

The role of ICDS services on early childhood development: A cross-sectional study in Hyderabad, Telangana

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ABSTRACT

Background: Integrated child development services (ICDS) include supplementary nutrition, nutrition and health education, health check-ups, immunization, preschool education, and referral services targeted at beneficiaries including pregnant and lactating mothers, children below six years, and women of reproductive age. Specific interventions are implemented to support children for a higher developmental outcome. **Objectives:** The aims of this study are (1) to compare the development of ICDS beneficiaries in the age group of 4–6 years with the dropouts, (2) to assess caregiver practices among mothers of beneficiaries and the dropouts, and (3) to understand the perceptions of Anganwadi workers (AWWs) on early child development (ECD) and ICDS services. **Methods:** A cross-sectional study was conducted for two months in select Anganwadi centers (AWCs) of Hyderabad. AWCs were selected through multi-stage sampling. Respondents included 114 mothers and five AWWs. Quantitative data was collected by a questionnaire and qualitative data through an interview guide. Proportions were estimated for description. STATA 14.0 was used to find out correlates of development in children through unpaired *t*-test, Chi-square test, and logistic regression. Thematic analysis was done for qualitative data. **Results:** About 68.42% and 33.33% of children from the beneficiary group were found to show normal cognitive and emotional development when compared to the dropout group (59.65% and 21.05%, respectively). KAP assessment revealed no significant difference between the mothers of dropouts and beneficiaries. Lack of infrastructure and poor attention to preschool activities were identified as reasons for dropout. **Conclusion:** Improving infrastructure, capacity building of AWWs, and reducing their workload will help in focusing on ECD-related activities at ICDS centers.

Keywords: AWWs, early childhood development, ICDS, preschool education

Introduction

A child's potential to learn and develop is influenced by a combination of genetic factors and the quality of care, stimulation, and education they receive. Recognizing this critical

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connection, the Integrated Child Development Services (ICDS), a comprehensive early childhood development (ECD) program launched in 1975 by the Government of India, aims to provide holistic services for children aged 0–6 years through 1.37 million AWCs. These centers, including dedicated preschool activities, play a crucial role in promoting ECD.^[1,2]

However, the effectiveness of ECD programs can vary widely, resulting in inadequate access and unequal outcomes. Shockingly,

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nearly 250 million children (43%) under the age of five in low- and middle-income countries are at risk of not reaching their full developmental potential.^[3] Before the COVID-19 pandemic, promising data from 2012 to 2020 revealed a positive trend in early learning participation, with 65% in 2010 rising to 73% in 2019 across 76 countries. Moreover, gender parity was achieved in every region. Unfortunately, this progress was severely disrupted in 2020, as childcare and early education facilities were closed in most countries, leaving many young children solely dependent on parents or caregivers at home. Consequently, they faced unsafe conditions, limited interactions, and a lack of adequate stimulation and learning opportunities during the crucial early years.^[4]

Recent surveys have indicated varying levels of enrolment in Early Childhood Care and Education (ECCE) programs, with participation rates ranging from 43.7% in Uttar Pradesh to 86.6% in Karnataka. Notably, almost half of the enrolled children are in private facilities, particularly in urban areas. It is essential to recognize that children from the lowest wealth quintile primarily attend AWCs, while those from the highest wealth quintile often have access to private facilities.^[2] Regrettably, existing research highlights significant socio-economic barriers and misconceptions among caregivers that prevent many children from receiving early childcare services under ICDS.^[5-8] Role of family medicine in ECD: family medicine as a comprehensive care specialization encloses women's health and maternal care from the prenatal care to improving ECD.^[9] Nurturing care from the time of pregnancy to childbirth enables child reach high developmental potential without any delays. The primary-care providers, including pediatricians, can provide support to the caregivers and children leading to positive developmental outcomes in children.^[10] As primary-care providers and family-care physicians, understanding the challenges and gaps in ECD programs is crucial for effective intervention and support.^[11-14] By delving into this research, we aim to shed light on the barriers faced by caregivers, identify strategies to enhance participation, and ultimately promote optimal developmental outcomes for children in our communities.

Despite some variations in service quality, several evaluation studies have demonstrated the positive impact of the ICDS program on the survival, growth, and development of young children.^[6,15-18] Building upon these findings, the present study aims to identify gaps in ICDS service delivery by comparing the cognitive and emotional development of children enrolled in AWCs with those who dropped out. Specifically, the primary objective is to assess the developmental differences between ICDS beneficiaries and dropouts in the age group of 4–6 years. The secondary objectives include assessing caregiver practices among mothers of beneficiaries and dropouts, as well as gaining insights into the perceptions of AWWs regarding ECD and ICDS services.

Methods

Study design and duration: A mixed-method cross-sectional study

was conducted in the Hyderabad district in the South Indian state of Telangana from September to October 2022.

Sample size and sampling technique: The sample size was calculated, using the formula $n = [z^2 \times p \times (1 - p)] / d^2$ (where $z = 1.96$, prevalence (p) = 0.54,^[3] d = error of 10%, allowing a nonresponse rate of 10%). The total sample selected for the study was 114 mothers of both beneficiaries and dropouts. A multistage sampling technique was undertaken for the study. As a first step, cluster sampling was done to identify a sector. This is followed by a second step of simple random sampling to identify primary caregivers of children utilizing ICDS services and dropouts from the AWCs in the identified sector.

Data collection: A predesigned, semistructured questionnaire translated into local language, Telugu was used to collect quantitative data from the mothers. The data collected through the questionnaire included details about the respondent, child, and household characteristics; assessment of child's development [developmental milestones, Pediatric Psychiatric Symptom Checklist (PPSC) extracted from the age-specific survey of well-being of young children (SWYC) form];^[19] questions on knowledge, attitude, and practices related to ECD; and perceptions on AWC and AWW.

Five interviews were conducted with AWWs to understand their perceptions on ECD using an interview guide. A mixed-method study design was adopted to assess child's development quantitatively and understand from the AWWs perspective (qualitatively) on how ICDS is contributing to the child's development and to identify any gaps/challenges in service delivery.

Definition of outcome variables: As per SWYC guidelines, a PPSC total score of nine or greater indicates that a child is "at risk" and needs further evaluation or investigation. Following scoring chart for milestones, the child's total score falls into either "needs review" or "appears to meet age expectations" category.^[19]

In-depth interviews (IDIs) were digitally recorded. Transcription was undertaken to come up with verbatim of the interviews in Telugu. These transcripts were translated into English for analysis. Through a thematic analysis approach, codes and subthemes were set up, themes were finalized and reporting was done after placing responses under respective codes. Figure 1 summarizes the themes and subthemes developed before IDIs.

Statistical analysis: The quantitative research data collected were entered into the Microsoft Excel spreadsheet. The data were analyzed using STATA 14.0 version. Proportions were estimated as descriptive statistics. Tables were used for displaying data. Chi-square test, unpaired "t"-test, logistic regression were performed to find out the relationship between child's development and its correlates such as maternal age at the time of childbirth, educational status of mother, child's age, child's gender, presence of an under four-year-aged child in the household, youngest child's age (in years) and caregiver knowledge, and others.

Ethics: Ethical clearance was obtained from institutional ethics committee. Official permissions were taken from the district welfare officer and child development project officer, Hyderabad district. On the day of visit, the purpose of the study was explained to all the study participants and a nonwitness-signed informed consent was taken from all the participants. Anonymity and confidentiality were maintained throughout the study process.

Results

A total of 114 participants (57 mothers of beneficiaries and 57 mothers of dropouts) were surveyed. Among the beneficiary group, the age of the children of the respondents was distributed as 63.16% aged four years and 36.84% aged five years, whereas it was 59.65% and 40.35% in the dropout group, respectively. The children included 43.86% males and 56.14% females each from both the groups. In addition to these children who were registered with ICDS, there were 94.74% under four years' children in the households of the beneficiary group and 98.25% in the dropout group. About 22.8% of mothers from each group were engaged in some form of employment. About 36.84% of mothers in the beneficiary group were illiterate compared to 26.32% from the dropout group. Only 1.75% of mothers in the dropout group were in the risky maternal age group (>30 years) at the time of childbirth.

Assessment of child's developmental milestones and pediatric psychiatric symptoms showed that a higher proportion of children from the dropout group had poor cognitive and emotional development compared to the beneficiary group [Table 1].

The mean (SD) knowledge scores of caregivers from the beneficiary group were 3.40 (1.15) and the dropout group were 3.47 (1.32) (*t*-test; *P* value >0.05) [Table 2].

Study findings revealed that maternal age at the time of the childbirth, falling below 18 years or above 30 years and the

presence of under-four children in the household in addition to the children registered with ICDS resulted in a high psychiatric risky behavior (Significant, *P* < 0.05) among the dropout group of the children. Children of the mothers with good (80%) and moderate knowledge (68.33%) had age-appropriate milestone development (significant, *P* < 0.05) [Table 3].

Logistic regression analysis identified that mother's educational status, youngest child's age, caregiver knowledge, and loud arguments in the household were key factors influencing cognitive development among the children. Maternal age at the time of childbirth and presence of under-four children in the household were found to influence emotional development of the children [Table 3].

The reasons mentioned by dropouts for withdrawing from ICDS centers are shown in Figure 2. The main reasons for withdrawal include a poor education system (41.02%), followed by poor service delivery (17.94%). Other factors include poor infrastructure, social stigma, inaccessibility, poor hygiene, and child's denial and influence from private school marketing.

Qualitative research findings showed that all the AWWs firmly believed that ICDS program has a positive impact on the children who continue in the centers till the age of six years.

Table 1: Assessment of Child's development SWYC guidelines

Development indicator	Beneficiary group (n=57)	Dropout group (n=57)	<i>P</i>
Milestone score range			
Below average for age	18 (31.58)	23 (40.35)	0.329
Average for age	39 (68.42)	34 (59.65)	
PPSC score range			
At risk	38 (66.67)	45 (78.95)	0.141
Normal	19 (33.33)	12 (21.05)	

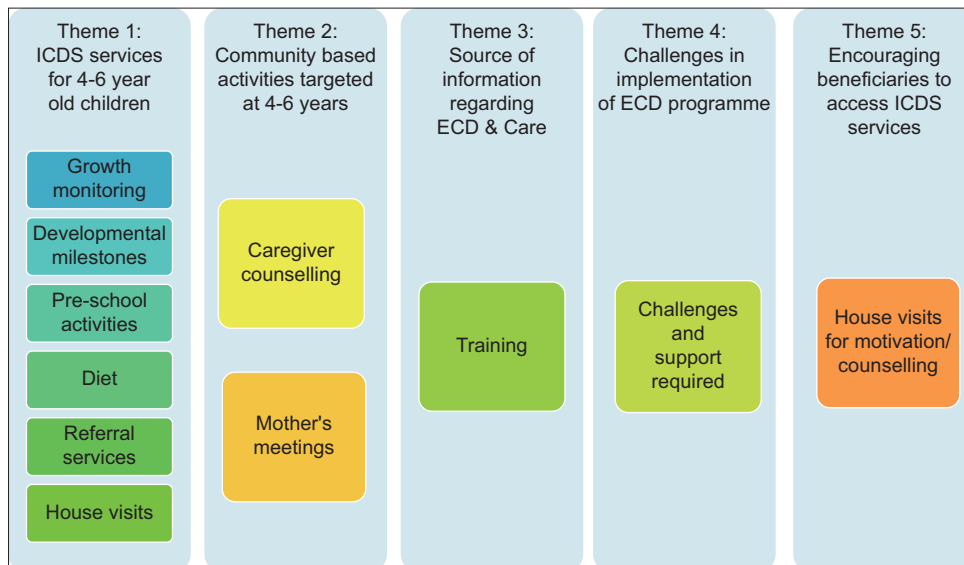


Figure 1: Conceptual summarization of the themes and subthemes developed before IDIS

“ICDS provides all services required for a child’s development up to 6 years of age.” (p. 1)

AWWs mentioned that they follow a scheduled timetable and counsel parents as per the program for the improvement of developmental status of the children in early childhood years. AWWs identified the following as challenges that impact delivery of services:

- (1) Lack of proper infrastructure and facilities,
- (2) Insufficient play materials for children,
- (3) Lack of trainings for upgradation of skills and knowledge,

- (4) Targets to enroll mothers and children taking their time away from the center, and
- (5) A higher workload.

“We need more training regarding ECD.” (p. 2)

“We don’t have enough interesting/stimulating play materials for children.” (p. 3)

This was also reflected in the feedback from the mothers availing ICDS services regarding schedule of AWCs, infrastructure,

Assessment	Categories	Beneficiary group (n=57)	Dropout group (n=57)	P
Knowledge	Good	10 (17.54)	10 (17.54)	0.912
	Moderate	31 (54.39)	29 (50.88)	
	Poor	16 (28.07)	18 (31.58)	
Attitude	Good	2 (3.51)	2 (3.51)	0.635
	Moderate	9 (15.79)	13 (22.81)	
	Poor	46 (80.70)	42 (73.68)	
Practice	Good	21 (36.84)	15 (26.32)	0.481
	Moderate	17 (29.82)	20 (35.09)	
	Poor	19 (33.33)	22 (38.6)	

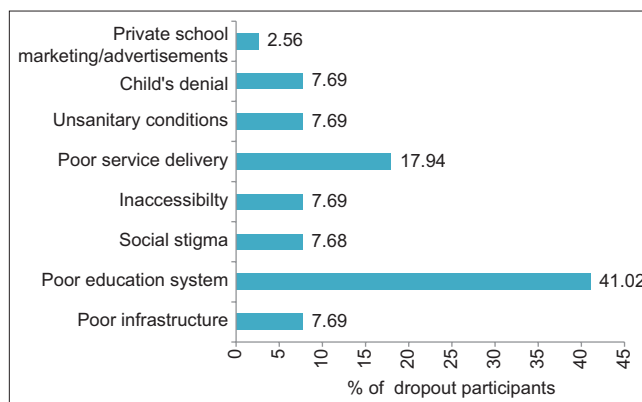


Figure 2: Reasons of dropouts for withdrawal from ICDS centers

Variable	Cognitive development		Emotional development	
	UOR (95% CI)	AOR (95% CI)	UOR (95% CI)	AOR (95% CI)
Maternal age at the time of childbirth				
At risk	0.45 (0.15–1.34)	0.69 (0.16–2.93)	0.35 (0.13–0.94)*	0.35 (0.09–1.39)
Normal			Ref.	
Educational status of mother				
Illiterate	4.13 (0.91–18.75)	6.17 (0.88–43.41)	2.57 (0.28–23.48)	4.74 (0.41–54.48)
Primary	6.99 (1.51–32.33)*	11.89 (1.77–79.77)*	3.86 (0.44–33.91)	6.38 (0.57–70.81)
Secondary	3.61 (0.76–17.00)	3.97 (0.57–27.75)	5 (0.55–45.39)	6.06 (0.50–73.06)
Graduation and above			Ref.	
Economic activity of mother				
Yes	0.71 (0.29–1.72)	1.19 (0.32–4.36)	1.26 (0.48–3.27)	1.94 (0.45–8.44)
No			Ref.	
Child’s gender				
Male			Ref.	
Female	1.002 (0.46–2.16)	0.80 (0.31–2.11)	1.61 (0.69–3.78)	2.10 (0.70–6.28)
Is there an under-four-year-aged child in the household?				
Yes	1	1	0.11 (0.01–1.14)	0.11 (0.01–2.47)
No			Ref.	
Youngest child’s age (in years)				
<1 year	1.17 (0.35–3.94)	0.73 (0.14–3.66)	0.82 (0.20–3.31)	0.82 (0.20–3.31)
≥1 and <4 years	2.93 (1.06–8.04)*	3.87 (1.09–13.68)*	1.17 (0.46–3.01)	1.17 (0.46–3.01)
≥4 years			Ref.	
Knowledge				
Good	4.25 (1.24–16.28)*	7.1 (1.28–39.39)*	0.36 (0.07–1.90)	0.21 (0.03–1.39)
Moderate	2.42 (1.02–5.77)*	2.97 (0.97–9.05)	1.75 (0.67–4.54)	1.47 (0.45–4.81)
Poor		Ref.		
Any loud arguments in the last 10 days?				
Yes	0.57 (0.24–1.39)	0.24 (0.07–0.85)	0.41 (0.13–1.31)	0.27 (0.06–1.10)
No			Ref.	

and hygiene. Few significant responses, subthemes, and themes evolved from the study are mentioned in Table 4.

Discussion

As primary-care providers and family physicians, our commitment to the holistic growth and development of children is paramount. In this study, we aimed to compare the developmental status of children aged 4–6 years accessing ICDS services at AWCs with those who dropped out after completing three years of age. By assessing the knowledge, attitudes, and practices of mothers, as well as gathering feedback from Anganwadi workers (AWWs), we explored the impact of ICDS services and identified areas for improvement in service delivery.

Key findings: AWCs as catalysts for development

The statistics revealed a noteworthy trend that children from the beneficiary group exhibited a higher number of normal developmental outcomes compared to those who dropped out. These findings underscore the pivotal role AWCs play in realizing the developmental potential of preschool children. It is remarkable to note that despite the limited understanding of ECD among AWWs and the absence of significant differences in knowledge scores between mothers of both groups, positive outcomes were still achieved.

Advancing awareness: Strengthening ECD components

The provision of advanced trainings on Early Childhood Care and Education (ECCE) and ECD by the state government has led to increased awareness among AWWs. Consequently, mothers are becoming more knowledgeable about critical components such as nutrition and health, early stimulation and learning, family support, and the safety and protection of children from injuries and illnesses. This growing awareness sets the stage for improved overall growth and development in preschool children.

Addressing gaps: Strengthening ICDS for optimal outcomes

Our study highlighted several areas requiring attention and improvement within the ICDS program. Inadequate infrastructure, including the absence of water and toilet facilities, insufficient play materials, and a lack of focus on preschool education at the AWCs were identified as key gaps.

Addressing these shortcomings is vital to increase the number of beneficiaries availing ICDS services, ensuring not only supplementary nutrition but also comprehensive growth and development for preschool children.

The role of AWWs: Dedicated service delivery

Despite their workload, AWWs consistently demonstrated unwavering dedication and ensured beneficiaries' access to facilities. Their commitment is commendable and serves as a testament to their pivotal role in delivering ICDS services to the community.

Limitations

The study was conducted for a small sample therefore its generalizability of the study is limited. There may be a chance of cluster sampling bias since representative samples from diverse clusters were not included in the study.

Conclusion

Primary healthcare is the way forward to achieve the sustainable development goals. The study findings establish that there is a need to invest in improving ICDS program as it plays a critical role in the holistic growth and development of a child. While there are a lot of improvements being brought in ICDS scheme regarding ECD, bolstering key components such as infrastructure, capacity building, and human resources can result in an increased uptake of services and a better outcome.

Recommendations

For researchers: Conducting larger scale studies utilizing mixed methods approaches will allow for a comprehensive understanding of the gaps and challenges specific to different contexts, facilitating the development of tailored interventions.

For policymakers: Address the misconception among households that AWCs solely provide supplementary nutrition to those from economically disadvantaged backgrounds. Public awareness campaigns through mass media and engagement with local community leaders can emphasize the comprehensive services offered at AWCs and their importance. Regular training for AWWs and periodic assessments of their understanding will contribute to more efficient service delivery. The shortage of frontline workers at AWCs often hampers prompt attention to preschool education, and therefore, increasing the workforce and providing incentives for exemplary performance will ensure optimal division of labor and motivation to excel. The implementation of grade-wise teaching and issuance of certificates at AWCs is commendable. Additionally, introducing uniforms for preschool children will not only attract parents and children but also foster unity and equality among them.

By collectively addressing these recommendations, we can enhance the ICDS program's efficacy and promote the optimal growth and development of children in our care.

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Name	Role
Dr. Jayaram	For providing constant support and motivation throughout the study procedure.
Respondents	Provided valuable information for this study with their kind participation and cooperation during the data collection procedure.

Ethical policy and institutional review board statement

Ethical clearance was obtained from the Institutional Ethics Committee of the Indian Institute of Public Health, Hyderabad.

Table 4: Thematic analysis framework

Theme	Subtheme	Code	Response	
1. ICDS services for 4–6-year-old children	Growth monitoring	Anthropometric measurements (height, weight, MUAC)	<p>“I will check the height, weight, MUAC measurements of children from 1st to 5th of every month and will be uploaded in Poshan tracking app and growth charts are maintained.” (p. 2)</p> <p>“I will check the height, weight, MUAC measurements of children from 1st to 5th of every month and will be uploaded in Poshan tracking app and growth charts are maintained.” (p. 2)</p> <p>“As a part of growth monitoring, I will take measurements of heights, weights every month, plot on growth charts and identify underweight/SAM/MAM children.” (p. 3)</p>	
		Growth charts	<p>“I will do growth monitoring of children monthly once and keep them recorded in growth charts to identify SAM, MAM children.” (p. 4)</p> <p>“I will take heights and weights of all the registered children in the first week of every month and update them on 3 apps, growth drive, NHTS and Poshan tracker and identify SAM, MAM children for further care and counselling.” (p. 5)</p>	
		Observation	<p>“I will observe the developmental milestones by seeing if the child listening to my words or following the actions which I do, is the child singing rhymes, jumping, running and will record in those things in the observation book.” (p. 1)</p> <p>“I will observe the developmental milestones by seeing if the child is able to follow my instructions to jump, listen, read, write etc., and stars are given to the child in an observation book (scale of 1–3) that will be showed to the mother every 3 months.” (p. 5)</p>	
	Developmental milestones	Parents meeting/ Delayed milestones	<p>“I will observe the child while playing and doing class activities and give marks for his/her developmental status.” (p. 2)</p> <p>“I will teach and provide assessment cards and if there are any developmental delays observed in the child, I will counsel mothers about parent’s role on child’s development.” (p. 4)</p> <p>“If at all, the child does not achieve developmental milestones, I will refer to the RBSK team and then if the situation is same, will refer to hospital/NCU unit.” (p. 2)</p> <p>“I will teach and provide assessment cards and if there are any delayed milestones observed in the children, mothers are counselled to take care of their children and also we will tell them about the influence of parent’s role on the child’s development.” (p. 4)</p> <p>“By observing the child’s activities and inter-personal skills, I give scores to each child in an observation book that will be showed to their mothers in the months of June, December, March during parents’ meeting.” (p. 5)</p>	
		Preschool activities	Subjective teaching	<p>“I will do teaching in the preschool from morning 9 am to evening 4 pm, which includes writing, reading, drawing, making them do activities, sing rhymes, with the help of CD I will do actions and children will follow those actions and learn.” (p. 1)</p> <p>“We will take classes from 9 am to 4 pm mostly following the timetable and there will be separate syllabus for 3+and 4+children.” (p. 3)</p> <p>“We are providing scheduled sessions from morning 9 am to 3 pm performing pre-school activities like encouraging children to learn good habits, rhymes, tell stories, practice exercises, purva ganitham, samsidhatha etc.” (p. 2)</p>
			Physical activity	<p>“I will make them do simple yoga weekly once and other small physical activities daily that will help for muscle strengthening.” (p. 2)</p>
	Diet	Exposure visit	<p>“I will make the child play indoor and outdoor games seeing YouTube videos and sometimes take them out (prakruthi vanam).” (p. 2)</p>	
		Mid-day meal	<p>“We will provide mid-day meals to all the pre-school children at 12 pm everyday.” (p. 5)</p>	
		Diet counseling to parents	<p>“I go to house visits monthly once and give diet counselling to families using Charts containing foods to be consumed.” (p. 3)</p> <p>“I give counselling to mothers on foods to be given to their child and to maintain meal timings in monthly meetings and house visits.” (p. 2)</p>	
	Referral services	Supervisory feeding	<p>“I will provide additional food, extra boiled egg, balamrutham (50 g/day, double ration) for SAM, MAM children.” (p. 4)</p> <p>“I will go for 4 house visits a month to SAM, MAM children’s house and tell their mothers to give supervisory feeding.” (p. 5)</p> <p>“For SAM MAM, we will teach to take extra nutrients and proteins to be take, Balamrutham is also encouraged to consume Daily twice.” (p. 3)</p>	
		Referral services	Referral services	<p>“We will send a SAM child to Niloufer hospital, if there is no improvement in the child even after supervisory feeding, in last 1–2 months I have sent 1 member and there is an improvement in the growth chart now.” (p. 1)</p> <p>“I recently sent one SAM child to NCU referral units as she had severe delayed developmental milestones.” (p. 3)</p>

Contd...

Table 4: Contd...

Theme	Subtheme	Code	Response
2. Community-based activities targeted at 4–6 years	House visits	House visits	“If at all the children does not achieve developmental milestones, we will refer them to RBSK team and then we will refer to hospital referral unit (also referred to NCU unit).” (p. 2)
		ECCE day	“I will go for house visits of the delayed children frequently and talk to their mothers showing the charts, regarding food, mind development, activities and awareness.” (p. 4)
	Caregiver counseling	Counseling	“Monthly twice, I will conduct mother’s meetings on immunization day and on fourth Saturday (ECCE day).” (p. 1)
		Assessment feedback	“On ECCE day, I encourage children to do role plays.” (p. 5)
3. Source of information regarding ECD and care	Mother’s meetings	Assessment feedback	“In mothers meetings we will say about growth monitoring, weight gain of the child, why, and what to do also and counsel on parenting styles.” (p. 2)
		Alana Palana videos	“I talk about the importance of responsive caregiving and diet counselling in mother’s meetings.” (p. 5)
		Milestone assessment	“Mothers meetings will be done once in a month and every 3 months, I have parent-teacher’s meeting where I will talk about child’s developmental milestones and cognitive/social development.” (p. 4)
4. Challenges in implementation of ECD program	Training	ECD training	“In House to house visits, along with Gruha Sandharshana books, Alana Palana trainings videos are shown to mothers to explain them about role of parenting on ECD.” (p. 3)
		Lack of proper infrastructure	“I do the milestones assessment for the children who are coming, records are maintained by observation and intimated to the mothers about their activity performance and participations.” (p. 3)
		Workload	“I have recently attended ECD training in which they told about importance of Responsive caregiving, early stimulation from 0–6 years.” (p. 4)
	Challenges and support required	Lack of sufficient training and reading materials	“I can provide better preschool education if digital learning materials, chairs, board and infrastructure are provided.” (p. 2)
			“Children should have uniforms, benches, like as private schools, it will be good.” (p. 3)
		Parent’s attitude	“Because of lack of own building and time, I am unable to deliver preschool activities well.” (p. 1)
			“There is no proper timings for THR distribution.” (p. 5)
5. Encouraging beneficiaries to access ICDS services	House visits	Motivation/Counseling	“We need scheduled time for food and egg distribution.” (p. 3)
		“There is so much workload on AWTs to actually implement what we are being trained regarding ECD.” (p. 4)	
		“We need more training regarding ECD.” (p. 2)	
			“We don’t have enough materials to give home works to children which mothers are asking.” (p. 2)
			“We need separate rooms like classes, playground, play items like outdoor items.” (p. 5)
			“We don’t have enough interesting/stimulating play materials for children.” (p. 3)
			“Parents don’t send their children regularly and they will take their children whenever they want as they are concerned that their child is crying and not staying.” (p. 4)
			“Parents are more interested in uniforms, buses and more disciplined/scheduled classroom environment.” (p. 5)
			“I will motivate them by saying that diet counselling will be given along with preschool education only in Anganwadis till your child is 5 years.” (p. 1)
			“I don’t force mothers once the child is 3 years old because we are short of many reading materials and poor infrastructure.” (p. 2)
			“I will talk about incentives that will be provided to the children coming to the preschool like mid-day meal, snacks, boiled egg and also that me and aayamma will take care of the child very well.” (p. 5)

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Conflicts of interest

There are no conflicts of interest.

List of Abbreviations

Abbreviation	Definition
ICDS	Integrated child development services
ECD	Early childhood development
AWW	Anganwadi worker
AWC	Anganwadi center
KAP	Knowledge, attitudes, practices
ECCE	Early Childhood Care and Education
SWYC	Survey of well-being of young children
IDI	In-depth interview

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