

April 2015

## Early Childhood Development in the Sundarbans

### Neglect in the face of risks and adversity



*About one third of children between 0-5 years of age are chronically malnourished and defecate in the open in the Patharpratima block of the Indian Sundarbans.*

Early Childhood refers to the crucial initial years of a child's life. Early childhood development (ECD) is the growth and advancement in a child's physical and cognitive functioning during this period. During the initial five years of life, children learn to talk, walk, play, analyze and comprehend. Research shows that majority of the developments in the brain occur during these formative years<sup>1</sup>

Several social and biological factors risk an optimal growth and development of a child; poverty and lack of care being the most important factors. It is estimated that around 200 million children in developing countries do not reach their developmental potential due to poverty, social factors, lack of nutrition and care<sup>2</sup>.

Risks and adversities during this period majorly hamper this neurological development. They are also irreversible with long standing impact on the eventual productivity in life. Given the huge impact that deficits in the early years have in terms of human productivity and sustainable development, early childhood development needs serious attention.

The present brief provides formative evidence on the gaps in the care practices needed for Early Childhood Development in the Sundarbans. It will begin by first gauging the status of child development, the gaps and challenges in key practices needed for it and it will conclude with key recommendations.

## Context

A child's development is very sensitive to nutrition, care and environment within the home and the wider community. The islands of the Sundarbans are an epitome of vulnerability. Evidence from the studies done by Future Health Systems (FHS) strongly echoes the morbid fragility innate to the place. Children in the Sundarbans are the worst sufferers and bear a high burden of malnutrition coupled with high morbidity. The situational analysis of child health done by FHS in 2012 revealed that 35.2 percent children were stunted while 38.6 percent were moderately underweight - a figure higher than the district average<sup>3</sup>.

Climatic and geographical hurdles are a commonality. The study showed that the health system was grossly ill equipped to manage child health and nutrition issues. Challenges pertaining to infrastructure, human resource were only accentuated by formidable challenges to access in this inhospitable terrain. Amidst rampant poverty and malnutrition, frequent climatic adversities and a deplorable state of child health care, early child development lies neglected.

## Methodology

The results presented in this brief are based on a research study on psychosocial care practices for early child development that was conducted by FHS India Team in 2013, in the Patharpratima block of the Sundarbans. The study followed a mixed method design with both qualitative and quantitative instruments to develop a formative understanding of the status, perceptions and need for psychosocial care practices, and early childhood education and care.

A survey was done to elicit care practices, risk factors, and ICDS service utilization from the caregivers. The survey covered 28 villages selected through a multi stage cluster sampling method from 6 Gram Panchayats of the block. A detailed mapping listing was done and a systematic random sample was collected from each of the sampled village. In the survey a total of 918 caregivers were interviewed.

A series of qualitative techniques like Venn diagrams, Focused group discussions, In-depth

Interviews and Daily Clocks to gauge the perceptions, understanding and issues pertaining to child development and care in the community. The qualitative design followed a criteria based sampling. Villages were categorized based on malnutrition and climatic adversity and three villages were sampled, for qualitative studies.

## Results

### Status of Child Development

Child development is typically assessed in terms of physical, cognitive and social development. Although, our study did not screen for any developmental delays using a standard instrument, responses regarding basic milestones on each of these domains were elicited from the primary caregivers. Mothers of 382 children between 3 to 5 years were asked if their child could perform basic tasks like counting numbers, holding objects, and play.

Following indicators have been used for child development status and have been adapted from multi indicator cluster survey conducted by UNICEF in various countries<sup>4</sup>. The indicators were defined as follows- **Physical Development** - Cannot hold small objects with hand (36 to 59 months); **Numeracy** - Does not know how to count numbers in general (36 to 59 months); **Social Development** - Does not play and Co-operate with other children (36 to 59 months). These figures in Box item 1 help us gauge an estimate of the status of child development (See below).

#### BOX ITEM 1: INDICATORS FOR CHILD DEVELOPMENT IN THE SUDNARBANS

- **Physical Development: 4.45 percent** children between 3 to 5 years cannot hold small objects in hand.
- **Social Development: 9.16 percent** do not co-operate with other children in play.
- **Numeracy: 17.68 percent** cannot count numbers.

These figures are comparable to many African and South Asian countries like **Ghana, Mongolia, Kazakhstan and Vietnam**<sup>1</sup>.

Child development clearly needs attention. Along with nutrition, key practices like stimulation, effective preschool education and nurturant care and environment are vital for development. Our study explored these practices and challenges in the study region.

## Gaps and Challenges

### Children do not receive developmentally stimulating care

Children need care and stimulation from caregivers that promotes their development. These include care practices like play, stories, singing, outdoor activities etc. These activities help children learn basic physical and cognitive skills like- holding small objects, counting, sorting and play. We assessed the prevalence of and these practices in the study region by asking caregivers of the children. Indicators from MICS-3 from UNICEF were used<sup>5</sup>.

In only, 43.89 percent of the cases caregivers/family members engaged in 4 or more developmentally stimulating activities.

While almost half of the children did not receive developmentally stimulating care, 42.36 percent of the children had less than two developmentally supportive play materials. The prevalence of developmentally stimulating behaviours in the study region is found to be lower than in countries like Iraq, Bangladesh, Afghanistan and Nigeria<sup>2</sup>. These practices were predictably lower among caregivers belonging to poor households. Qualitative Interviews with mothers also revealed a gap in the awareness about the importance of stimulation during the early years.

### Lack of a safe physical environment

Children in the region are not only bereft of adequate care but also live in a very vulnerable physical environment. Our study revealed that 53% of the households face climatic adversities more than once in a year. During this time, maximum damage is to houses, drinking water sources and transport. The kuccha houses in the region fail to put up a defence against these events leaving children highly vulnerable to disease and distress.

*“There are strong winds and storms during rainy season. Our roof got damaged many times during the last year. We restored it by rebuilding it. It happens every year and all members of the household work in restoring it. We leave our child with elder children or neighbors during this time. They feed and take care of him. We are busy with this during this season, what we can do?” – Mother of a one year old Child in Dakshin Gangadharpur*

### Inadequate care in the absence of primary caregivers

The common caregiver in the Sundarbans is burdened by many climatic and economic challenges. An eventuality of which has been a gradual and sizeable exodus of the bread earners of the family to nearby cities and towns for employment.

As a result mothers in many families take the sole responsibility of child care alongside other household responsibilities. Qualitative evidence has shown that mothers spend a sizeable share of their time in household activities, restoration and in some cases income generation when they receive no money from their husbands.

The immediate impact of this phenomenon is on child care and rearing. Children are often left in the hands of other family members and children. Our study showed that around 8 percent of the mothers left their child with younger siblings. Among families where the father of the child worked outside the village for more than 183 days in a year, 15.5 percent of the women headed households left their child with children compared to 7.84 percent of non-women headed households.

### Preschool at ICDS - Issues of inaccessibility and Quality

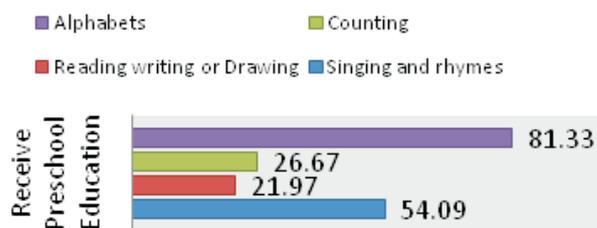
Preschool education is an important stepping stone for children between 3 to 6 years of age, for school. The block has 400 anganwadi centres (AWC) against a required number of 577. However, there remain issues of inaccessibility and quality. Our study revealed that attendance and coverage were major barriers to Preschool education (PSE) at AWC (See box item 2).

#### BOX ITEM 2

67.28% of the children receive preschool education services, of which only 39.97% of the children go to AWC regularly.

Mothers were asked about the various topics and issues taught to their children at preschool. The results show a monochromatic picture of early childhood education component of the Integrated Child Development Scheme (ICDS) (See figure 1). Children are clearly not engaged in many developmentally stimulating activities.

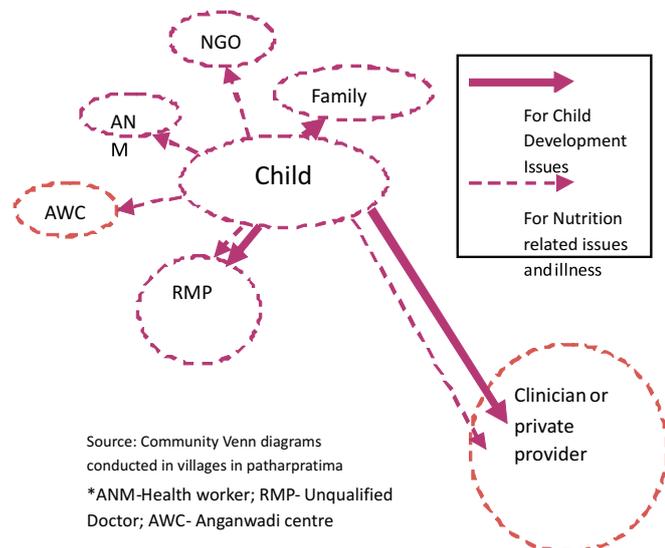
Figure 1: Activities taught at Pre-School Education (%)



**Developmental Problems - a case of no Redressal**  
Malnutrition and a developmentally deficient environment can pave way for developmental delays and disorders. Caregivers with complaints of

developmental issues are not uncommon in the region. We conducted a series of participatory rural appraisal activities with village members to understand the health seeking behaviour and perceived importance for various child health issues. The community members and caregivers were asked to draw Venn diagrams of various institutions and community members that they depend on for child health and development. The results show that households solely rely on the local informal provider or private providers for developmental problems. In figure 2, increase in length represents inaccessibility. The size of the circle represents importance of the provider as perceived by the community. Anganwadi worker, the nodal person for AWC, is clearly not a resource in this context.

**Figure 2: Access to services for child development issues**



## Recommendations

### 1 Leverage on existing resources to improve care and stimulation for children

The ICDS services for child nutrition and development have primarily catered to the nutritional needs of the children. With respect to child development, services that cater to child care needs through improvement of awareness on child development and stimulation, and crèches have already been proposed in the Early Childhood Care and Education (ECCE) policy of India<sup>6</sup>. Improvement of skills of the AWW on issues pertaining to child care and stimulation, coupled with an effective strategy that equips caregivers on child care through the existing child development program will go a long way in improving developmental outcomes.

### 2 Improve the quality of preschool education at ICDS

Quality Early Childhood Care and Education through preschool at ICDS is an important step towards development. Thus, improving resources and quality of education provided at these centres is not only important but also a major stepping stone towards improving early child developmental outcomes. It also calls for mechanisms to periodically identify children with developmental needs at the centre.

### 3 Establish referral and rehabilitative services for children with developmental issues

Child Developmental issues arise due to deficiencies in nutrition and stimulation. Immediate identification and rehabilitation of children with any delays or disabilities is critical in this context. The role of the existing AWW of ICDS scheme in proper identification, counselling and referral is key to caregivers accessing services for children.

1. Shonkoff JP: Building a new biodevelopmental framework to guide the future of early childhood policy. Child Dev 2010, 81:357-67.
2. Walker SP, Wachs TD, Gardner JM, Lozoff B, Wasserman GA, Pollitt E, Carter JA: Child development in developing countries 2 Child development: risk factors for adverse outcomes in developing countries. Lancet 2007, 369:145-157.
3. IIMR: How Healthy Are the Children of Indian Sundarbans? Kolkata; 2013.
4. UNICEF DATA - Monitoring the Situation of Children and Women : [http://data.unicef.org/corecode/uploads/document6/uploaded\\_pdfs/corecode/Measuring-ECD-Brochure-HR-10\\_8\\_116.pdf](http://data.unicef.org/corecode/uploads/document6/uploaded_pdfs/corecode/Measuring-ECD-Brochure-HR-10_8_116.pdf)
5. Early Childhood Development: A statistical Snapshot - Building Better Brains and Sustainable Outcomes for children [http://data.unicef.org/corecode/uploads/document6/uploaded\\_pdfs/corecode/ECD\\_Brochure\\_2014\\_197.pdf](http://data.unicef.org/corecode/uploads/document6/uploaded_pdfs/corecode/ECD_Brochure_2014_197.pdf)



The briefing was prepared by Lalitha Swathi Vadrevu, Arnab Mandal and Barun Kanjilal and is based on the study on psychosocial care practices for child development with support from FHS India Team.

The document has been funded by the UK department and Bloomberg School of Public Health - Johns Hopkins University through the young researcher grant. However, the views expressed herein are those of the authors and do not necessarily reflect those of the UK Government or the partners in the Future Health System Research Consortium.



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