Bangladesh - Building Parental Capacity to Help Child Development: A Randomized Controlled Trial of the Save the Children Early Childhood Stimulation Program in Bangladesh 2015, Endline Survey

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Sampling

Sampling Procedure

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, 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.

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).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 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.

Questionnaires

Overview

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 were modified slightly based on lessons learned during baseline data collection and monitoring data collection. The non-compliance survey was not administered at endline. Two new measures were added during endline: the Wolke Behavioral Rating Scale, which measures children's behavior during the Bayley-III; and a focus group protocol, with fathers and mothers grouped separately.

Data Collection

Data Collection Dates

Start	End	Cycle
2015-09-01	2015-12-30	Endline

Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

Survey instruments 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.

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.

Data Processing

No content available

Data Appraisal

No content available

Related Materials

Questionnaires

Baseline and Endline Instruments

Title	Baseline and Endline Instruments
Filename	SIEF_Bangladesh_Baseline_and_EndlineTools.pdf

Reports

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

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