Early Childhood Development and Nutrition Intervention

Odisha, India

**Partners:** Institute of Fiscal Studies (IFS), Yale University, Pratham Education Foundation-ASER Centre, Centre for Childhood Care and Education Department (CECED), J-PAL (Phase 1), Morsel (Phase 2)

**Funders:** Waterloo Foundation (Pilot); NIH, SIEF World Bank (Phase 1); Jacobs Foundation, Cowles Foundation, ELP World Bank, Dubai Cares (Phase 2)

The project is a multi-partner, collaborative, early years’ implementation and research program in Odisha to develop and test scalable interventions that promote child development; thus improving the future abilities of children. The overall objective of this two-phased longitudinal study is to determine the right stage and age of intervention in early years for optimum development of the child.

**Initial Pilot: 2013-15**

**Stimulation in the urban slums of Cuttack – Odisha, 2013-15**

This was a small-scale pilot implemented by Pratham in Cuttack. It was delivered to the treatment communities as an 18-month stimulation programme through weekly home visits by local women. The programme covered 400 children between the ages of 1-2 at the start of the intervention.

**Aim:** To improve health and development outcomes in children through stimulation programmes enabling interaction between mother and child. Additionally, to contextualize the Early Childhood Education (ECE) curriculum used in various international locales to Indian conditions.

This pilot exercise proved to be great learning experience, as it helped us to evolve the right package which could then be used in the rural areas. The pilot also gave the idea that Group Stimulation (GS) can be a model of intervention, apart from the Individual Stimulation (IS) used in the pilot.

**Phase 1: 2015-2017**

In 2015, the *first phase* of the program was rolled out in 3 districts (one block each) of the State-Cuttack, Balasore and Balangir (all Rural).

**Aim:** Promote parenting practices (play and mother-child interactions) and nutritional education to improve child development, targeted at children younger than three years (i.e. before they attend the Anganwadi Centers), was delivered by local women over a period of 24 months.

**Intervention:** Pratham Odisha implemented an early stimulation and nutrition programme divided into three intervention arms:

1. Nutritional Education (NE)
2. Individual Stimulation (IS) + NE
3. Group Stimulation (GS) + NE

*Figure 1: Location of the 3 intervention districts in Odisha*
The intervention was delivered through *home visits and a group model*

### Table 1: Description of intervention arms

| Nutritional Education | - Nutrition and health follow ups were done during home visits and group sessions  
|                       | - Once in two months Focus Nutrition Sessions were held where discussion & recipe demonstrations were taken up  
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<th>- Health and nutrition based interactive games and activities were developed</th>
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| Individual Stimulation (by home visits) + Nutritional Education | - Age appropriate stimulation activities were done by mothers with children  
|                       | - Quick follow up and discussion on the select health domains - Food & feeding, diarrhea, immunization, growth monitoring and water, hygiene & sanitation (Two domains each week)  
|                       | - Nutrition education was an additional component in these interventions |
| Group Stimulation + Nutritional Education |  

**To evaluate by Cluster Randomized Control Trial (CRCT):** 192 villages (~1400 children) in the blocks of Bolangir (Bolangir district), Salepur (Cuttuck District) and Soro (Balasore district) divided as:

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<th>NE</th>
<th>IS+NE</th>
<th>GS+NE</th>
<th>Control</th>
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**Assessment:** Some of the *key assessment* tools used were- Bayley Scales of Infant and Toddler Development, Ages and Stages Questionnaire, Mother and Child Diet Tool (developed by ASER Centre, Pratham) at baseline, midline and end line.

Following the first phase of the project, a transition phase *(May-June 2018)* in the form of group sessions with the same mothers and their children (who were now entering 3 years of age) was done, before the commencement of phase 2 of the program.

**Phase 2: Enhanced Preschool Program (EPP), 2018 onwards**

The second phase offered an opportunity to track the development trajectory of the same cohort of children as they enter the age group 3-6 years and are enrolled in the Anganwadi system.

For this phase, Pratham has collaborated with the Department of Women and Child Development, Government of Odisha, to implement the EPP in Anganwadi Centres (AWCs) of the sample villages. The 192 villages have been randomized into two-

- Control  
- Treatment [Intervention: ICDS\(^1\)*(Nua Arunima) enhanced curriculum]

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\(^1\)Integrated Child Development Services (ICDS) is one of the flagship programmes of Government of India running since 1975. The beneficiaries of the scheme are children in the age group of 0-6 years, lactating mothers and pregnant women. The services offered under the scheme are pre-school education, supplementation, immunization, nutrition and health education, health check-up and referral services. All the services of the scheme are delivered through Anganwadi centres in the villages.
EPP Design

Figure 2: Experiment Design

We aim at promoting development of the child in various dimensions, such as:

- Language, cognition, executive function, motor and social and emotional development, as well as early literacy and mathematics, general knowledge of the world and creativity;
- Play-based activities are the focus of the learning process;
- A parental and community engagement component is also included in the programme to maintain a continuous contact with the parents and help them contribute in their children’s development, ensuring that they reach their full potential.

Features of the Enhanced ICDS Curriculum

The second-phase intervention aims at improving outcomes for children using the current infrastructure and ICDS curriculum. The plan to do this works on three basic axes:

- Within the existing ICDS curriculum, strengthen key components based on Ministry of Women and Child Development (MoWCD) guidelines
- Provide training for the Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs)
- Provide regular (twice a week) on-site support to the AWWs (through the Pratham Mentor) for conducting these activities

Program Structure

A three-tier implementation model at the state-level has been set up by Pratham to ensure effective implementation and monitoring of the intervention-

**Tier 1: 3 Super Mentors (SMs)- 1 per district + 1 more for additional support**

The SMs are responsible for one district each. Their roles and responsibilities include:

- Ensuring effective implementation of the program in their respective districts
- Monitoring the program by periodic visits to intervention centres
• Providing feedback on the EPP curriculum every quarter before it is finalized to be used in the next quarter. Their feedback is instrumental in contextualizing the curriculum to the local context
• Facilitating communication with the government officials of the district
• Acting as a support in the trainings of the Pratham Mentors and as the lead trainers in the training for the AWWs

**Tier 2: 9 District Coordinators (DCs)**

The DCs are the link between the SMs and the Pratham Mentors (PMs) and are available in the district at all times. Their responsibilities are:

• Facilitating the feedback mechanism from the PMs to the SMs
• Close monitoring of the programme on a regular basis and flagging any issues with the SMs, to maintain high standard of quality of delivery

**Tier 3: 108 Pratham Mentors (each responsible for 2 AWCs)**

• PMs are the ground level workers who act as support for the AWWs
• They visit their centres twice a week, assisting and mentoring the AWWs where required
• PMs also maintain a relationship with the parents and keep them updated about the programme

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**Figure 3: Roles and responsibilities of PMs**

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**In addition to the state implementation teams, the project is supported by:**

• A Central Team at Pratham based out of Delhi, which assists with program design, overall monitoring and coordination with all partners; and
• The Odisha Pratham State Coordinator, who facilitates interactions with the State Government.

The training and capacity building of the Pratham teams and orientation of the front-line workers is done periodically every quarter for smooth delivery of the programme. The programme has been well-received by the major stakeholders- the government functionaries at the State and local level, the community and the parents. We strive to make continuous developments through feedback channels that have been established for this project.