

Early Childhood Development

The Problem

Pre-school education in India is primarily provided through Anganwadi Centres (AWCs) running under the Integrated Child Development Scheme (ICDS), and private-run pre-schools. Studies suggest that participation in pre-school component of ICDS is correlated to improved cognitive outcomes, school readiness, and health, in relation to non-users (Pandey, 1991; Kaul, Bhattacharjea, Chaudhary, Ramanujan, Banerji, & Nanda, 2017).

Majority of Anganwadi Workers (AWWs) face problems in organizing pre-school education (PSE) activities. About 63.33% of them receive no help from supervisors to plan or execute PSE activities, Kular (2014). Moreover, AWWs do not take enough interest in their job-related responsibilities due to lack of skills and formal training in early childhood development. The absence of fixed service conditions for AWWs aggravate the situation.

In India, half the population aged 5-29 is still educated only up to the primary school level (Government of India, 2014a). This is indicative of a significantly high proportion of children dropping out of the education system at an early age. On average, children's school readiness levels at the age of 5 are far below expected levels in India, indicating they enter school unequipped with the cognitive, pre-literacy and pre-numeracy skills necessary to meet the demands of the primary school curriculum (Kaul et al., 2017). Half of the population aged 5-29 is still educated only up to the primary school level (Government of India, 2014a).

The first six years of a child's life are marked by rapid physical, cognitive, and psychosocial development. Early childhood care and education (ECCE) lays the foundation for sustained cognitive, psychosocial, behavioural, health and schooling benefits

This study aims to address the issues of quality of education and enrolment ratios in preschool education offered by AWCs in Andhra Pradesh (AP). Cost-benefit analysis of two interventions: i) a conditional cash incentive to induce uptake of PSE services for 4 year olds at AWCs and, ii) improving quality of pre-school education at AWCs by hiring external teaching inputs from localized organizations specializing in early childhood development has been undertaken in this study.

Solutions

Interventions	BCR	Total benefit (INR crore)	Total cost (INR crore)
Conditional payments for 4- year-olds to attend PSE classes at AWCs	10	3,479	333
Improving quality of PSE by partnering with localized organizations	18	21,815	1,183

Total costs and benefits are discounted at 5%

The full paper by **Dr. Abusaleh Shariff** Chief Scholar US India Policy Institute Washington DC & **Amit Sharma** Consultant, The World Bank, New Delhi and People Research on India's Consumer Economy, New Delhi is available on www.APpriorities.com/Education

Cash incentives to induce uptake of PSE at AWCs

The Problem

About 70% of all rural children aged 3-6 years in Andhra Pradesh have the benefit of enrolment and are possibly going to AWCs for pre-school education. However, the quality of PSE at AWCs is quite poor; this is reflected in the fact that children spend only about 99 minutes per day on PSE in Andhra Pradesh's AWCs, on average, going by data from 2009. Further, just about one-half of all AWCs in India are found to have basic facilities such as proper books, drawing materials, puzzles, etc. (Government of India, 2011).

The Solution

Since children seem to lack the motivation to attend preschool classes at AWCs, it would be essential to incentivize them to join the PSE program to affect an increase in the time spent at the centers to 200 minutes, and possibly more. This intervention proposes to provide cash incentives of about Rs 6,000 each to all 4-year-olds attending PSE programs at AWCs in Andhra Pradesh, irrespective of the levels of income of the mother or household. The incentives would initially be given to all 4 lakh children aged 4 currently enrolled in AWCs for PSE and would result in the coverage of 1.4 lakh more children in the same age group.

Costs

The cost of the current intervention is calculated by assuming that every 4-year-old enrolled at AWCs in Andhra Pradesh for PSE gets the incentive. The number of PSE beneficiaries (aged 4 years) in the state post the intervention stood at 5.4 lakh.

The incentive per child is Rs. 6,000 (5% of GSDP), which translates to an annual cost of Rs. 333 crores per year for all 4-year-olds enrolled in AWCs in Andhra Pradesh.

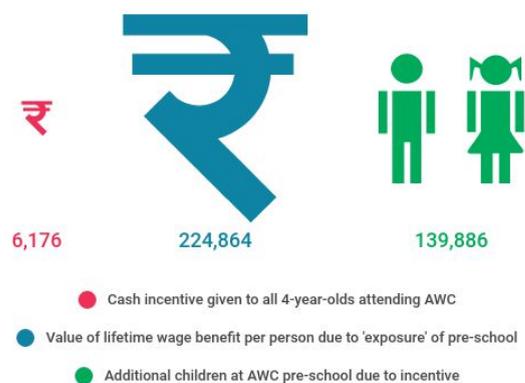
Benefits

The conditional cash incentives are expected to result in a 35% increase in pre-school enrolment, taking the percentage of 4-year-olds enrolled in AWCs for PSE from 49% to 66% in the short term (Wong et al., 2013). This will lead to an addition of 1.4 lakh new

4-year-olds to the AWC PSE program in Andhra Pradesh.

Further, these children will see an increase of 23% to their average wages as they reach the labour and employment market. The wage benefits of the intervention are thus estimated at Rs. 3,146 crores for the state at 5% discounting. The transfer (Rs. 333 crore) is also considered a benefit in the calculation. The total benefits of this intervention are estimated at Rs. 3,479 crores.

Cash incentive per 4-year-old and the value of lifetime wage benefit per person



Source: Authors paper

Improving quality of PSE in AWCs by partnering with accredited private organizations

The Problem

Most AWCs currently operate primarily as nutrition or day-care centers staffed by individuals with no formal training in child development (Dean and Jayachandran, 2016). Anganwadi Workers (AWWs) do not take enough interest in their job-related responsibilities due to lack of skills. The absence of fixed service conditions for AWWs aggravate the situation. Moreover, a majority of AWWs face problems in organizing preschool education activities.

About 63.33% of them receive no help from supervisors to plan or execute PSE activities (Kular (2014)). AWW and ICDS helper at a center are generally barely educated and lack the required formal training in early childhood education. Besides, there are no benchmarks to assess the capacity to teach and manage AWCs, and to measure the achievement levels of the children who visit AWCs. AWWs are often mandated to engage in multiple tasks; including work in community surveys and attendance at village, taluk and district level bureaucratic events that take away from their capacity to concentrate work on child development.

The Solution

An amount of about Rs. 7,200 per year is spent on each child in the 3-6 years age group currently enrolled at AWCs. This sum is spent on improving the quality of PSE offered by partnering with accredited localized organizations that focus on early childhood education and development.

The amount is spent towards the cost of hiring one teacher per center, improving the curriculum, training of existing AWC staff, and uniforms and books for the students. One teacher comes to the AWC every day for one year.

The effect for this intervention is based on the demonstrated effectiveness from private school preschool programs, which while not perfect, are generally regarded as providing a more appropriate environment and curriculum for children (Kaul et al., 2017).

Costs

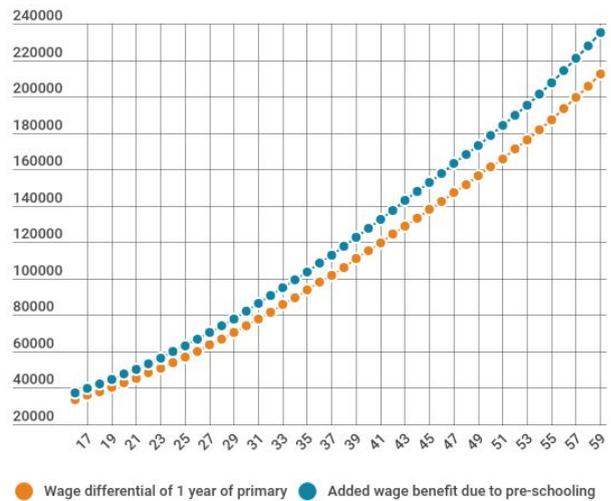
An annual sum of about Rs. 7,200 is spent on each 3-6-year-old currently enrolled in AWCs to bring the quality of PSE provided through ICDS at par with private pre-schools. This amount will go towards hiring

an external teacher trained in early childhood development for each AWC, curriculum improvement, uniforms, books and training of existing staff. The total cost for this intervention estimated to be Rs. 1,183 crores per year for all 3-6-year-olds currently enrolled at AWCs in the state.

Benefits

Estimations in this paper conclude that this intervention will lead to a 13% increase in average wages for one year of quality preschool education. Thus, the total benefits for Andhra Pradesh are estimated at Rs. 21,815 crores at 5% discounting.

Wage differentials in rupees per year by age due to 'exposure' of schooling



Source: Authors paper