitoring Check Up	Number of Times	

F. PREGNANT AND LACTATING MOTHERS

Sl.	Questions	Code	Answer
F001	Are you pregnant now?	1 = Yes 2 = No *(If 2 skip to section G)*	
F002	If yes, how many months have you been pregnant for?	Month(s)	

G. STIMULATION KNOWLEDGE

Sl.	Statement	Answer
Tell us your level of agreement Regarding the following statements…		4 = Strongly Agree 3 = Agree 2 = Disagree 1 = Strongly Disagree 99 = Don't Know
G001	Fathers are naturally clumsy when it comes to taking care of children	
G002	Parents can teach things to their children by playing with them	
G003	Children understand only words they can say	
G004	Singing to child is good for him/her development	
G005	Talking to young children (under 3 years old) is NOT important because they do not understand words yet	
G006	Teaching your child the names of simple objects is good for him/her development	
G007	Children should only play with toys not with household utensils	
G008	Parents can teach things to their children by reading to them	
G009	The more you soothe your crying child by talking to him/her, the more you spoil him/her	
G010	Mothers can teach things to the child while doing household chores	
G011	Young children (under 3 years old) can learn things from picture books	
G012	Children can learn several things while playing	
G013	Children benefit from books only when they learn how to read	
G014	Children learn more from the TV than from parents	
Educational Aspiration		1 = Yes 2 = No
G015	Do you expect that [CHILD] will enroll in preschool?	
G016	Do you expect that [CHILD] will complete primary school?	
G017	Do you expect that [CHILD] will complete secondary school?	

H. DECISION MAKING/INFLUENCE OF FAMILY MEMBERS

Sl.	Questions	Code		
	Who usually makes decisions about the following things:	**A:** 1 = Respondent 2 = Husband 3 = Respondent and husband jointly 4 =Respondent and other family member jointly 5 = Husband and other family member jointly 6 = Mother-in-law 7 = Father-in-law 8 = Other	**B:** Have you discussed this decision with someone in your household in the last month? 1 = Yes 2 = No	**C:** Do you feel you can make your own decision regarding [things] if you wanted to? 1 = Yes 2 = No
	FOOD			
H001	What food is prepared every day?			
H002	How much money the household spends on food?			
H003	What food is bought for household consumption?			
H004	The food the child is fed with?			
	MONEY			
H005	Buying important things for the family?			
H006	How earnings would be spent?			
	HEALTH			
H007	What to do when your child is seriously ill?			
H008	When to take your child to a health facility for monitoring checks or to be immunized?			
	ACTIVITIES WITH THE CHILD			
H009	Buying toys or any play material for the child? (**Interviewer:** Please write NA if parents do not buy toys/materials)			
H010	Taking the child outside the house to visit family or friends?			

I. RESPONSIVE FEEDING

Sl.	Questions	Code	Answer
I001	When you feed ([CHILD] and he refuses to eat, do you usually do something to make him/her eat?	1 = Yes 2 = No *(If 2 skip to J001)*	
I002	When [CHILD] refuses to eat, what do you usually do to encourage him/her to eat? Tell me certain things that you usually do. *There can be multiple responses here, so each response must have a yes/no answer.*		
I002a	Force [CHILD] to eat	1= Yes 2 = No	
I002b	Beat [CHILD]	1 = Yes 2 = No	
I002c	Threaten [CHILD]	1 = Yes 2 = No	
I002d	Caress [CHILD]	1 = Yes 2 = No	
I002e	Play with [CHILD]	1 = Yes 2 = No	
I002f	Entertain [CHILD]	1 = Yes 2 = No	
I002g	Give [CHILD] other types of food	1 = Yes 2 = No	
I002h	Other (Specify):	1 = Yes 2 = No	

J. MODIFIED SHORT HOME INVENTORY: INFANT TODDLER VERSION

The child in these questions refers to the [CHILD] tested during baseline.
If no response for any question, write NA as response.

Responsivity (observation)

Sl.	Questions	Code	Answer
J001	The mother responds verbally to child's talk.	1 = Yes 2 = No	
J002	Mother begins talking to interviewer about anything. *(not only responds to your questions)*	1 = Yes 2 = No	
J003	Mother permits child to play freely. *(includes mess, noise)*	1 = Yes 2 = No	
J004	Mother spontaneously praises child without prompt.	1 = Yes 2 = No	
J005	After visitor praises child, mother responds positively. *(e.g. mother nods, smiles, thanks, agrees)*	1 = Yes 2 = No	

Acceptance (observation)

Sl.	Questions	Code	Answer
J006	Mother shouts at child.	1 = Yes 2 = No	
J007	Mother complains about child, or says child is bad.	1 = Yes 2 = No	
J008	Mother hits, pushes, or shakes child during visit.	1 = Yes 2 = No	
J009	Have you had to hit or shake child in past week to discipline? *(ask about circumstance)*	1 = Yes 2 = No	
J010	Mother threatens punishment or criticizes child during visit.	1 = Yes 2 = No	

Involvement			
Sl.	**Questions**	**Code**	**Answer**
J011	When you are busy with housework, do you talk with your child?	1=Always 2=At times 3=No	
J012	This past week, did you show or teach your child something new like teach a new word, or help child do something difficult?	1 = Yes 2 = No	
J013	Did you find/make something new for your child to play with?	1 = Yes 2 = No	
J014	When did child get the newest toy?	1=Past month 2=Past six months 3=Past year 4=No	
J015	In the past week, did you look at pictures in a book or magazine with child?	1 = Yes 2 = No	

K. PLAY MATERIALS

Interviewer Say: *"I am interested in learning about the toys that [CHILD] plays with at home. The toys may be: a) home-made (like clay toys, dolls made of cloths, etc.), b) household materials (like pots and pans, crockeries, pillow, school bag, mobile phone etc.), c) bought toys, d) children books/ picture books (can be bought/received from school or someone free of charge) and the child should have access to play with at home during the last month.***"**

Can you please bring me all toys that your child plays with?

(**Interviewer:** Do not include play at playgroup. Count all the toys and register the number in different questions)

Sl.	**Questions**	**1 = Yes 2 = No**
K001	In the past 30 days, has [CHILD] played with toys that make or play music (e.g. Instrument, stuffed animals that play melodies or any other toy that make noise, but it should be given to [CHILD] to play)?	
That makes music like make sound/music, not just noise for example e.g. instruments such as drum, piano, harmonica flute, harmonium, jory, etc. (**Interviewer:** Instruments can be real instruments or toy instruments. Only included things that are played at home)		
K002	In the past 30 days, has [CHILD] played with materials for drawing and writing (e.g. coloring picture books, crayons, pencils, pens etc.)?	
K003	In the past 30 days, has [CHILD] played at being something or someone else, such as a mommy, doctor, teacher, or a hero using toys or objects (e.g. dolls, tea-set/ cups, toy kitchen set and plates for eating)?	
K004	In the past 30 days, has [CHILD] played with toys that encourage (Gross Motor) movement (e.g. balls, small car, skipping rope, bats, rope for swinging, pull-along, push along etc.)?	
K005	In the past 30 days, has [CHILD] played with homemade toys such as dolls, cars, or other toys made at home?	
K006	In the past 30 days, has [CHILD] played with household objects (such as bowls or pots) or objects found outside (such as sticks, rocks, animal shells or leaves)?	
K007	How many **pictured books** are there which are suitable for [CHILD]? (Please do not include school books).	

K008	How many **books** are there in the house? (Please include school books but do not include the pictured books of the children).	
K009	How many **magazines** and newspaper are in the house?	

Interviewer Say: *"In the past 3 days did you or any household member (over 15 years of age) engage in any of the following activities with [CHILD]":*

If yes, who engaged in this activity with [CHILD]?

		1 = Yes 2 = No 99 = Don't Know
K010	Have you read books, including poem books to the child or showed pictured books to him or her? If yes, who engaged in this activity?	
K010a	Mother	
K010b	Father	
K010c	Any elder household member (over 15 years of age)	
K011	Have you told stories or nursery rhymes to the child? If yes, who engaged in this activity?	
K011a	Mother	
K011b	Father	
K011c	Any elder household member (over 15 years of age)	
K012	Have you sang songs (including lullabies) to the child? If yes, who engaged is this activity?	
K012a	Mother	
K012b	Father	
K012c	Any elder household member (over 15 years of age)	
K013	Have you played with toys with the child? If yes, who engaged is this activity?	
K013a	Mother	
K013b	Father	
K013c	Any elder household member (over 15 years of age)	
K014	Have you spent time with the child naming, counting, and/or drawing things? If yes, who engaged in these activities?	
K014a	Mother	
K014b	Father	
K014c	Any elder household member (over 15 years of age)	
K015	Interviewer count the number of **toys** that the mother brought to you **(Interviewer**. Do not count children books/picture books)	
K016	[Observation] Interviewer indicate whether the toys are kept within the reach of the child ?	

L. MATERNAL DEPRESSION

Interviewer say: *"Sometimes we feel unhappy other times we feel good. Now I want to ask you some questions about how you've been feeling this **LAST WEEK**. We may not remember how we felt a long time ago. But we can remember recent feelings. Therefore, I will ask you about the last7 seven days. Explain about the past week (e.g. today is Monday so I want to you tell me how you have been feeling in the past week, from Monday morning to last Sunday night). Whatever we ask you will be kept confidential and will only be used for research purpose."*

Sl.	Question	Code 0-7 days
L001	How many days did you feel sad?	
L002	How many days did you feel lonely?	
L003	How many days did you feel like crying?	
L004	How many days did you feel that you enjoyed life?	
L005	How many days did you feel depressed?	
L006	How many days did you feel like you have interest or pleasure in doing things?	

M. ABOUT EARLY CHILDHOOD STIMULATION PROGRAM

Please ask the mother to show you the early childhood stimulation materials. If the mother does not remember the exact month please ask her to report the proxy month.

Sl.	Question				
M001		Have you received any materials (related to how to stimulate your children) from FWA, HA, or at the community clinic?			
	If Yes, which materials?	1 = Yes 2 = No	*If Yes, when?*	*Did the person who gave it to you, go over the material with you?* *1= Yes* *2= No*	*If yes, condition?* 1= Material is almost new, in great condition. 2= Material is ok, maybe some pages are missing. 3= Material is in bad condition, several pages are missing. 4= received it but lost it.
M001a	The child development card?		Month: Year:		
M001b	The household picture book?		Month: Year:		
M001c	The nature picture book?		Month: Year:		
M001d	The key message booklet?		Month: Year:		
M001e	Other (Specify):		Month: Year:		
M002	How did you get the materials:	1 = Yes 2 = No			
M002a	During visit to community clinic?				
M002b	During visit to Expand Program on Immunization (EPI)?				

M002c	FWA brought them to your household?			
M002d	HA brought them to your household?			
M002e	During Growth Monitoring Checkup?			
M002f	Other (Specify):			
M002g	How many times did you receive counselling on early child stimulation?		Number of times	

(Interviewer: Should have a copy of all the Save the Children Materials. The caregiver should respond to the following questions if she received any of the child development materials)

Sl.	Question	1 = Yes 2 = No
M003	Have you used the child development card with [CHILD]? If yes, who used it?	
M003a	Mother	
M003b	Father	
M003c	Mother-in-law	
M003d	Other (specify):	
M004	Have you used the household/nature picture book with [CHILD]? If yes, who used it?	
M004a	Mother	
M004b	Father	
M004c	Mother-in-law	
M004d	Other (specify):	
M005	Have you used the key messages booklet with [CHILD]?	
M005a	Mother	
M005b	Father	
M005c	Mother-in-law	
M005d	Other (specify):	
M006	Have you implemented any of the recommendations included in the Child Development Card with [CHILD]? *Show the card to mother and include the code below related to the activity*	
M006a	If Yes, which ones? *(add the codes from child development card)*	
M007	Have you used the child development card with [CHILD]'s siblings?	
M008	Have you used the household/nature picture with [CHILD]'s siblings?	
M009	Currently, Do you still use the early childhood stimulation materials?	
Interviewer. *If the mother is no longer using the materials, ask her for the period she used to used them*		

M011	How many days in the **week** do you and your children usually use the SC materials? (*Record 99 if mother and child do not use the materials at least once week)*	Number of days in a week:
M012	When you use the SC materials, for how long, on average, do you use them?	_____ hours _____ minutes
M013	How useful do you think are the early childhood stimulation materials? (**Interviewer:** Please read answer options to respondent)	1 = Not useful 2 = Somewhat useful 3 = Useful 4 = Very useful
M014	Have you made any toys in the last six months?	1 = Yes 2 = No

N. ABOUT FAMILY WELFARE ASSISTANTS HOUSEHOLD VISITS

Sl.	Question		
N001	In the last **SIX MONTHS**, how many visits have you received from a FWA?	Number of visits: _____ *(If none mark 0)*	
N002	When was the **LAST** visit you received from a FWA?	Month: ____ Year: ____	
N003	In the **LAST** FWA visit, approximately how many minutes did she spend in your house?	Minutes: ____	
			1 = Yes 2 = No
N004	In the **LAST** FWA visit…		
N004a	Did she speak with you about how to play with your child?		
N004b	Did she speak with you about how to talk to your child?		
N004c	Did she speak with you about the Child Development Card?		
N004d	Did she speak with you about the Picture Books?		
N004e	Did she speak with you about the Key Messages Booklet?		

O. ABOUT HEALTH ASSISTANTS HOUSEHOLD VISITS

Sl.	Question		
O001	In the last **SIX MONTHS**, how many visits have you received from an HA?	Number of visits: _____ *(If none mark 0)*	
O002	When was the **LAST** visit you received from a HA?	Month: ____ Year: ____	
O003	In the **LAST** HA visit, approximately how many minutes did she spend in your house?	Minutes: ____	
O004	In the **LAST** HA visit…		
O004a	Did she speak with you about how to play with your child?		
O004b	Did she speak with you about how to talk to your child?		
O004c	Did she speak with you about the Child Development Card?		
O004d	Did she speak with you about the Picture Books?		
O004e	Did she speak with you about the Key Messages Booklet?		

P. ABOUT VISITS TO COMMUNITY CLINICS

Sl.	Question		
P001	In the **LAST SIX MONTHS**, how many visits have you done to the Community Clinic?	Number of visits: _____ *(If none mark 0)*	
P002	When was your **LAST** visit to the CC?	Month: ____ Year: ____	
P003	In your **LAST** visit to the CC, approximately how many minutes did you spend there?	Minutes: _____	
Regarding your last visit to the CC…			1 = Yes 2 = No
P004	Why did you go to the CC?		
P004a	[CHILD] was sick		
P004b	[CHILD]'s sibling was sick		
P004c	For immunization		
P004d	For Growth Monitoring Checks		
P004e	You were sick		
P004f	You heard about the Early Childhood Development Card		
P004g	Other (specify):		
P005	In your **LAST** visit to the community clinic…		
P005a	Did you see the child development poster?		
P005b	Did someone speak with you about how to play with your child?		
P005c	Did someone speak with you about how to talk to your child?		
P005d	Did someone speak with you about the Child Development Card?		
P005e	Did someone speak with you about the Picture Books?		
P005f	Did someone speak with you about the Key Messages Booklet?		

Q. FOR INTERVENTION HOUSEHOLDS [open questions]

(Interviewer: Write NA if household did not receive the early childhood stimulation materials)

Q1. Does the early childhood stimulation materials changed the way you interact with your children? If yes, How?

Q2. If you received the early childhood stimulation materials but haven't used them, please tell us why?

Q3. If you received the early childhood stimulation materials, used them for a while, but STOP using them, please tell us why?

Q4. Have you shared what you learned through the early childhood stimulation materials with other women? If yes, what have you shared with them?

R. FOR INTERVENTION HOUSEHOLDS – QUESTIONS FOR MOTHER IN LAW

(Interviewer: Write NA if household did not receive the early childhood stimulation materials or if mother in law is not present during the interview)

		1 = Yes 2 = No
R001	Have you seen the early childhood stimulation materials?	
R002	Have you used the early childhood stimulation materials?	
R003	Do you support the messages related to the importance of communication and play of the child development card?	
R004	If no, why not?	

End of the survey

Endline Service Provider Survey

V001	Date of interview	Day:	Month:	Year:	
V002	Name of interviewer			Code	

A. IDENTIFICATION

A001	Service Provider Name	
A002	Gender: 1 = Male 2 = Female	
A003	Religion: 1 = Islam 2 = Hindu 3 = Christian 4 = Buddhist 5 = Other (specify):	
A004	Age in years	
A005	Service Provider Position: 1 = FWA 2 = HA 3 = CHCP	
A006	Service Provider ID number	
A007	Service Provider Mobile Number	
A008	Place of current residence	
A009	Name of the Community Clinic where the Service Provider works	
A010	Community Clinic Code	
A011	Name of Union	
	Code of Union	
A012	Name of Upazila	
	Code of Upazila	
A013	Distance from your home to the *nearest* Community Clinic (distance in kilometers)	
A014	GPS Location of the community clinic	Latitude _____ Longitude_____

List Villages **FWA** is assigned to (separated by commas):

B. EDUCATION, EXPERIENCE AND TRAINING

1. Highest Grade Attained (use code): _____

100a	Highest class passed	0 = No class 1 = Class 1 2 = Class 2 3 = Class 3 4 = Class 4 5 = Class 5	6 = Class 6 7 = Class 7 8 = Class 8 9 = Class 9 10 = SSC pass 11 = Class 11	12 = HSC pass 14 = Graduate 16 = Masters 66 = Preprimary school

2. Degree and Name of the Degree

		Code	Answer
200a	Do you have any professional degree/diploma?	1 = Yes 2 = No	
200b	If yes, name the professional degree/diploma?	Name	

3. Working Experience

		Number of years
300a	Total years of working experience as FWA/HA/CHCP?	
300b	Total years of working experience as FWA/HA/CHCP in *the current working place (Union)*?	
300c	Total years of working experience as FWA/HA/CHCP in *the current working place (Community Clinic)*?	

4. What are your three primary tasks?

	Task	Please rank relevant options as 1, 2 or 3
400a	Provide family planning services	
400b	Supervise the work of other service providers (FWA, HA)	
400c	Look after general well-being of pregnant mothers and children under 3	
400d	Teach mothers about how to stimulate their children	
400e	Provide health services to children under 5	
400f	Look after malnourished children	
400g	Take care of immunizations of children	
400h	Take care of diarrhea and fever problems of children	
400i	Other specify:	
400j	Other specify:	
400k	Other specify:	

5. Training and Implementation

	Training type	1 = Yes 2 = No	If Yes, when? (Please begin with the most recent)
500a	Have you attended a Save the Children's training on early childhood stimulation?		Month_____ Year_____ Month_____ Year_____ Month_____ Year_____
500b	Have you attended training on child health?		Month_____ Year_____ Month_____ Year_____ Month_____ Year_____
500c	Have you attended training on child feeding and nutrition?		Month_____ Year_____ Month_____ Year_____ Month_____ Year_____
500d	Have you attended any other child-related training? (specify): _____		Month_____ Year_____ Month_____ Year_____ Month_____ Year_____

6. Regarding Save the Children's materials on early childhood, did you receive…

		1 = Yes 2 = No	If Yes, when?
600a	The child development card?		Month _____ Year_____
600b	"My House" picture book?		Month _____ Year_____
600c	"My Nature" picture book?		Month _____ Year_____
600d	The key message booklet?		Month _____ Year_____
600e	Any nutrition materials related to NNS?		Month _____ Year_____

7. How did you distribute the Save the Children materials to beneficiaries?

	Means of distribution of materials	1 = Yes 2 = No	Please rank relevant options as 1, 2 or 3
700a	In the household during a routine visit		
700b	In the community clinic during routine health visit		
700c	In the Expand Program on Immunization (EPI)		
700d	Other (specify):		
700e	Other (specify):		

C. WORK ACTIVITIES

Now we would like to know more about your work activities and the number of households you are assigned to visit.

8. Activities. How do you normally distribute your week?
Interviewer: *Add "NA" if Service Provider does not work that day of the week. Include the number of hours dedicated to each of the listed activities.*

	Activity	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
800a	Visit HHs	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
800b	Work in CC	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
800c	Vaccination place	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
800d	Other (specify):	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
800e	Other (specify):	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
800f	**Total** service hour (add all hours and confirmed total with SP)						

9. Household Visits[Actual Number of household visit].

Interviewer. *If the service provider is not assigned to visit households skip to* ***Section E.***
Try to check the HA, CHCP & FWAs registers, and validate the information provided in this section.

900a	How many households are you *assigned* to visit on an average working *month*?	No. of HH	
900b	How many households are you *assigned* to visit on an average working *week*?	No. of HH	
900c	How many households are you *supposed* to visit on an average working *day*?	No. of HH	

We understand that due to several reasons you may end up visiting fewer households or working fewer or more days/hours per week/day. If so, please answer:

900d	Approximately how many households were you able to visit *last month*?	No. of HH	
900e	Approximately how many households were you able to visit *last week*?	No. of HH	
900f	Approximately, how many households were you able to visit in your *last day of work*?	No. of HH	
900g	Approximately how many families could you reach during the last day of work?	No of family	

		1 = Yes 2 = No	
10.	Can you usually visit all assigned households?		If Yes, skip to section D

What are the main three reasons that explain why you usually cannot visit all assigned households? [Please do not read the options to the respondent]

	Reasons	Please rank relevant options as 1, 2 or 3
1000a	I am assigned more households than I can handle	
1000b	Household visits are time-consuming because I have too many messages to deliver	
1000c	Distance among households is too long	
1000d	Households do not cooperate because (specify):	
1000e	I often have to reschedule household visits because of (specify):	
1000f	I have other responsibilities in satellite clinics	
1000g	I have other responsibilities in Family Welfare Centers (FWC)	
1000h	I have other responsibilities in Expand Promotion of Immunizations (EPI) Center	
1000i	Other (specify):	
1000j	Other (specify):	
1000k	Other (specify):	

E. TIME SPENT WITH HOUSEHOLDS

I will now ask you about your LAST WORKING DAY when you had to visit households.

11. Remember your LAST WORKING DAY when you had to visit households; on average how many MINUTES did you spend with each household?

Average number of minutes: _____

12. Approximately, how did you distribute the total number of minutes spent within each household?

	Topics	Number of minutes
1200a	Talking about family planning	
1200b	Talking about general nutrition	
1200c	Talking about early childhood stimulation	
1200d	Providing information on EPI	
1200e	Health services and advice to pregnant women	
1200f	Child health	
1200g	Other (specify):	
1200h	Other (specify):	
	TOTAL (add the different tasks included in question12)	

Depending on household characteristics - such as household size, number of children, and presence of a sick person - some household visits may take longer than others.

		1 = Yes 2 = No	
13.	Do you spend more time with certain types of households?		If No, skip to section E

14. With which type of households are you likely to spend more time?

Mark the three main types of households that you spend more time with and the average number of minutes that you spend with each of these households.

	Descriptors of the household	Check Box	Average number of minutes
		Q1	Q2
1400a	Household with a sick child		
1400b	Household with multiple children		
1400c	Household with depressed mother		
1400d	Poorer households		
1400e	Household with pregnant women		
1400f	More friendly households		
1400g	Other (specify):		
1400h	Other (specify):		
1400i	Other (specify):		

F. PERCEPTIONS ABOUT EARLY CHILDHOOD DEVELOPMENT

15. For mothers with children under 3 years old, how important do you think is to:

		5 = Very Important 4 = Important 3 = Neither Important nor unimportant 2 = Unimportant 1 = Very unimportant 99 = Don't know
1500a	Teach mothers how to talk with their children and how to respond to children's attempt to talk?	
1500b	Teach mothers how to care for their children's health?	
1500c	Teach mothers what food they should feed their children?	
1500d	Teach mothers how to respond to children's cues?	
1500e	Teach mothers how to play games with their children?	

G. UNDERSTANDING HOW COMMUNITY CLINICS OPERATE

16. Who supervises your job?

		Mark all that apply
1600a	Community Health Care Provider (CHCP)	
1600b	Family Planning Inspector (FPI)	
1600c	Health Inspector (HI)	
1600d	Family Welfare Visitor (FWV)	
1600e	Sub Assistant Community Medical Officer (SACMO)	
1600f	Assistant Health Inspector (AHI)	
1600g	Other (specify):	

H. JOB SATISFACTION

1700a	How satisfied are you with the work you are doing?	1 2 3 4 5 1 = Very dissatisfied 5 = Very satisfied	
1700b	What value do you think the community puts on your service?	1 2 3 4 5 1 = Not at all 5 = Very great	
1700c	In your daily work, how free are you to make decisions and to act on them?	1 2 3 4 5 1 = Not at all 5 = Very free	
1700d	How much recognition does your supervisor show for a job well done?	1 2 3 4 5 1 = None 5 = Great deal	

FOR INTERVENTION SERVICE PROVIDERS

1700e	How satisfied are you with the addition of delivering ECD messages to your scope of work?	1 2 3 4 5 1 = Very dissatisfied 5 = Very satisfied	
1700f	How satisfied are you with the training you received from Save the Children to deliver ECD messages?	1 2 3 4 5 1 = Very dissatisfied 5 = Very satisfied	

I. FOR INTERVENTION SERVICE PROVIDERS *[open questions]*

18. What do you think about the Save the Children early childhood stimulation program?

		1 = Yes 2 = No
1800a	Do you think the materials are appropriate?	
1800b	Do you think the materials are of good quality?	
1800c	Do you think the trainings were appropriate?	
1800d	Do you think you received enough training?	
1800e	Do you think you received enough support from Save the Children?	
1800f	If answer to 1800e is NO, what else could SC have done to provide you with more support?	

19. What were the THREE main challenges that you encountered implementing the SC program?
Interviewer*. Write NA if service provider experienced no challenges.*

1.
2.
3.

20. What do you think are the main attributes of the SC program?

21. WHAT and HOW would you improve the SC program? *E.g. Would you improve the training? materials? logistics? Other? And how?*

What?
How?

22. Do you think the SC program will improve mother's knowledge on early childhood stimulation?

1 = Yes, 2 = No	
Why?	

23. Do you think the SC program will improve children' cognitive and language skills?

1 = Yes, 2 = No	
Why?	

24. What needs to be done to keep this sort of program running in the future?

End of the survey. Thank you!

Endline Community Leader Survey

Interviewer.
This questionnaire is intended to capture community-level information. Community is defined as the CC's catchment area for this survey. Please interview at least three (3) knowledgeable resource persons in the village and ask them to answer the following questions in a group setting. Please ask these questions in front of all of these resource persons and write those answers in agreement to all. Identify the parishad chairman/member and request his/her help in identifying 3 community leaders and arranging a meeting with them at a convenient place and time.

Community leaders may be:

- Senior School teacher(s)
- Imam of mosque
- Elderly person (over 50 years) that has lived in the village for a long time
- Union Parishad chairman/members
- Representative officer of local health facility
- Any elderly public official

V001	Date of interview	Day: Month: Year:		
V002	Name of interviewer		Code	

A. IDENTIFICATION AREA

	Area	Name	Code
A001	Para/sub-village		
A002	Village		
A003	Union		
A004	Upazila		
A005	District		
A006	Community clinic		

B. IDENTIFICATION RESPONDENT

Enumerator:
Record the following information for each of the community leaders you are interviewing.

		Leader 1	Leader 2	Leader 3
B001	Name of respondent			
B002	Age			
B003	Gender: 1 = Male 2 = Female			
B004	Religion: 1=Islam 2=Hindu 3=Christian 4=Buddhist 5=Other (specify)			
B005	Length of time resident in community: How many years have you been living in this village?	_____ years	_____ years	_____ years
B006	How far (in k.m) is the nearest community clinic located from the center of your village	_____k.m	_____k.m	_____k.m
B007	Main occupation:			
B008	Leadership role: 1 = Senior School teacher(s) 2 = Imam of mosque 3 = Elderly person (over 50 years) 4 = Union Parishad chairman/members 5 = Representative of local health facility 6 = Any elderly public official 7 = other (specify)			

B009	Highest Grade Attained: 0 = No class 1=Class 1 2=Class 2 3=Class 3 4=Class 4 5=Class 5 6=Class 6 7=Class 7 8=Class 8 9=Class 9 10= SSC pass 11=Class 11 12=HSC pass 14=Graduate 16=Masters 66=Preprimary school			
B010	Mobile number			

C. BASIC INFRASTRUCTURE OF THE COMMUNITY

(Interviewer: please check these questions for knowledgeable person(s) in their respective community)

	Question	Code	Answer
C001	What is the main access route to this village/mohalla?	1= All weather road/ pacca road/motor able 2= Seasonal road/earthen 3= Waterway 4= Path 5= Other	
C002	Is electricity available here?	1 = Yes 2 = No	
C003	How many hours per day on average is there electricity?	Number of hours	
C004	How many days is there electricity in an average month?	Number of days	
C005	Is there mobile service?	1= Yes 2 = No	
C006	Is there internet access within the community?	1= Yes 2= No	
C007	What is the primary source of water for the majority of people in this community?	1=Piped 2=Public tap 3=Well 4=Tube well 5=River/stream/lake 6=Rainwater 7=Other	

D. MAJOR ECONOMIC ACTIVITIES

	Question	Answer

D001	What are the main economic activities—that is, the main source of people's livelihoods—in this community:	Describe Main Economic Activities
D001a	Agriculture	
D001b	Livestock	
D001c	Fishing	
D001d	Commerce	
D001e	Manufacturing	
D001f	Day labor	
D001g	Service	
D001h	Remittances	
D001i	Other (specify):	

	Question	Answer	
		Peak season wage	Off-season wage
D002	What is the average daily wage for **MEN** doing casual labor in the community this season?		
D003	What is the average daily wage for **WOMEN** doing casual labor in the community this season?		

E. COMMUNITY ASSETS

(Interviewer: please check these questions for knowledgeable person(s) in their respective community. If there are many we ask for the nearest)

	Facility	**Where is [FACILITY] located?** 1=In community (as defined by CC catchment area) 2=Outside community, but in nearby community 3=Outside community, but in nearby large town 4= Outside community, not nearby 99=Don't know	**Is the facility functional or not?** 1= Yes 2 = No	**How far in km is [FACILITY] located from the community clinic?**	**How many minutes does it take to go from CC to [FACILITY] using the most common type of transportation?**	**Mode of transportation.** 1=walking 2=rickshaw /van 3= boat 4=auto-rickshaw 5=bicycle	**Is the [FACILITY] location in this Union?** 1=Yes 2=No
		Q1	**Q2**	**Q3**	**Q4**	**Q5**	**Q6**
E001	Upazila Health Center						
E002	Family Welfare Center						
E003	Maternal and Child Welfare Center (MCWC)						
E004	Private clinic						
E005	NGO clinic						
E006	Rural dispensary						
E007	Satellite Clinic						
E008	Homeopathy dispensary						
E09	Traditional medicine practitioner						

F. MIGRATION

	Question	Code	Answer
F001	What proportion of households currently has household member working outside of the community (within Bangladesh)?	% of HH	
F002	What proportion of households has a household member working outside of Bangladesh?	% of HH	
F003	Among those that are working outside Bangladesh, Where are they mostly working? Write the country name		

G. EXTERNAL SHOCKS

(Interviewer: please check these questions for knowledgeable person(s) in their respective community)

We now would like us to talk about the important events that have taken place in this community since November 2013/January2014 until today. We are specifically interested in events that have changed the well-being of people in this community for better or for worse. Examples of events that might have made people worse off are disease epidemics, crop failures, natural disasters, price fluctuations, or the loss of key social services. Examples of events or projects that may have made people better off are new schools or medical facilities, new employment opportunities, or the construction of a new road.

		Q1	Q2	Q3
Events that made people ***worse*** off		Has [EVENT] taken place in this community in the last two years? 1=Yes 2=No **>>NEXT EVENT**	In how many of the past two years has [EVENT] taken place? 1=2014 2=2015	What proportion (%) of the community was affected by [EVENT]? [**USE PROPORTIONAL PILING]**
G001	Natural disaster (drought/flood/storm)			
G002	Crop disease/pests			
G003	Livestock disease			
G004	Human epidemic disease			
G005	Unusual increase in overall prices			
G006	Political unrest			
G007	Other (specify)			

		Q1	Q2	Q3
Projects that made people ***better*** off		Has [PROJECT] been constructed/taken place in this community in the past two years? 1=Yes 2=No **>>NEXT EVENT**	In the past two years, how many of these [PROJECTS] have been constructed/taken place?	What proportion (%) of the community was affected by [PROJECT]? [**USE PROPORTIONAL PILING]**
G008	Development project (e.g. LGSP)			
G009	New employment opportunity (eg. Kabikha, TR)			
G010	New health facility			
G011	New road			
G012	New preprimary center (or ECD center) – **government**			
G013	New preprimary center (or ECD center) – non-government			

G014	New primary school – - **government**			
G015	New primary school – non-government			
G016	New secondary school – **government**			
G017	New secondary school – non-government			
G018	New nutrition program – **government**			
G019	New nutrition program non-government			
G020	Other (specify)			

H. CRIME PROBLEMS

Please compare today's living conditions with those of the previous two years, and tell me if the following types of crimes have:

	Question	Answer
	Type of Crime	1=Significantly increased 2=Increased 3=Remained the same 4=Decreased 5= Significantly decreased 6=Don't know
H001	Personal property crime	
H002	Dowry	
H003	Drug abuse / use	
H004	Sexual violence / harassment	
H005	Women / child trafficking	
H006	Domestic violence	
H007	Extortion	
H008	Political violence	
H009	Land grabbing	
H010	Ethnic / religious violence	
H011	Other (specify):	

I. ABOUT THE LOCAL COMMUNITY CLINIC

(Interviewer: please check these questions for knowledgeable person(s) in their respective community)

	Question	Code	Answer
I001	Number of days (per week) that the community clinic is open:	Days per week	
I002	Number of hours per day that the community clinic is open:	Hours per day	
I003	Number of Family Welfare Assistant (FWA) that work in the community clinic:	Number of FWA	

I004	Number of Health Assistants (HA) that work in the community clinic:	Number of HA	
I005	Number of Community Health Care Provider (CHCP) that work in the community clinic:	Number of CHCP	
I006	Since when did the CC start operating from its own building?	1. Year 2. Operating from another building	

J. ABOUT SAVE THE CHILDREN PROGRAM

J001	How do people in your area view the early childhood stimulation program?	1 = Positively 2= Negatively 99= Don't know about this program – End survey	

Only in Intervention Communities:

J002. What are the main positive features of the SC program to your knowledge?

1.

2.

3.

J003. What are the THREE main challenges of implementing the SC early childhood program?

1.

2.

3.

J004. What needs to be done to keep this sort of program running in the future?

J005. Do you have any other comments related to the SC early childhood program?

End of the survey. Thank you!

Endline Focus Group Protocol with Mothers and Fathers

This protocol is intended to foster conversation rather than to be used like a survey with content-specific items. Separate meetings should be organized with mothers and fathers who are household members with potentially different perceptions of events/ who may see things from different perspectives. The intervention Group receives all questions. Control Group only receives questions denoted by (C).

Confidentiality

- All participants need to sign confidentially agreement.
- Data will not be shared with anyone outside of the research team.
- Data will only be shared as themes—there will be no attribution of data to any specific person.

Guidelines for Facilitator:

- Please keep the group on track, both in terms of topic and time limits.
- Remain neutral as a facilitator.
- Encourage quiet respondents to speak up, and gently redirect if one person dominates the discussion.
- Listen actively, and paraphrase if necessary to clarify responses.
- Probe deeper where appropriate, including by asking people to help you understand what they mean or asking them to give an example.
- Be comfortable with pauses if they give participants a chance to think and respond.

Purpose of the Meeting

The purpose of this meeting is to gather data to understand:

- How parents received the information about the Early Childhood Stimulation Program (ECSP).
- Whether the ECSP help increased parents' knowledge about early childhood stimulation.
- How parents interact with their children.
- Parents' perception and opinions regarding the program messages and the program materials.
- Parents' perception and opinions regarding the program delivery mechanism.
- What is working and what could be improved.
- Factors facilitating or inhibiting the implementation of the program.

Participants

- Six to eight individuals, preferably who do not know each other (this encourages free and open discussion).

Number of Focus Groups

- By group, district and condition:

	Treatment Group (T)			Control Group (C)	
Groups	Muladi	Kulaura	Satkania	Muladi	Kulaura or Satkania
Fathers	1	1	1	1	1
Mothers	1	1	1	1	1

Opening: The moderator should introduce herself, briefly explain the study, distribute and collect the consent forms, and offer an opportunity for questions before the focus group begins. The intervention Group receives all questions. Control Group only receives questions denoted by (C).

Engagement Questions: Briefly tell us your name, how many children you have, what ages are your children (C)

Receiving materials

1. How did you learn about the ECSP? (C)
2. How did you receive the ECSP materials?
3. Did the [service provider] go over the material with you, when you received them?
4. Did the [service provider] provide counselling about Early Childhood Stimulation when giving the materials? If Yes, Do you remember what they told you?

Using the materials

5. How did you use the materials?
6. If you received them, but haven't used them, please tell us why.
7. If you received them, used them for a while but stop using them, please tell us why.
8. Did someone talk to you about the ECSP messages? Who? Where?
9. What did he/ she tell you regarding ECSP?
10. What do you think about the usefulness of ECS materials?

Questions Testing Theory of Change: Knowledge and Practices

[These questions are related to smaller children up to 5 years old]

Parent's knowledge

11. What have you learned from the ECSP materials and/or service providers' visits?
12. Do you think playing with your child is important? If Yes, Why? If No, Why Not? (C)
13. Do you think talking to your child is important? If Yes, Why? If No, Why Not? (C)
14. Do you think singing or telling story to your child is important? If Yes, Why? If No, Why Not? (C)
15. Do you think reading to your child is important? If Yes, Why? If No, Why Not? (C)

Parent's Behavior

16. What activities do you do with your child (beyond basic caregiving)? (C)
17. Do you play with your child? How do you play your child? (C)
18. Do you talk to your child? What do you talk(C)
19. Do you sing or tell story) to your child? What do you sing(C)
20. Do you read anything to your child? What do you read to your child? (C)
21. Have the early childhood stimulation materials changed the way you interact with your child, including how you play and communicate with them?
    a. If so, why? If not, why not? (note: please probe this question in particular)

Empowerment (Note: these questions only apply to the mothers' focus groups)

22. Who is the person in your household that knows most about early childhood development?
23. Has the knowledge gained through the program allowed you more decision making ability related to your children and household matters? For example, which food should be bought, when to take the child to a health facility, or what things to buy for the child? If yes, Please explain how.
24. Have you shared what you learned through the early childhood stimulation materials with other women? If yes, what have you shared? If no, why not?

Ending Question.

25. How do you think the services, related ECD that were provided to you, could be improved?

Conclusion: Thank everyone for participating.

Monitoring Instruments

SIEF: Program Monitoring Questions for TREATMENT Households (Mother)

V001	Ques. Sl. No.:	
V002	Unique Child ID:	
V003	Date of interview:	Day: Month: Year:
V004	Interviewer:	Name: Code:
V005	Starting time of visit:	Hour:
A001	Household:	Name: Code:
A002	Village:	Name: Code:
A003	Community Clinic name:	Name:
A004	Mother's name:	Name:
A005	Date of birth of the child:	Day: Month: Year:

Q001 Have you seen the Save the Children Poster in the community clinic? Yes ☐1 No ☐2

Q001 Have you received any materials from FWA, HA, or at the community clinic? Yes ☐1 No ☐2 *(If No, skip to Q 43)*

If Yes, which materials?

Q002/3	A child development card?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q004/5	A household picture book?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q006/7	A nature picture book?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q008/9	A key message booklet?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q010/11	Other materials?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q012	If Yes, please specify what other materials:		

Note. If Yes please ask the mother to show the material to you. Yes = received it AND have it.

How did you get the Save the Children materials?

Q011	During visit to community clinic	Yes ☐1 No ☐2
Q012	During visit to Expand Program on Immunization (EPI)	Yes ☐1 No ☐2
Q013	FWA brought them during last visit	Yes ☐1 No ☐2
Q014	HA brought them during last visit	Yes ☐1 No ☐2

Q015	I received them in another way:	Yes ☐1 No ☐2
Q016	If Yes, please specify what other way:	
Q016	Have you used the child development card?	Yes ☐1 No ☐2 If Yes, skip to Q018
Q017	If No, why not?	
Q018	Have you used the household picture book with [child name]?	Yes ☐1 No ☐2 If Yes, skip to Q020
Q019	If No, why not?	
Q020	Have you used the nature picture book with [child name]?	Yes ☐1 No ☐2 If Yes, skip to Q022
Q021	If No, why not?	
Q022	Have you used the key messages booklet?	Yes ☐1 No ☐2 If Yes, skip to Q024
Q023	If No, why not?	
Q024	Have you implemented any of the recommendations included in the child development card with [child name]?	Yes ☐1 No ☐2 If No, skip to Q026
Q025	If Yes, which ones?	Codes: Skip to Q027
Q026	If you didn't implement any of the recommendations, why not?	
Q027	Have you talked to your **husband** about the SC materials?	Yes ☐1 No ☐2
Q028	Have you talked to your **mother-in-law** about the SC materials?	Yes ☐1 No ☐2
Q029	Have you talked to anyone else in the household about the SC materials?	Yes ☐1 No ☐2 If No, skip to Q031
Q030af	If Yes, to whom? (Mark all that apply)	Son/daughter ☐a Sibling ☐b Parent(s) ☐c Sister in law/brother in law ☐d Father in Law ☐e Others ☐f
Q031	Does your **husband** support the use of the SC materials?	Yes ☐1 No ☐2 If Yes, skip to Q033
Q032	If No, why not?	
Q033	Does your **mother-in-law** support the use of the SC materials?	Yes ☐1 No ☐2 If Yes, skip to Q03X
Q034	If No, why not?	
Q033	How many days in the week do you and your child usually use the SC materials?	_____ number of days in a week

		*(record 99 if mother and child **do not** use the SC materials at least **once a week**)*
Q034	When you and your child use the SC materials, for how long do you usually use them?	_____ hours _____ minutes
Q037	Do you find the SC materials useful?	Yes ☐1 No ☐2
Q038	If No, why not?	
Q039	Have you talked to other women **inside** your community about the SC materials?	Yes ☐1 No ☐2
Q040	Have you talked to other women **outside** your community about the SC material	Yes ☐1 No ☐2
Q041	If Yes to either Q039 or Q040, what did you talk about?	
Q040	Have you participated in a court-yard meeting(s) with service providers?	Yes ☐1 No ☐2 *(If No, skip to Q XX)*
Q040	In how many court-yard meeting have you participated?	_____ number of court-yard meetings
Q041	What did you talk about in the court-yard meeting(s)?	

About Family Welfare Assistant visit:

Q042	In the last **six** months, how many visits have you received from your FWA?	Number of visits:	If 0, skip to Q055
Q043	In the last FWA visit, approximately how many minutes did she spend in your household?	Number of minutes:	

<u>During the last FWA visit:</u>

Q044	Did she talk about **how to talk** to your child?	Yes ☐1 No ☐2
Q045	Did she talk to you about **how to play** with your child?	Yes ☐1 No ☐2
Q046	Did she speak with you about the SC child development card?	Yes ☐1 No ☐2
Q047	Did she speak with you about the SC books?	Yes ☐1 No ☐2
Q048	Did she speak with you about the key message booklet?	Yes ☐1 No ☐2

During the last FWA visit, what was the overall topic that she talked about the most? Please rank the top three topics in order of most-discussed and provide the approximately number of minutes spent in each topic:

			Rank (1-3)	Approx. number of minutes
Q049	Family planning			
Q050	General well-being of you and children under 3 years old			
Q051	Nutrition			
Q052	Early childhood stimulation			
Q053	Other (specify):			
Q054	Other (specify):			

Q040	Have you heard about any of these topics/messages from someone else?	Yes ☐1 No ☐2
Q040	If Yes please specify who?	

About HA visit:

Q055	In the last **six** months, how many visits have you received from your HA?	Number of visits:	If 0, skip to Q062
Q056	In the last HA visit, approximately how many minutes did she spend in your household?	Number of minutes:	

During the last HA visit:

Q057	Did she talk about **how to talk** to your child?	Yes ☐1 No ☐2
Q058	Did she talk to you about **how to play** with your child?	Yes ☐1 No ☐2
Q059	Did she speak with you about the SC child development card?	Yes ☐1 No ☐2
Q060	Did she speak with you about the SC books?	Yes ☐1 No ☐2
Q061	Did she speak with you about the key message booklet?	Yes ☐1 No ☐2

During the last HA visit, what was the overall topic that she talked about the most? Please rank the top three topics in order of most-discussed and provide the approximately number of minutes spent in each topic:

			Rank (1-3)	Approx. number of minutes
Q050	General well-being of you and children under 3 years old			

Q051	Nutrition			
Q052	Early childhood stimulation			
Q053	Other (specify):			
Q054	Other (specify):			

Q040 Have you heard about any of these topics/messages from someone else? Yes ☐1 No ☐2

Q040 If Yes please specify who?

About CC visits:

Q062 In the last **six** months, did you visit a community clinic? Yes ☐1 No ☐2 If No, survey ends here

<u>During your last community clinic visit:</u>

Q063 Did someone talk with you about the SC child development card? Yes ☐1 No ☐2

Q044 Did someone talk with you about **how to talk** to your child? Yes ☐1 No ☐2

Q045 Did someone talk with you about **how to play** with your child? Yes ☐1 No ☐2

Q047 Did someone talk with you about the SC books? Yes ☐1 No ☐2

Q048 Did someone talk with you about the booklet? Yes ☐1 No ☐2

Thank you for your participation!

SIEF: Program Monitoring Questions for CONTROL Households (Mother)

V001	Ques. Sl. No.:	
V002	Unique Child ID:	
V003	Date of interview:	Day: Month: Year:
V004	Interviewer:	Name: Code:
V005	Starting time of visit:	Hour:
A001	Household:	Name: Code:
A002	Village:	Name: Code:
A003	Community Clinic name:	Name:
A004	Mother's name:	Name:
A005	Date of birth of the child:	Day: Month: Year:

Q001 Have you received any materials from FWA, HA, or at the community clinic? Yes ☐1 No ☐2 *(If No, skip to Q 43)*

If Yes, which materials?

Q002/3	A child development card?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q004/5	A household picture book?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q006/7	A nature picture book?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q008/9	A key message booklet?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q010/11	Other materials?	Yes ☐1 No ☐2	If Yes, when? Month: Year:
Q012	If Yes, please specify what other materials:		

Note. If Yes please ask the mother to show the material to you. Yes = received it AND have it.

About Family Welfare Assistant visit:

Q042	In the last **six** months, how many visits have you received from your FWA?	Number of visits:	If 0, skip to Q055
Q043	In the last FWA visit, approximately how many minutes did she spend in your household?	Number of minutes:	

During the last FWA visit, what was the overall topic that she talked about the most? Please rank the top three topics in order of most-discussed and provide the approximately number of minutes spent in each topic:

			Rank (1-3)	Approx. number of minutes
Q049	Family planning			
Q050	General well-being of you and children under 3 years old			
Q051	Nutrition			
Q052	Early childhood stimulation			
Q053	Other (specify):			
Q054	Other (specify):			

About Health Assistants visit:

Q055	In the last **six** months, how many visits have you received from your HA?	Number of visits:	If 0, skip to Q062
Q056	In the last HA visit, approximately how many minutes did she spend in your household?	Number of minutes:	

During the last HA visit, what was the overall topic that she talked about the most? Please rank the top three topics in order of most-discussed and provide the approximately number of minutes spent in each topic:

			Rank (1-3)	Approx. number of minutes
Q050	General well-being of you and children under 3 years old			
Q051	Nutrition			
Q052	Early childhood stimulation			
Q053	Other (specify):			
Q054	Other (specify):			

Q062 In the last **six** months, did you visit a community clinic? Yes ☐1 No ☐2 If No, survey ends here

Thank you for your participation!

SIEF Bangladesh Study

Service Provider Monitoring Questionnaire (Treatment)

V001	Service Provider ID	
V002	Service Provider name	
V003	District name	
V004	Community clinic ID	
V005	Date of the visit	Hour: Day: Month: Year:
V006	Position	FWA___ HA___ CHCP___

Objective 1: Training and Implementation

Q001/2	Did you attend Save the Children's training on early childhood stimulation?	Yes ☐1 No ☐2 *(If No, skip to Q003)*	If Yes, when? Month: Year:
Q003	Have you participated in any other meeting/training led by Save the Children personnel?	Yes ☐1 No ☐2 *(If No, skip to Q009)*	
Q004	If yes, when was meeting 1? (Please begin with the most recent)		Month: Year:
Q005	If yes, when was meeting 2?		Month: Year:
Q006	If yes, when was meeting 3?		Month: Year:
Q007	Other		Month: Year:
Q008	What have you learned in this/these meetings/trainings?		
Q009	If you have a question regarding SC materials do you know who to ask or how to resolve it?	Yes ☐1 No ☐2 *(If No, skip to QXX)*	
Q010	What do you think about the SC materials and training?		
Q010	Have you seen the child development poster in the community clinic?	Yes ☐1 No ☐2	

Regarding the Save the Children materials, Did you receive

Q011/12	The child development cards?	Yes ☐1 No ☐2 *(If No, skip to Q013)*	If Yes, when? Month: Year:

Q013/14	The household picture books?	Yes ☐1 No ☐2 *(If No, skip to Q015)*	If Yes, when? Month: Year:
Q015/16	The nature picture books?	Yes ☐1 No ☐2 *(If No, skip to Q017)*	If Yes, when? Month: Year:
Q017/18	The key message booklets?	Yes ☐1 No ☐2 *(If No, skip to Q023)*	If Yes, when? Month: Year:

Note. If Yes please ask the interviewee to show you the materials. Yes = received it AND have it.

a) How do you know whether a household has received the four materials from Save the Children?
b) How do you keep track of which materials the household has received?
c) How do you track when a household receives each of the four materials?

How did you distribute the Save the Children materials to beneficiaries?

			What is the primary form of distribution? Rank 1, 2 or 3
Q019	In the household during a routine visit	Yes ☐1 No ☐2	
Q020	In the community clinic during a routine health visit	Yes ☐1 No ☐2	
Q021	In the Expand Program on Immunization (EPI)	Yes ☐1 No ☐2	
Q022	Other way (specify):		

Objective 2: Workload, coverage and crowing out

Q023 This **month**, how many households are you visiting approximately? Number of visits: If 0, skip to Q026

Yesterday ~~or the last day you worked~~:

Q024 How many households did you visit? Number of households:

Q025 How many hours did you work? Number of hours:

What did you do during those working hours?

Q026 Worked in the community clinic Yes ☐1 No ☐2

Q027 Visited households Yes ☐1 No ☐2

Q028	Other (specify):	
Q029	Other (specify):	
Q030	How many minutes did you spent with each household approximately?	**Number of minutes:**

YESTERDAY ~~or the last day you worked~~, approximately how did you distribute the minutes within each household?

		Number of minutes:	
Q031	Talking about family planning		
Q032	Talking about nutrition		
Q033	Talking about early childhood stimulation		
Q034	Talking about another topic (specify):		
Q035	Talking about another topic (specify):		
Q036	Total:		*This should match line Q030*

Q037	In general, which of the tasks listed above is the most time-consuming?	1=Family planning 2=Nutrition 3= Early childhood stimulation 4=Other topic from Q034 5=Other topic from Q035
Q038	Why?	
Q039	In general, which of the tasks listed above is the least time-consuming?	1=Family planning 2=Nutrition 3= Early childhood stimulation 4=Other topic from Q034 5=Other topic from Q035
Q040	Why?	
Q040	Do you know yesterday's operation schedule of the community clinic?	Yes ☐1 No ☐2 *(If No, skip to QXX)*
Q040	What was it?	____:____ am/pm to ____:____am/pm

Tomorrow

Q041	How many households will you visit?	Number of households:
Q042	How many hours will you work?	Number of hours:

Tomorrow, what will you do during those working hours?

Q043	Work in the community clinic	Yes ☐1 No ☐2
Q044	Visit households	Yes ☐1 No ☐2
Q045	Other (specify):	
Q046	Other (specify):	

Do you think…

Q047	You have more households than you can handle?	Yes ☐1 No ☐2
Q048	Your work is easy?	Yes ☐1 No ☐2
Q049	You have to deliver too many messages?	Yes ☐1 No ☐2
Q050	Your work is very demanding?	Yes ☐1 No ☐2
Q051	What do you think is the most difficult aspect of your work?	

SIEF Bangladesh Study

Service Provider Monitoring Questionnaire (Control)

V001	Service Provider ID	
V002	Service Provider name	
V003	District name	
V004	Community clinic ID	
V005	Date of the visit	Hour: Day: Month: Year:
V006	Position	FWA___ HA___ CHCP___

Q001 This **month**, how many households are you visiting approximately? Number of visits: If 0, skip to Q003

Yesterday or the last day you worked:

Q002 How many households did you visit? Number of visits:

Q003 How many hours did you work? Number of hours:

What did you do during those working hours?

Q004 Worked in the community clinic Yes ☐1 No ☐2

Q005 Visited households Yes ☐1 No ☐2

Q006 Other (specify):

Q007 Other (specify):

Q008 How many minutes did you spent with each household approximately? Number of minutes:

Yesterday or the last day you worked, approximately how did you distribute the minutes within each household?

		Number of minutes:	
Q009	Talking about family planning		
Q010	Talking about nutrition		
Q011	Talking about early childhood stimulation		
Q012	Talking about another topic (specify):		
Q013	Talking about another topic (specify):		
Q014	Total:		*This should match line Q008*

Q015	In general, which of the tasks listed above is the most time-consuming?	1=Family planning 2=Nutrition 3=Early childhood stimulation 4=Other topic from Q012 5=Other topic from Q013
Q016	Why?	
Q017	In general, which of the tasks listed above is the least time-consuming?	1=Family planning 2=Nutrition 3= Early childhood stimulation 4=Other topic from Q012 5=Other topic from Q013
Q018	Why?	

Tomorrow

Q019	How many households will you visit?	Number of households:
Q020	How many hours will you work?	Number of hours:

Tomorrow, what will you do during those working hours?

Q021	Work in the community clinic	Yes ☐1 No ☐2
Q022	Visit households	Yes ☐1 No ☐2
Q023	Other (specify):	
Q024	Other (specify):	

Do you think…

Q025	You have more households than you can handle?	Yes ☐1 No ☐2
Q026	Your work is easy?	Yes ☐1 No ☐2
Q027	You have to deliver too many messages?	Yes ☐1 No ☐2
Q028	Your work is very demanding?	Yes ☐1 No ☐2
Q029	What do you think is the most difficult aspect of your work?	

Consent Forms

Child ID no.	

BANGLADESH MEDICAL RESEARCH COUNCIL

SIEF Bangladesh Impact Evaluation

6a. Informed Consent Form For Mothers

We are from Data International Ltd. (DI), Bangladesh and we are working with the American Institutes for Research (AIR), USA investigating parenting practices and early childhood stimulation. We are particularly interested in finding out what is happening with your child's development and how you care for him/her. We are asking if you would like to participate and help us understand more about how children learn and what factors affect their development.

If you participate in our study, we will interview you to find out how your child spends the day at home and some general characteristics of your household. The interview will take about 1 hour.

We will also ask you to bring your children to the community clinic tomorrow to measure his/her weight and length and test him/her using the Bayley Test. The Bayley test will take about 30 minutes.

You will not receive any money for participating in our study and no medications will be provided. Your participation and cooperation is entirely voluntary; it is your decision whether or not to participate. Also you have the right not to answer any questions you do not want to and you can withdraw from the study at any time, without giving a reason. Your decision to participate in the research will not in any way affect your participation in other community health activities.

There is no risk to you or your child if you decide to participate. Nothing harmful will come from it. The interviews will not give you any immediate benefit.

During the interviews and child observations we will write down some notes about what we see you and your child doing. You can fully rely on us to keep confidential your identity and the information you provide. The papers containing the information will remain at Data International Ltd. in a locked cabinet and no one except the people involved with this research and the Ethical Review Committee will be able to see the information. However, we would like to inform you that disclosure of such information is subject to the laws of the country.

If you have concerns or questions about your rights as a participant, you may contact DI at (8802) 895-2912 or you may contact AIR's Institutional Review Board (which is responsible for the protection of research/project participants) at IRB@air.org, call the IRB in the United States at +1 202 403 5542, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street, NW, Washington, DC 20007, USA.

If you have any question you can ask us without hesitation. I am ready to answer all your questions regarding this issue.

Do you have any questions? Yes – Answer questions, No - Go to next question.
Do you agree that you and your child will participate in the interviews?

No - Thank you. (Go to the next household)

Yes – Ask when it would be a good time to start the interview.

Signature or mark/thumbprint of mother _____

Date _____

Name of the mother: _____

The interviewer will complete this section:

This consent form was read to her and all the questions have been answered and she has agreed to give an interview herself and let her child participate. Date: _____

Signature of the interviewer: _____

Name of the interviewer: _____ Interviewer ID: _____

BANGLADESH MEDICAL RESEARCH COUNCIL

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SIEF Bangladesh Impact Evaluation

6b. Informed Consent Form Service Providers

We are from Data International Ltd. (DI), Bangladesh and we are working with the American Institutes for Research (AIR), USA investigating parenting practices and early childhood stimulation. We are particularly interested in finding out something about the characteristics of your work, about some of the challenges you encounter doing your work, and in your perceptions about early childhood. We are asking if you would like to participate and help us assess the effectiveness of the program.

If you participate in our study, we will ask you some questions. The interview will take about 30 minutes, you are free to participate or not; it will not affect your job if you would rather not be interviewed. You can refuse to answer any question and you can stop the interview at any time without a reason. We want to assure you that your answers will be kept confidential and anonymous; that means your name is not put on the answer form so no one will know they are your answers. .

There is no risk to you if you decide to participate in the interview and in the observation. Nothing harmful will come from it. The interviews will not give you any immediate benefit.

During the interview and session observations we will write down some notes about what we see you and others are doing. You can fully rely on us to keep your identity and the information you provide confidential. The papers containing the information will remain at Data International Ltd. in a locked cabinet and no one except the people involved with this research and the Ethical Review Committee will be able to see the information. We would also like to inform you that disclosure of such information is subject to the laws of the country.

If you have concerns or questions about your rights as a participant, you may contact DI at (8802) 895-2912 or you may contact AIR's Institutional Review Board (which is responsible for the protection of research/project participants) at IRB@air.org, call the IRB in the United States at +1 202 403 5542, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street, NW, Washington, DC 20007, USA.

If you have any question you can ask us without hesitation. I am ready to answer all your questions.

Do you have any questions? Yes – Answer questions, No - Go to next question.

Do you agree that you will participate in the interview and observations?

No - Thank you. I'm sure you will do a good job during the sessions. Leave.

Yes.

Signature or mark/thumbprint of participant _____ Date _____

Name of the participant: _____

The interviewer will complete this section:

This consent form was read to participant and all the questions have been answered and she has agreed to give an interview. Date: _____

Signature of the interviewer: _____

Name of the interviewer: _____

Community Clinic Name	
Community Clinic Code	

BANGLADESH MEDICAL RESEARCH COUNCIL

SIEF Bangladesh Impact Evaluation

6c. Informed Consent Form Community Leaders

We are from Data International Ltd. (DI), Bangladesh and we are investigating about parenting practices and early childhood stimulation. To better understand and contextualize the data we collect on parents, we are also gathering data of the community where parents live. We are interested in finding out about the characteristics of your community and aspects such as basic infrastructure, major economic activity, health services, as well as the cultural norms of the community. We are asking if you would like to participate in this study.

If you participate in our study, we will ask you some questions. The interview will take about 30 minutes, you are free to participate or not; it will not affect your job if you would rather not be interviewed. You can refuse to answer any question and you can stop the interview at any time without a reason. We want to assure you that your answers will be kept confidential and anonymous; that means your name is not put on the answer form so no one will know they are your answers. We would also like to ask for your collaboration organizing some focus groups with parents.

There is no risk to you if you decide to participate in the interview. Nothing harmful will come from it. The interviews will not give you any immediate benefit. The hard copy questionnaire containing your answers will remain at Data International Ltd. in a locked cabinet and no one except the people involved with this research and the Ethical Review Committee will be able to see the information. However, we would like to inform you that disclosure of such information is subject to the laws of the country.

If you have concerns or questions about your rights as a participant, you may contact DI at (8802) 895-2912 or you may contact AIR's Institutional Review Board (which is responsible for the protection of research/project participants) at IRB@air.org, call the IRB in the United States at +1 202 403 5542, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street, NW, Washington, DC 20007, USA.

If you have any question you can ask us without hesitation. I am ready to answer all your questions.

Do you have any questions? Yes – Answer questions, No - Go to next question.

Do you agree that you will participate in the interview and observations?

No - Thank you. Leave.

Yes.

Signature or mark/thumbprint of participant _____ Date _____

Name of the participant: _____

The interviewer will complete this section:

This consent form was read to participant and all the questions have been answered and she has agreed to give an interview. Date: _____

Signature of the interviewer: _____

Name of the interviewer: _____

BANGLADESH MEDICAL RESEARCH COUNCIL

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SIEF Bangladesh Impact Evaluation

Informed Consent Form Focus Groups with Parents and Mothers in Law

We are from Data International Ltd. (DI), Bangladesh and we are working with the American Institutes for Research (AIR), USA investigating parenting practices and early childhood stimulation. We are particularly interested in understanding your perceptions and opinions regarding the Save the Children early childhood stimulation program. We are asking if you would like to participate and help us understand more about what is working in the program and what could be improved.

The interview will take about 2 hours. You will not receive any money for participating in our study. Your participation and cooperation is entirely voluntary; it is your decision whether or not to participate. Also you have the right not to answer any questions you do not want to. Your decision to participate in the research will not in any way affect your participation in other community activities.

Nothing harmful will come from it. The interviews will not give you any immediate benefit.

During the interview we will write down some notes. You can fully rely on us to keep confidential your identity and the information you provide. The papers containing the information will remain at Data International Ltd. in a locked cabinet and no one except the people involved with this research and the Ethical Review Committee will be able to see the information. However, we would like to inform you that disclosure of such information is subject to the laws of the country.

If you have concerns or questions about your rights as a participant, you may contact DI at (8802) 895-2912 or you may contact AIR's Institutional Review Board (which is responsible for the protection of research/project participants) at IRB@air.org, call the IRB in the United States at +1 202 403 5542, or by postal mail: AIR c/o IRB, 1000 Thomas Jefferson Street, NW, Washington, DC 20007, USA.

If you have any question you can ask us without hesitation. I am ready to answer all your questions regarding this issue.

Do you have any questions? Yes – Answer questions, No - Go to next question.

Do you agree that you will participate in the interview and observations?

No - Thank you. I'm sure you will do a good job during the sessions. Leave.

Yes.

Signature or mark/thumbprint of participant _____ Date _____

Name of the participant: _____

The interviewer will complete this section:

This consent form was read to participant and all the questions have been answered and she has agreed to give an interview. Date: _____

Signature of the interviewer: _____

Name of the interviewer: _____

Appendix E: Program Cost Summary

Summary cost of program in USD

USD	Nominal cost		Real cost in 2014 units		Total real cost in
Direct Costs by item	**2014**	**2015**	**2014**	**2015**	**2014 units**
Personnel	25,241	20,348	25,241	20,348	45,589
Training - delivery personnel	12,682	11,852	12,682	11,852	24,534
Training - program beneficiaries	-	-	-	-	-
Program resources	-	-	-	-	-
Food and supplements	-	-	-	-	-
Cash transfers	-	-	-	-	-
Contracted supplier services	-	-	-	-	-
Travel and accommodation	6,207	4,655	6,207	4,655	10,862
Knowledge sharing	16,921	4,391	16,921	4,391	21,312
Equipment	-	-	-	-	-
Administration (direct costs)	-	-	-	-	-

Administration (indirect overheads)	24,969	269		24,969	269		25,237
Own item name 1	-	-		-	-		-
Own item name 2	-	-		-	-		-
Own item name 3	-	-		-	-		-
Own item name 4	-	-		-	-		-
Unallocated	-	-		-	-		-
Total cost (excl cost of buildings)	**86,020**	**41,514**		**86,020**	**41,514**		**127,534**
Buildings							
Building type 1	-	-		-	-		-
Building type 2	-	-		-	-		-
Building type 3	-	-		-	-		-
Total cost of buildings	**-**	**-**		**-**	**-**		**-**
Total Direct Costs	**86,020**	**41,514**	#	**86,020**	**41,514**	#	**127,534**

Cost by main activity	**2014**	**2015**		**2014**	**2015**		**2014 units**
Design, start-up, and evaluation of program	10,508	-		10,508	-		10,508
Management of program	43,911	22,456		43,911	22,456		66,367

Community Clinics	18,919	7,206	18,919	7,206	26,125
Training	12,682	11,852	12,682	11,852	24,534
Total cost (excluding cost of buildings)	**86,020**	**41,514**	**86,020**	**41,514**	**127,534**
New buildings required to deliver ECDN services	-	-	-	-	-
Total Direct Costs	**86,020**	**41,514**	**86,020**	**41,514**	**127,534**

Imputed costs by Item	**2014**	**2015**	**2014**	**2015**	**2014 units**
Personnel	-	-	-	-	-
Training - delivery personnel	-	-	-	-	-
Training - program beneficiaries	-	-	-	-	-
Program resources	-	-	-	-	-
Food and supplements	-	-	-	-	-
Cash transfers	-	-	-	-	-
Contracted supplier services	-	-	-	-	-
Travel and accommodation	-	-	-	-	-
Knowledge sharing	-	-	-	-	-
Equipment	-	-	-	-	-

Administration (direct costs)	-	-	-	-	-
Administration (indirect overheads)	-	-	-	-	-
Own item name 1	-	-	-	-	-
Own item name 2	-	-	-	-	-
Own item name 3	-	-	-	-	-
Own item name 4	-	-	-	-	-
Unallocated	-	-	-	-	-
Total Imputed Costs	**-**	**-**	**-**	**-**	**-**
Total cost, including imputed costs	**86,020**	**41,514**	**86,020**	**41,514**	**127,534**

Appendix F: Program Materials

Child Development Card

গর্ভ থেকে জন্ম

শিশু মায়ের গর্ভে থাকার সময় থেকেই আপনার কণ্ঠস্বর শুনতে ও চিনতে পারে। তাই গর্ভে থাকার সময় থেকেই শিশুর সাথে কথা বলুন।

প্রতিদিন শব্দ করে গল্পের বই পড়ুন ও গান শুনুন। তাহলে জন্মের পর আপনার শিশুর ভাল অভ্যাস গড়ে উঠবে।

আপনার শিশুর বেড়ে ওঠার জন্য একটি হাসিখুশি পরিবার প্রয়োজন। শিশুর জন্মের আগে থেকেই স্বামীর সাথে শিশুর যত্ন ও লালন নিয়ে আলাপ করুন।

আপনার শিশুর জন্য ঝুনঝুনি, রঙিন ও নরম জাতীয় বিভিন্ন খেলনা তৈরি করুন।

আপনাকে প্রতিদিন কমপক্ষে ২ ঘন্টা বিশ্রাম নিতে হবে। তাহলে আপনার শিশুও বিশ্রাম পাবে এবং গর্ভকালীন শিশুর বৃদ্ধি ও গঠন পরিপূর্ণ হবে।

শিশুর জীবনের প্রথম তিন বছর খুবই গুরুত্বপূর্ণ। গর্ভকালীন যত্ন নিশ্চিত করতে পারলেই শিশুর ধারাবাহিক বিকাশ সম্ভব।

জন্ম থেকে ৬ মাস

বলতে বলতে শেখা

শিশুকে খাওয়ানো বা জামা-কাপড় বদলাবার সময় তার সঙ্গে কথা বলুন, গান করুন, মজা করুন। এমন কি ঘরের অন্যান্য কাজের মাঝেও আপনি নিয়মিত শিশুর সঙ্গে কথা বলুন।

ছোট্ট শিশুও যোগাযোগ করতে পারে। শিশুকে অনুকরণ করে তার মতো শব্দ ও অঙ্গভঙ্গি করুন।

কথা বলা ও আদর করার সময় শিশুর চোখে চোখ রাখুন এবং হাসি মুখে শিশুর দিকে তাকান।

শিশুকে সবসময় ভালোবাসা ও আদর দিন

খেলতে খেলতে শেখা

শিশুর চোখের ও হাতের নাগালের মধ্যে কিছু রঙিন খেলনা রাখুন। মাঝে মাঝে রঙিন খেলনাটি আস্তে দুলিয়ে দিন যেন সে দেখতে পায় ও ধরতে পারে।

ঝুনঝুনি দিয়ে শিশুর আশেপাশে হালকা শব্দ করুন এবং খেয়াল করুন শিশু শব্দের দিকে তাকাচ্ছে কিনা ?

শিশু ধরতে পারে এমন ধরনের জিনিস দেখতে ও স্পর্শ করতে সাহায্য করুন (যেমন: রঙিন কাপড়ের খেলনা ও পুতুল, রঙিন বল, প্লাস্টিকের খেলনা ইত্যাদি)।

প্রতিদিন শিশুর সাথে খেলাধুলা করুন

৬ থেকে ১২ মাস

বলতে বলতে শেখা

শিশু বিভিন্ন ধরনের অঙ্গভঙ্গি ও শব্দ করে। এগুলোর মধ্য দিয়ে শিশু ধীরে ধীরে কথা বলা শুরু করে। শিশুর এসব শব্দ বা অঙ্গভঙ্গি নিয়মিত অনুকরণ করুন।

পরিবারের সদস্যদের সাথে শিশুকে পরিচিত করান। বাড়ির চারপাশের নতুন নতুন মানুষ ও জিনিসের নাম বলুন (যেমন: নানি-দাদি, খালা-ফুপু, মামা-চাচা, ফলমূল, গাছপালা, পশুপাখি)।

শিশুকে প্রতিদিন ছবির বই দেখান, নাম বলুন ও ছবিটি নিয়ে কথা বলুন।

শিশুর সঙ্গে কথা বলুন ও তার অঙ্গভঙ্গিতে সাড়া দিন

খেলতে খেলতে শেখা

শিশুকে নাড়াচাড়া ও খেলা করার জন্য নিরাপদ ও পরিষ্কার ঘরোয়া জিনিসপত্র দিন। এসব জিনিসপত্র দিয়ে শিশু শব্দ তৈরি করতে পারে (যেমন: স্টিল বা অ্যালুমিনিয়ামের প্লেট, গ্লাস, বাটি ইত্যাদি)।

শিশুর সাথে লুকোচুরি খেলা খেলুন। রুমাল অথবা কাপড়ের নিচে খেলনা লুকিয়ে রেখে শিশুকে খুঁজে বের করতে বলুন।

শিশুর সাথে হাত নাড়িয়ে তালে তালে গান করুন। সেইসাথে শিশুও যেন আপনাকে অনুসরণ করে একইভাবে অঙ্গভঙ্গির তালে তালে গান করতে পারে।

ঘরের নিরাপদ জিনিসপত্র দিয়ে শিশুকে খেলতে দিন

Key Message Picture Book


গর্ভবতী মা ও গর্ভে থাকা শিশুর সঠিক যত্ন নিন। গর্ভবতী মাকে হাসিখুশি রাখুন। এটা পরিবারের দায়িত্ব।
আপনার শিশুর মস্তিস্ক ইতোমধ্যে গঠন হতে শুরু করেছে। মস্তিস্কে হাজার হাজার স্নায়ুকোষ একে অন্যের সাথে যুক্ত হচ্ছে, ঠিক যেমনটি গাছে গাছে পরিপূর্ণ একটি বন সৃষ্টি হয়।
শিশু গর্ভে থাকার সময় থেকেই আপনার কণ্ঠ শুনতে এবং চিনতে পারে। তাই গর্ভবতী হওয়ার পর থেকেই শিশুর সাথে কথা বলুন ও তাকে স্পর্শ করুন। আপনার শিশু তা শুনতে পাবে ও বুঝতে পারবে।
প্রতিদিন পর্যাপ্ত বিশ্রাম নিন। কমপক্ষে দিনে ২ ঘন্টা গর্ভবতী মাকে বিশ্রামের সুযোগ দিন। এতে করে আপনার শিশুও বিশ্রাম পাবে এবং সুষ্ঠভাবে বেড়ে উঠবে।
শিশু গর্ভে থাকার সময় আপনি পুষ্টিকর খাবার খান যা শিশুর মস্তিস্ক গঠনের জন্য সহায়ক হবে।
বাবা এবং পরিবারের অন্যান্য সদস্যরা নতুন মাকে গৃহস্থালীর কাজে সহযোগিতা করুন এবং মাকে দুঃশ্চিন্তা মুক্ত রাখুন।
আপনার শিশুর জন্য ঝুনঝুনি, নরম কাপড়ের বল, সরিষার বালিশ এবং বিভিন্ন রঙের খেলনা তৈরি করুন।


স্বামী স্ত্রী উভয়েই
শিশুর যত্ন ও লালনে
একে অপরকে
সহযোগিতা করুন ।
স্বামী-স্ত্রীর ইতিবাচক আচরণ, সম্পর্ক এবং বাবার পূর্ণ সহযোগিতা শিশুর বুদ্ধিমত্তা ও বিকাশে যথেষ্ট প্রভাব ফেলে ।
স্বামী-স্ত্রী একে অপরের প্রতি শ্রদ্ধাশীল এবং ভালোবাসা থাকতে হবে (যেকোন ধরণের নির্যাতন ও নিপীড়ন থেকে বিরত থাকুন) ।
জন্মের পর শিশুর স্বাভাবিক বিকাশে পরিবারে বাবার ভূমিকা অনেক গুরুত্বপূর্ণ । যদি বাবা শিশুকে কোলে নেয়, খেলা করে, কথা বলে সেক্ষেত্রে শিশুর ইতিবাচক বিকাশ ঘটবে ।
স্ত্রীকে গর্ভকালীন ও গর্ভ পরবর্তী সময়ে গৃহস্থালীর কাজে সহায়তা করতে হবে । সে পুষ্টিকর খাবার খাচ্ছে কিনা তা খেয়াল রাখতে হবে । আপনার স্ত্রী যেন কোন প্রকার দুঃশ্চিন্তাগ্রস্থ না থাকে সেদিকে সচেতন থাকতে হবে ।
মায়ের সিদ্ধান্ত গ্রহণ এবং গতিশীলতাকে উৎসাহিত করতে হবে ।
৩


শিশুকে সবসময়
ভালোবাসা ও
আদর দিন।
● শিশুর সঠিকভাবে বেড়ে ওঠা ও নিরাপত্তা বিধানে তার উষ্ণ ছোঁয়া, আদর ও উৎসাহের প্রয়োজন।
● আপনার শিশুকে কোলে নিয়ে, আলতো স্পর্শ করে, বুকে জড়িয়ে, তার প্রতি ভালোবাসা প্রদর্শন করুন। প্রথম তিন বছর শিশুর সাথে মা-বাবার যত নিবিড় সম্পর্ক থাকবে ততই শিশুর বিকাশের ভিত মজবুত হবে।
● আপনি আপনার শিশুর চোখের দিকে তাকান এবং তার মনোযোগ আকর্ষণ করুন। জন্মের পর থেকেই সে আপনাকে দেখে এবং চেনে।
● আপনার শিশুর সাথে হাসুন এবং তার চাহনির ও কথার উত্তর দিন।
● আপনার শিশু যখন নতুন কিছু করতে শেখে তখন তার কাজের প্রশংসা করুন এবং তাকে উৎসাহ দিন।
৪


প্রতিদিন শিশুর সাথে খেলার জন্য সময় রাখুন। এমনকি ঘরোয়া কাজের ফাঁকেও খেলতে পারেন।
শিশুরা খেলতে খেলতে অনেক কিছু শেখে। শিশুকে তার সমবয়সীদের সাথে খেলার সুযোগ তৈরি করে দিন। এতে করে সে আত্মবিশ্বাসী হয়ে উঠবে।
আপনি যখন ঘরের কাজ করবেন তখনও আপনার শিশুর সাথে খেলা করতে পারেন। শিশুর সাথে ঘরের জিনিস নিয়ে খেলতে পারেন, যেমনঃ কতটা আলু, পিয়াজ, রসুন ইত্যাদি আছে তা শিশুকে গুণতে বলতে পারেন।
আপনি আপনার শিশুর সাথে লুকোচুরি খেলতে পারেন। কোন খেলনা কাপড়ের নিচে, কাপের নিচে বা বাটির নিচে ঢেকে রেখে তা খুজেঁ বের করতে বলুন।
খুব সহজ কিছু নির্দেশ দিতে পারেন যা সে অনুসরণ করতে পারে (যেমন বাটিটি নিয়ে আস, প্লেটটি রেখে আস অথবা মগটি নিয়ে আস)।
তালে তালে আপনার শিশুর সাথে গান করুন। দেখবেন শিশুও একই তালে আপনার মত করে গান গাইতে শুরু করেছে।
শিশুকে অন্যান্য ভাইবোনদের সাথে খেলতে উৎসাহিত করুন। এটি শিশুর বিকাশের জন্য অত্যন্ত গুরুত্বপূর্ণ।
আপনার শিশুকে শারিরিক ব্যায়াম ও খেলাধুলায় উৎসাহিত করুন। যেমন উপরে ওঠা, বল লাথি মারা, লাফ দেওয়া, দৌড়ানো ও গাছে ওঠা ইত্যাদি।
৫


শিশুকে ঘরের বিভিন্ন
নিরাপদ খেলনা
দিয়ে খেলতে
দিন।
শিশুরা মাতৃগর্ভে থাকার সময় থেকেই শিখতে শুরু করে।
জন্মের পর থেকে শিশুরা বিভিন্ন ঘরোয়া জিনিসপত্র ও খেলনা দিয়ে খেলতে চায়।
ঘরের বিভিন্ন জিনিস নিয়ে শিশুকে খেলতে দিন।
শিশুকে ঘরের জিনিস ধরা, শব্দ করার জন্য নিরাপদ এবং পরিস্কার পাত্র দিন (যেমন: বাটি, প্লেট, ঢাকনা এবং লোহার পাত্র)।
আপনার শিশুর জন্য খুবই সহজ কিছু খেলনা তৈরি করুন। যেমন- প্লাস্টিকের বোতল দিয়ে ঝুনঝুনি, কাপড়ের বল, কাগজের ঘুড়ি, মাটির পুতুল, পাতার খেলনা ইত্যাদি।
আপনার শিশু যেসব খেলনা নিয়ে খেলে সেসব খেলনা রাখার জন্য একটি ঝুড়ি তৈরি করতে পারেন। যেখানে পরিষ্কার ও নিরাপদ খেলনা থাকবে। আপনি যখন ঘরের কাজে ব্যস্ত থাকবেন তখন শিশুকে খেলনার এই ঝুড়িটি শিশুর সামনে দিন এবং কাজের ফাঁকে ফাঁকে শিশুর সাথে গল্প করুন।


শিশুর সাথে প্রতিদিন কথা বলুন, গল্প করুন ও গান করুন। এই কাজটি ঘরের কাজের ফাঁকে ফাঁকে করতে পারেন।
ভাষা ও বুদ্ধিমত্তার বিকাশ নির্ভর করে আপনি কতটা সময় শিশুর সাথে কথা বলছেন, গল্প করছেন ও খেলাধুলা করছেন। সে জন্য শিশুকে সময় দিন।
আপনার শিশু যখন ছোট, তখন আপনার শিশুর প্রতি খেয়াল রাখুন। তার বিভিন্ন শব্দের একইরকমের উত্তর দিয়ে, তাকে কিছু বলতে সহায়তা করুন, তার মত করে হাত-পা নেড়ে খেলা করুন।
আপনি ও আপনার শিশু একসাথে ছড়া বলুন এবং গান করুন।
যখন রান্না করেন তখন আপনার শিশুকে বলুন যে আপনি কোন সবজি রান্না করছেন, কিভাবে করছেন ইত্যাদি।
আপনার শিশুকে নিয়ে যখন বাইরে হাঁটবেন তখন আশেপাশের পশুপাখি, গাছপালা, মানুষজন চোখে পড়বে সেগুলোর সাথে পরিচয় করান।
শিশুর সাথে কথা বলুন এবং তার কথা মনোযোগ দিয়ে শুনুন। তাকে ভালোবাসা দিন, তার কথার গুরুত্ব দিন এতে করে শিশুর আত্মবিশ্বাস বাড়বে।


শিশুরা কৌতূহলী, বিভিন্ন বিষয় সম্পর্কে জানতে চায়, প্রশ্ন করে, তা শুনুন ও উত্তর দিন।
শিশুর কথা ধৈর্য সহকারে শুনুন এবং শিশুর প্রশ্নের উত্তর দিন।
পরিচিত বিভিন্ন বিষয় নিয়ে আপনার শিশুর সাথে কথা বলুন, গল্প করুন এবং তাকেও কথা বলাতে উৎসাহিত করুন।
আপনার শিশুকে সহজ সহজ কিছু প্রশ্ন করুন এবং তাকে উত্তর বলতে দিন। যেমন- কলাটির রং কি, এটি কিসের পাত্র, ছাগলটি কি করছে ইত্যাদি।
আপনার সন্তানকে গল্প বলুন এবং পরবর্তী সময়ে দু'জনে মিলে একটি গল্প তৈরি করুন।
শিশুকে বাজার, হাট, মেলা ইত্যাদি জায়গায় বেড়াতে নিয়ে যান, মজা করুন ও গল্প করুন। বাইরের পরিবেশের সঙ্গে পরিচয় করিয়ে দিন।


শিশুর সাথে আপনিও বইয়ের দিকে তাকান। শিশুরা যেমন শুনে গল্প শেখে ঠিক তেমনি ছবি দেখেও তারা গল্প শেখে ও বলতে চেষ্টা করে।
আপনার শিশুকে ছবির বই দেখান, নাম বলুন ও ছবির বর্ণনা করুন। মজার মজার গল্প বলুন।
আপনিও শিশুর সাথে ছবির বইয়ের দিকে তাকান। ছবি সম্পর্কে খুবই সহজ প্রশ্ন করুন যাতে করে সে কথা বলতে আগ্রহী হয়ে ওঠে এবং উত্তর দেয়।
শিশুকে নিজে নিজে বইটি ধরতে দিন। সে যেন নিজে নিজে বইটির দিকে তাকায়, পাতা উল্টাতে পারে ও ঠিকভাবে ধরতে পারে, সহযোগিতা করুন।
বইয়ের ছবি দেখে শিশুকে গল্প বলতে উৎসাহিত করুন।
আমার বাড়ি
৯


আপনার শিশুকে
অনেক সময় নিয়ে
ধৈর্য সহকারে
খাওয়ান।
● শিশুকে ৬ মাস (১৮০ দিন) পর্যন্ত শুধু বুকের দুধ খাওয়ান। শিশুর সাথে ভালো সম্পর্ক তৈরি করুন, শিশুর চোখে চোখ রাখুন, আলতো করে আপনার শিশুর শরীরে হাত বুলিয়ে দিন ও আদর করুন।
● ৬ মাস পর বুকের দুধের পাশাপাশি বাড়ির তৈরি পরিপূরক খাবার দিন।
● আপনার বেড়ে ওঠা শিশুটিকে খাওয়ানোর সময় দু'জন মুখোমুখি বসুন। এখানেও তার চোখে চোখ রাখুন। এতে করে দেখবেন আপনার শিশু খাবার খেতে উৎসাহিত হবে। শিশু পেট ভরে আনন্দ সহকারে খাবে।
● পুরো খাবার শেষ করতে আপনার শিশুকে উৎসাহিত করুন। কিন্তু কোন অবস্থাতেই জোর করবেন না। চেষ্টা করবেন খাবার খেতে দেওয়ার সময় যেন বিভিন্ন রকমের খাবার থাকে। যেমন: নরম খিচুরি, ভাত, ডাল, মাছ, শাক-সবজি, ডিম, মাংস, ফলমূল ইত্যাদি। শিশু যদি কোন নির্দিষ্ট খাবার পছন্দ করে সেক্ষেত্রে সেই খাবারটিই খেতে দিন।
● আপনার শিশুকে নিজে নিজে খেতে উৎসাহিত করুন এবং ধৈর্য সহকারে তাকে সময় দিন। সাধারণত শিশুরা নয় মাস বয়স থেকেই একা একা খেতে আগ্রহী হয়।
● আপনার শিশুকে খাওয়ার জন্য পর্যাপ্ত সময় দিন।
● পরিবারের সবাই মিলে একসাথে খাবেন। খাওয়ার সময় পরিবারের সদস্যরা বিভিন্ন বিষয় নিয়ে ইতিবাচক ও মজার গল্প করুন।


নিজে সাবান দিয়ে হাত পরিষ্কার করুন এবং আপনার শিশুকে সাবান দিয়ে হাত ধুতে উৎসাহিত করুন।
নিজে খাবার আগে এবং শিশুকে খাওয়ানোর আগে অবশ্যই সাবান দিয়ে হাত ধুয়ে নিন।
যেসব কাজের পর অবশ্যই সাবান দিয়ে হাত ধুতে হবে-
মলমূত্র ত্যাগের পর
কোন প্রাণি বা জীবজন্তু স্পর্শ করলে
ময়লা পরিষ্কার করলে
নাকের ভিতরে হাত দিলে
আপনার শিশুর হাত প্রায় সময়েই সাবান দিয়ে ধুয়ে দিন। বিশেষ করে সে যখন বাইরে খেলবে এবং অপরিষ্কার কোন কিছু ধরবে।
যত দ্রুত সম্ভব আপনার শিশুকে শেখান, কিভাবে সাবান দিয়ে হাত ধুতে হয়, এতে শিশু সুস্থ থাকবে।
আপনার শিশুর হাতের নখ ছোট এবং পরিষ্কার রাখুন।

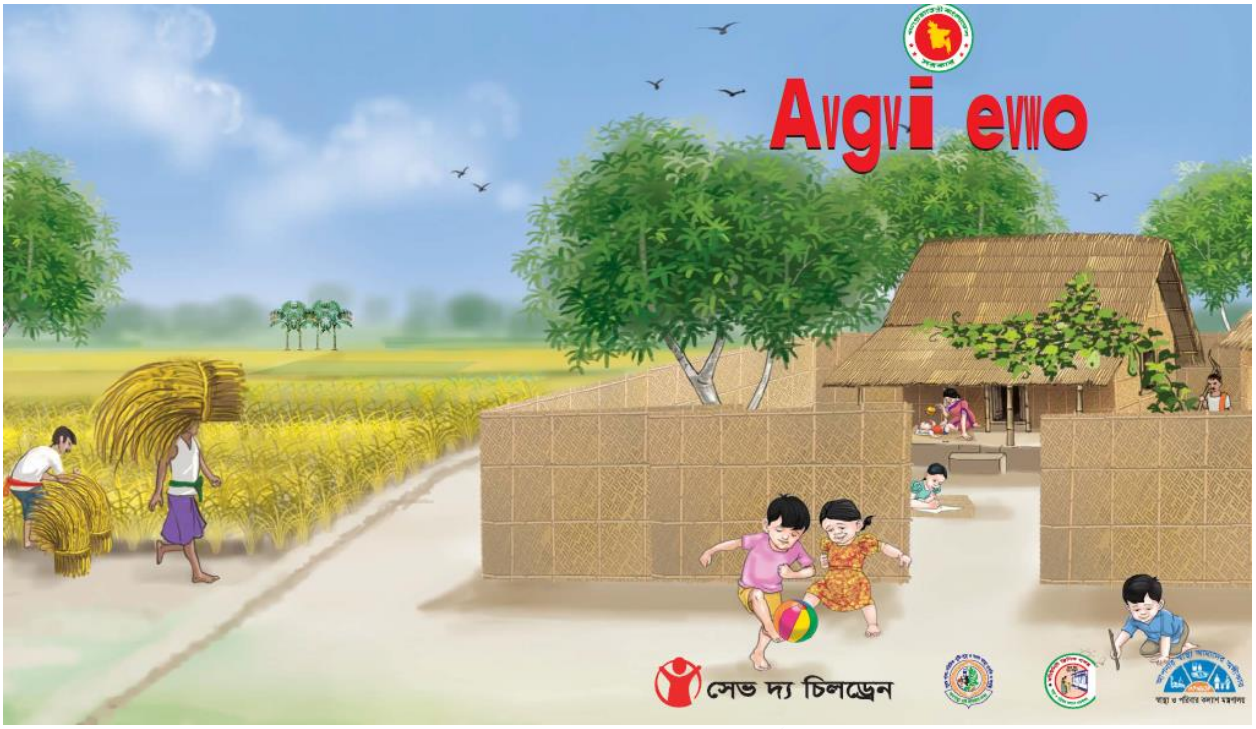

শিশুকে ভালো ব্যবহার করতে শেখান। শিশু ইতিবাচক আচরণ করলে তাকে প্রশংসা ও উৎসাহিত করুন।
যে সকল শিশু বাবা-মায়ের সহযোগিতা পায় এবং আনন্দের মাঝে বড় হয় তারা দ্রুত শিখতে পারে তাদের বিকাশ সঠিক হয় এবং তারা একটি সুন্দর জীবন যাপন করতে পারে।
আপনার শিশু ভুল করলেও তাকে কখনো মারবেন না, তাকে বুঝান। এমনকি যে সব শিশু এখনো কথা বলা শেখেনি তারাও বুঝতে পারে।
যখন কোন মা-বাবা শিশুর সাথে রাগ করে, তাকে মারে, তাকে ভয় দেখায় তখন-
শিশুটি কষ্ট পায় এবং ভীত হয়।
আত্মবিশ্বাস কমে যায়।
কোন বিষয়কে সহজভাবে না নিয়ে তার পাল্টা জবাব দেয়।
তাদের শিক্ষা ও বিকাশে নেতিবাচক প্রভাব পড়ে।
আপনার শিশুর ভালো আচরণের জন্য প্রশংসা করুন এবং যেসব আচরণ করা ঠিক নয় সেগুলো বলুন।
শিশুকে নিয়ম মেনে চলার অভ্যাস গড়ে উঠতে সহায়তা করুন। কোন রকম অনিয়ম করলে তাকে শাস্তি না দিয়ে বুঝিয়ে বলুন।
আপনি যেসব নিয়ম মানেন তা সবসময় মেনে চলবেন এবং তা মেনে চলতে আপনার শিশুকে উৎসাহিত করুন।


শিশু যত্ন ও লালন বিষয়ক অতি গুরুত্বপূর্ণ তথ্যগুলো আপনার প্রতিবেশীদের সাথে আলোচনা করুন।
পরিবারের অন্যান্য সদস্যদের সাথে শিশু যত্ন ও লালনের বিষয়গুলো নিয়ে আলাপ করুন এবং নতুন শেখা জ্ঞানগুলোও বলুন, বিশেষত আপনার স্বামী ও শাশুড়ির সাথে।
প্রতিবেশীদের মা-বাবার সাথে গল্প করার সময় শিশু বিকাশের উপকরণ দেখান এবং সেগুলোর যে উপকারিতা সেসব বিষয়ে কিছু কথা বলুন।
আপনি নতুন নতুন শিশু যত্ন ও লালন বিষয়ক যেসব তথ্য জানতে পেরেছেন, তা আপনার পরিবারের সদস্য ও প্রতিবেশিদের বলতে উৎসাহিত করুন।
এসব চর্চার ফলে আপনার শিশুর বুদ্ধি ও বিকাশ কতটা সহজ হবে তা নিয়ে আলোচনা করুন। সম্ভব হলে বিভিন্ন সহজ উদাহরণ দিন বা দেখান।

গ্রন্থস্বত্ব (সংরক্ষিত)	:	শিশুদের জন্য, শিক্ষা সেক্টর, সেভ দ্য চিলড্রেন
কারিগরি নির্দেশনা	:	ইভলিনা বরিসোভা
পরিকল্পনা ও সম্পাদনা	:	রোকসানা খানম
পর্যালোচনা কমিটি	:	ইফ্‌ফাত আরা মাহমুদ, উপসচিব, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয় মো: আদম আলী পাটোয়ারী, ডেপুটি চীফ, স্বাস্থ্য শিক্ষা ব্যুরো, স্বাস্থ্য অধিদপ্তর, মহাখালী, ঢাকা মো: সরওয়ার মিয়া, পরিচালক (জনসংখ্যা কার্যক্রম), বাংলাদেশ টেলিভিশন, রামপুরা, ঢাকা আমানুল্লাহ মাসুদ হাসান, পরিচালক (অনুষ্ঠান), বাংলাদেশ বেতার, সদর দপ্তর, শাহবাগ, ঢাকা স্বপন কুমার শর্মা, এডিটর কাম ট্রান্সলেটর, আইইএম ইউনিট, প.প. অধিদপ্তর, ঢাকা মো: নাজমুল আহসান, প্রোগ্রামিং অফিসার, আইপিএইচএন, এনএনএস, মহাখালী
কৃতজ্ঞতা স্বীকার	:	এলিজাবেথ পিয়ার্স ম. হাবিবুর রহমান ডা: শাহানা নাজনীন
সহযোগিতায়	:	ফেরদৌস নাহিদ মো: মনজুরুল আলম
প্রচ্ছদ ও অলংকরণ	:	জাহিদ হাসান বেনু
প্রকাশকাল	:	এপ্রিল, ২০১৪
প্রিন্টিং	:	ডন কমিউনিকেশন এন্ড প্রিন্টিং (প্রাঃ) লিঃ

Household Picture Book

Only a few pages of the household picture presented below. The picture book has 15 pictures.



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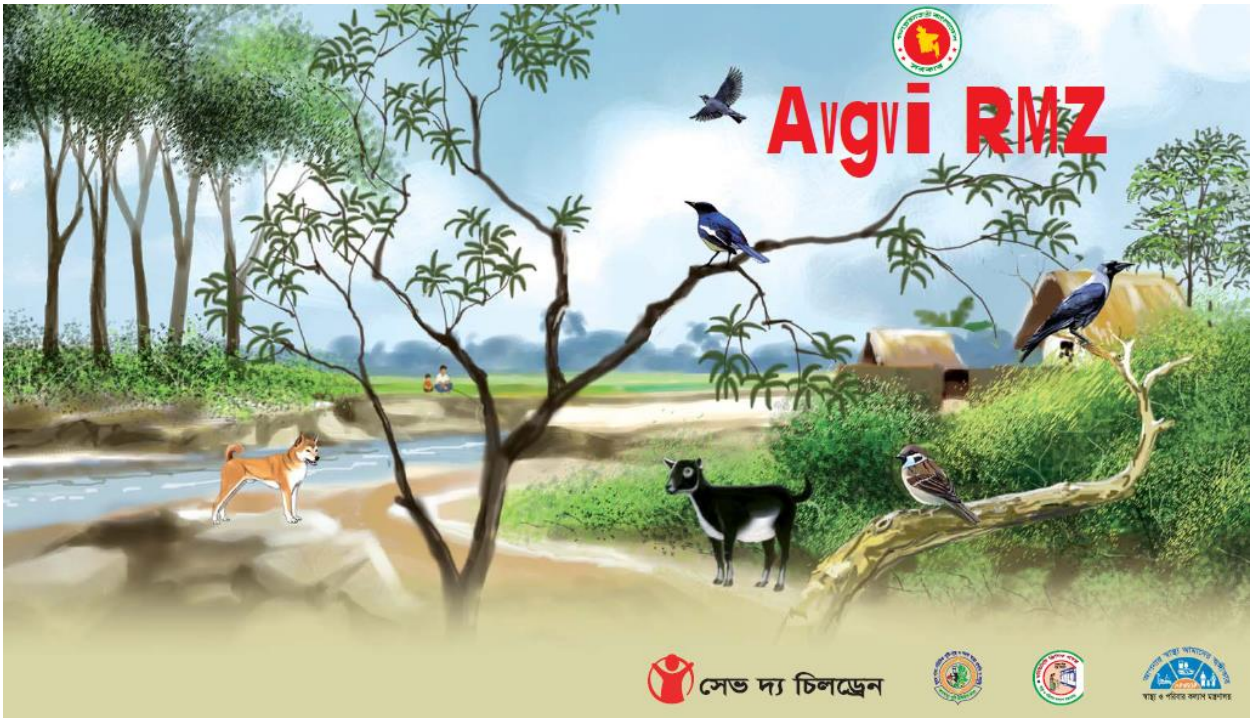
Nature Picture Book

Only a few pages of the nature picture presented below. The nature picture book has 15 pictures.



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Home Visit Guidelines

Save the Children: Early Care and Stimulation Home Visiting Guidelines

The Home Visiting Guidelines are to help frontline workers to support mothers and families to implement the play and communication activities with their young children. It is envisioned that the FWAs or HAs or CHCPs should take no more than 5-8 minutes on this part of the home visit.

Guidelines

1. Worker should explain the purpose of this part of the home visit.

> Purpose: *I would like to spend some time understanding how the child is growing and developing and how the family is supporting the child. If you need any advice, I will do my best to help you.*

2. **If you have visited recently**, ask mother/family if she has been able to implement any of the activities from the card? Does she manage 10-15 minutes a day to play/interact with her child?

3. Ask to see an example of an activity that she is able to do with her child everyday?

> Action: Using the ***Play and Communication Activity Guide***, demonstrate and guide mother through 1-2 play activities suitable for this age group. Praise and encourage mother and child.

4. Ask mother/family how she talks with her baby/child? How does caregiver get her baby/child to smile?

> Action: Using the ***Play and Communication Card*** demonstrate and guide mother through 1-2 talking activities suitable for this age group. Praise and encourage mother and child.

5. Ask if mother/family has any difficulties/challenges in implementing the advice and activities?

> Action: Go through the ***Problem Solving Checklist*** provided. Problem solve with mother/family. Reassure mother and family.

6. Ask if mother/family observed any benefits in implementing the advice and activities?

> Action: Praise mother, child and family

7. Ask if mother/family have any further questions? Ask mother/family if she has any concerns (e.g. child is sick, appears slower to develop)

> Action: Try to answer the question. Make a note of common questions to discuss in the future with your supervisors. During trainings we can also try to solve common problems asked by families.

Thank mother and family. Encourage mother to go to the clinic if needed and to practice the activities at least once day with her child.

Clinic Visit Guidelines

Save the Children: Early Care and Stimulation Clinic Visit Guidelines

The Clinic Visiting Guidelines are to help frontline workers to support mothers and families to implement the play and communication activities with their young children during a routine or sick visit to the community clinic. It is envisioned that the FWAs or HAs or CHCPs should take no more than 5 minutes on this part of the clinic visit.

Guidelines

1. Worker should explain the purpose of this part of the visit.

> Purpose: *I would like to spend some time understanding how the child is growing and developing and how the family is supporting the child. If you need any advice, I will do my best to help you.*

2. Show the Child Development Card to the mother/family and ask if she already has a copy of it at home.

> Action: If yes, good; if not, give her a Card and the 3 books for the child and explain briefly the purpose of the card and the books. Emphasize that this is the most critical time for her child's development and the time she spends playing and interacting with her child will help her child grown healthy and smart. Make sure mother understands where to look on the card for her child's age.

3. Ask mother/family if she plays with her baby/child?

> Action: Using the ***Play and Communication Card*** demonstrate and guide mother through 1 play activity suitable for this age group. Praise and encourage mother and child.

4. Ask mother/family how she talks with her baby/child? How does caregiver get her baby/child to smile?

> Action: If family doesn't have the book, give mother the books for the child and explain how important it is for the child to look at pictures and learn new words. If there is time, using the ***Play and Communication Card*** demonstrate and guide mother through 1 talking activity suitable for this age group. Praise and encourage mother and child.

5. Ask if mother/family can do these activities at home? Are there any difficulties/challenges she sees in implementing the advice and activities?

> Action: Problem solve with mother/family. Reassure mother and family.

6. Thank mother and family. Encourage mother to keep the card in a visible place so she can remember the activities she can practice at least once day with her child.

Appendix G: Implementation Analysis

Table G1. Comparing Behavior of Family Welfare Assistants between Treatment and Control Groups

	Was visited by FWA in the last 6 months	# of Visits in the last 6 months	Minutes per Visit During the last FWA visit	Talk about playing w/Child	Talk about Talking to Child	Talk about Child Dev. Card	Talk about Pict. Books	Talk about Booklet
Program Impact	0.075	0.210	-0.012	0.399	0.380	0.428	0.381	0.289
	(0.056)	(0.283)	(0.484)	(0.092)***	(0.075)***	(0.065)***	(0.069)***	(0.060)***
Constant	0.143	0.559	9.648	0.217	0.126	0.011	0.017	0.006
	(0.036)***	(0.174)***	(0.294)***	(0.061)***	(0.033)***	(0.009)	(0.011)	(0.006)
R^2	0.01	0.00	0.00	0.15	0.15	0.22	0.19	0.13
N	2486	2486	448	446	446	446	446	443
Mean Treatment	0.22	0.77	9.64	0.62	0.51	0.44	0.40	0.30
Mean Control	0.14	0.56	9.65	0.22	0.13	0.01	0.02	0.01
Effect Size	0.195	0.128	-0.003	0.800	0.792	0.961	0.881	0.748

Note. Ordinal Least Square regression with lustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Module N of the household survey.

Table G2. Comparing Behavior of Health Assistants between Treatment and Control Groups

	Was visited by HA in the last 6 months	# of Visits in the last 6 months	Minutes per Visit	Talk about playing w/Child	Talk about Talking to Child	Talk about Child Dev. Card	Talk about Pict. Books	Talk about Booklet
Program Impact	0.075	0.119	0.506	0.378	0.368	0.451	0.419	0.268
	(0.041)*	(0.166)	(1.128)	(0.122)***	(0.119)***	(0.071)***	(0.088)***	(0.064)***
Constant	0.100	0.365	7.699	0.200	0.150	0.017	0.017	0.017
	(0.025)***	(0.111)***	(0.977)***	(0.091)**	(0.081)*	(0.013)	(0.013)	(0.013)
R^2	0.01	0.00	0.00	0.13	0.13	0.22	0.20	0.11
N	2486	2486	342	338	338	338	338	337
Mean Treatment	0.17	0.48	8.21	0.58	0.52	0.47	0.44	0.28
Mean Control	0.10	0.36	7.70	0.20	0.15	0.02	0.02	0.02
Effect Size	0.218	0.092	0.128	0.760	0.755	0.976	0.925	0.681

Note. Ordinal Least Square regression with clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$. Module O of the household survey.

Table G3. Comparing Visits to Community Clinics between Treatment and Control Groups

	Mother visited CC in the last 6 months	# of Visits in the last 6 months	Minutes per Visit During the last visit	Child was sick	Child's Sibling was sick	Went for Immunization	Growth Monitoring Check	Mother was sick	to get ECD Card
Program Impact	0.042	0.081	1.659	-0.041	-0.078	0.032	-0.004	-0.060	0.111
	(0.055)	(0.237)	(1.504)	(0.058)	(0.031)**	(0.030)	(0.072)	(0.040)	(0.029)***
Constant	0.310	0.983	14.870	0.402	0.198	0.089	0.311	0.407	0.005
	(0.039)***	(0.188)***	(0.844)***	(0.047)***	(0.025)***	(0.019)***	(0.057)***	(0.031)***	(0.004)
R^2	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.05
N	2486	2486	808	823	823	823	823	823	822
Mean Treatment	0.35	1.06	16.53	0.36	0.12	0.12	0.31	0.35	0.12
Mean Control	0.31	0.98	14.87	0.40	0.20	0.09	0.31	0.41	0.01
Effect Size	0.090	0.041	0.171	-0.084	-0.214	0.103	-0.008	-0.123	0.450

Note. Ordinal Least Square regression with lustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$. Module P of the household survey.

Table G4. Comparing Community Clinic Visit Experiences between Treatment and Control Groups

	Saw ECD Poster	Talk about playing w/Child	Talk about Talking to Child	Talk about Child Dev. Card	Talk about Pict. Books	Talk about Booklet
Program Impact	0.738	0.418	0.458	0.394	0.357	0.282
	(0.062)***	(0.063)***	(0.053)***	(0.058)***	(0.058)***	(0.049)***
Constant	0.159	0.082	0.037	0.024	0.024	0.022
	(0.050)***	(0.026)***	(0.018)**	(0.018)	(0.018)	(0.016)
R^2	0.55	0.20	0.26	0.21	0.19	0.14
N	815	816	816	816	816	798
Mean Treatment	0.90	0.50	0.50	0.42	0.38	0.30
Mean Control	0.16	0.08	0.04	0.02	0.02	0.02
Effect Size	1.485	0.906	1.017	0.928	0.869	0.743

Note. Ordinal Least Square regression with lustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01. Module P of the household survey.

Appendix H: Additional Baseline Tables

Table H1. Breastfeeding Practices for the Selected Child

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Ever breastfed	1.000	1,287	1.000	1,287	0.000	0.000		
Exclusively breastfed (six or more months)[1]	0.928	942	0.906	945	-0.022	0.019	0.253	-0.080
Months exclusively breastfed	5.171	1,287	5.183	1,287	0.012	0.163	0.939	0.007
N Hours after birth child was put to the breast	2.663	1,283	2.463	1,280	-0.200	0.439	0.650	-0.019
Child was given colostrum	0.977	1,265	0.975	1,274	-0.002	0.008	0.769	-0.014
Currently breastfed	0.976	1,287	0.981	1,287	0.005	0.007	0.519	0.032
Number of night breast-feedings (prior night)	4.799	1,256	4.748	1,262	-0.051	0.144	0.722	-0.025
Number of day breast-feedings (prior day)	6.876	1,255	6.797	1,262	-0.079	0.194	0.687	-0.026
Child was given liquids or solid foods with breastfeeding (five months or younger)[2]	0.324	68	0.258	89	-0.065	0.075	0.383	-0.144
Child was given liquids or solid foods with breastfeeding (six or more months)[1]	0.944	1,187	0.933	1,171	-0.012	0.011	0.271	-0.049

Notes: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated.

[1]Reported for children six months or more only.

[2]Reported for children five months or younger only (includes 15 children of three months, 50 children of four months, and 92 children of five months).

Table H2. Micronutrients and Food Diversity

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Micronutrients child received…:								
Vitamin A capsule in last six months (Ages 11-18 months)	0.805	704	0.752	646	-0.053	0.031	0.086	-0.128
Do you use Iodized salt for cooking and with meals?	0.839	1,264	0.853	1,268	0.014	0.037	0.706	0.039
Food Diversity	0.753	1,153	0.775	1,119	0.022	0.036	0.543	0.052
Minimum times fed (%)	0.498	1,221	0.507	1,208	0.009	0.040	0.829	0.017
Diet diversity (%)	0.903	1,221	0.893	1,208	-0.009	0.017	0.588	-0.031
How many times during last 24 hours child was given any of the following:	0.110	1,221	0.125	1,208	0.015	0.019	0.427	0.047
Water	0.066	1,221	0.088	1,208	0.021	0.013	0.105	0.080
Sugar/honey water	0.096	1,221	0.108	1,208	0.013	0.015	0.403	0.042
Baby formula	0.133	1,221	0.115	1,208	-0.018	0.025	0.464	-0.056

Fresh milk	0.063	1,221	0.073	1,208	0.010	0.013	0.453	0.039
Other liquids	0.779	1,221	0.782	1,208	0.003	0.034	0.920	0.008
Tinned or powdered milk	0.479	1,221	0.411	1,208	-0.068	0.038	0.078	-0.136
Rice/porridge/wheat	0.432	1,221	0.401	1,208	-0.031	0.044	0.480	-0.063
Roots/tubers	0.155	1,221	0.127	1,208	-0.027	0.023	0.233	-0.078
Fats/oils/butter	0.238	1,221	0.268	1,208	0.030	0.038	0.436	0.069
Fruits	0.075	1,221	0.074	1,208	-0.001	0.014	0.950	-0.003
Green leafy vegetables	0.163	1,221	0.151	1,208	-0.012	0.036	0.732	-0.034
Orange and yellow vegetables	0.234	1,221	0.224	1,208	-0.011	0.027	0.694	-0.026
Other fruit/vegetables	0.286	1,221	0.284	1,208	-0.002	0.032	0.953	-0.004
Egg	0.065	1,221	0.055	1,208	-0.009	0.014	0.502	-0.039
Fish	0.050	1,221	0.066	1,208	0.016	0.014	0.225	0.070
Poultry	0.262	1,221	0.268	1,208	0.006	0.028	0.827	0.014
Meat/offal/organs	0.167	1,221	0.162	1,208	-0.005	0.023	0.832	-0.013
Pulse/pea nuts/beans/ground nuts	0.805	704	0.752	646	-0.053	0.031	0.086	-0.128
Khichuri	0.839	1,264	0.853	1,268	0.014	0.037	0.706	0.039

Notes: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated..

Table H3. Morbidity and Treatment for Illness

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Morbidity								
Child had diarrhea last two weeks	0.123	1,287	0.118	1,284	-0.005	0.017	0.756	-0.016
Child had major illness last two weeks	0.172	1,287	0.148	1,285	-0.024	0.022	0.283	-0.065
Treatment for Illness *Reported only for those who answered having a major illness in the last two weeks*								
Sought treatment for diarrhea last two weeks	0.886	158	0.875	152	-0.011	0.043	0.796	-0.034
Sought treatment for major illness last two weeks	0.964	221	0.901	191	-0.063	0.028	**0.014**	-0.255
Ante-helminth (De-worming) in last six months (Ages 12-18 months)	0.299	705	0.264	647	-0.035	0.034	0.299	-0.078

Notes: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated.

Table H4. Hand Washing Practices

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Family members use soap or detergent to wash hands	0.883	1,287	0.904	1,286	0.022	0.024	0.363	0.070
Mother washes hands before food preparation	0.240	1,287	0.242	1,287	0.002	0.035	0.947	0.005
Mother washes hands before eating	0.430	1,287	0.467	1,287	0.037	0.047	0.434	0.073
Mother washes hands before feeding children	0.514	1,287	0.542	1,287	0.029	0.036	0.427	0.058
Mother washes hands after defecation	0.894	1,287	0.915	1,287	0.022	0.018	0.226	0.074
Mother washes hands after cleaning babies' bottoms	0.779	1,287	0.805	1,287	0.026	0.024	0.288	0.063

Notes: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except where indicated.

Table H5. Responsive Feeding Practices

Variables	Control Mean	Control N1	Treatment Mean	Treatment N2	T-C Diff	Diff SE	Diff p-value	Diff ES
Mother practices any positive feeding practices (%)	0.723	1,287	0.668	1,287	-0.054	0.035	0.119	-0.118
Mother practices any negative feeding practices, including not encouraging to eat	0.590	1,287	0.597	1,287	0.007	0.031	0.824	0.014
Scale of positive feeding practices (0-4)	1.678	1,287	1.557	1,287	-0.120	0.111	0.282	-0.091
Scale of negative feeding practices (0-3)	0.736	1,287	0.734	1,287	-0.002	0.044	0.972	-0.002
When child refuses to eat, mother does something to make them eat such as…	0.770	1,287	0.721	1,287	-0.049	0.036	0.176	-0.112
Force child to eat	0.411	991	0.389	928	-0.022	0.036	0.552	-0.044
Beat child	0.073	991	0.085	928	0.012	0.018	0.477	0.046
Threaten child	0.174	991	0.157	928	-0.016	0.022	0.467	-0.044
Caress child	0.839	991	0.834	928	-0.004	0.026	0.864	-0.012
Play with child	0.628	991	0.630	928	0.003	0.044	0.951	0.006
Entertainment	0.448	991	0.414	928	-0.034	0.039	0.385	-0.069
Give other types of food	0.264	991	0.281	928	0.017	0.038	0.653	0.038

Notes: "Diff" is the average difference between treatment and control groups; "SE" is the standard error of this difference clustered at the community clinic level; "ES" is the effect size of the estimated impact. All values are in decimal points except for the scales.

Appendix I: Impact Results

As described in Chapter 3, we specified three different ANCOVA models for each outcome measure. Model 1 includes only the treatment indicator and the outcome variable at baseline; Model 2 includes Model 1 covariates, as well as 29 Union dummies which were used for stratification of random assignments. The coefficient for the 29 unions are omitted from all tables; Finally, Model 3 includes Model 2 covariates and some additional covariates at the individual and household level. These variables includes the child's gender, age in months and weight for age; mother's age, religion, education, and employment status; household composition (single household or not, household size, number of people in the households aged between 0 to 18 years old); whether the father was present 8 months or more; the asset index; shocks in the household (deaths in the household, and natural disasters that affected the household); finally we also included time in minutes to the community clinic. For outcomes that were not collected during baseline, such as the Wolke behavioral rating, we specified simple ordinary least squares (OLS) regressions with clustered standard errors. The impact tables presented in this appendix include the point estimates, the standard errors in parenthesis, the p-values, the r-square of the model, the number of observations, the unadjusted means at endline for the treatment and control groups, the overall baseline mean for the outcome, and the effect size. We first present the ITT estimates for each of the outcomes (impact, intermediate and secondary outcomes), and for each of the three models. The ITT estimates are followed by the TOT two-stage least squares estimates for Bayley, Wolke and anthropometric outcomes.

ITT Impact Results

Table I1. ANCOVA OLS: ITT Impact of Program on Bayley Scores (Model 1)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	1.967	0.899	0.281	0.416
	(0.930)**	(0.719)	(0.144)*	(0.185)**
Outcome at Baseline	0.094	0.061	0.080	0.060
	(0.020)***	(0.015)***	(0.013)***	(0.021)***
Constant	79.479	78.443	6.935	7.747
	(2.151)***	(1.534)***	(0.179)***	(0.259)***
R2	0.03	0.02	0.03	0.02
N	2482	2482	2482	2482
N Treat	1248	1248	1248	1248
N Control	1234	1234	1234	1234
Mean Treatment (end)	90.49	85.39	7.98	8.70
Mean Control (end)	88.37	84.40	7.68	8.27
Mean at Baseline	95.34	98.51	9.51	8.83
p-value Impact	0.038	0.215	0.055	0.028
Effect Size	0.123	0.060	0.086	0.137

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I2. ANCOVA OLS: ITT Impact of Program on Bayley Scores with Union Controls (Model 2)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	2.169	1.203	0.310	0.455
	(0.565)***	(0.416)***	(0.092)***	(0.110)***
Outcome at Baseline	0.117	0.089	0.088	0.087
	(0.016)***	(0.009)***	(0.011)***	(0.017)***
Constant	79.424	77.310	7.100	7.939
	(1.689)***	(1.116)***	(0.206)***	(0.183)***
R^2	0.15	0.15	0.12	0.13
N	2482	2482	2482	2482
N Treat	1219	1219	1219	1219
N Control	1202	1202	1202	1202
Mean Treatment (end)	90.49	85.39	7.98	8.70
Mean Control (end)	88.37	84.40	7.68	8.27
Mean at Baseline	95.34	98.51	9.51	8.83
p-value Impact	0.000	0.005	0.001	0.000
Effect Size	0.136	0.081	0.095	0.150

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation
29 Unions were included in the regression but omitted from the table.

Table I3. ANCOVA OLS: ITT Impact of Program on Bayley Scores with Union-Demographic-HH Controls (Model 3)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	2.198	1.137	0.293	0.478
	(0.509)***	(0.379)***	(0.080)***	(0.103)***
Outcome at Baseline	0.072	0.064	0.055	0.048
	(0.014)***	(0.009)***	(0.010)***	(0.015)***
Female Child	0.402	-0.431	0.043	0.102
	(0.340)	(0.248)*	(0.060)	(0.070)
Child's age in months	-0.195	-0.230	-0.075	0.006
	(0.055)***	(0.038)***	(0.009)***	(0.011)
Mother's age	0.098	0.063	0.013	0.020
	(0.038)**	(0.027)**	(0.006)**	(0.008)**
Muslim mother	-0.376	-0.293	-0.119	-0.039
	(0.651)	(0.524)	(0.116)	(0.125)
Mother's education	0.441	0.250	0.066	0.087
	(0.070)***	(0.063)***	(0.014)***	(0.013)***
Mother is employed	-0.035	-0.230	-0.120	0.092
	(0.847)	(0.748)	(0.175)	(0.162)
Single parent household	0.936	1.036	0.129	0.210
	(0.649)	(0.542)*	(0.117)	(0.133)
Household size	0.423	0.383	0.073	0.074
	(0.133)***	(0.098)***	(0.024)***	(0.028)***
# of people in hh ages0-18	-0.878	-0.598	-0.170	-0.134
	(0.180)***	(0.145)***	(0.034)***	(0.037)***
Father present 8+ months	0.850	0.890	0.137	0.153
	(0.569)	(0.428)**	(0.095)	(0.117)
Asset index	0.718	0.515	0.111	0.144
	(0.227)***	(0.170)***	(0.043)**	(0.045)***
Weight-for-age (z-score)	1.097	0.602	0.169	0.224
	(0.148)***	(0.112)***	(0.029)***	(0.027)***
Deaths in hh	0.591	-0.220	0.122	0.108
	(0.807)	(0.493)	(0.127)	(0.186)
Nat. Disaster affected hh	-1.455	-0.841	-0.243	-0.240
	(0.583)**	(0.461)*	(0.094)**	(0.124)*
Agri. Event affected hh	0.769	-0.070	0.176	0.092
	(0.655)	(0.479)	(0.114)	(0.127)
Time(min) to C.Clinic	-0.002	-0.010	-0.001	-0.000

	(0.010)	(0.007)	(0.002)	(0.002)
Constant	81.105	79.273	7.709	7.195
	(2.033)***	(1.797)***	(0.286)***	(0.370)***
R^2	0.23	0.23	0.22	0.20
N	2420	2420	2420	2420
N Treat	1219	1219	1219	1219
N Control	1202	1202	1202	1202
Mean Treatment (end)	90.49	85.39	7.98	8.70
Mean Control (end)	88.37	84.40	7.68	8.27
Mean at Baseline	95.34	98.51	9.51	8.83
p-value Impact	0.000	0.004	0.000	0.000
Effect Size	0.137	0.076	0.090	0.157

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

29 Unions were included in the regression but omitted from the table.

Table I4. ANCOVA OLS: Impact of Program on Anthropometrics (Model 1)

	head circumference	Under weight	Severely under weight	wasted	Severely wasted	stunted	Severely stunted	waz	whz	haz
Program Impact	0.103	-0.019	-0.027	-0.045	-0.015	0.032	0.009	0.111	0.217	-0.069
	(0.094)	(0.019)	(0.010)***	(0.011)***	(0.005)***	(0.024)	(0.020)	(0.035)***	(0.068)***	(0.062)
Outcome at Baseline	0.505	0.537	0.403	0.197	0.080	0.449	0.477	0.493	0.319	0.533
	(0.017)***	(0.020)***	(0.054)***	(0.039)***	(0.044)*	(0.020)***	(0.031)***	(0.018)***	(0.020)***	(0.016)***
Constant	24.458	0.221	0.069	0.085	0.022	0.387	0.135	-1.150	-0.593	-1.294
	(0.732)***	(0.014)***	(0.008)***	(0.009)***	(0.004)***	(0.017)***	(0.013)***	(0.030)***	(0.046)***	(0.040)***
R^2	0.43	0.21	0.10	0.04	0.01	0.16	0.12	0.40	0.16	0.36
N	2486	2485	2485	2453	2453	2466	2466	2485	2453	2466
N Treat	1250	1250	1250	1231	1231	1240	1240	1250	1231	1240
N Control	1236	1235	1235	1222	1222	1226	1226	1235	1222	1226
Mean Treatment (end)	46.42	0.30	0.06	0.05	0.01	0.54	0.18	-1.52	-0.49	-2.07
Mean Control (end)	46.33	0.33	0.09	0.10	0.02	0.52	0.18	-1.64	-0.70	-2.04
Mean at Baseline	43.28	0.20	0.04	0.07	0.02	0.28	0.08	-0.99	-0.35	-1.36
p-value Impact	0.278	0.305	0.010	0.000	0.005	0.199	0.646	0.002	0.002	0.266
Effect Size	0.054	-0.048	-0.135	-0.179	-0.116	0.070	0.032	0.090	0.172	-0.057

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I5. ANCOVA OLS: Impact of Program on Anthropometrics with Union Controls (Model 2)

	head circumference	Under weight	Severely under weight	wasted	Severely wasted	stunted	Severely stunted	waz	whz	haz
Program Impact	0.107	-0.021	-0.030	-0.045	-0.014	0.026	0.012	0.120	0.220	-0.056
	(0.057)*	(0.015)	(0.007)***	(0.008)***	(0.004)***	(0.017)	(0.011)	(0.025)***	(0.042)***	(0.037)
Outcome at Baseline	0.527	0.538	0.404	0.194	0.077	0.452	0.475	0.493	0.316	0.534
	(0.015)***	(0.020)***	(0.054)***	(0.039)***	(0.044)*	(0.019)***	(0.031)***	(0.018)***	(0.020)***	(0.015)***
Constant	23.756	0.231	0.089	0.113	0.014	0.361	0.106	-1.227	-0.857	-1.207
	(0.666)***	(0.016)***	(0.031)***	(0.020)***	(0.010)	(0.032)***	(0.017)***	(0.053)***	(0.073)***	(0.043)***
R^2	0.48	0.22	0.12	0.06	0.02	0.19	0.15	0.42	0.21	0.40
N	2486	2485	2485	2453	2453	2466	2466	2485	2453	2466
N Treat	1221	1221	1221	1203	1203	1212	1212	1221	1203	1212
N Control	1204	1203	1203	1190	1190	1194	1194	1203	1190	1194
Mean Treatment (end)	46.42	0.30	0.06	0.05	0.01	0.54	0.18	-1.52	-0.49	-2.07
Mean Control (end)	46.33	0.33	0.09	0.10	0.02	0.52	0.18	-1.64	-0.70	-2.04
Mean at Baseline	43.28	0.20	0.04	0.07	0.02	0.28	0.08	-0.99	-0.35	-1.36
p-value Impact	0.067	0.143	0.000	0.000	0.001	0.123	0.293	0.000	0.000	0.135
Effect Size	0.056	-0.054	-0.147	-0.178	-0.110	0.058	0.043	0.097	0.175	-0.046

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation
29 Unions were included in the regression but omitted from the table.

Table I6. ANCOVA OLS: Impact of Program on Anthropometrics with Union-Demographic-HH Controls (Model 3)

	head circumference	Under weight	Severely under weight	wasted	Severely wasted	stunted	Severely stunted	waz	whz	haz
Program Impact	0.053	-0.026	-0.029	-0.044	-0.014	0.020	0.008	0.134	0.227	-0.026
	(0.052)	(0.015)*	(0.007)***	(0.008)***	(0.004)***	(0.015)	(0.012)	(0.024)***	(0.042)***	(0.032)
Outcome at Baseline	0.605	0.509	0.388	0.202	0.080	0.437	0.451	0.478	0.321	0.536
	(0.025)***	(0.021)***	(0.053)***	(0.040)***	(0.046)*	(0.020)***	(0.032)***	(0.018)***	(0.020)***	(0.017)***
Female Child	-0.392	0.041	0.034	0.009	0.006	0.005	0.016	-0.104	-0.018	-0.039
	(0.057)***	(0.018)**	(0.011)***	(0.012)	(0.005)	(0.018)	(0.014)	(0.031)***	(0.037)	(0.028)
Child's age in months	-0.104	-0.006	-0.001	-0.000	0.000	-0.009	-0.005	0.026	0.015	0.050
	(0.010)***	(0.002)***	(0.001)	(0.001)	(0.001)	(0.003)***	(0.002)***	(0.004)***	(0.005)***	(0.005)***
Mother's age	0.011	-0.004	-0.001	-0.000	0.001	-0.002	-0.004	0.003	-0.002	0.006
	(0.004)***	(0.002)**	(0.001)	(0.001)	(0.001)*	(0.002)	(0.002)**	(0.003)	(0.004)	(0.003)*
Muslim mother	-0.051	-0.051	-0.012	-0.029	-0.005	0.032	-0.003	0.033	0.089	0.020
	(0.072)	(0.029)*	(0.017)	(0.019)	(0.007)	(0.029)	(0.025)	(0.045)	(0.054)	(0.049)
Mother's education	0.018	-0.011	-0.005	-0.001	0.000	-0.019	-0.010	0.018	-0.001	0.036
	(0.007)***	(0.003)***	(0.002)**	(0.002)	(0.001)	(0.003)***	(0.003)***	(0.006)***	(0.007)	(0.006)***
Mother is employed	-0.045	-0.024	0.064	0.007	0.006	-0.034	0.067	0.113	0.182	-0.016
	(0.107)	(0.037)	(0.028)**	(0.024)	(0.013)	(0.042)	(0.036)*	(0.078)	(0.084)**	(0.075)
Single parent household	0.080	-0.101	-0.021	0.020	0.011	-0.067	-0.082	0.102	0.043	0.159
	(0.085)	(0.029)***	(0.017)	(0.022)	(0.008)	(0.035)*	(0.023)***	(0.048)**	(0.067)	(0.053)***
Household size	0.030	-0.008	-0.002	0.004	-0.000	-0.009	-0.020	0.010	-0.003	0.028
	(0.014)**	(0.005)	(0.003)	(0.003)	(0.001)	(0.006)	(0.005)***	(0.011)	(0.014)	(0.010)***
# of people in hh ages0-18	-0.036	0.024	0.004	-0.007	0.000	0.019	0.044	-0.024	0.012	-0.067
	(0.023)	(0.009)**	(0.006)	(0.006)	(0.002)	(0.011)*	(0.008)***	(0.018)	(0.021)	(0.019)***
Father present 8+ months	0.022	-0.051	-0.033	-0.015	0.001	-0.033	-0.028	0.128	0.118	0.070
	(0.068)	(0.025)**	(0.017)*	(0.016)	(0.004)	(0.030)	(0.022)	(0.053)**	(0.060)*	(0.052)
Asset index	0.061	-0.021	-0.006	-0.005	-0.004	-0.032	-0.021	0.045	0.010	0.058
	(0.028)**	(0.010)**	(0.006)	(0.007)	(0.003)	(0.012)**	(0.009)**	(0.018)**	(0.023)	(0.021)***
Deaths in hh	-0.205	0.062	0.046	0.004	-0.016	0.133	0.094	-0.175	-0.050	-0.264
	(0.096)**	(0.046)	(0.037)	(0.030)	(0.004)***	(0.048)***	(0.046)**	(0.086)**	(0.099)	(0.077)***
Nat. Disaster affected hh	-0.023	-0.002	-0.000	-0.018	-0.002	-0.017	-0.004	0.035	0.085	-0.040

	(0.075)	(0.024)	(0.014)	(0.016)	(0.007)	(0.027)	(0.022)	(0.049)	(0.060)	(0.048)
Agri. Event affected hh	0.150	0.029	0.007	0.009	0.001	-0.001	-0.000	-0.012	-0.070	0.056
	(0.088)*	(0.024)	(0.014)	(0.016)	(0.007)	(0.029)	(0.021)	(0.041)	(0.049)	(0.046)
Time(min) to C.Clinic	-0.001	0.000	0.000	0.000	0.000	0.000	0.001	-0.001	-0.001	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Constant	21.288	0.521	0.167	0.150	-0.021	0.651	0.336	-1.785	-1.143	-2.130
	(1.006)***	(0.076)***	(0.055)***	(0.055)***	(0.024)	(0.085)***	(0.063)***	(0.145)***	(0.186)***	(0.144)***
R^2	0.56	0.24	0.13	0.07	0.03	0.23	0.19	0.43	0.22	0.46
N	2425	2424	2424	2393	2393	2406	2406	2424	2393	2406
N Treat	1221	1221	1221	1203	1203	1212	1212	1221	1203	1212
N Control	1204	1203	1203	1190	1190	1194	1194	1203	1190	1194
Mean Treatment (end)	46.42	0.30	0.06	0.05	0.01	0.54	0.18	-1.52	-0.49	-2.07
Mean Control (end)	46.33	0.33	0.09	0.10	0.02	0.52	0.18	-1.64	-0.70	-2.04
Mean at Baseline	43.28	0.20	0.04	0.07	0.02	0.28	0.08	-0.99	-0.35	-1.36
p-value Impact	0.315	0.072	0.000	0.000	0.003	0.184	0.507	0.000	0.000	0.415
Effect Size	0.028	-0.067	-0.141	-0.174	-0.104	0.045	0.028	0.108	0.180	-0.022

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I7. OLS Regression: Impact of Program on Wolke Outcomes (Model 1)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.122	0.128	0.207	-0.000	0.011
	(0.168)	(0.136)	(0.160)	(0.121)	(0.137)
Constant	4.858	5.163	3.312	5.192	4.418
	(0.124)***	(0.097)***	(0.119)***	(0.083)***	(0.076)***
R^2	0.00	0.00	0.00	0.00	0.00
N	2485	2485	2485	2485	2485
N Treat	1249	1249	1249	1249	1249
N Control	1236	1236	1236	1236	1236
Mean Treatment (end)	4.98	5.29	3.52	5.19	4.43
Mean Control (end)	4.86	5.16	3.31	5.19	4.42
p-value Impact	0.469	0.349	0.202	0.997	0.937

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table I8. OLS Regression: Impact of Program on Wolke Outcomes with Union Controls (Model 2)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.156	0.125	0.207	0.022	0.040
	(0.072)**	(0.071)*	(0.080)**	(0.071)	(0.087)
Constant	5.297	5.195	2.546	5.579	4.798
	(0.121)***	(0.309)***	(0.079)***	(0.268)***	(0.156)***
R^2	0.20	0.13	0.17	0.10	0.07
N	2485	2485	2485	2485	2485
N Treat	1220	1220	1220	1220	1220
N Control	1204	1204	1204	1204	1204
Mean Treatment (end)	4.98	5.29	3.52	5.19	4.43
Mean Control (end)	4.86	5.16	3.31	5.19	4.42
p-value Impact	0.034	0.084	0.011	0.753	0.646

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table I9. OLS Regression: Impact of Program on Wolke Outcomes with Union-Demographic-HH Controls (Model 3)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.192	0.158	0.189	0.057	0.088
	(0.070)***	(0.075)**	(0.079)**	(0.072)	(0.083)
Female Child	-0.043	-0.046	-0.241	-0.022	-0.041
	(0.055)	(0.047)	(0.053)***	(0.044)	(0.061)
Child's age in months	0.046	0.044	-0.016	0.047	0.060
	(0.008)***	(0.008)***	(0.008)**	(0.007)***	(0.010)***
Mother's age	-0.001	0.006	0.007	0.001	0.007
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Muslim mother	-0.253	-0.125	-0.017	-0.171	-0.298
	(0.086)***	(0.102)	(0.110)	(0.090)*	(0.103)***
Mother's education	0.044	0.047	0.031	0.031	0.070
	(0.010)***	(0.011)***	(0.013)**	(0.010)***	(0.015)***
Mother is employed	-0.229	-0.268	-0.068	-0.204	-0.332
	(0.154)	(0.141)*	(0.106)	(0.153)	(0.152)**
Single parent household	0.110	0.130	-0.015	0.094	-0.013
	(0.076)	(0.089)	(0.112)	(0.087)	(0.121)
Household size	0.024	0.058	-0.011	0.060	0.061
	(0.021)	(0.018)***	(0.023)	(0.018)***	(0.028)**
# of people in hh ages0-18	-0.072	-0.133	-0.026	-0.108	-0.149
	(0.030)**	(0.030)***	(0.037)	(0.028)***	(0.039)***
Father present 8+ months	0.151	0.118	0.126	0.101	0.080
	(0.074)**	(0.085)	(0.096)	(0.089)	(0.102)
Asset index	0.063	0.029	0.003	0.061	0.136
	(0.034)*	(0.034)	(0.038)	(0.033)*	(0.044)***
Weight-for-age (z-score)	0.081	0.069	0.048	0.078	0.114
	(0.027)***	(0.026)***	(0.027)*	(0.026)***	(0.036)***
Deaths in hh	0.318	0.221	0.123	0.089	0.333
	(0.113)***	(0.113)*	(0.162)	(0.138)	(0.181)*
Nat. Disaster affected hh	0.083	-0.083	-0.096	-0.089	-0.078
	(0.109)	(0.085)	(0.120)	(0.075)	(0.112)
Agri. Event affected hh	-0.142	-0.010	-0.096	-0.077	-0.104
	(0.114)	(0.084)	(0.103)	(0.073)	(0.109)
Time(min) to C.Clinic	-0.003	-0.000	0.001	-0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	4.874	4.378	2.569	4.971	3.942

	(0.238)***	(0.430)***	(0.299)***	(0.351)***	(0.336)***
R^2	0.25	0.18	0.19	0.14	0.14
N	2423	2423	2423	2423	2423
N Treat	1220	1220	1220	1220	1220
N Control	1204	1204	1204	1204	1204
Mean Treatment (end)	4.98	5.29	3.52	5.19	4.43
Mean Control (end)	4.86	5.16	3.31	5.19	4.42
p-value Impact	0.007	0.037	0.019	0.426	0.290

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table I10. Ancova OLS: Impact of Program on Knowledge Scale, Home Inventory Scale, Play Materials Scale & Items, and Depression Scale (Model 1)

	Sum Knowledge Scale	Sum Home Inventory	Sum Play/Learning	Sum Play	Sum Learning	N of Picture Books	N of Books	N of Magazines	Maternal Depression Scale
Program Impact	0.023	0.083	0.402	0.172	0.214	0.130	0.283	-0.016	0.234
	(0.379)	(0.197)	(0.347)	(0.175)	(0.206)	(0.106)	(0.513)	(0.194)	(0.592)
Outcome at Baseline	-0.014	0.228	0.421	0.232	0.398	0.108	1.330	1.443	0.123
	(0.076)	(0.027)***	(0.042)***	(0.044)***	(0.037)***	(0.033)***	(0.061)***	(0.309)***	(0.018)***
Constant	29.133	1.311	5.363	3.661	1.936	0.581	2.306	0.521	3.839
	(0.541)***	(0.204)***	(0.312)***	(0.152)***	(0.178)***	(0.056)***	(0.352)***	(0.123)***	(0.421)***
R^2	0.00	0.06	0.12	0.04	0.12	0.01	0.33	0.02	0.02
N	2486	2486	2486	2486	2486	2486	2486	2478	2486
N Treat	1250	1250	1250	1250	1250	1250	1250	1245	1250
N Control	1236	1236	1236	1236	1236	1236	1236	1233	1236
p-value Impact	0.952	0.675	0.251	0.329	0.303	0.224	0.582	0.936	0.694
Effect Size	0.004	0.061	0.138	0.114	0.126	0.108	0.025	-0.004	0.035

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.

Effect Size is calculated by standardizing outcome using endline mean and standard deviation, except for Depression Scale where baseline mean and standard deviation were used

Table I11. Ancova OLS: Impact of Program on Knowledge Scale, Home Inventory Scale, Play Materials Scale & Items, and Depression Scale with Union Controls (Model 2)

	Sum Knowledge Scale	Sum Home Inventory	Sum Play/Learning	Sum Play	Sum Learning	N of Picture Books	N of Books	N of Magazines	Maternal Depression Scale
Program Impact	-0.066	0.010	0.234	0.092	0.136	0.106	0.331	-0.063	0.362
	(0.223)	(0.108)	(0.116)**	(0.062)	(0.087)	(0.063)*	(0.345)	(0.165)	(0.368)
Outcome at Baseline	0.036	0.135	0.284	0.226	0.216	0.083	1.321	1.328	0.087
	(0.057)	(0.019)***	(0.026)***	(0.032)***	(0.024)***	(0.032)**	(0.061)***	(0.309)***	(0.015)***
Constant	27.357	1.261	3.997	2.911	1.184	0.237	2.482	0.803	3.765
	(0.812)***	(0.149)***	(0.194)***	(0.101)***	(0.191)***	(0.108)**	(0.954)**	(0.361)**	(0.595)***
R^2	0.24	0.40	0.41	0.32	0.39	0.11	0.36	0.04	0.17
N	2486	2486	2486	2486	2486	2486	2486	2478	2486
N Treat	1221	1221	1221	1221	1221	1221	1221	1217	1221
N Control	1204	1204	1204	1204	1204	1204	1204	1201	1204
p-value Impact	0.767	0.927	0.047	0.144	0.124	0.097	0.340	0.702	0.328
Effect Size	-0.011	0.007	0.081	0.061	0.080	0.088	0.030	-0.016	0.053

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation, except for Depression Scale where baseline mean and standard deviation were used

Table I12. Ancova OLS: Impact of Program on Knowledge Scale, Home Inventory Scale, Play Materials Scale & Items, and Depression Scale with Union-Demographic-HH Controls (Model 3)

	Sum Knowledge Scale	Sum Home Inventory	Sum Play/Learning	Sum Play	Sum Learning	N of Picture Books	N of Books	N of Magazines	Maternal Depression Scale
Program Impact	-0.043	0.022	0.249	0.096	0.153	0.123	0.025	0.035	0.258
	(0.217)	(0.103)	(0.116)**	(0.067)	(0.083)*	(0.055)**	(0.293)	(0.132)	(0.373)
Outcome at Baseline	-0.023	0.069	0.128	0.098	0.105	0.036	0.666	0.677	0.048
	(0.055)	(0.017)***	(0.024)***	(0.031)***	(0.024)***	(0.030)	(0.057)***	(0.252)***	(0.015)***
Female Child	0.127	0.008	0.116	0.044	0.071	0.044	0.473	0.095	0.293
	(0.100)	(0.037)	(0.070)	(0.044)	(0.043)	(0.042)	(0.355)	(0.141)	(0.220)
Child's age in months	0.021	0.013	0.027	0.016	0.016	0.015	0.044	0.009	-0.042
	(0.013)	(0.006)**	(0.013)**	(0.007)**	(0.008)**	(0.006)**	(0.053)	(0.018)	(0.032)
Mother's age	0.016	-0.001	0.007	-0.001	0.009	0.008	0.236	0.056	0.009
	(0.010)	(0.004)	(0.008)	(0.004)	(0.005)*	(0.004)*	(0.043)***	(0.024)**	(0.022)
Muslim mother	0.018	-0.064	-0.376	-0.190	-0.193	-0.040	-0.112	-0.495	0.537
	(0.200)	(0.058)	(0.131)***	(0.068)***	(0.085)**	(0.067)	(0.495)	(0.348)	(0.340)
Mother's education	0.134	0.056	0.187	0.083	0.107	0.038	0.318	0.083	-0.124
	(0.024)***	(0.008)***	(0.017)***	(0.009)***	(0.010)***	(0.008)***	(0.065)***	(0.044)*	(0.041)***
Mother is employed	-0.032	-0.121	0.053	0.042	0.007	0.156	-0.800	0.782	-0.444
	(0.252)	(0.094)	(0.162)	(0.102)	(0.097)	(0.093)*	(0.553)	(0.692)	(0.519)
Single parent household	0.165	0.154	0.488	0.336	0.161	0.012	1.207	-0.381	0.018
	(0.169)	(0.069)**	(0.133)***	(0.080)***	(0.084)*	(0.106)	(0.604)**	(0.254)	(0.335)
Household size	0.052	0.032	0.072	0.027	0.047	0.047	-0.019	0.162	-0.316
	(0.034)	(0.014)**	(0.025)***	(0.014)**	(0.017)***	(0.019)**	(0.125)	(0.079)**	(0.077)***
# of people in hh ages0-18	-0.130	-0.072	-0.113	-0.043	-0.074	-0.118	3.086	-0.153	0.551
	(0.058)**	(0.022)***	(0.039)***	(0.023)*	(0.027)***	(0.029)***	(0.293)***	(0.099)	(0.124)***
Father present 8+ months	-0.195	0.141	-0.013	0.067	-0.077	-0.096	1.054	-0.055	-0.515
	(0.157)	(0.055)**	(0.112)	(0.062)	(0.073)	(0.087)	(0.518)**	(0.173)	(0.335)
Asset index	0.164	0.081	0.385	0.184	0.207	0.186	0.323	0.636	-0.456
	(0.067)**	(0.023)***	(0.050)***	(0.030)***	(0.032)***	(0.037)***	(0.171)*	(0.150)***	(0.102)***
Weight-for-age (z-score)	0.040	0.049	0.105	0.040	0.066	0.059	0.156	0.080	-0.146
	(0.030)	(0.016)***	(0.034)***	(0.021)*	(0.022)***	(0.020)***	(0.151)	(0.066)	(0.094)
Deaths in hh	0.154	-0.029	-0.372	-0.102	-0.268	-0.194	-0.604	-0.714	1.755
	(0.258)	(0.099)	(0.227)	(0.135)	(0.141)*	(0.148)	(0.977)	(0.297)**	(0.731)**
Nat. Disaster affected hh	-0.363	-0.195	-0.064	-0.006	-0.056	-0.116	-0.906	0.023	-0.134
	(0.205)*	(0.123)	(0.154)	(0.076)	(0.101)	(0.069)*	(0.481)*	(0.166)	(0.378)
Agri. Event affected hh	0.090	-0.136	0.240	0.052	0.190	0.157	1.550	-0.384	0.927

	(0.201)	(0.109)	(0.144)	(0.086)	(0.093)**	(0.081)*	(0.569)***	(0.134)***	(0.480)*
Time(min) to C.Clinic	-0.001	-0.000	-0.003	-0.002	-0.002	-0.000	-0.001	-0.002	-0.008
	(0.003)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.008)	(0.004)	(0.005)*
Constant	26.662	1.290	3.047	2.511	0.498	-0.098	-12.013	-1.056	5.039
	(0.787)***	(0.199)***	(0.369)***	(0.235)***	(0.236)**	(0.197)	(1.441)***	(0.705)	(1.071)***
R^2	0.30	0.45	0.53	0.42	0.49	0.19	0.50	0.09	0.21
N	2424	2424	2424	2424	2424	2424	2424	2417	2424
N Treat	1221	1221	1221	1221	1221	1221	1221	1217	1221
N Control	1204	1204	1204	1204	1204	1204	1204	1201	1204
p-value Impact	0.844	0.834	0.035	0.158	0.070	0.029	0.932	0.791	0.492
Effect Size	-0.007	0.016	0.086	0.064	0.090	0.102	0.002	0.009	0.038

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation, except for Depression Scale where baseline mean and standard deviation were used

Table I13. Ancova OLS: Impact of Program on Nutrition Outcomes (Model 1)

	Currently Breastfeeding	Num of Times Fed Child Yesterday	Milk: Fresh or Tinned	Carbs: Rice, Porridge, Wheat, Roots, & Tubers	Oils, Fats, Butter	Fruits and Vegetables	Egg, Fish, Poultry, and Meat	Sum of # of Times Fed for ALL Food Items	Diet Diversity	Pulse, Peanuts, Beans & Ground Nuts	Local Food
Program Impact	0.011	0.010	-0.023	0.039	0.006	-0.038	0.119	0.125	0.010	0.061	0.009
	(0.042)	(0.183)	(0.040)	(0.042)	(0.010)	(0.096)	(0.066)*	(0.152)	(0.023)	(0.049)	(0.010)
Outcome at Baseline	0.182	0.113	0.131	0.062	-0.009	0.162	0.159	0.150	0.068	0.067	0.025
	(0.026)***	(0.026)***	(0.031)***	(0.016)***	(0.006)	(0.028)***	(0.021)***	(0.020)***	(0.016)***	(0.025)***	(0.011)**
Constant	0.014	5.166	0.334	1.666	0.978	1.181	1.751	5.742	0.835	0.504	0.020
	(0.029)	(0.127)***	(0.029)***	(0.039)***	(0.008)***	(0.061)***	(0.047)***	(0.125)***	(0.018)***	(0.038)***	(0.006)***
R^2	0.00	0.02	0.01	0.01	0.00	0.02	0.03	0.04	0.01	0.01	0.00
N	2486	2238	2346	2346	2346	2346	2346	2346	2346	2346	2346
N Treat	1250	1107	1172	1172	1172	1172	1172	1172	1172	1172	1172
N Control	1236	1131	1174	1174	1174	1174	1174	1174	1174	1174	1174
Mean Treatment (end)	0.20	5.54	0.33	1.77	0.98	1.24	1.99	6.34	0.87	0.58	0.03
Mean Control (end)	0.19	5.52	0.36	1.74	0.97	1.26	1.88	6.24	0.87	0.53	0.02
Mean at Baseline	0.98	3.56	0.17	1.22	0.42	0.63	0.90	3.50	0.50	0.26	0.17
p-value Impact	0.784	0.958	0.576	0.347	0.509	0.696	0.075	0.415	0.658	0.212	0.399
Effect Size	0.079	0.006	-0.059	0.054	0.013	-0.051	0.138	0.062	0.021	0.139	0.024

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I14. Ancova OLS: Impact of Program on Nutrition Outcomes with Union Controls (Model 2)

	Currently Breastfeeding	Num of Times Fed Child Yesterday	Milk: Fresh or Tinned	Carbs: Rice, Porridge, Wheat, Roots, & Tubers	Oils, Fats, Butter	Fruits and Vegetables	Egg, Fish, Poultry, and Meat	Sum of # of Times Fed for ALL Food Items	Diet Diversity	Pulse, Peanuts, Beans & Ground Nuts	Local Food
Program Impact	0.020	-0.131	-0.016	0.033	0.006	-0.090	0.085	0.032	0.002	0.044	0.010
	(0.018)	(0.103)	(0.023)	(0.025)	(0.004)	(0.047)*	(0.041)**	(0.063)	(0.012)	(0.040)	(0.006)*
Outcome at Baseline	0.142	0.048	0.114	0.021	-0.007	0.040	0.103	0.064	0.032	0.041	0.028
	(0.037)***	(0.013)***	(0.032)***	(0.014)	(0.006)	(0.025)	(0.018)***	(0.016)***	(0.015)**	(0.019)**	(0.011)**
Constant	0.353	5.117	0.313	1.627	0.975	1.089	1.531	5.547	0.812	0.555	0.066
	(0.068)***	(0.244)***	(0.045)***	(0.029)***	(0.021)***	(0.081)***	(0.095)***	(0.104)***	(0.029)***	(0.086)***	(0.035)*
R^2	0.18	0.29	0.09	0.14	0.07	0.20	0.10	0.19	0.08	0.08	0.05
N	2486	2238	2346	2346	2346	2346	2346	2346	2346	2346	2346
N Treat	1221	1082	1146	1146	1146	1146	1146	1146	1146	1146	1146
N Control	1204	1102	1144	1144	1144	1144	1144	1144	1144	1144	1144
Mean Treatment (end)	0.20	5.54	0.33	1.77	0.98	1.24	1.99	6.34	0.87	0.58	0.03
Mean Control (end)	0.19	5.52	0.36	1.74	0.97	1.26	1.88	6.24	0.87	0.53	0.02
Mean at Baseline	0.98	3.56	0.17	1.22	0.42	0.63	0.90	3.50	0.50	0.26	0.17
p-value Impact	0.247	0.206	0.499	0.192	0.136	0.060	0.044	0.610	0.839	0.275	0.099
Effect Size	0.141	-0.076	-0.041	0.045	0.011	-0.122	0.098	0.016	0.005	0.101	0.028

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I15. Ancova OLS: Impact of Program on Nutrition Outcomes with Union-Demographic-HH Controls (Model 3)

	Currently Breastfeeding	Num of Times	Milk: Fresh or	Carbs: Rice,	Oils, Fats,	Fruits and Vegetables	Egg, Fish,	Sum of # of Times	Diet Diversity	Pulse, Peanuts,	Local Food

		Fed Child Yesterday	Tinned	Porridge, Wheat, Roots, & Tubers	Butter		Poultry, and Meat	Fed for ALL Food Items		Beans & Ground Nuts	
Program Impact	0.021	-0.125	-0.016	0.027	0.006	-0.080	0.088	0.039	0.002	0.048	0.013
	(0.015)	(0.101)	(0.021)	(0.025)	(0.003)*	(0.047)*	(0.037)**	(0.058)	(0.012)	(0.041)	(0.006)*
Outcome at Baseline	0.081	0.015	0.066	0.021	-0.009	0.009	0.081	0.028	0.016	0.041	0.023
	(0.039)**	(0.015)	(0.031)**	(0.013)	(0.007)	(0.026)	(0.020)***	(0.018)	(0.014)	(0.018)**	(0.011)**
Female Child	0.009	-0.087	-0.043	-0.010	0.002	-0.017	-0.012	-0.085	0.008	-0.002	-0.004
	(0.013)	(0.047)*	(0.021)**	(0.017)	(0.005)	(0.033)	(0.032)	(0.058)	(0.014)	(0.017)	(0.007)
Child's age in months	-0.023	0.014	-0.004	0.001	0.001	-0.000	0.001	0.002	-0.001	0.000	0.002
	(0.003)***	(0.007)**	(0.003)	(0.003)	(0.001)**	(0.005)	(0.005)	(0.009)	(0.002)	(0.003)	(0.001)
Mother's age	0.001	0.001	0.001	0.000	0.000	-0.000	0.003	0.005	0.003	0.003	0.000
	(0.001)	(0.005)	(0.002)	(0.002)	(0.001)	(0.003)	(0.004)	(0.006)	(0.001)**	(0.002)	(0.001)
Muslim mother	-0.299	-0.067	-0.093	-0.031	-0.001	-0.135	0.138	-0.149	0.012	-0.073	-0.027
	(0.036)***	(0.096)	(0.031)***	(0.030)	(0.008)	(0.065)**	(0.059)**	(0.111)	(0.022)	(0.025)***	(0.014)*
Mother's education	-0.002	0.016	0.018	0.002	0.002	0.018	0.024	0.067	0.013	-0.003	0.002
	(0.003)	(0.011)	(0.004)***	(0.003)	(0.001)	(0.006)***	(0.007)***	(0.012)***	(0.003)***	(0.004)	(0.001)*
Mother is employed	-0.009	0.131	0.067	0.039	0.024	0.169	0.130	0.458	0.012	0.002	0.029
	(0.044)	(0.115)	(0.040)*	(0.042)	(0.007)***	(0.069)**	(0.079)	(0.146)***	(0.032)	(0.048)	(0.024)
Single parent household	0.003	-0.034	0.035	-0.034	-0.010	0.038	0.023	0.045	0.024	0.004	-0.015
	(0.023)	(0.091)	(0.038)	(0.028)	(0.011)	(0.060)	(0.060)	(0.101)	(0.025)	(0.031)	(0.010)
Household size	-0.003	0.040	0.005	0.001	-0.002	0.037	0.028	0.071	0.008	0.008	0.003
	(0.005)	(0.018)**	(0.008)	(0.007)	(0.002)	(0.012)***	(0.014)**	(0.023)***	(0.005)*	(0.006)	(0.003)
# of people in hh ages0-18	0.012	-0.049	-0.011	0.007	0.001	-0.044	-0.047	-0.098	-0.017	-0.017	-0.002
	(0.008)	(0.030)*	(0.012)	(0.011)	(0.004)	(0.018)**	(0.021)**	(0.034)***	(0.008)**	(0.010)	(0.005)
Father present 8+ months	0.024	-0.242	-0.030	-0.007	-0.007	-0.064	-0.098	-0.213	-0.000	-0.013	-0.013
	(0.019)	(0.068)***	(0.033)	(0.020)	(0.010)	(0.055)	(0.054)*	(0.089)**	(0.021)	(0.030)	(0.012)
Asset index	-0.001	0.145	0.062	-0.014	-0.003	0.100	0.103	0.253	0.011	0.007	0.001
	(0.008)	(0.032)***	(0.012)***	(0.011)	(0.004)	(0.023)***	(0.022)***	(0.039)***	(0.006)*	(0.012)	(0.004)
Weight-for-age (z-score)	-0.010	0.008	-0.001	0.013	-0.000	-0.010	0.028	0.030	-0.004	0.002	-0.001
	(0.006)	(0.023)	(0.010)	(0.007)**	(0.003)	(0.015)	(0.014)**	(0.025)	(0.007)	(0.009)	(0.003)
Deaths in hh	0.028	0.048	-0.000	0.056	-0.001	-0.144	-0.194	-0.309	-0.052	-0.080	-0.022

	(0.046)	(0.126)	(0.052)	(0.046)	(0.018)	(0.098)	(0.082)**	(0.155)*	(0.040)	(0.054)	(0.009)**
Nat. Disaster affected hh	-0.013	0.005	0.010	0.099	-0.001	0.051	-0.105	0.040	0.023	-0.076	-0.015
	(0.018)	(0.091)	(0.032)	(0.032)***	(0.012)	(0.046)	(0.060)*	(0.092)	(0.019)	(0.045)*	(0.011)
Agri. Event affected hh	0.011	0.208	0.074	-0.037	0.007	-0.019	0.032	0.070	0.023	0.020	0.013
	(0.017)	(0.082)**	(0.040)*	(0.025)	(0.013)	(0.069)	(0.064)	(0.106)	(0.021)	(0.045)	(0.011)
Time(min) to C.Clinic	-0.000	-0.001	-0.001	-0.000	-0.000	-0.001	-0.000	-0.003	-0.000	-0.000	-0.000
	(0.000)	(0.002)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.002)	(0.000)	(0.001)	(0.000)*
Constant	0.789	5.153	0.352	1.617	0.968	1.096	1.339	5.400	0.658	0.568	0.053
	(0.088)***	(0.295)***	(0.093)***	(0.083)***	(0.028)***	(0.147)***	(0.174)***	(0.289)***	(0.062)***	(0.121)***	(0.040)
R^2	0.29	0.33	0.15	0.15	0.08	0.23	0.16	0.28	0.11	0.09	0.06
N	2424	2183	2289	2289	2289	2289	2289	2289	2289	2289	2289
N Treat	1221	1082	1146	1146	1146	1146	1146	1146	1146	1146	1146
N Control	1204	1102	1144	1144	1144	1144	1144	1144	1144	1144	1144
Mean Treatment (end)	0.20	5.54	0.33	1.77	0.98	1.24	1.99	6.34	0.87	0.58	0.03
Mean Control (end)	0.19	5.52	0.36	1.74	0.97	1.26	1.88	6.24	0.87	0.53	0.02
Mean at Baseline	0.98	3.56	0.17	1.22	0.42	0.63	0.90	3.50	0.50	0.26	0.17
p-value Impact	0.165	0.219	0.448	0.274	0.098	0.094	0.020	0.502	0.843	0.242	0.052
Effect Size	0.143	-0.072	-0.042	0.037	0.011	-0.108	0.102	0.019	0.005	0.110	0.034

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I16. Ancova OLS: Impact of Program on Health Outcomes (Model 1)

	Diarrhea last two weeks	Major illness last two weeks	Health of my children does not depend on my action but on our fate	Health of my children does not depend on my action but on the wishes of almighty	Family members use soap or detergent to wash hands	Mother washes hands before food preparation	Mother washes hands before eating	Mother washes hands before feeding children	Mother washes hands after defecation	Mother washes hands after cleaning babies' bottoms
Program Impact	0.004	-0.010	0.071	0.034	0.001	-0.014	-0.029	-0.024	0.005	-0.002
	(0.010)	(0.010)	(0.138)	(0.142)	(0.027)	(0.043)	(0.049)	(0.051)	(0.015)	(0.046)
Outcome at Baseline	0.027	0.027	0.041	0.112	0.133	0.085	0.109	0.102	0.035	0.079
	(0.014)*	(0.014)*	(0.021)*	(0.044)**	(0.032)***	(0.025)***	(0.024)***	(0.025)***	(0.029)	(0.027)***
Constant	0.039	0.040	2.107	3.625	0.796	0.204	0.363	0.485	0.939	0.799
	(0.007)***	(0.007)***	(0.105)***	(0.222)***	(0.038)***	(0.036)***	(0.034)***	(0.035)***	(0.029)***	(0.041)***
R^2	0.00	0.00	0.00	0.02	0.02	0.01	0.01	0.01	0.00	0.01
N	2483	2484	2485	2485	2485	2486	2486	2486	2486	2486
N Treat	1247	1248	1249	1249	1249	1250	1250	1250	1250	1250
N Control	1236	1236	1236	1236	1236	1236	1236	1236	1236	1236
Mean Treatment (end)	0.05	0.03	2.28	4.12	0.92	0.21	0.39	0.52	0.98	0.86
Mean Control (end)	0.04	0.04	2.21	4.09	0.91	0.22	0.41	0.54	0.97	0.86
Mean at Baseline	0.12	0.16	2.58	4.12	0.90	0.24	0.45	0.53	0.90	0.79
p-value Impact	0.712	0.323	0.608	0.811	0.983	0.748	0.558	0.644	0.733	0.966
Effect Size	0.011	-0.028	0.049	0.026	0.002	-0.033	-0.058	-0.047	0.017	-0.005

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I17. Ancova OLS: Impact of Program on Health Outcomes with Union Controls (Model 2)

	Diarrhea last two weeks	Major illness last two weeks	Health of my children does not depend on my action but on our fate	Health of my children does not depend on my action but on the wishes of almighty	Family members use soap or detergent to wash hands	Mother washes hands before food preparation	Mother washes hands before eating	Mother washes hands before feeding children	Mother washes hands after defecation	Mother washes hands after cleaning babies' bottoms
Program Impact	0.005	-0.009	0.080	0.069	0.007	-0.021	-0.038	-0.035	0.007	-0.008
	(0.007)	(0.007)	(0.080)	(0.118)	(0.023)	(0.030)	(0.027)	(0.032)	(0.011)	(0.023)
Outcome at Baseline	0.023	0.022	0.053	0.072	0.128	0.071	0.085	0.116	0.027	0.054
	(0.014)	(0.013)*	(0.014)***	(0.031)**	(0.028)***	(0.021)***	(0.018)***	(0.022)***	(0.024)	(0.020)***
Constant	0.026	0.025	1.874	3.736	0.782	0.094	0.352	0.354	0.963	0.561
	(0.018)	(0.009)***	(0.151)***	(0.189)***	(0.056)***	(0.043)**	(0.041)***	(0.084)***	(0.023)***	(0.117)***
R^2	0.03	0.04	0.19	0.12	0.08	0.12	0.15	0.13	0.08	0.27
N	2483	2484	2485	2485	2485	2486	2486	2486	2486	2486
N Treat	1219	1220	1221	1221	1221	1221	1221	1221	1221	1221
N Control	1204	1204	1204	1204	1204	1204	1204	1204	1204	1204
Mean Treatment (end)	0.05	0.03	2.28	4.12	0.92	0.21	0.39	0.52	0.98	0.86
Mean Control (end)	0.04	0.04	2.21	4.09	0.91	0.22	0.41	0.54	0.97	0.86
Mean at Baseline	0.12	0.16	2.58	4.12	0.90	0.24	0.45	0.53	0.90	0.79
p-value Impact	0.456	0.180	0.319	0.561	0.777	0.484	0.167	0.277	0.555	0.733
Effect Size	0.015	-0.025	0.056	0.051	0.022	-0.048	-0.076	-0.070	0.023	-0.019

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I18. Ancova OLS: Impact of Program on Health Outcomes with Union-Demographic-HH Controls (Model 3)

	Diarrhea last two weeks	Major illness last two weeks	Health of my children does not depend on my action but on our fate	Health of my children does not depend on my action but on the wishes of almighty	Family members use soap or detergent to wash hands	Mother washes hands before food preparation	Mother washes hands before eating	Mother washes hands before feeding children	Mother washes hands after defecation	Mother washes hands after cleaning babies' bottoms
Program Impact	0.005	-0.009	0.078	0.088	0.012	-0.014	-0.026	-0.029	0.008	-0.010
	(0.007)	(0.007)	(0.078)	(0.108)	(0.021)	(0.025)	(0.025)	(0.028)	(0.011)	(0.023)
Outcome at Baseline	0.020	0.019	0.030	0.054	0.072	0.033	0.038	0.044	0.009	0.034
	(0.015)	(0.013)	(0.013)**	(0.030)*	(0.028)**	(0.019)*	(0.017)**	(0.022)*	(0.020)	(0.018)*
Female Child	-0.008	-0.009	-0.028	-0.026	0.005	0.018	0.039	0.065	0.011	0.012
	(0.009)	(0.009)	(0.040)	(0.038)	(0.010)	(0.016)	(0.019)**	(0.018)***	(0.007)	(0.014)
Child's age in months	0.000	-0.002	-0.011	0.001	0.001	0.002	0.004	0.000	-0.001	-0.002
	(0.001)	(0.001)	(0.006)*	(0.006)	(0.002)	(0.002)	(0.003)*	(0.002)	(0.001)	(0.002)
Mother's age	-0.001	0.001	0.002	0.004	0.000	0.001	-0.004	-0.002	-0.000	0.001
	(0.001)	(0.001)**	(0.004)	(0.005)	(0.001)	(0.002)	(0.002)*	(0.002)	(0.001)	(0.001)
Muslim mother	0.013	0.026	-0.121	0.112	0.038	-0.014	-0.011	-0.011	0.005	0.010
	(0.013)	(0.008)***	(0.080)	(0.094)	(0.019)*	(0.034)	(0.037)	(0.040)	(0.009)	(0.026)
Mother's education	-0.001	0.000	-0.035	-0.019	0.014	0.011	0.019	0.027	0.003	0.007
	(0.002)	(0.002)	(0.009)***	(0.010)*	(0.003)***	(0.004)***	(0.004)***	(0.004)***	(0.001)**	(0.003)**
Mother is employed	-0.019	0.005	-0.185	-0.044	-0.081	-0.002	0.092	0.022	-0.006	-0.013
	(0.015)	(0.018)	(0.110)*	(0.125)	(0.045)*	(0.037)	(0.043)**	(0.043)	(0.015)	(0.043)
Single parent household	0.000	0.014	0.012	0.124	0.038	0.067	0.073	0.085	0.009	0.019
	(0.016)	(0.014)	(0.064)	(0.071)*	(0.019)**	(0.025)**	(0.029)**	(0.032)***	(0.009)	(0.021)
Household size	-0.002	0.003	-0.001	0.000	0.007	0.009	0.004	0.011	0.001	0.003
	(0.003)	(0.003)	(0.013)	(0.019)	(0.003)**	(0.006)	(0.007)	(0.007)*	(0.002)	(0.004)
# of people in hh ages0-18	0.005	-0.009	0.027	-0.008	-0.012	-0.010	-0.012	-0.024	-0.001	-0.007
	(0.004)	(0.005)*	(0.022)	(0.033)	(0.007)*	(0.010)	(0.010)	(0.011)**	(0.004)	(0.007)
Father present 8+ months	-0.012	0.006	0.075	0.187	0.011	0.024	-0.015	-0.022	-0.002	-0.015
	(0.013)	(0.011)	(0.058)	(0.061)***	(0.018)	(0.021)	(0.029)	(0.032)	(0.010)	(0.014)
Asset index	-0.013	-0.005	-0.076	-0.086	0.015	0.076	0.070	0.050	0.006	-0.002
	(0.005)**	(0.004)	(0.026)***	(0.033)**	(0.006)**	(0.013)***	(0.013)***	(0.013)***	(0.003)*	(0.007)

Weight-for-age (z-score)	-0.001	-0.001	-0.004	0.005	0.001	-0.012	-0.001	0.008	0.003	0.004
	(0.005)	(0.003)	(0.019)	(0.019)	(0.003)	(0.006)*	(0.007)	(0.009)	(0.002)	(0.005)
Deaths in hh	-0.015	0.004	-0.152	0.249	-0.005	0.017	0.068	0.006	-0.043	-0.093
	(0.021)	(0.022)	(0.111)	(0.105)**	(0.029)	(0.042)	(0.050)	(0.048)	(0.024)*	(0.036)**
Nat. Disaster affected hh	0.013	-0.014	-0.222	-0.280	-0.090	-0.135	-0.072	-0.041	-0.031	-0.039
	(0.013)	(0.011)	(0.079)***	(0.132)**	(0.027)***	(0.035)***	(0.032)**	(0.033)	(0.012)**	(0.028)
Agri. Event affected hh	0.010	0.015	0.138	-0.079	0.009	0.013	0.032	0.052	-0.000	0.035
	(0.018)	(0.012)	(0.096)	(0.095)	(0.021)	(0.028)	(0.031)	(0.037)	(0.013)	(0.025)
Time(min) to C.Clinic	0.000	0.000	0.001	-0.001	0.000	0.000	-0.000	-0.001	-0.000	0.000
	(0.000)	(0.000)	(0.001)	(0.002)	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Constant	0.044	-0.015	2.138	3.662	0.710	-0.053	0.333	0.315	0.975	0.540
	(0.036)	(0.032)	(0.236)***	(0.309)***	(0.074)***	(0.073)	(0.084)***	(0.091)***	(0.029)***	(0.136)***
R^2	0.04	0.04	0.23	0.15	0.15	0.19	0.23	0.22	0.10	0.28
N	2422	2423	2424	2424	2424	2424	2424	2424	2424	2424
N Treat	1219	1220	1221	1221	1221	1221	1221	1221	1221	1221
N Control	1204	1204	1204	1204	1204	1204	1204	1204	1204	1204
Mean Treatment (end)	0.05	0.03	2.28	4.12	0.92	0.21	0.39	0.52	0.98	0.86
Mean Control (end)	0.04	0.04	2.21	4.09	0.91	0.22	0.41	0.54	0.97	0.86
Mean at Baseline	0.12	0.16	2.58	4.12	0.90	0.24	0.45	0.53	0.90	0.79
p-value Impact	0.473	0.219	0.316	0.417	0.568	0.576	0.299	0.316	0.446	0.661
Effect Size	0.015	-0.024	0.054	0.066	0.040	-0.033	-0.053	-0.057	0.028	-0.025

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I19. Ancova OLS: Impact of Program on Responsive Feeding Practices (Model 1)

	Scale of positive feeding practices (0-4)	Mother practices any positive feeding practices	Mother does nothing when child refuses to eat.	Scale of negative feeding practices (0-3)	Mother practices any negative feeding practices, including not encouraging to ea
Program Impact	0.087	0.027	-0.015	0.079	0.018
	(0.146)	(0.037)	(0.031)	(0.101)	(0.034)
Outcome at Baseline	0.067	0.007	-0.032	0.134	0.065
	(0.023)***	(0.016)	(0.015)**	(0.029)***	(0.021)***
Constant	2.050	0.805	0.166	0.886	0.596
	(0.108)***	(0.030)***	(0.023)***	(0.056)***	(0.023)***
R^2	0.00	0.00	0.00	0.01	0.00
N	2486	2486	2486	2486	2486
N Treat	1250	1250	1250	1250	1250
N Control	1236	1236	1236	1236	1236
Mean Treatment (end)	2.24	0.84	0.14	1.06	0.65
Mean Control (end)	2.16	0.81	0.16	0.99	0.64
Mean at Baseline	1.61	0.69	0.26	0.74	0.60
p-value Impact	0.553	0.475	0.618	0.433	0.599
Effect Size	0.066	0.058	-0.035	0.109	0.037

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I20. Ancova OLS: Impact of Program on Responsive Feeding Practices with Union Controls (Model 2)

	Scale of positive feeding practices (0-4)	Mother practices any positive feeding practices	Mother does nothing when child refuses to eat.	Scale of negative feeding practices (0-3)	Mother practices any negative feeding practices, including not encouraging to ea
Program Impact	0.035	0.024	-0.013	0.041	0.007
	(0.101)	(0.023)	(0.022)	(0.081)	(0.025)
Outcome at Baseline	0.120	0.031	-0.010	0.144	0.082
	(0.018)***	(0.015)**	(0.014)	(0.027)***	(0.020)***
Constant	1.743	0.779	0.184	0.917	0.591
	(0.205)***	(0.072)***	(0.059)***	(0.078)***	(0.041)***
R^2	0.12	0.11	0.07	0.09	0.06
N	2486	2486	2486	2486	2486
N Treat	1221	1221	1221	1221	1221
N Control	1204	1204	1204	1204	1204
Mean Treatment (end)	2.24	0.84	0.14	1.06	0.65
Mean Control (end)	2.16	0.81	0.16	0.99	0.64
Mean at Baseline	1.61	0.69	0.26	0.74	0.60
p-value Impact	0.732	0.310	0.553	0.615	0.766
Effect Size	0.026	0.052	-0.030	0.056	0.015

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I21. Ancova OLS: Impact of Program on Responsive Feeding Practices with Union-Demographic-HH Controls (Model 3)

	Scale of positive feeding practices (0-4)	Mother practices any positive feeding practices	Mother does nothing when child refuses to eat.	Scale of negative feeding practices (0-3)	Mother practices any negative feeding practices, including not encouraging to ea
Program Impact	0.014	0.021	-0.013	0.029	-0.001
	(0.088)	(0.021)	(0.019)	(0.070)	(0.021)
Outcome at Baseline	0.065	0.028	-0.014	0.127	0.068
	(0.020)***	(0.016)*	(0.016)	(0.025)***	(0.021)***
Female Child	-0.016	-0.026	0.013	-0.053	-0.026
	(0.050)	(0.016)	(0.015)	(0.038)	(0.019)
Child's age in months	-0.008	-0.003	0.001	-0.002	-0.002
	(0.007)	(0.002)*	(0.002)	(0.006)	(0.003)
Mother's age	-0.007	-0.001	0.001	-0.011	-0.003
	(0.005)	(0.002)	(0.002)	(0.004)***	(0.002)
Muslim mother	-0.119	-0.016	0.009	-0.090	-0.014
	(0.098)	(0.024)	(0.023)	(0.064)	(0.035)
Mother's education	0.054	0.012	-0.009	-0.020	-0.013
	(0.010)***	(0.003)***	(0.003)***	(0.009)**	(0.004)***
Mother is employed	-0.054	-0.029	0.027	0.084	0.058
	(0.118)	(0.036)	(0.032)	(0.092)	(0.050)
Single parent household	0.138	0.004	-0.013	0.051	-0.016
	(0.099)	(0.025)	(0.027)	(0.064)	(0.034)
Household size	0.033	0.001	-0.002	-0.005	-0.002
	(0.016)**	(0.005)	(0.004)	(0.014)	(0.007)
# of people in hh ages0-18	-0.026	-0.001	0.006	-0.008	-0.010
	(0.029)	(0.008)	(0.008)	(0.023)	(0.010)
Father present 8+ months	-0.098	-0.028	0.025	0.046	0.023
	(0.086)	(0.021)	(0.022)	(0.052)	(0.027)
Asset index	0.129	0.003	-0.004	-0.058	-0.021
	(0.034)***	(0.007)	(0.007)	(0.029)**	(0.013)
Weight-for-age (z-score)	0.026	-0.001	0.003	-0.012	-0.006
	(0.018)	(0.006)	(0.007)	(0.014)	(0.008)
Deaths in hh	-0.346	-0.029	0.026	0.108	0.093
	(0.138)**	(0.039)	(0.039)	(0.107)	(0.044)**

Nat. Disaster affected hh	0.278	0.065	-0.063	0.392	0.115
	(0.119)**	(0.029)**	(0.030)**	(0.099)***	(0.032)***
Agri. Event affected hh	0.169	0.027	-0.033	0.192	0.095
	(0.102)	(0.021)	(0.020)*	(0.087)**	(0.039)**
Time(min) to C.Clinic	0.000	0.000	0.000	-0.002	-0.000
	(0.001)	(0.000)	(0.000)	(0.001)*	(0.001)
Constant	1.816	0.804	0.186	1.387	0.760
	(0.289)***	(0.096)***	(0.085)**	(0.196)***	(0.096)***
R^2	0.18	0.13	0.09	0.14	0.10
N	2424	2424	2424	2424	2424
N Treat	1221	1221	1221	1221	1221
N Control	1204	1204	1204	1204	1204
Mean Treatment (end)	2.24	0.84	0.14	1.06	0.65
Mean Control (end)	2.16	0.81	0.16	0.99	0.64
Mean at Baseline	1.61	0.69	0.26	0.74	0.60
p-value Impact	0.873	0.323	0.496	0.679	0.974
Effect Size	0.011	0.046	-0.030	0.040	-0.001

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I22. OLS Regression: Impact of Program on Health Outcomes (Model 1)

	Vitamin A capsule last 6 months (Ages 12-18 months)	Ante-helminth (De-worming) last 6 months (Ages 12-18 months)	Had GMP Card	Had and showed GMP Card	Number of Times [CHILD] had a Growth Monitoring Check Up
Program Impact	0.033	0.022	0.092	0.078	0.269
	(0.041)	(0.046)	(0.043)**	(0.043)*	(0.148)*
Constant	0.658	0.703	0.294	0.275	0.664
	(0.028)***	(0.030)***	(0.027)***	(0.028)***	(0.087)***
R^2	0.00	0.00	0.01	0.01	0.01
N	2479	2482	2486	2486	2486
N Treat	1245	1248	1250	1250	1250
N Control	1234	1234	1236	1236	1236
Mean Treatment (end)	0.69	0.72	0.39	0.35	0.93
Mean Control (end)	0.66	0.70	0.29	0.28	0.66
p-value Impact	0.423	0.636	0.035	0.075	0.073

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table I23. OLS Regression: Impact of Program on Health Outcomes with Union Controls (Model 2)

	Vitamin A capsule last 6 months (Ages 12-18 months)	Ante-helminth (De-worming) last 6 months (Ages 12-18 months)	Had GMP Card	Had and showed GMP Card	Number of Times [CHILD] had a Growth Monitoring Check Up
Program Impact	0.027	0.000	0.091	0.075	0.250
	(0.025)	(0.029)	(0.032)***	(0.030)**	(0.098)**
Constant	0.726	0.456	0.103	0.079	0.122
	(0.053)***	(0.061)***	(0.051)**	(0.032)**	(0.110)
R^2	0.10	0.12	0.08	0.10	0.15
N	2479	2482	2486	2486	2486
N Treat	1217	1220	1221	1221	1221
N Control	1202	1202	1204	1204	1204
Mean Treatment (end)	0.69	0.72	0.39	0.35	0.93
Mean Control (end)	0.66	0.70	0.29	0.28	0.66
p-value Impact	0.282	0.987	0.006	0.014	0.013

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table I24. OLS Regression: Impact of Program on Health Outcomes with Union-Demographic-HH Controls (Model 3)

	Vitamin A capsule last 6 months (Ages 12-18 months)	Ante-helminth (De-worming) last 6 months (Ages 12-18 months)	Had GMP Card	Had and showed GMP Card	Number of Times [CHILD] had a Growth Monitoring Check Up
Program Impact	0.029	-0.006	0.098	0.081	0.265
	(0.025)	(0.028)	(0.032)***	(0.029)***	(0.096)***
Female Child	-0.007	0.003	-0.029	-0.038	-0.102
	(0.018)	(0.019)	(0.015)*	(0.015)**	(0.042)**
Child's age in months	-0.000	-0.000	-0.004	-0.004	-0.013
	(0.003)	(0.002)	(0.003)	(0.003)	(0.007)*
Mother's age	0.000	0.000	-0.002	-0.001	-0.004
	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)
Muslim mother	-0.051	-0.005	-0.021	-0.028	-0.047
	(0.029)*	(0.024)	(0.034)	(0.034)	(0.079)
Mother's education	0.005	0.005	-0.001	0.001	0.014
	(0.003)	(0.004)	(0.004)	(0.004)	(0.011)
Mother is employed	-0.059	-0.091	0.079	0.077	0.301
	(0.044)	(0.045)**	(0.052)	(0.046)*	(0.144)**
Single parent household	0.113	0.076	0.046	0.034	0.112
	(0.027)***	(0.026)***	(0.029)	(0.030)	(0.097)
Household size	0.015	0.010	0.013	0.013	0.040
	(0.006)**	(0.006)	(0.007)*	(0.006)*	(0.019)**
# of people in hh ages0-18	-0.027	-0.020	-0.022	-0.016	-0.058
	(0.010)***	(0.009)**	(0.012)*	(0.012)	(0.032)*
Father present 8+ months	0.008	0.007	0.000	0.001	0.019
	(0.029)	(0.025)	(0.027)	(0.026)	(0.107)
Asset index	0.005	-0.003	-0.027	-0.027	-0.071
	(0.013)	(0.011)	(0.011)**	(0.011)**	(0.034)**
Weight-for-age (z-score)	0.008	0.007	0.009	0.005	-0.007
	(0.008)	(0.008)	(0.007)	(0.007)	(0.020)
Deaths in hh	0.003	-0.043	-0.029	-0.020	-0.079
	(0.043)	(0.047)	(0.048)	(0.049)	(0.140)
Nat. Disaster affected hh	0.045	0.044	-0.001	-0.021	-0.054

	(0.031)	(0.029)	(0.035)	(0.034)	(0.095)
Agri. Event affected hh	0.000	0.073	0.032	0.038	0.112
	(0.029)	(0.032)**	(0.035)	(0.034)	(0.108)
Time(min) to C.Clinic	-0.001	-0.002	-0.005	-0.004	-0.011
	(0.001)	(0.001)***	(0.001)***	(0.001)***	(0.002)***
Constant	0.731	0.476	0.350	0.277	0.560
	(0.095)***	(0.088)***	(0.085)***	(0.076)***	(0.205)***
R^2	0.12	0.14	0.13	0.13	0.19
N	2418	2421	2424	2424	2424
N Treat	1217	1220	1221	1221	1221
N Control	1202	1202	1204	1204	1204
Mean Treatment (end)	0.69	0.72	0.39	0.35	0.93
Mean Control (end)	0.66	0.70	0.29	0.28	0.66
p-value Impact	0.258	0.829	0.003	0.007	0.007

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

TOT Impact Results

Table I25. Treatment on the Treated - Impact of Program on Bayley Scores (Model 1)

	lang_comp	cog_comp	exp_scale	rec_scale
Impact-TOT	3.877	1.767	0.554	0.818
	(1.882)**	(1.422)	(0.290)*	(0.375)**
Outcome at Baseline	0.092	0.059	0.079	0.059
	(0.020)***	(0.015)***	(0.013)***	(0.020)***
Constant	79.559	78.548	6.931	7.737
	(2.119)***	(1.496)***	(0.179)***	(0.260)***
R2	0.03	0.02	0.03	0.02
N	2475	2475	2475	2475
p-value Impact	0.039	0.214	0.056	0.029
Effect Size	0.242	0.119	0.170	0.269

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.

Table I26. Treatment on the Treated - Impact of Program on Bayley Scores with Union Controls (Model 2)

	lang_comp	cog_comp	exp_scale	rec_scale
Impact-TOT	4.220	2.330	0.604	0.884
	(1.095)***	(0.790)***	(0.180)***	(0.212)***
Outcome at Baseline	0.115	0.087	0.087	0.086
	(0.016)***	(0.009)***	(0.011)***	(0.017)***
Constant	80.188	77.843	7.198	8.076
	(1.503)***	(1.013)***	(0.162)***	(0.141)***
R2	0.15	0.15	0.11	0.13
N	2475	2475	2475	2475
p-value Impact	0.000	0.003	0.001	0.000
Effect Size	0.264	0.156	0.185	0.291

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I27. Treatment on the Treated - Impact of Program on Bayley Scores with Union-Demographic-HH Controls (Model 3)

	lang_comp	cog_comp	exp_scale	rec_scale
Impact-TOT	4.261	2.115	0.569	0.926
	(0.994)***	(0.727)***	(0.156)***	(0.200)***
Outcome at Baseline	0.072	0.062	0.055	0.048
	(0.013)***	(0.008)***	(0.010)***	(0.015)***
Female Child	0.445	-0.391	0.046	0.114
	(0.323)	(0.248)	(0.058)	(0.067)*
Child's age in months	-0.176	-0.228	-0.073	0.010
	(0.057)***	(0.038)***	(0.010)***	(0.011)
Mother's age	0.094	0.061	0.013	0.019
	(0.039)**	(0.027)**	(0.007)*	(0.008)**
Muslim mother	-0.501	-0.341	-0.133	-0.068
	(0.649)	(0.515)	(0.116)	(0.126)
Mother's education	0.417	0.237	0.064	0.081
	(0.070)***	(0.061)***	(0.014)***	(0.012)***
Mother is employed	0.390	-0.012	-0.066	0.186
	(0.803)	(0.720)	(0.171)	(0.151)
Single parent household	1.126	1.090	0.153	0.253
	(0.657)*	(0.536)**	(0.117)	(0.133)*
Household size	0.396	0.351	0.070	0.068
	(0.132)***	(0.098)***	(0.024)***	(0.027)**
# of people in hh ages0-18	-0.846	-0.581	-0.166	-0.127
	(0.184)***	(0.142)***	(0.035)***	(0.037)***
Father present 8+ months	0.937	0.902	0.146	0.174
	(0.583)	(0.424)**	(0.096)	(0.121)
Asset index	0.787	0.555	0.121	0.157
	(0.215)***	(0.167)***	(0.042)***	(0.042)***
Weight-for-age (z-score)	1.065	0.589	0.165	0.217
	(0.149)***	(0.111)***	(0.029)***	(0.028)***
Constant	81.668	79.478	7.761	7.316
	(1.999)***	(1.686)***	(0.282)***	(0.354)***
R2	0.23	0.22	0.21	0.20
N	2413	2413	2413	2413
p-value Impact	0.000	0.004	0.000	0.000
Effect Size	0.269	0.148	0.176	0.307

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I28. Treatment on the Treated - Impact of Program on Anthropometrics (Model 1)

	head circumference	Under Weight	very_under	wasted	very_wasted	stunted	very_stunted	waz	whz	haz
Impact-TOT	0.203	-0.038	-0.054	-0.089	-0.031	0.062	0.019	0.222	0.431	-0.137
	(0.187)	(0.037)	(0.021)**	(0.022)***	(0.011)***	(0.047)	(0.038)	(0.075)***	(0.136)***	(0.119)
Outcome at Baseline	0.505	0.539	0.407	0.198	0.080	0.451	0.477	0.490	0.315	0.534
	(0.017)***	(0.020)***	(0.055)***	(0.039)***	(0.045)*	(0.020)***	(0.031)***	(0.018)***	(0.020)***	(0.016)***
Constant	24.462	0.222	0.070	0.087	0.023	0.385	0.134	-1.158	-0.605	-1.289
	(0.729)***	(0.015)***	(0.009)***	(0.010)***	(0.005)***	(0.018)***	(0.014)***	(0.032)***	(0.051)***	(0.043)***
R2	0.42	0.21	0.10	0.03	0.00	0.16	0.12	0.40	0.14	0.36
N	2479	2478	2478	2446	2446	2459	2459	2478	2446	2459
p-value Impact	0.279	0.303	0.012	0.000	0.004	0.189	0.624	0.003	0.002	0.252
Effect Size	0.106	-0.097	-0.266	-0.354	-0.233	0.137	0.068	0.179	0.342	-0.112

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.

Table I29. Treatment on the Treated - Impact of Program on Anthropometrics Scores with Union Controls (Model 2)

	head circumference	Under	very_under	wasted	very_wasted	stunted	very_stunted	waz	whz	haz
Impact-TOT	0.212	-0.042	-0.058	-0.088	-0.029	0.050	0.025	0.236	0.432	-0.110
	(0.114)*	(0.029)	(0.016)***	(0.016)***	(0.008)***	(0.031)	(0.022)	(0.056)***	(0.089)***	(0.070)
Outcome at Baseline	0.527	0.540	0.408	0.197	0.079	0.453	0.475	0.491	0.314	0.535
	(0.015)***	(0.020)***	(0.054)***	(0.040)***	(0.045)*	(0.018)***	(0.031)***	(0.018)***	(0.021)***	(0.015)***
Constant	23.777	0.224	0.081	0.100	0.010	0.368	0.109	-1.195	-0.795	-1.222
	(0.661)***	(0.016)***	(0.030)***	(0.020)***	(0.008)	(0.029)***	(0.017)***	(0.057)***	(0.065)***	(0.033)***
R2	0.48	0.23	0.12	0.05	0.02	0.19	0.15	0.41	0.19	0.40
N	2479	2478	2478	2446	2446	2459	2459	2478	2446	2459
p-value	0.062	0.145	0.000	0.000	0.001	0.113	0.252	0.000	0.000	0.116
Impact Effect Size	0.111	-0.105	-0.287	-0.348	-0.220	0.111	0.091	0.190	0.344	-0.090

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I30. Treatment on the Treated - Impact of Program on Anthropometrics with Union-Demographic-HH Controls (Model 3)

	head circumference	Under Weight	Severely under Weight	Wasted	Severely Wasted	Stunted	Severely stunted	waz	whz	haz
Impact-TOT	0.107	-0.052	-0.055	-0.086	-0.027	0.038	0.017	0.264	0.446	-0.050
	(0.104)	(0.029)*	(0.016)***	(0.016)***	(0.009)***	(0.029)	(0.023)	(0.054)***	(0.086)***	(0.061)
Outcome at Baseline	0.606	0.513	0.395	0.205	0.082	0.437	0.451	0.478	0.321	0.536
	(0.025)***	(0.020)***	(0.053)***	(0.041)***	(0.047)*	(0.020)***	(0.031)***	(0.018)***	(0.021)***	(0.017)***
Female Child	-0.387	0.037	0.032	0.007	0.006	0.006	0.016	-0.095	-0.007	-0.039
	(0.055)***	(0.018)**	(0.010)***	(0.012)	(0.005)	(0.018)	(0.013)	(0.031)***	(0.037)	(0.028)
Child's age in months	-0.104	-0.006	-0.001	-0.000	0.000	-0.009	-0.005	0.026	0.017	0.049
	(0.009)***	(0.002)***	(0.001)	(0.002)	(0.001)	(0.003)***	(0.002)***	(0.004)***	(0.005)***	(0.005)***
Mother's age	0.011	-0.004	-0.001	-0.000	0.001	-0.002	-0.004	0.003	-0.002	0.006
	(0.003)***	(0.002)**	(0.001)	(0.001)	(0.001)*	(0.002)	(0.002)***	(0.003)	(0.004)	(0.003)*
Muslim mother	-0.055	-0.051	-0.011	-0.028	-0.005	0.031	-0.004	0.028	0.079	0.021
	(0.071)	(0.028)*	(0.017)	(0.018)	(0.007)	(0.028)	(0.024)	(0.045)	(0.054)	(0.048)
Mother's education	0.018	-0.010	-0.004	-0.001	0.000	-0.020	-0.010	0.017	-0.003	0.036
	(0.006)***	(0.003)***	(0.002)**	(0.002)	(0.001)	(0.003)***	(0.003)***	(0.006)***	(0.007)	(0.006)***
Mother is employed	-0.037	-0.027	0.060	0.001	0.004	-0.031	0.068	0.133	0.217	-0.020
	(0.106)	(0.037)	(0.027)**	(0.023)	(0.013)	(0.042)	(0.036)*	(0.075)*	(0.081)***	(0.075)
Single parent household	0.087	-0.102	-0.022	0.019	0.011	-0.064	-0.082	0.109	0.055	0.157
	(0.083)	(0.029)***	(0.017)	(0.022)	(0.008)	(0.035)*	(0.023)***	(0.048)**	(0.065)	(0.053)***
Household size	0.029	-0.007	-0.001	0.004	-0.000	-0.009	-0.020	0.008	-0.005	0.028
	(0.014)**	(0.005)	(0.003)	(0.003)	(0.001)	(0.006)	(0.004)***	(0.010)	(0.014)	(0.010)***
# of people in hh ages0-18	-0.035	0.024	0.003	-0.007	0.000	0.019	0.044	-0.023	0.014	-0.067
	(0.023)	(0.009)***	(0.006)	(0.006)	(0.002)	(0.011)*	(0.008)***	(0.018)	(0.021)	(0.019)***
Father present 8+ months	0.028	-0.052	-0.033	-0.016	0.001	-0.033	-0.028	0.131	0.123	0.069
	(0.067)	(0.024)**	(0.016)**	(0.016)	(0.004)	(0.030)	(0.022)	(0.052)**	(0.060)**	(0.052)
Asset index	0.060	-0.021	-0.006	-0.005	-0.004	-0.032	-0.021	0.047	0.012	0.058
	(0.027)**	(0.010)**	(0.006)	(0.006)	(0.003)	(0.012)***	(0.009)**	(0.018)***	(0.024)	(0.021)***
Deaths in hh	-0.206	0.056	0.038	0.008	-0.015	0.134	0.086	-0.169	-0.054	-0.256
	(0.095)**	(0.046)	(0.036)	(0.030)	(0.004)***	(0.048)***	(0.045)*	(0.085)**	(0.100)	(0.076)***
Nat. Disaster affected hh	-0.021	-0.004	0.000	-0.011	-0.000	-0.021	-0.008	0.023	0.056	-0.032
	(0.071)	(0.023)	(0.014)	(0.016)	(0.007)	(0.027)	(0.022)	(0.047)	(0.055)	(0.049)
Agri. Event affected hh	0.143	0.035	0.010	0.008	0.001	0.002	0.002	-0.017	-0.071	0.052
	(0.087)*	(0.024)	(0.014)	(0.017)	(0.007)	(0.028)	(0.021)	(0.042)	(0.050)	(0.045)
Time(min) to C.Clinic	-0.001	0.000	0.000	0.000	0.000	0.000	0.001	-0.000	0.000	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)

Constant	21.257 (0.991)***	0.513 (0.076)***	0.159 (0.055)***	0.144 (0.056)***	-0.022 (0.023)	0.654 (0.083)***	0.333 (0.062)***	-1.764 (0.146)***	-1.114 (0.180)***	-2.132 (0.140)***
R2	0.56	0.25	0.13	0.06	0.02	0.23	0.19	0.42	0.20	0.46
N	2418	2417	2417	2386	2386	2399	2399	2417	2386	2399
p-value Impact	0.303	0.070	0.000	0.000	0.002	0.187	0.456	0.000	0.000	0.412
Effect Size	0.056	-0.130	-0.273	-0.342	-0.208	0.084	0.061	0.212	0.355	-0.041

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I31. Treatment on the Treated - Impact of Program on Wolke Outcomes (Model 1)

	Approach	Emotion	Activity	Cooperation	Vocalization
Impact-TOT	0.249	0.257	0.397	0.006	0.016
	(0.335)	(0.273)	(0.314)	(0.239)	(0.271)
Constant	4.846	5.155	3.308	5.187	4.419
	(0.129)***	(0.101)***	(0.126)***	(0.088)***	(0.080)***
R2	0.00	.	0.00	.	0.00
N	2478	2478	2478	2478	2478
p-value Impact	0.457	0.345	0.207	0.979	0.952
Effect Size	0.168	0.182	0.263	0.005	0.009

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.

Table I32. Treatment on the Treated - Impact of Program on Wolke Outcomes with Union Controls (Model 2)

	Approach	Emotion	Activity	Cooperation	Vocalization
Impact-TOT	0.311	0.249	0.395	0.053	0.067
	(0.144)**	(0.142)*	(0.157)**	(0.141)	(0.169)
Constant	5.341	5.230	2.607	5.584	4.811
	(0.133)***	(0.312)***	(0.051)***	(0.264)***	(0.152)***
R2	0.20	0.13	0.16	0.10	0.07
N	2478	2478	2478	2478	2478
p-value Impact	0.030	0.080	0.012	0.709	0.692
Effect Size	0.210	0.176	0.262	0.038	0.038

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Table I33. Treatment on the Treated - Impact of Program on Wolke Outcomes with Union-Demographic-HH Controls (Model 3)

	Approach	Emotion	Activity	Cooperation	Vocalization
Impact-TOT	0.387	0.318	0.360	0.125	0.164
	(0.139)***	(0.148)**	(0.154)**	(0.142)	(0.161)
Female Child	-0.040	-0.046	-0.237	-0.022	-0.041
	(0.053)	(0.046)	(0.052)***	(0.043)	(0.061)
Child's age in months	0.048	0.046	-0.014	0.048	0.061
	(0.008)***	(0.008)***	(0.008)*	(0.008)***	(0.010)***
Mother's age	-0.001	0.006	0.007	0.001	0.007
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Muslim mother	-0.263	-0.132	-0.023	-0.176	-0.298
	(0.085)***	(0.103)	(0.107)	(0.090)*	(0.102)***
Mother's education	0.043	0.047	0.030	0.031	0.069
	(0.010)***	(0.011)***	(0.013)**	(0.010)***	(0.015)***
Mother is employed	-0.198	-0.243	-0.042	-0.193	-0.320
	(0.151)	(0.136)*	(0.104)	(0.150)	(0.147)**
Single parent household	0.111	0.130	-0.001	0.088	-0.020
	(0.077)	(0.087)	(0.113)	(0.086)	(0.118)
Household size	0.023	0.056	-0.014	0.059	0.060
	(0.021)	(0.018)***	(0.022)	(0.018)***	(0.027)**
# of people in hh ages0-18	-0.070	-0.129	-0.024	-0.106	-0.148
	(0.031)**	(0.030)***	(0.037)	(0.028)***	(0.038)***
Father present 8+ months	0.147	0.115	0.134	0.095	0.072
	(0.073)**	(0.084)	(0.097)	(0.087)	(0.100)
Asset index	0.066	0.030	0.004	0.061	0.138
	(0.033)**	(0.034)	(0.038)	(0.032)*	(0.044)***
Weight-for-age (z-score)	0.079	0.066	0.045	0.076	0.111
	(0.027)***	(0.025)***	(0.026)*	(0.026)***	(0.034)***
Deaths in hh	0.284	0.197	0.120	0.072	0.343
	(0.109)***	(0.111)*	(0.165)	(0.134)	(0.183)*
Nat. Disaster affected hh	0.039	-0.119	-0.127	-0.108	-0.102
	(0.106)	(0.086)	(0.119)	(0.078)	(0.111)
Agri. Event affected hh	-0.133	0.005	-0.079	-0.071	-0.092
	(0.111)	(0.081)	(0.101)	(0.073)	(0.109)
Time(min) to C.Clinic	-0.002	0.001	0.001	0.000	-0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	4.887	4.383	2.589	4.964	3.964
	(0.254)***	(0.437)***	(0.300)***	(0.351)***	(0.327)***

R2	0.25	0.17	0.18	0.14	0.14
N	2416	2416	2416	2416	2416
p-value Impact	0.005	0.032	0.020	0.380	0.308
Effect Size	0.260	0.224	0.239	0.091	0.092

Clustered standard errors in parentheses. * p<0.1 ** p<0.05; *** p<0.01.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using baseline mean and standard deviation

Appendix J: Sub-Group Impact Results

Table J1. ANCOVA OLS: Impact of Program on Bayley Scores by Gender with Union-Demographic-HH Controls (Model 3)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	1.972	0.931	0.237	0.442
	(0.648)***	(0.458)**	(0.106)**	(0.130)***
Additional Impact on Females	0.464	0.423	0.116	0.073
	(0.696)	(0.516)	(0.122)	(0.141)
Outcome at Baseline	0.072	0.064	0.055	0.048
	(0.013)***	(0.009)***	(0.010)***	(0.015)***
Female Child	0.168	-0.645	-0.016	0.065
	(0.481)	(0.374)*	(0.085)	(0.102)
Child's age in months	-0.195	-0.229	-0.075	0.006
	(0.055)***	(0.038)***	(0.009)***	(0.011)
Mother's age	0.097	0.062	0.013	0.020
	(0.038)**	(0.027)**	(0.006)**	(0.008)**
Muslim mother	-0.391	-0.308	-0.123	-0.042
	(0.642)	(0.524)	(0.115)	(0.124)
Mother's education	0.442	0.250	0.067	0.087
	(0.070)***	(0.063)***	(0.014)***	(0.013)***
Mother is employed	-0.065	-0.257	-0.127	0.088
	(0.855)	(0.750)	(0.176)	(0.162)
Single parent household	0.933	1.034	0.128	0.210
	(0.648)	(0.543)*	(0.117)	(0.132)
Household size	0.421	0.380	0.072	0.074
	(0.133)***	(0.097)***	(0.024)***	(0.028)***
# of people in hh ages0-18	-0.873	-0.594	-0.169	-0.133
	(0.180)***	(0.144)***	(0.034)***	(0.037)***
Father present 8+ months	0.850	0.889	0.137	0.153
	(0.568)	(0.428)**	(0.095)	(0.117)
Asset index	0.720	0.517	0.111	0.144
	(0.227)***	(0.171)***	(0.043)**	(0.045)***
Weight-for-age (z-score)	1.098	0.603	0.169	0.224
	(0.148)***	(0.112)***	(0.029)***	(0.027)***
Deaths in hh	0.583	-0.227	0.120	0.107
	(0.808)	(0.493)	(0.128)	(0.186)

Nat. Disaster affected hh	-1.454	-0.841	-0.243	-0.239
	(0.583)**	(0.462)*	(0.094)**	(0.124)*
Agri. Event affected hh	0.778	-0.062	0.179	0.093
	(0.657)	(0.483)	(0.115)	(0.127)
Time(min) to C.Clinic	-0.002	-0.010	-0.001	-0.000
	(0.010)	(0.007)	(0.002)	(0.002)
Constant	81.254	79.385	7.746	7.219
	(2.071)***	(1.806)***	(0.289)***	(0.376)***
N	2420	2420	2420	2420
R^2	0.23	0.23	0.22	0.20
N Trt (end)	1219	1219	1219	1219
N Ctrl (end)	1201	1201	1201	1201
N Trt Females(end)	588	588	588	588
N Ctrl Females(end)	595	595	595	595
p-value Program Impact	0.003	0.045	0.029	0.001
p-value Add.Impact	0.507	0.415	0.344	0.605

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All Controls are at Baseline Values except HH Shocks
Base Category of Mother's Religion is Christian/Buddhist

Table J2. ANCOVA OLS: Impact of Program on Anthropometrics by Gender with Union-Demographic-HH Controls (Model 3)

	head circumference	Under	very_under	wasted	very_wasted	stunted	very_stunted	waz	whz	haz
Program Impact	0.032	-0.043	-0.015	-0.040	-0.009	0.005	0.009	0.118	0.197	-0.015
	(0.061)	(0.020)**	(0.011)	(0.013)***	(0.005)	(0.024)	(0.017)	(0.031)***	(0.045)***	(0.041)
Additional Impact on Females	0.042	0.034	-0.029	-0.007	-0.010	0.032	-0.003	0.033	0.060	-0.024
	(0.097)	(0.035)	(0.021)	(0.022)	(0.009)	(0.037)	(0.028)	(0.061)	(0.073)	(0.058)
Outcome at Baseline	0.605	0.510	0.389	0.202	0.081	0.437	0.451	0.478	0.321	0.536
	(0.025)***	(0.021)***	(0.053)***	(0.040)***	(0.046)*	(0.020)***	(0.032)***	(0.018)***	(0.020)***	(0.017)***
Female Child	-0.413	0.024	0.049	0.013	0.011	-0.011	0.018	-0.120	-0.048	-0.027
	(0.081)***	(0.021)	(0.018)***	(0.018)	(0.007)	(0.030)	(0.019)	(0.047)**	(0.049)	(0.044)
Child's age in months	-0.104	-0.006	-0.001	-0.000	0.000	-0.009	-0.005	0.026	0.015	0.050
	(0.010)***	(0.002)***	(0.001)	(0.001)	(0.001)	(0.003)***	(0.002)***	(0.004)***	(0.005)***	(0.005)***
Mother's age	0.011	-0.004	-0.001	-0.000	0.001	-0.002	-0.004	0.003	-0.002	0.006
	(0.004)***	(0.002)**	(0.001)	(0.001)	(0.001)*	(0.002)	(0.002)**	(0.003)	(0.004)	(0.003)*
Muslim mother	-0.053	-0.052	-0.011	-0.029	-0.005	0.031	-0.003	0.032	0.087	0.021
	(0.072)	(0.029)*	(0.017)	(0.019)	(0.007)	(0.029)	(0.025)	(0.045)	(0.054)	(0.049)
Mother's education	0.018	-0.011	-0.005	-0.001	0.000	-0.019	-0.010	0.018	-0.000	0.036
	(0.007)***	(0.003)***	(0.002)**	(0.002)	(0.001)	(0.003)***	(0.003)***	(0.006)***	(0.007)	(0.006)***
Mother is employed	-0.047	-0.026	0.066	0.008	0.006	-0.036	0.067	0.111	0.179	-0.014
	(0.108)	(0.037)	(0.028)**	(0.023)	(0.013)	(0.042)	(0.037)*	(0.079)	(0.085)**	(0.075)
Single parent household	0.080	-0.101	-0.021	0.020	0.011	-0.067	-0.082	0.102	0.043	0.159
	(0.085)	(0.029)***	(0.017)	(0.022)	(0.008)	(0.035)*	(0.023)***	(0.048)**	(0.067)	(0.053)***
Household size	0.030	-0.008	-0.002	0.004	-0.000	-0.009	-0.020	0.009	-0.003	0.028
	(0.014)**	(0.005)	(0.003)	(0.003)	(0.001)	(0.006)	(0.005)***	(0.011)	(0.014)	(0.010)***
# of people in hh ages0-18	-0.035	0.024	0.004	-0.007	0.000	0.020	0.044	-0.024	0.012	-0.067
	(0.023)	(0.009)**	(0.006)	(0.006)	(0.002)	(0.011)*	(0.008)***	(0.018)	(0.021)	(0.019)***
Father present 8+ months	0.022	-0.051	-0.033	-0.015	0.001	-0.033	-0.028	0.128	0.118	0.070
	(0.068)	(0.025)**	(0.016)**	(0.016)	(0.004)	(0.030)	(0.022)	(0.053)**	(0.060)*	(0.052)

Asset index	0.061	-0.021	-0.006	-0.005	-0.004	-0.032	-0.021	0.045	0.011	0.058
	(0.028)**	(0.010)**	(0.006)	(0.006)	(0.003)	(0.012)**	(0.009)**	(0.018)**	(0.023)	(0.021)***
Deaths in hh	-0.205	0.062	0.047	0.004	-0.016	0.133	0.094	-0.176	-0.050	-0.263
	(0.095)**	(0.046)	(0.037)	(0.030)	(0.004)***	(0.048)***	(0.046)**	(0.086)**	(0.099)	(0.077)***
Nat. Disaster affected hh	-0.023	-0.002	-0.000	-0.018	-0.002	-0.017	-0.004	0.035	0.085	-0.040
	(0.075)	(0.024)	(0.014)	(0.016)	(0.007)	(0.027)	(0.022)	(0.049)	(0.060)	(0.048)
Agri. Event affected hh	0.151	0.030	0.007	0.009	0.001	-0.000	-0.000	-0.011	-0.068	0.056
	(0.089)*	(0.024)	(0.014)	(0.016)	(0.007)	(0.029)	(0.021)	(0.041)	(0.049)	(0.046)
Time(min) to C.Clinic	-0.001	0.000	0.000	0.000	0.000	0.000	0.001	-0.001	-0.001	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Constant	21.293	0.531	0.158	0.147	-0.024	0.661	0.335	-1.775	-1.125	-2.138
	(1.009)***	(0.074)***	(0.053)***	(0.055)***	(0.024)	(0.088)***	(0.063)***	(0.149)***	(0.187)***	(0.145)***
N	2425	2424	2424	2393	2393	2406	2406	2424	2393	2406
R^2	0.56	0.24	0.13	0.07	0.03	0.23	0.19	0.43	0.22	0.46
N Trt (end)	1221	1221	1221	1203	1203	1212	1212	1221	1203	1212
N Ctrl (end)	1204	1203	1203	1190	1190	1194	1194	1203	1190	1194
N Trt Females(end)	589	589	589	581	581	584	584	589	581	584
N Ctrl Females(end)	597	597	597	591	591	593	593	597	591	593
p-value Program Impact	0.599	0.032	0.189	0.002	0.105	0.850	0.592	0.000	0.000	0.718
p-value Add.Impact	0.663	0.340	0.184	0.738	0.275	0.384	0.917	0.596	0.411	0.682

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All Controls are at Baseline Values except HH Shocks
Base Category of Mother's Religion is Christian/Buddhist

Table J3. OLS: Impact of Program on Wolke Outcomes by Gender with Union-Demographic-HH Controls (Model 3)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.130	0.110	0.153	0.009	0.040
	(0.088)	(0.090)	(0.098)	(0.082)	(0.100)
Additional Impact on Females	0.128	0.099	0.074	0.099	0.100
	(0.106)	(0.094)	(0.105)	(0.089)	(0.114)
Female Child	-0.107	-0.096	-0.279	-0.072	-0.092
	(0.077)	(0.065)	(0.073)***	(0.057)	(0.078)
Child's age in months	0.046	0.044	-0.016	0.047	0.060
	(0.008)***	(0.008)***	(0.008)**	(0.007)***	(0.010)***
Mother's age	-0.001	0.006	0.007	0.001	0.007
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Muslim mother	-0.257	-0.128	-0.020	-0.175	-0.302
	(0.085)***	(0.102)	(0.110)	(0.090)*	(0.103)***
Mother's education	0.044	0.047	0.031	0.031	0.070
	(0.010)***	(0.011)***	(0.013)**	(0.010)***	(0.015)***
Mother is employed	-0.237	-0.274	-0.073	-0.210	-0.338
	(0.153)	(0.139)*	(0.106)	(0.152)	(0.150)**
Single parent household	0.109	0.130	-0.016	0.093	-0.013
	(0.076)	(0.089)	(0.113)	(0.087)	(0.121)
Household size	0.023	0.058	-0.011	0.059	0.061
	(0.021)	(0.018)***	(0.023)	(0.018)***	(0.028)**
# of people in hh ages0-18	-0.071	-0.132	-0.026	-0.107	-0.148
	(0.030)**	(0.030)***	(0.037)	(0.029)***	(0.039)***
Father present 8+ months	0.150	0.118	0.126	0.101	0.080
	(0.074)**	(0.085)	(0.096)	(0.089)	(0.102)
Asset index	0.064	0.030	0.003	0.061	0.136
	(0.034)*	(0.035)	(0.038)	(0.033)*	(0.044)***
Weight-for-age (z-score)	0.081	0.069	0.048	0.078	0.114
	(0.027)***	(0.026)***	(0.027)*	(0.026)***	(0.036)***
Deaths in hh	0.316	0.219	0.122	0.088	0.332
	(0.114)***	(0.113)*	(0.162)	(0.139)	(0.180)*
Nat. Disaster affected hh	0.083	-0.083	-0.096	-0.089	-0.078
	(0.109)	(0.086)	(0.120)	(0.075)	(0.112)
Agri. Event affected hh	-0.140	-0.008	-0.094	-0.075	-0.102
	(0.114)	(0.084)	(0.103)	(0.074)	(0.110)

Time(min) to C.Clinic	-0.003	-0.000	0.001	-0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	4.914	4.409	2.592	5.002	3.974
	(0.242)***	(0.438)***	(0.314)***	(0.358)***	(0.341)***
N	2423	2423	2423	2423	2423
R^2	0.25	0.18	0.19	0.14	0.14
N Trt (end)	1220	1220	1220	1220	1220
N Ctrl (end)	1203	1203	1203	1203	1203
N Trt Females(end)	588	588	588	588	588
N Ctrl Females(end)	597	597	597	597	597
p-value Program Impact	0.143	0.222	0.121	0.913	0.692
p-value Add.Impact	0.234	0.296	0.484	0.266	0.384

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table J4. ANCOVA OLS: Impact of Program on Bayley Scores by Upazila with Union-Demographic-HH Controls (Model 3)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	3.124	1.643	0.440	0.648
	(0.455)***	(0.343)***	(0.073)***	(0.096)***
Additional Impact in Muladi	1.903	1.019	0.060	0.595
	(1.855)	(1.866)	(0.329)	(0.332)*
Additional Impact in Kulaura	-2.883	-1.567	-0.385	-0.602
	(0.979)***	(0.716)**	(0.155)**	(0.197)***
Muladi	2.411	-1.821	0.539	0.355
	(1.948)	(2.113)	(0.374)	(0.295)
Kulaura	6.566	2.758	0.873	1.362
	(0.995)***	(0.704)***	(0.198)***	(0.180)***
Female Child	0.428	-0.416	0.047	0.108
	(0.334)	(0.248)*	(0.060)	(0.069)
Child's age in months	-0.200	-0.232	-0.076	0.005
	(0.054)***	(0.037)***	(0.009)***	(0.011)
Mother's age	0.096	0.062	0.013	0.020
	(0.038)**	(0.027)**	(0.006)**	(0.008)**
Muslim mother	-0.418	-0.316	-0.127	-0.046
	(0.635)	(0.523)	(0.115)	(0.122)
Mother's education	0.437	0.247	0.066	0.086
	(0.068)***	(0.062)***	(0.014)***	(0.012)***
Mother is employed	-0.173	-0.304	-0.138	0.063
	(0.833)	(0.739)	(0.173)	(0.158)
Single parent household	0.948	1.043	0.129	0.214
	(0.656)	(0.547)*	(0.117)	(0.134)
Household size	0.424	0.384	0.074	0.074
	(0.133)***	(0.098)***	(0.024)***	(0.028)***
# of people in hh ages0-18	-0.861	-0.590	-0.169	-0.129
	(0.184)***	(0.147)***	(0.034)***	(0.038)***
Father present 8+ months	0.835	0.880	0.134	0.150
	(0.569)	(0.430)**	(0.095)	(0.117)
Asset index	0.705	0.508	0.109	0.141
	(0.226)***	(0.172)***	(0.043)**	(0.045)***
Weight-for-age (z-score)	1.087	0.599	0.168	0.222
	(0.149)***	(0.113)***	(0.029)***	(0.028)***
Deaths in hh	0.601	-0.213	0.130	0.104

	(0.801)	(0.484)	(0.126)	(0.186)
Nat. Disaster affected hh	-1.504	-0.866	-0.246	-0.254
	(0.606)**	(0.478)*	(0.097)**	(0.128)*
Agri. Event affected hh	0.758	-0.078	0.168	0.097
	(0.649)	(0.486)	(0.113)	(0.126)
Time(min) to C.Clinic	-0.002	-0.010	-0.001	-0.000
	(0.010)	(0.007)	(0.002)	(0.002)
Outcome at Baseline	0.074	0.063	0.056	0.049
	(0.013)***	(0.009)***	(0.009)***	(0.015)***
Constant	75.534	77.159	6.957	6.080
	(2.039)***	(1.855)***	(0.311)***	(0.370)***
R^2	0.24	0.23	0.22	0.21
N	2420	2420	2420	2420
N Treatment	1219	1219	1219	1219
N Muladi(end)	292	292	292	292
N Mulati Trt(end)	145	145	145	145
N Kulaura(end)	959	959	959	959
N Kulaura Trt(end)	464	464	464	464
p-value Program Impact	0.000	0.000	0.000	0.000
p-value Add.Imp Muladi	0.308	0.587	0.855	0.077
p-value Add. Imp Kulaura	0.004	0.032	0.015	0.003

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.

Table J5. ANCOVA OLS: Impact of Program on Anthropometrics by Upazila with Union-Demographic-HH Controls (Model 3)

	head circumference	Under	very_under	wasted	very_wasted	stunted	very_stunted	waz	whz	haz
Program Impact	0.188	-0.027	-0.043	-0.067	-0.022	0.053	0.028	0.178	0.371	-0.084
	(0.082)**	(0.021)	(0.010)***	(0.009)***	(0.006)***	(0.019)***	(0.019)	(0.037)***	(0.062)***	(0.045)*
Additional Impact in Muladi	-0.453	0.061	0.047	0.053	0.003	-0.028	0.016	-0.128	-0.309	0.007
	(0.167)***	(0.054)	(0.019)**	(0.017)***	(0.012)	(0.044)	(0.023)	(0.089)	(0.104)***	(0.073)
Additional Impact in Kulaura	-0.202	-0.017	0.023	0.042	0.020	-0.074	-0.054	-0.072	-0.270	0.142
	(0.103)*	(0.029)	(0.016)	(0.017)**	(0.009)**	(0.033)**	(0.024)**	(0.050)	(0.083)***	(0.072)*
Muladi	-0.314	-0.048	0.056	-0.039	-0.017	0.045	0.022	-0.001	0.232	-0.150
	(0.385)	(0.070)	(0.021)***	(0.018)**	(0.011)	(0.039)	(0.017)	(0.145)	(0.106)**	(0.106)
Kulaura	0.391	0.089	0.034	0.013	0.006	-0.060	0.037	-0.074	0.015	-0.156
	(0.308)	(0.028)***	(0.034)	(0.030)	(0.011)	(0.052)	(0.034)	(0.069)	(0.102)	(0.116)
Female Child	-0.389	0.041	0.034	0.009	0.006	0.006	0.017	-0.103	-0.014	-0.041
	(0.057)***	(0.018)**	(0.011)***	(0.012)	(0.005)	(0.018)	(0.014)	(0.031)***	(0.037)	(0.028)
Child's age in months	-0.103	-0.007	-0.001	-0.000	0.000	-0.009	-0.006	0.026	0.016	0.050
	(0.010)***	(0.002)***	(0.001)	(0.001)	(0.001)	(0.003)***	(0.002)***	(0.004)***	(0.005)***	(0.005)***
Mother's age	0.012	-0.004	-0.001	-0.000	0.001	-0.002	-0.004	0.003	-0.001	0.006
	(0.004)***	(0.002)**	(0.001)	(0.001)	(0.001)*	(0.002)	(0.002)**	(0.003)	(0.004)	(0.003)*
Muslim mother	-0.062	-0.051	-0.011	-0.028	-0.005	0.030	-0.004	0.030	0.079	0.023
	(0.072)	(0.029)*	(0.017)	(0.019)	(0.007)	(0.028)	(0.025)	(0.045)	(0.054)	(0.048)
Mother's education	0.018	-0.011	-0.005	-0.001	0.000	-0.019	-0.010	0.018	-0.000	0.036
	(0.007)***	(0.003)***	(0.002)**	(0.002)	(0.001)	(0.003)***	(0.003)***	(0.006)***	(0.007)	(0.006)***
Mother is employed	-0.052	-0.025	0.065	0.009	0.007	-0.037	0.064	0.110	0.172	-0.010
	(0.108)	(0.037)	(0.028)**	(0.024)	(0.013)	(0.043)	(0.036)*	(0.078)	(0.084)**	(0.076)
Single parent household	0.077	-0.100	-0.021	0.021	0.011	-0.067	-0.082	0.102	0.041	0.159
	(0.083)	(0.029)***	(0.017)	(0.022)	(0.008)	(0.035)*	(0.023)***	(0.048)**	(0.066)	(0.053)***
Household size	0.032	-0.008	-0.002	0.004	-0.000	-0.009	-0.020	0.010	-0.001	0.028
	(0.014)**	(0.005)	(0.003)	(0.003)	(0.001)	(0.006)	(0.005)***	(0.011)	(0.014)	(0.010)***
# of people in hh ages0-18	-0.038	0.024	0.004	-0.007	0.000	0.019	0.044	-0.025	0.011	-0.067

	(0.023)	(0.009)**	(0.006)	(0.006)	(0.002)	(0.011)*	(0.008)***	(0.018)	(0.021)	(0.019)***
Father present 8+ months	0.019	-0.051	-0.033	-0.015	0.001	-0.034	-0.028	0.127	0.114	0.071
	(0.067)	(0.025)**	(0.017)*	(0.016)	(0.004)	(0.030)	(0.022)	(0.053)**	(0.060)*	(0.052)
Asset index	0.061	-0.021	-0.006	-0.005	-0.004	-0.033	-0.021	0.045	0.010	0.059
	(0.027)**	(0.010)**	(0.006)	(0.006)	(0.003)	(0.012)***	(0.009)**	(0.018)**	(0.023)	(0.021)***
Deaths in hh	-0.186	0.061	0.044	0.001	-0.017	0.136	0.095	-0.169	-0.032	-0.267
	(0.094)*	(0.046)	(0.037)	(0.030)	(0.004)***	(0.048)***	(0.046)**	(0.087)*	(0.100)	(0.077)***
Nat. Disaster affected hh	-0.014	-0.004	-0.001	-0.019	-0.002	-0.017	-0.005	0.038	0.090	-0.040
	(0.074)	(0.024)	(0.014)	(0.016)	(0.007)	(0.027)	(0.021)	(0.050)	(0.057)	(0.047)
Agri. Event affected hh	0.127	0.031	0.010	0.012	0.001	-0.004	-0.001	-0.019	-0.088	0.061
	(0.087)	(0.024)	(0.014)	(0.016)	(0.007)	(0.029)	(0.021)	(0.041)	(0.048)*	(0.046)
Time(min) to C.Clinic	-0.001	0.001	0.000	0.000	0.000	0.000	0.001	-0.001	-0.001	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Outcome at Baseline	0.605	0.509	0.388	0.201	0.080	0.437	0.451	0.478	0.320	0.537
	(0.025)***	(0.021)***	(0.053)***	(0.040)***	(0.046)*	(0.020)***	(0.032)***	(0.018)***	(0.021)***	(0.017)***
Constant	20.893	0.496	0.142	0.073	-0.022	0.796	0.516	-1.744	-0.647	-2.569
	(1.048)***	(0.088)***	(0.047)***	(0.057)	(0.025)	(0.122)***	(0.087)***	(0.145)***	(0.201)***	(0.188)***
R^2	0.57	0.24	0.13	0.07	0.03	0.23	0.19	0.43	0.22	0.46
N	2425	2424	2424	2393	2393	2406	2406	2424	2393	2406
N Treatment	1221	1221	1221	1203	1203	1212	1212	1221	1203	1212
N Muladi(end)	293	293	293	286	286	291	291	293	286	291
N Mulati Trt(end)	145	145	145	139	139	143	143	145	139	143
N Kulaura(end)	961	960	960	944	944	949	949	960	944	949
N Kulaura Trt(end)	465	465	465	457	457	461	461	465	457	461
p-value Program Impact	0.025	0.195	0.000	0.000	0.001	0.007	0.159	0.000	0.000	0.063
p-value Add.Imp Muladi	0.008	0.260	0.017	0.003	0.776	0.531	0.475	0.154	0.004	0.924
p-value Add. Imp Kulaura	0.053	0.563	0.153	0.018	0.033	0.027	0.027	0.156	0.002	0.053

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All Controls are at Baseline Values except HH Shocks
Base Category of Mother's Religion is Christian/Buddhist

Table J6. Simple Post OLS: Impact of Program on Wolke Outcomes by Upazila with Union-Demographic-HH Controls (Model 3)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.270	0.086	0.135	0.021	-0.050
	(0.099)***	(0.069)	(0.102)	(0.093)	(0.109)
Additional Impact in Muladi	0.316	0.615	0.324	0.237	0.762
	(0.144)**	(0.187)***	(0.249)	(0.132)*	(0.154)***
Additional Impact in Kulaura	-0.288	-0.004	0.038	0.019	0.117
	(0.144)**	(0.159)	(0.170)	(0.161)	(0.172)
Muladi	0.859	1.323	-0.771	1.613	0.491
	(0.125)***	(0.168)***	(0.206)***	(0.236)***	(0.241)**
Kulaura	1.614	1.426	-1.190	1.786	0.906
	(0.172)***	(0.388)***	(0.205)***	(0.350)***	(0.236)***
Female Child	-0.040	-0.046	-0.242	-0.022	-0.043
	(0.054)	(0.046)	(0.052)***	(0.044)	(0.060)
Child's age in months	0.045	0.042	-0.017	0.047	0.059
	(0.008)***	(0.007)***	(0.008)**	(0.007)***	(0.010)***
Mother's age	-0.001	0.006	0.006	0.000	0.007
	(0.006)	(0.006)	(0.007)	(0.006)	(0.007)
Muslim mother	-0.256	-0.117	-0.012	-0.168	-0.286
	(0.086)***	(0.102)	(0.110)	(0.091)*	(0.103)***
Mother's education	0.043	0.046	0.031	0.030	0.069
	(0.010)***	(0.011)***	(0.013)**	(0.010)***	(0.015)***
Mother is employed	-0.243	-0.270	-0.067	-0.203	-0.329
	(0.152)	(0.140)*	(0.106)	(0.153)	(0.152)**
Single parent household	0.112	0.134	-0.013	0.095	-0.008
	(0.076)	(0.089)	(0.113)	(0.087)	(0.121)
Household size	0.023	0.056	-0.012	0.059	0.058
	(0.021)	(0.018)***	(0.023)	(0.018)***	(0.028)**
# of people in hh ages0-18	-0.070	-0.129	-0.025	-0.106	-0.146
	(0.030)**	(0.031)***	(0.037)	(0.029)***	(0.039)***
Father present 8+ months	0.149	0.120	0.128	0.102	0.083
	(0.073)**	(0.085)	(0.096)	(0.089)	(0.101)
Asset index	0.062	0.028	0.002	0.060	0.134
	(0.034)*	(0.034)	(0.038)	(0.033)*	(0.044)***
Weight-for-age (z-score)	0.080	0.069	0.049	0.078	0.114
	(0.028)***	(0.026)***	(0.026)*	(0.026)***	(0.035)***

Deaths in hh	0.316	0.202	0.112	0.082	0.307
	(0.113)***	(0.112)*	(0.160)	(0.137)	(0.180)*
Nat. Disaster affected hh	0.075	-0.097	-0.104	-0.094	-0.094
	(0.110)	(0.086)	(0.120)	(0.074)	(0.108)
Agri. Event affected hh	-0.139	0.013	-0.083	-0.068	-0.072
	(0.116)	(0.082)	(0.103)	(0.072)	(0.107)
Time(min) to C.Clinic	-0.003	-0.000	0.001	-0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	3.382	3.014	3.779	3.202	3.075
	(0.217)***	(0.252)***	(0.318)***	(0.240)***	(0.357)***
R^2	0.25	0.18	0.19	0.14	0.14
N	2423	2423	2423	2423	2423
N Treatment	1220	1220	1220	1220	1220
N Muladi(end)	293	293	293	293	293
N Mulati Trt(end)	145	145	145	145	145
N Kulaura(end)	959	959	959	959	959
N Kulaura Trt(end)	464	464	464	464	464
p-value Program Impact	0.008	0.214	0.187	0.819	0.649
p-value Add.Imp Muladi	0.032	0.002	0.198	0.077	0.000
p-value Add. Imp Kulaura	0.049	0.982	0.823	0.904	0.499

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Table J7. ANCOVA OLS: Impact of Program on Bayley Scores by Bayley Baseline Status with Union-Demographic-HH Controls (Model 3)

	lang_comp	cog_comp	exp_scale	rec_scale
Program Impact	2.459	1.045	0.332	0.524
	(0.522)***	(0.365)***	(0.083)***	(0.106)***
Additional Impact on At Risk/Emerging Bayley	-1.986	0.659	-0.290	-0.374
	(1.217)	(0.922)	(0.198)	(0.251)
At Risk or Emerging in Cog/Rec/Exp Test	-0.504	-0.851	-0.236	-0.121
	(0.782)	(0.561)	(0.117)**	(0.169)
Female Child	0.404	-0.432	0.040	0.103
	(0.340)	(0.247)*	(0.060)	(0.070)
Child's age in months	-0.200	-0.234	-0.078	0.005
	(0.055)***	(0.038)***	(0.009)***	(0.011)
Mother's age	0.098	0.063	0.013	0.020
	(0.038)**	(0.027)**	(0.006)**	(0.008)**
Muslim mother	-0.376	-0.293	-0.115	-0.042
	(0.645)	(0.522)	(0.115)	(0.125)
Mother's education	0.440	0.250	0.066	0.086
	(0.069)***	(0.063)***	(0.014)***	(0.012)***
Mother is employed	-0.029	-0.230	-0.118	0.093
	(0.851)	(0.750)	(0.176)	(0.162)
Single parent household	0.936	1.055	0.135	0.209
	(0.654)	(0.549)*	(0.118)	(0.133)
Household size	0.424	0.380	0.073	0.073
	(0.132)***	(0.097)***	(0.024)***	(0.028)***
# of people in hh ages0-18	-0.862	-0.589	-0.166	-0.129
	(0.178)***	(0.146)***	(0.033)***	(0.037)***
Father present 8+ months	0.840	0.908	0.139	0.151
	(0.569)	(0.431)**	(0.096)	(0.117)
Asset index	0.736	0.509	0.113	0.146
	(0.228)***	(0.171)***	(0.043)**	(0.045)***
Weight-for-age (z-score)	1.075	0.591	0.163	0.217
	(0.149)***	(0.110)***	(0.029)***	(0.027)***
Deaths in hh	0.616	-0.241	0.121	0.112
	(0.787)	(0.491)	(0.124)	(0.183)
Nat. Disaster affected hh	-1.430	-0.837	-0.243	-0.233
	(0.586)**	(0.458)*	(0.094)**	(0.124)*

Agri. Event affected hh	0.822	-0.059	0.192	0.102
	(0.644)	(0.477)	(0.112)*	(0.125)
Time(min) to C.Clinic	-0.002	-0.010	-0.001	-0.000
	(0.010)	(0.007)	(0.002)	(0.002)
Outcome at Baseline	0.055	0.060	0.034	0.035
	(0.014)***	(0.009)***	(0.011)***	(0.015)**
Constant	82.810	79.711	7.948	7.321
	(2.047)***	(1.789)***	(0.286)***	(0.368)***
R^2	0.24	0.23	0.22	0.21
N	2420	2420	2420	2420
N Treatment	1219	1219	1219	1219
N AtRisk/Emrg	321	321	321	321
N AtRisk/Emrg Treat	154	154	154	154
Program Impact	0.000	0.005	0.000	0.000
Add. Impact AtRisk/Emrg	0.107	0.477	0.148	0.141

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.

Table J8. ANCOVA OLS: Impact of Program on Anthropometrics by Bayley Baseline Status with Union-Demographic-HH Controls (Model 3)

	head circumference	Under weight	Severely under weight	wasted	Severely wasted	stunted	Severely stunted	waz	whz	haz
Program Impact	0.065	-0.029	-0.030	-0.043	-0.017	0.013	0.006	0.144	0.233	-0.025
	(0.056)	(0.014)**	(0.008)***	(0.009)***	(0.005)***	(0.017)	(0.012)	(0.024)***	(0.044)***	(0.036)
Additional Impact on At Risk/Emerging Bayley	-0.101	0.022	0.016	-0.009	0.026	0.066	0.024	-0.085	-0.049	-0.021
	(0.125)	(0.050)	(0.035)	(0.039)	(0.014)*	(0.048)	(0.046)	(0.095)	(0.124)	(0.088)
At Risk or Emerging in Cog/Rec/Exp Test	-0.041	0.022	0.010	0.012	-0.018	0.047	0.036	-0.010	0.003	-0.076
	(0.109)	(0.038)	(0.026)	(0.034)	(0.009)*	(0.038)	(0.030)	(0.070)	(0.093)	(0.051)
Female Child	-0.396	0.042	0.035	0.009	0.006	0.006	0.016	-0.104	-0.018	-0.040
	(0.057)***	(0.018)**	(0.011)***	(0.012)	(0.005)	(0.019)	(0.014)	(0.031)***	(0.037)	(0.028)
Child's age in months	-0.104	-0.006	-0.001	-0.000	0.000	-0.009	-0.005	0.026	0.015	0.049
	(0.010)***	(0.002)***	(0.001)	(0.001)	(0.001)	(0.003)***	(0.002)***	(0.004)***	(0.005)***	(0.005)***
Mother's age	0.011	-0.004	-0.001	-0.000	0.001	-0.002	-0.004	0.003	-0.002	0.006
	(0.004)***	(0.002)**	(0.001)	(0.001)	(0.001)*	(0.002)	(0.002)**	(0.003)	(0.004)	(0.003)*
Muslim mother	-0.052	-0.051	-0.012	-0.029	-0.005	0.032	-0.003	0.033	0.089	0.020
	(0.072)	(0.029)*	(0.017)	(0.018)	(0.007)	(0.029)	(0.025)	(0.045)	(0.054)	(0.049)
Mother's education	0.018	-0.010	-0.005	-0.001	0.000	-0.019	-0.010	0.018	-0.001	0.036
	(0.007)***	(0.003)***	(0.002)**	(0.002)	(0.001)	(0.003)***	(0.003)***	(0.006)***	(0.007)	(0.006)***
Mother is employed	-0.045	-0.024	0.064	0.007	0.006	-0.033	0.067	0.113	0.183	-0.016
	(0.108)	(0.037)	(0.028)**	(0.024)	(0.013)	(0.042)	(0.036)*	(0.078)	(0.084)**	(0.075)
Single parent household	0.079	-0.101	-0.021	0.020	0.012	-0.067	-0.083	0.102	0.043	0.160
	(0.085)	(0.029)***	(0.018)	(0.022)	(0.008)	(0.035)*	(0.023)***	(0.049)**	(0.067)	(0.053)***
Household size	0.029	-0.007	-0.002	0.004	-0.000	-0.009	-0.020	0.009	-0.003	0.027
	(0.014)**	(0.005)	(0.003)	(0.003)	(0.001)	(0.006)	(0.005)***	(0.011)	(0.014)	(0.010)**
# of people in hh ages0-18	-0.033	0.023	0.003	-0.008	0.000	0.017	0.043	-0.023	0.012	-0.065
	(0.023)	(0.009)**	(0.006)	(0.006)	(0.002)	(0.011)	(0.008)***	(0.018)	(0.021)	(0.019)***
Father present 8+ months	0.023	-0.052	-0.033	-0.015	0.002	-0.034	-0.029	0.128	0.118	0.072
	(0.068)	(0.025)**	(0.017)*	(0.016)	(0.005)	(0.030)	(0.022)	(0.053)**	(0.060)*	(0.052)
Asset index	0.061	-0.021	-0.006	-0.005	-0.004	-0.032	-0.021	0.045	0.010	0.058
	(0.027)**	(0.010)**	(0.006)	(0.007)	(0.003)	(0.012)**	(0.009)**	(0.018)**	(0.024)	(0.021)***
Deaths in hh	-0.205	0.063	0.047	0.004	-0.017	0.134	0.095	-0.175	-0.049	-0.265
	(0.095)**	(0.046)	(0.037)	(0.030)	(0.004)***	(0.048)***	(0.045)**	(0.086)**	(0.099)	(0.077)***
Nat. Disaster affected hh	-0.023	-0.002	-0.000	-0.018	-0.002	-0.017	-0.004	0.035	0.085	-0.040

	(0.074)	(0.024)	(0.014)	(0.016)	(0.007)	(0.028)	(0.022)	(0.050)	(0.060)	(0.049)
Agri. Event affected hh	0.153	0.028	0.007	0.009	0.001	-0.003	-0.002	-0.010	-0.068	0.059
	(0.088)*	(0.024)	(0.014)	(0.016)	(0.007)	(0.029)	(0.021)	(0.041)	(0.049)	(0.046)
Time(min) to C.Clinic	-0.001	0.001	0.000	0.000	0.000	0.000	0.001	-0.001	-0.001	-0.001
	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Outcome at Baseline	0.603	0.507	0.386	0.201	0.080	0.431	0.447	0.476	0.320	0.533
	(0.025)***	(0.021)***	(0.052)***	(0.040)***	(0.046)*	(0.021)***	(0.032)***	(0.018)***	(0.020)***	(0.017)***
Constant	21.385	0.516	0.164	0.148	-0.019	0.640	0.328	-1.781	-1.142	-2.118
	(1.004)***	(0.076)***	(0.055)***	(0.054)***	(0.024)	(0.084)***	(0.062)***	(0.145)***	(0.186)***	(0.144)***
R^2	0.56	0.24	0.13	0.07	0.03	0.23	0.19	0.43	0.22	0.46
N	2425	2424	2424	2393	2393	2406	2406	2424	2393	2406
N Treatment	1221	1221	1221	1203	1203	1212	1212	1221	1203	1212
N AtRisk/Emrg	323	322	322	311	311	316	316	322	311	316
N AtRisk/Emrg Treat	155	155	155	146	146	150	150	155	146	150
Program Impact	0.252	0.050	0.000	0.000	0.001	0.451	0.636	0.000	0.000	0.490
Add. Impact AtRisk/Emrg	0.421	0.667	0.651	0.824	0.060	0.167	0.607	0.375	0.695	0.811

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All Controls are at Baseline Values except HH Shocks
Base Category of Mother's Religion is Christian/Buddhist

Table J9. OLS: Impact of Program on Wolke Outcomes by Bayley Baseline Status with Union-Demographic-HH Controls (Model 3)

	Approach	Emotion	Activity	Cooperation	Vocalization
Program Impact	0.180	0.168	0.146	0.074	0.097
	(0.071)**	(0.073)**	(0.086)*	(0.072)	(0.083)
Additional Impact on At Risk/Emerging Bayley	0.061	-0.095	0.336	-0.154	-0.116
	(0.159)	(0.176)	(0.202)*	(0.176)	(0.201)
At Risk or Emerging in Cog/Rec/Exp Test	-0.294	-0.166	-0.091	-0.154	-0.379
	(0.107)***	(0.109)	(0.098)	(0.097)	(0.121)***
Female Child	-0.045	-0.048	-0.239	-0.024	-0.045
	(0.054)	(0.047)	(0.053)***	(0.043)	(0.061)
Child's age in months	0.044	0.043	-0.016	0.046	0.058
	(0.008)***	(0.008)***	(0.008)**	(0.007)***	(0.010)***
Mother's age	-0.001	0.006	0.007	0.001	0.008
	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)
Muslim mother	-0.253	-0.125	-0.017	-0.171	-0.298
	(0.086)***	(0.102)	(0.110)	(0.091)*	(0.103)***
Mother's education	0.043	0.046	0.032	0.030	0.069
	(0.010)***	(0.011)***	(0.013)**	(0.010)***	(0.015)***
Mother is employed	-0.230	-0.269	-0.067	-0.205	-0.334
	(0.155)	(0.140)*	(0.107)	(0.152)	(0.152)**
Single parent household	0.117	0.133	-0.011	0.096	-0.006
	(0.076)	(0.089)	(0.113)	(0.088)	(0.121)
Household size	0.022	0.057	-0.011	0.058	0.058
	(0.021)	(0.018)***	(0.023)	(0.018)***	(0.028)**
# of people in hh ages0-18	-0.066	-0.128	-0.028	-0.102	-0.139
	(0.030)**	(0.030)***	(0.036)	(0.028)***	(0.039)***
Father present 8+ months	0.157	0.121	0.130	0.104	0.088
	(0.074)**	(0.086)	(0.096)	(0.090)	(0.102)
Asset index	0.061	0.029	0.001	0.060	0.133
	(0.034)*	(0.034)	(0.038)	(0.032)*	(0.043)***
Weight-for-age (z-score)	0.072	0.061	0.052	0.069	0.098
	(0.027)***	(0.026)**	(0.026)**	(0.026)***	(0.035)***
Deaths in hh	0.311	0.217	0.120	0.086	0.324
	(0.112)***	(0.112)*	(0.162)	(0.137)	(0.181)*
Nat. Disaster affected hh	0.083	-0.083	-0.097	-0.088	-0.076

	(0.108)	(0.085)	(0.120)	(0.075)	(0.112)
Agri. Event affected hh	-0.134	-0.003	-0.099	-0.069	-0.089
	(0.113)	(0.083)	(0.102)	(0.072)	(0.107)
Time(min) to C.Clinic	-0.003	-0.000	0.001	-0.000	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Constant	4.914	4.404	2.574	4.996	4.000
	(0.238)***	(0.432)***	(0.299)***	(0.353)***	(0.336)***
R^2	0.25	0.18	0.19	0.15	0.15
N	2423	2423	2423	2423	2423
N Treatment	1220	1220	1220	1220	1220
N AtRisk/Emrg	321	321	321	321	321
N AtRisk/Emrg Treat	154	154	154	154	154
Program Impact	0.013	0.025	0.092	0.309	0.249
Add. Impact AtRisk/Emrg	0.701	0.593	0.099	0.385	0.565

Clustered standard errors in parentheses. * $p<0.1$ ** $p<0.05$; *** $p<0.01$.
All controls are at baseline values except HH Shocks
Base category of mother's religion is Hindu+Christian+Buddhist
Effect Size is calculated by standardizing outcome using endline mean and standard deviation

Appendix K: Summary of Focus Group Discussions

Control Area's Fathers

Receiving the Materials

1. How did you learn about the ECSP?

Only one participating father from the control area in Kulaura heard about the program. This particular father visited a treatment area where a relative's house was located. In that area an ECSP (Early Child Stimulation Program) was being conducted and books were being given out. The relative's household received the ECSP materials, and the father participant could learn about these materials while his stay there (i.e. his relative's home). Two father participants from Satkania claimed to have also heard about the ECSP from their respective relatives, but the field team is not confident about this claim. This is because their (the two fathers') statements regarding the Early Child Stimulation Program were a bit ambiguous.

Parent's Knowledge

2. Do you think playing with your child is important? If yes, why? If no, why not?

The importance of playing with children are felt and expressed by all participating fathers in the control group (from the two sub districts of Kulaura and Satkania). They said that children learn a lot through playing. One father stated that if a child plays a lot, then he remains healthy. Also a child gets hungry fast when he plays a lot; this helps him to eat properly. One father stated: "health is the key to all happiness."

3. Do you think talking to your child is important? If yes, why? If no, why not?

4. Do you think singing or telling story to your child is important? If yes, why? If no, why not?

The summary of the answers for questions 3 and 4 are as follows: all control group father participants think that singing songs and telling stories to the children are good things. If they (i.e. the children) are not talked to, they will not learn how to speak. When songs are sung to

children and stories are told to them, they remain happy. Young children fall asleep faster when songs are sung to them. Also, children learn to talk at an earlier age when stories are told to them. One father participant from Kulaura stated that it is not good to talk too much with the child; talking too much with him would make him talkative.

5. Do you think reading to your child is important? If yes, why? If no, why not?

According to the participant fathers in the control group, when a child is 3-4 years old, reading books to him or showing him picture books are good activities. He (i.e. the child) learns a lot if picture books are given to him, or if other rhyme books are read to him. For example, a child can learn about materials, things, names of different types of animals from picture and rhyme books. Two participants stated that children can learn about alphabets, and different things present in their environment from picture books and children's primary books. Regarding children reading by themselves, two father participants from Kulaura have said that children should not read before 3 years of age. They believe that children below the age of 3 years would experience a lot of stress upon their brains if they read at that age.

Parent's Behavior

6. What activities do you do with your child (beyond basic caregiving)?

For earning a livelihood, father participants go off to work in the morning and come back to their houses in the evening or at night. Thus, they cannot spend enough time with their children. If the father participants get time, they play with their children, converse with them and take them out to visit different places. A few father participants from Kulaura have said that they allow their children to hear songs from their cell phones and show them photos from their phones. Also, some of the fathers from Kulaura teach their children about family relations, for example who the children's aunts, uncles, grandparents, etc. are. Sometimes the father participants of the control group buy toys for their children, and sometimes they take them (i.e. the children) out for rickshaw rides.

7. Do you play with your child? How do you play with your child?

The control group father participants (from the two sub districts of Kulaura and Satkania) usually do not get enough time to play with their children. If they get some time, they play with their children. They buy the children bats, balls, dolls, flutes, and balloons from the markets. All the father participants of this group (i.e. control) have said that their children (of the age range zero-three and half years) play with their brothers and sisters, and the neighborhood children. The younger ones in this age group play with their mothers.

8. Do you talk to your child? What do you talk?

In Kulaura, some of the father participants asked the children: 'what have you eaten?,' 'what have you done all day?,' 'what is your name?,' 'what is your father's name?,' etc. In Satkania, 2 father participants teach the children names of different body parts, names of different animals, and ask them how animals make noises.

9. Do you sing or tell story to your child? What do you sing?

If they find time, the father participants of the control group (from the two sub-districts of Satkania and Kulaura) tell stories and sing songs to the children. A father participant by the name of Luqman stated that he creates scary ghost stories and tells them to his child. Another father participant stated that he tells stories about animals to his children; while another said that he sings 'ghazal' songs to his child. Some father participants have said that these sorts of activities are done by the children's mothers. Children of some of the participants are made to hear songs from the television and from cell phones.

10. Do you read anything to your child? What do you read to your child?

Three out of eight participants said that if they find time, they read alphabet books and rhyme books to their children. Through the discussions it could be understood that the father participants of the control group are not too keen on teaching the children. They are busy in their workplaces throughout the day, and so they do not get much time to read books to their children. Also some of the father participants in Satkania in the control group think that it is the duty of the mothers to teach and read. Some think that the children would learn how to read in the future when they grow up and go to schools or madrassas (Islamic schools).

Two father participants from the control group have stated that there are no separate books for little children under three; while 2 fathers in Kulaura have stated that their children sit with the older siblings to study.

Treatment Area's Fathers

Receiving the materials

1. How did you learn about the ECSP (Early Child Stimulation Program)?

The father participants of the treatment group heard about Early Child Stimulation Program (ECSP), as can be expected; however, the mothers of the treatment areas deal with ECSP. Some of these mothers have stated that they heard about the ECSP when they took their children to the Community Clinics (CCs) for getting medicine or when they took their children to the vaccination centers.

In Muladi out of 8 father participants, 5 heard from their wives, and 3 from service providers. Out of 8 participating fathers in Satkania, 7 heard from their respective wives and 1 from service providers. While in Kulaura, out of 8 father participants, 4 heard from their wives and 4 from service providers.

2. How did you receive the ECSP materials?

21 participants in the treatment group stated that they got the ECSP materials. One participant from Satkania was not sure whether he had gotten these materials, and 2 (also from Satkania) said that they did not receive the books. The ECSP materials were given to the father participants by the following kinds of service providers: Community Healthcare Providers, Health Assistants and Family Welfare Assistants (FWAs).

In Muladi, 5 participants obtained the ECSP materials from the Community Healthcare Provider (CHCP), and 3 from HA and FWA during home-visits and/or EPI program. In Satkania, 4 father participants received the materials from the CHCP, 1 from a HA during an EPI program. While in Kulaura, 6 participants got the materials from the CHCP, 2 from the HA or/and FWA during a home-visit or/and EPI program.

3. Did the [service provider] go over the material with you, when you received them?

In most cases, in all the three sub-districts, the wives of the participants received the materials from the service providers. However, in some cases the fathers received the materials. When giving the materials to the father participants, the service providers told them and their wives the procedures of using the ECSP materials and the benefits of using these materials.

4. Did the [service provider] provide counselling about Early Childhood Stimulation when giving the materials? If yes, do you remember what they told you?

One participant father of the treatment group stated that he received counselling; 4 participant fathers said that they did not and 3 stated that they did not receive the materials.

The time period from 0 to 3 years is very important for a child. 80% of a person's cognitive intelligence develops by 3 years of age. It is thus important to take care of the child up to that age. These materials have to be taught to the child every day for 10 to 15 minutes. New toys should be given to the child and one cannot behave badly with the child. Songs have to be sung to the child, and stories have to be told to him. The child has to be introduced to various new things. If the mother is busy at work; then the father has to give time to the child.

In the context of this question, there is no new information from the field team regarding differences that can be stated when comparing the three sub-districts.

Using the materials

5. How did you use the materials?

Two father participants from Kulaura use the materials with the children every day. There has been an error in the data entry by the field team regarding a particular subset of wives of participants in the treatment group. This subset consists of wives of participants who have received the materials and who have claimed to use these materials every day. In the answer previously given by them (i.e. the field team), they said that the total number of women in this subset was 5; but this is incorrect as the team acknowledges.

In Kulaura, 2 father participants have said that they themselves use the materials. 6 have said that their wives use these materials, 20-25 minutes a day. In Satkania, 5 participants have said that their wives use these materials 20-25 minutes a day. While in Muladi, all participants' wives use the materials 10-15 minutes every day. Sometimes fathers and mothers sit together to go through the materials with the children.

6. If you received them, but haven't used them, please tell us why.

All the participants from Kulaura, Satkania and Muladi who received the materials used the materials with their children.

7. If you received them, used them for a while but stop using them, please tell us why.

In all the three sub-districts, those (majority of the father participants) who received the materials are still continuing to use them. However, since the books are a bit old now, the enthusiasm of these participant fathers has decreased for the books. One father has stated that the child has torn the books that were given, and thus the books cannot be used by the child anymore. Almost all fathers have said that it would have been better if new toys and materials were given to the children.

8. Did someone talk to you about the ECSP messages? Who? Where?

Majority of the father participants of Muladi, Satkania and Kulaura have heard about the ECSP messages from their wives. Some have heard from service providers like CHCPs (in the Community Clinic); HAs and FWAs (when HAs and FWAs visited the participants' houses).

9. What did he/she tell you regarding ECSP?

As has been already mentioned in answer 8, most of the father participants in all the three sub-districts have heard about the ECSP messages from their wives, while some heard from the service providers. When talking about these messages, the wives have usually said that the children's cognitive intelligence increases because of using the ECSP messages.

Regarding the ECSP materials, some Health Assistants have spoken to the father participants of the treatment group. Some of the issues that the HAs talked about are as follows: Using the book will increase the child's cognitive intelligence and benefit the child a lot. The ECSP materials should be used with the child 20-25 minutes, every day. Every day songs will have to be sung to the child, poems have to be recited him, and new things have to be introduced to him. The child needs to be taken out to different places, and has to be spoken to a lot.

10. What do you think about the ECS (Early Child Stimulation) materials?

The ECS program is quite beneficial for the children in the targeted age category of 0-3 and half years according to majority of the participating fathers in the treatment group. Only a few fathers have stated that they cannot say anything about the ECS program. The ECS materials have helped the parents understand better how to take care of the child. Some father participants from Kulaura and Muladi have said that the ECS materials help to take care of the mothers and the children in their wombs during pregnancy periods.

Parents' Knowledge

11. What have you learned from the ECSP materials and/or service providers' visits?

Majority of the fathers have said that they have learned a lot about how the child's cognitive development takes place through these materials. For example, they learned that the child has to be talked to a lot, played with a lot and needs to be taken out often. He has to be introduced to new things; and songs have to be sung to him. The child cannot be conversed with in an angry manner, and child cannot be hit when he is crying. He has to be made to understand about things taught to him through affection and care.

In Muladi, the father participants have come to know that the children have to be given new toys. These toys can be made at home. They concurred that the parents cannot be angry at the children. A few participants in Kulaura have said that by the age of 3, 80% of a person's cognitive development occurs. During pregnancy if a mother is taken care of properly, then the child's cognitive development is positively affected.

12. Do you think playing with your child is important? If yes, why? If no, why not?

Almost all father participants in this group (i.e. treatment) have answered 'yes,' to this question. Playing helps the child remain physically healthy and also helps him increase his cognitive skills. Some fathers from Muladi said that through playing, father and child's distance decreases and it also makes it easier to associate with other family members. While a few fathers from Kulaura stated that playing with the children help them (i.e. the children) to associate better with the other children in the vicinity.

13. Do you think talking with your child is important? If yes, why? If no, why not?

According to majority of the participant fathers of the treatment group, it is important to talk to the child. Through talking the child's language skills improve and he learns more. Some father participants in Kulaura have stated that the improved language skills allow the child to tell others about his needs and wants; as a result it becomes easier to take care of the child. A few participating fathers in Muladi have said that the child becomes more capable of adjusting to new environments when he is conversed with.

14. Do you think singing or telling story to your child is important? If yes, why? If no, why not?

Few father participants in the treatment group have said that it is important to sing to the child. Whenever these fathers get time, they try to sing to the child. However, majority of the father participants in this group (i.e. treatment) have stated that they do not have enough time to spend with their children to sing songs or tell stories to them. Instead mothers spend a lot of time with the children.

In Kulaura some father participants said that in this day and age children are more enthusiastic about cells phones and television shows. Some fathers in Satkania have said that singing or telling stories to children help the children to stay more cheerful, and also they cry less when these activities are performed with them. In Muladi, a few participant fathers have said that these things help to strengthen the memories of the children; and also these things help to improve the relationships between the children and their parents.

15. Do you think reading to your child is important? If yes, why? If no, why not?

In the viewpoint of most of the father participants in this group (i.e. treatment), it is important to read a lot to the children. They have said that if children of this age range (0-3 and half years) are read to, they will remember more and their enthusiasm to read will increase. The children's enthusiasm to read will remain with them as they grow up, and this is important for their future. Some of the participant fathers have stated that because of lack of time available to them, they cannot read to their children.

Some information regarding the importance of reading to children (i.e. pertinent to answer 15) has already been presented in answer 14.

Parents' Behavior

16. What activities do you do with your child (beyond basic care giving)?

As has been already mentioned, owing to their large work-loads majority of the father participants in the treatment group have stated, they do not get enough time to spend with their children. Whenever these fathers get time to play, they do so (i.e. play) with the children. The mothers of the children and other family members also play with them (i.e. the children).

Other than playing, sometimes father participants do some other activities. A few of the fathers from Satkania have said that they involve their children in small household chores and teach them counting. They include telling stories to their children; making the children hear songs in their cell phones; taking them (i.e. the children) to the stores; taking them to the market places (bazars), and teaching them how to draw with pens. Some father participants in Kulaura said that they take their children to the crop fields, and teach them how to draw with pens.

17. Do you play with your child? How do you play with your child?

The answer by the father participants of Satkania, Muladi and Kulaura for question 17 was more or less the same as the response for question 16.

18. Do you talk to your child? What do you talk?

Majority of the father participants in the treatment group from all the three sub-districts have said that they talk to their children when they are at home. They teach the children names of different things, names of their relatives, and names of different animals. There is a perception that exists amongst some of these participants that children can remember things at this young age. Some father participants ask questions on various matters to their children: (i) "Did you eat?" (ii) "How are you?" (iii) "What is the name of your village?" (iv) Pictures in ECS materials are shown to the children and fathers ask them: (a) "What is this (referring to certain pictures in the ECS materials)?" (b) "What is going on in this picture?" etc.

19. Do you sing or tell stories to your child? What do you sing?

The answer given for this question (i.e. 19) by the father participants in this group (i.e. treatment) in Muladi, Kulaura and Satkania was quite similar as the response given for question 17.

20. Do you read anything to your child? What do you read to your child?

The answer for question 20 by the father participants from all the three districts was almost identical to the answer given for question 18.

21. Have the early child stimulation materials changed the way you interact with your child, including how you play and communicate with them? If so, why? If not, why not?

The majority of the father participants from Muladi, Satkania and Kulaura in the treatment group have stated they do not know about early child stimulation needs.

Few fathers stated that they hear their children with proper attention when the children speak with them (i.e. the father participants). The fathers play with their children, converse with them and do not beat the children in any circumstance. Thus their relationships with the children have improved.

Empowerment

22. How do you think the services, related ECD that were provided to you, could be improved?

When preparing the first report, the field team stated that this question was part of the Treatment Area's fathers' section. However, they have confirmed afterwards that they were at error regarding this matter. This particular question was not asked to the treatment area's father participants.

Control Area's Mothers

Receiving the Materials

1. How did you learn about the ECSP?

All mother participants from the control group, except one in Satkania, did not know about the program. The one mother participant heard about the program from a relative.

Parent's Knowledge

2. Do you think playing with your child is important? If yes, why? If no, why not?

Each participating mother in the control group has stated that it is very important to play with the child. In Muladi, few mother participants have said that playing is beneficial for the child's physical health. Playing helps children develop both mentally and physically. Through playing the child learns a lot, including names of different things. Also he (i.e. the child) cries less because of playing.

3. Do you think talking to your child is important? If yes, why? If no, why not?

Regarding talking to the child, all mother participants think it is very important to talk with the child. Talking more with the child allows him to be able to learn speaking at an earlier age. It is important to teach children names of different things, animals, fruits, flowers, etc. Some mother participants in Satkania have stated that through conversing, the children learn to identify their relatives better.

4. Do you think singing or telling story to your child is important? If yes, why? If no, why not?

According to all the participant mothers in the control group of Muladi and Satkania, it is very important to tell stories to the children and sing songs to them. The child stays calm if he is told a story or a song is sung to him. Telling stories and singing songs to the children are quite helpful tools when they are eating, or are trying to fall asleep. Children cry less, eat well, and stay calm if songs are sung to them; they also fall asleep faster when they are sung to.

5. Do you think reading to your child is important? If yes, why? If no, why not?

The mother participants have said that when the child has learned to read, it is very important to read to him at that time. This is because at that time he has more attention span while materials are being read out to him. Also, a child who learns how to read is able to remember things read out to him. The participating mothers have further stated that if a child is read to from a young age, he grows a keen interest and enthusiasm towards reading. In Satkania, all the mother participants think that the children should be taught to read when they (i.e. the children) are old enough to go to school, and not before this age.

Parent's Behavior

6. What activities do you do with your child (beyond basic caregiving)?

After speaking to the participant mothers in the control group of the two sub-districts (Muladi and Satkania), it has been found that they sing to their children and tell stories to them. Sometimes the mother or other family members take them (i.e. their children) out to visit places like a relative's house or the village market-place.

7. Do you play with your child? How do you play with your child?

Participating mothers of both the two sub-districts have stated that whenever they get an opportunity, they try to play with their children. The children are usually interested to play with balls, dolls, toy utensils and other play materials. Most of the time the children like to play with other children in their neighborhoods.

8. Do you talk to your child? What do you talk?

From the control group, all mother participants of Mualdi and Satkania have said that they talk to their children. When mothers are working in the house, they usually interact with them (i.e. the children). For example, the mothers converse with the children and sometimes ask them different questions like: 'what are you they doing?' 'What would you like to eat?' and more. Such conversations enable the child to learn about a lot of matters.

9. Do you sing or tell story to your child? What do you sing?

Few of the participating mothers from the two sub-districts of Satkania and Muladi have stated that they sing to their children and tell stories to them. However, the majority of the mother participants have said that because of different household works, they (the mothers) do not have time to sing to their children or tell stories to them. Amongst the few that do sing or tell stories, they do so during feeding the children or making them fall asleep.

10. Do you read anything to your child? What do you read to your child?

Majority of the mother participants of the control group have said that they do not get time to read books to their children. Also, owing to household works they do not get adequate time to spend with them (i.e. the children). However, most of the mother participants in this group have stated that it is important to read to the children and sing songs to them.

In Muladi, out of the 8 participating mothers 4 stated that they read to their children and tell rhymes to them; whilst the other 4 have said that they do not read to their children. Out of 7 participating mothers in Satkania, 2 recite rhymes from rhyme books to their children and the rest 5 mother participants do not read to their children.

Treatment Area's Mothers

Receiving the materials

1. How did you learn about the ECSP?

While discussing this matter it was found out that the participant mothers of the treatment group (of all three sub-districts) heard about the Early Child Stimulation Program (ECSP) when they: (i) took their children to the vaccination centers; (ii) went to the community clinics (CC) to get services; and (iii) from service providers (Health Assistant (HA)/Family Welfare Assistant (FWA) when they visited their (i.e. the mother participants') households.

2. How did you receive the ECSP materials?

As the table (i.e. table 2) below shows, out of the 22 interviewed mother participants in the treatment group, 20 received the ECSP materials. 12 participant mothers received these materials from a CHCP, the rest 10 received them from a FWA and/or a HA.

Table 2: From whom the treatment mothers received the ECSP materials

Treatment mothers	Participants	CHCP	FWA	HA	Total
Satkania	7	3	3		6
Mualdi	8	4	3		7
Kulaura	7	5	1	1	7
Total	22	12	7	1	20

3. Did the [service provider] go over the material with you, when you received them?

When the participants of the three sub-districts Satkania, Muladi, and Kulaura received the materials, the service providers discussed about these materials with them. The service providers also told the mother participants how to use the materials with the children.

4. Did the [service provider] provide counselling about Early Childhood Stimulation when giving the materials? If yes, do you remember what they told you?

During counselling, the service providers discussed or stated the following to mother participants:

a. They described how to use Child Development Card. Sections of the Card should be read to the child according to his/her age
b. They told those participants who received the materials to read the SAVE books and made them (i.e. the recipients) aware of the benefits of using the materials. Some of the benefits are mentioned in the points below
c. The child has to be given love and affection always
d. He/she (i.e. the child) has to be played with every day
e. He/she has to be conversed with a lot
f. Poems have to be recited and songs have to be sung to the child
g. The child needs to be introduced to new things
h. Only in Kulaura, the service providers made the participant mothers aware that within 3 years of age, 80% of a person's intelligence develops. This time period is very important for the child
i. If the mother is busy at work, then the father has to give time to the child
j. The child has to be taken outside the home to visit places
k. New toys have to be given to him/her (i.e. the child)
l. Safe things available inside the house can be given so that the child can play with them
m. The child has to be conversed with while cooking and while other household works are done
n. Child will be told to do small tasks/chores
o. The child has to be made familiar with vegetables, and other materials in the kitchen
p. With kitchen materials the child has to be taught: counting, how to compare the weights of the materials (i.e. say which are heavier and which are lighter), how to compare sizes, etc.
q. If the ECSP materials are used with the child then his/her intelligence will increase
r. Service providers told the participants to come to the clinics with their children for counselling
s. Child has to be treated well

Using the materials

5. How did you use the materials?

When the mother participants of the treatment group received the materials, the service providers instructed them on how to use these materials. Below is a brief description of these instructions:

Every day, even if it is for a small amount of time, the participant has to sit with her child and show the pictures in the books and read to him the messages from the books. She (i.e. the participant) will have to instruct the child according to the messages in the books. During the course of using the materials, the participant has to play with the child; sing to him; behave well with him; introduce new things to him, and converse a lot with him. The child has to be cared for and given a lot of affection.

The participant mothers have followed these instructions when they received them and are continuing to work accordingly with their children. When these participating mothers are busy at work, their children's grandfathers, and aunts are using the materials with them.

Regarding usage of the picture books by the participating mothers the following holds: in Muladi 15-20 minutes are spent every day using these materials; in Satkania, 20-25 minutes are spent by mothers, 4-5 days in a week; and in Kulaura 20-25 minutes are spent every day.

6. If you received them, but haven't used them, please tell us why.

All the mother participants of the treatment group (of Satkania, Muladi and Kulaura) who received the materials used them with their (i.e. participants') children. Each of the mother participants spent 20-25 minutes in a day, 4-5 days in a week making use of these materials.

7. If you received them, used them for a while but stop using them, please tell us why.

Mother-participants of all three sub-districts who have received the books are continuing to use the materials. These participants have not stopped using these materials. Since these materials were used for a long time, the children's enthusiasm and interest of using these materials has decreased.

8. Did someone talk to you about the ECSP messages? Who? Where?

All of the participant mothers from Muladi, Satkania and Kulaura .have been consulted by service providers (Community Health Care Provider (CHCP), Health Assistant (HA), and Family Welfare Assistant (FWA)) regarding the ECSP messages. CHCPs consult the ECSP

messages with participant mothers in the community clinics; HAs do so in home visits and in EPI centers. FWAs consult with mother participants regarding such matters during their home visits.

9. What did he/she tell you regarding ECSP?

These service providers have stated to the mother participants of all the three sub-districts that if they (the participating mothers) use the materials with their children, then these children's cognitive intelligences will increase. The service providers have further stated that to increase the children's cognitive intelligences they have to be played with, conversed with and stories have to be told to them. In addition, for cognitive development the children have to be taken out to visit other places, introduced to new things, and taught new things.

10. What do you think about the ECS (Early Child Stimulation) materials?

The majority of the participating mothers have said that their children's cognitive intelligences have increased because of using these materials. They (i.e. these mother participants) have also stated that their children in the treatment group are talking more and playing more compared to the other children in the family who have not received the program treatment. One participant stated that because she is uneducated, she cannot teach the contents of the materials. She suggested that if the HA or FWA visits her house once every 7 days, then he/she would be able to teach the materials' contents which she (the mother) is being unable to do at the moment. Some mothers from Kulaura and Satkania suggested that if there were poems and stories with the picture book, then this book would have been more effective.

One mother from Kulaura who had received the Child Development Card when she was pregnant, stated that it was quite useful to her since she was able to learn a lot of important issues regarding mother care and care of the child in the mother's womb during pregnancy.

Parents' Knowledge

11. What have you learned from the ECSP materials and/or service providers' visits?

The materials have to be used according to the child's age (i.e. only those materials appropriate for the child by age can be used). The child has to be talked to enough, and has to be played with. Songs should be sung to the child, poems should be recited to him, and he cannot be addressed in a high pitched voice. The child cannot be made to be afraid, and cannot be hit. If he is crying, he has to be stopped by care and affection.

20-25 minutes should be spent every day in using the SAVE materials with the child. The books have been appreciated by all the targeted children, and these books have benefitted them both in cognitive development and other areas of development. Owing to these materials mothers in the treatment areas of all three sub-districts have come to know a lot about mother and child care during pregnancy periods.

12. Do you think playing with your child is important? If yes, why? If no, why not?

All the mother participants have stated 'yes,' when this question was asked. They suggested that it is important to play with the children. Some mothers from Kulaura said that playing with the children benefits their (i.e. the children's) physical health as well as their mental health. When there is physical exercise in the child's life, he is happier, more focused at work, and also physically healthier.

The mother participants in all of the three sub-districts have said that through playing the children's cognitive skills develop and their mental health is benefitted.

13. Do you think talking with your child is important? If yes, why? If no, why not?

Again, all the participating mothers of Kulaura, Satkania and Muladi have stated 'yes,' when this question was asked. It is important to talk with the child. Talking to the child enables him to learn speaking at an earlier age; and also his (the child's) cognitive development is aided when he is conversed with.

14. Do you think singing or telling story to your child is important? If yes, why? If no, why not?

According to all the participant mothers it is a very good thing to sing and tell stories to the children. The children pay attention to the songs when they are being sung, and listen to the stories told to them. At those times the children stay calm and usually do not cry; their moods are made better because of this. Some mothers in Kulaura have stated that singing songs to the child or telling stories to them improves the child-parent relationship.

15. Do you think reading to your child is important? If yes, why? If no, why not?

The answer set of the participants to question 15 have been identical to the answer set of question 13. The mother participants have all stated 'yes,' when this question was asked. It is important to read to the child for many reasons. Reading to the child enables him to be able to learn reading at an earlier age; also it aides in the cognitive development of the child. Owing to this activity (i.e. reading to the child) his (i.e. the child's) enthusiasm towards studies also increase. In Kulaura some mothers have said that if the child is read to, then his behavior and interactions with others will improve.

Parents' Behavior

16. What activities do you do with your child (beyond basic care giving)?

All the participants have stated that the child should be always treated well because when treated well, the child is motivated to do activities like playing, talking, interacting non-verbally, etc. If the child wants something from the parents, they should make an attempt to fulfill his wants. If they cannot be fulfilled, then it is the duty of the parents to make the child understand (note: some mothers have stated that the children want many things, but because of financial constraints it is not possible to satiate all these wants). Some of the other activities that are done beyond basic care giving have already been mentioned in some of the previous answers.

In Muladi, some mothers stated that they sing songs and recite rhymes/poems to their children. In Satkania, a few mother participants have said that they teach their children counting; while some mothers in Kulaura have said that they teach their children the differences between sizes and quantities.

17. Do you play with your child? How do you play with your child?

In the treatment group, all participating mothers except one play with their children. They use bats, balls, toy cooking utensils, dolls, home-made toys, other toys, etc. One participant mother plays with her child by making faces and doing other antics; while another mother participant (from Kulaura) has stated that she does not play with her child anymore. This latter participant has put a flower vase above the child's bed; when the vase oscillates in the air, the child is amused by it.

18. Do you talk to your child? What do you talk?

The participating mothers from Satkania, Kulaura and Muladi have all said that they talk to their children. When mother participants are working in their houses, they usually interact with them (i.e. the children). Sometimes the mothers ask their children different questions

like: 'What do you want to eat?' 'What are you doing?' 'What is your father's name?' 'What is your paternal grandfather's name?' etc. Such discussions enable the children to learn a lot about various matters. The participants also ask regarding body parts of the children: about identifying their (the children's) hands, ears, legs, etc. Some mothers teach their children names of different animals, birds, etc.

19. Do you sing or tell stories to your child? What do you sing?

Regarding singing to their children and telling stories to them, all mother participants from the three sub-districts in the treatment group have stated that they tell stories or sings songs that their children like. Specially, the children enjoy listening to stories and songs during times when they are eating or trying to fall asleep. Some of the mothers have stated the type of stories they tell their children and songs they sing to them.

20. Do you read anything to your child? What do you read to your child?

Majority of the mothers in the treatment group of Kulaura, Satkania and Muladi show the children the pictures of the ECSP materials and go through some exercises with them. For example a mother may show her child the picture of a cat, and ask the child to name what animal it is. Some mother participants read story books, poem books, picture books, etc. to their young ones.

21. Have the early child stimulation materials changed the way you interact with your child, including how you play and communicate with them? If so, why? If not, why not?

All the participant mothers from the three sub-districts have stated that they did not know that the first three years of the child is important for his/her cognitive development; but they have learned about this from the activities of this program. Through these materials, the mother participants have been able to learn a lot, for example how to talk to the child, how to play with the child, when to sing to the child, how to behave with the child. As a result of using these materials, the treatment group's children's behaviors have changed. If mothers ask some questions to the children, they (i.e. the children) try to give answers to these questions. If the mothers instruct the children to do certain tasks, they try to perform according to the instructions given to them. Also the children ask different questions to the mothers. This is all because of using the ECSP materials.

As a result of the early child stimulation activities of the mothers with their children, the understanding between the mothers and their children (in the treatment group) has improved.

Empowerment

22. Who is the person in your household that knows most about early childhood development?

Regarding this issue, in most cases the children's mothers know about it the most. This is because the service providers give counselling to the mothers. Some of the mothers have stated that their older children learn a bit about early childhood stimulation program activities, because they are present when the mothers are being counselled by the service providers. One participant from Kulaura said that the child's aunt knows most about early childhood development; while another person, who was also from Kulaura, said that it is the child's grandfather who knows the most.

23. Has the knowledge gained through the program allowed you more decision making ability related to your children and household matters?

Owing to this program the mother participants of Satkania, Kulaura and Muladi have obtained some valuable knowledge understanding on child development. Based on this knowledge and understanding, the mothers are being able to take certain decisions on children; for example: (a) when to measure the height and weight of the child; (b) when and what to feed the child; (c) when the child would play; (d) what sort of toys to purchase for the child; (e) deciding what the child's activities would be in different parts of the day; (f) whether to take the child outside; and (g) when to take the child to the community clinic.

24. Have you shared what you learned through the early child stimulation materials with other women? If yes, what have you shared? If no, why not?

If yes: Amongst the participants of all three sub-districts, some mothers have discussed about the early child stimulation materials with their neighbors and relatives. They have stated that these materials are quite important for the children. Children learn a lot because of these materials and become quite fond of them.

The mother participants have received the materials from the service providers. Upon visiting their parents' houses, some participants have told the people of that area regarding these materials. Included in their message was the fact that a person's intelligence develops most by the age of 3, thus he/she has to be treated well during the time period 0-3 years of age.

If no: When the mothers receive the ECS (early child stimulation) books from the service providers, they (the service providers) tell the mothers not to discuss about the books with others outside their households.

25. How do you think the services, related ECD that were provided to you, could be improved?

For improving this program, staff working for the program needs to be increased and service providers' home-visits have to be increased. Mothers have to be counselled, and parents have to be made more aware. A few mother participants from Satkania stated that television and newspaper coverage of the activities will increase awareness, knowledge and understanding of the people on early childhood stimulation. Other than materials, the children have to be provided with toys.

Some very poor participating mothers from Muladi have stated that if financial benefits are given to the participants then their motivation to come to these programs would increase. All mothers cannot go to the clinics often. Thus if the service providers come to the courtyard sessions they would be able to convey all the program messages to those mothers who cannot go to the clinics regularly.