

Original Article

**A cross sectional study to assess the utilisation of integrated child development services among children aged 6 months to 6 years in Tamil Nadu – 2017.**

**Chitra A<sup>1\*</sup>, Kaleeswaran S<sup>2</sup>, Gopi Naath T<sup>3</sup>, Gowtham S<sup>3</sup>, Gowtham V<sup>3</sup>**

1. Professor, Institute of Community Medicine, Madras Medical College, Chennai

2. Postgraduate, Institute of Community Medicine, Madras Medical College, Chennai

3., Undergraduate, Institute of Community Medicine, Madras Medical College, Chennai

**Abstract**

**Background:** Integrated Child Development Services (ICDS) scheme lays foundation for the development of nation's human resource by providing an integrated package of early childhood services. Services are provided through public health facilities to improve the nutrition and health status of children 0-6 years. **Objectives:** To assess the utilisation of ICDS among Children aged 6 months to 6 years in Tamil Nadu. **Materials And Methods:** A cross sectional study conducted among 84 mothers of child aged 6 months to 6 years in randomly selected districts of Tamil Nadu from September to November 2017, using a semi-structured pre-tested questionnaire. Data was entered in MS excel and analysis done using SPSS 16. Appropriate descriptive and inferential statistics were used. **Results:** The study results revealed that 16.7% of the children were registered and utilising any of the services provided under the scheme, among them 92.8% children were taking supplementary nutrition, 78.5% children were availing health check-up services and 78.5% children were taking non formal preschool education. Among those not utilising the ICDS services, 48.5% were not aware of ICDS, 51.5% were aware but not utilising ICDS services. **Conclusion:** This study indicated that the utilisation of ICDS providing child health services needs to be improved in the study area. Also, indicates that there is a gap in awareness regarding the services and beneficiaries under the scheme. So, we need to strengthen the IEC and BCC activities regarding the services provided under ICDS scheme.

**Keywords:** ICDS, Supplementary nutrition, Utilisation, Non-formal education.

**Introduction**

Integrated Child Development Services (ICDS) is an important universal scheme, implemented on 2<sup>nd</sup> October 1975, under Department of Social Welfare. One Anganwadi centre (AWC) covers 400-800 population. ICDS lay foundation for the development of nation's human resource by providing an integrated package of early childhood services. Services provided through public health facilities are – supplementary nutrition, immunization, health check

-up, referral services, non-formal education, health education to improve the nutrition and health status of children 0-6 years, pregnant and lactating mothers and adolescent girls of 11-18 years.<sup>[1,2]</sup> ICDS gives the foundation for proper psychological, physical and social development of the child. Enhance the capability of mother & nutritional health of the child through health education and nutrition. Aims at improving immunization, increasing birth weight, decreasing malnutrition, infant and child mortality.<sup>[1]</sup>

**\*Corresponding Author**

Dr.Chitra A  
Professor, Institute of Community Medicine,  
Madras Medical College, Chennai 03.  
E-mail: communitymedicine\_16@yahoo.com

Malnutrition most widespread condition affecting the health of the children. Malnutrition affects the physical and mental abilities, increases the risk of infections. ICDS – provides supplementary nutrition of 500 calories and 12-15 gms of protein per day for 300 days in a

year. Also, provides immunization services, regular health check-up (height, weight, milestones monitoring) and referral services. Anganwadi worker gives the non-formal education to preschool children.<sup>[2,3]</sup>

Healthy mother brings forth a healthy baby, with better chances of survival. Intrauterine period and period of weaning are very important from nutritional standpoint, because it leads to low birth weight, increased risk of infections. ICDS provides Supplementary nutrition of 600 calories and 18-20 gms of protein per day, IFA tablets, TT injection, nutrition education to expectant mothers.<sup>[1]</sup>

Children in the age group 0-6 years constitute around 158 million of the population of India (2011 census), who are the future resources of the country. With this background, the study is undertaken.

## OBJECTIVE

To assess the utilisation of ICDS among Children aged 6 months to 6 years in Tamil Nadu.

## MATERIALS AND METHODS

A cross sectional study conducted among 84 mothers of child aged 6 months to 6 years in randomly selected districts of Tamil Nadu from September to November 2017. From previous study, the prevalence (of utilization of services) was taken as 33%. Considering confidence interval of 95%, absolute precision of 10%, the sample size was calculated and found to be 84. The sample was achieved by multistage sampling method. In Tamil Nadu, 3 districts were randomly selected, 1 ward in each selected districts were chosen, and households were selected randomly for interview. The study tool comprises of 2 sections – Semi structured pretested questionnaire – Interview method.

Section 1: Demographic Details,  
Section 2: Questions related to utilization of services,

## OPERATIONAL DEFINITIONUtilisation

Those who are registered in ICDS and availing any of the ICDS services at-least once were considered as utilizing the ICDS services. Official permission obtained from Institutional ethics committee, Madras medical college. After obtaining informed consent from parents and assent from children, the interview was conducted using a semi-structured pre-tested questionnaire. Data was entered in MS excel and analysed using SPSS 16 version software. Appropriate descriptive and inferential statistics like Chi-square test and Fischer exact test were used, considering p value of < 0.05 as significant.

## RESULTS

The study results of 84 respondents were analysed and depicted. (Table 1, 2 and 3). Most of the participants belong to nuclear family and about 60% of them belong to upper lower class. Only 60% of the participants had heard about anganwadi. The study results revealed that only 16.7% of the children were registered and utilising any of the services provided under the scheme. Among them 92.8% children were taking supplementary nutrition, 78.5% children were availing health check-up services and 78.5% children were taking non formal preschool education. Among those not utilising the ICDS services, 48.5% were not aware of ICDS, 51.5% were aware but not utilising ICDS services. Regarding the reason for non-utilization, majority (69.4%) said that they don't know about the services provided in ICDS.

## DISCUSSION

ICDS lay foundation for the development of nation's human resource by providing an integrated package of early childhood services. Services provided are – supplementary nutrition, immunization, health check-up, referral services, non-formal education, health education – to improve the nutrition and health status of children 0-6 years.<sup>[1,2]</sup>

**Table 1.** Socio-demographic details of the respondents.(N=84)

S.no	Socio- demographic variables		Frequency (Proportion)
1.	Mean (SD) age	Children	3.6 (1.10) years
		Mothers	29.12 (3.7) years
		Fathers	35.10 (4.2) years
2.	Sex of child	Male	42 (50%)
		Female	42 (50%)
3.	Child birth order	1	38 (45.2%)
		2	42 (50%)
		3	4 (4.8%)
4.	Religion	Hindu	79 (94%)
		Muslim	1 (1.2%)
		Christian	4 (4.8%)
5.	Community	BC	49 (58.3%)
		MBC	28 (33.3%)
		SC	7 (8.3%)
6.	No. of child <6 years in a household	1	11 (13.1%)
		2	66 (78.6%)
		3	7 (8.3%)
7.	Family type	Nuclear family	50 (59.5%)
		Joint family	8 (9.5%)
		3 generation family	26 (31.4%)
8.	Socio-economic status	Upper	15 (17.9%)
		Upper middle	17 (20.2%)
		Lower middle	22 (26.2%)
		Upper lower	30 (35.7%)
9.	Residing in that area	< 1 year	2 (2.4%)
		1-2 years	1 (1.2%)
		> 2 years	81 (96.4%)

**Table 2.** Utilisation of services among the respondents.

S.No	Utilisation of services		Frequency (Proportion)
1.	Heard about anganwadi/ICDS?	Yes	50 (59.5%)
		No	34 (40.5%)
2.	How heard about anganwadi/ICDS? (N=50)	AWW	15 (30.0%)
		Near-by home	31 (62%)
		Previous child	4 (8%)
3.	Anganwadi worker (AWW) visited? (N=50)	Yes	17 (34%)
		No	31 (66%)
4.	How often visited? (N=17)	Once a month	17 (100%)
5.	Registered in anganwadi/ICDS?	Yes	14 (16.7%)
		No	70 (83.3%)
6.	Reasons for utilising anganwadi/ICDS? (N=14)	Child care	3 (21.5%)
		For services available	11 (78.5%)
		Don't know about services	25 (69.4%)
7.	Reasons for not utilising anganwadi/ICDS? (N=36)	Private facility	7 (19.4%)
		Other Government facilities	1 (3%)
		AWW not visiting	3 (8.3%)

**Table 3.** Regarding the utilisation of individual services among those registered. (N=14)

S.No	Services		Supplementary nutrition	Immunisation	Pre-school education	Health check-up
1.	Do you know?	Yes	14 (100%)	10 (71.4%)	12 (85.7%)	12 (85.7%)
		No	0 (0%)	4 (28.6%)	2 (14.3%)	2 (14.3%)
2.	Do you avail?	Yes	13 (92.8%)	0	11 (78.5%)	11 (78.5%)
		No	1 (7.2%)	14 (100%)	3 (21.5%)	3 (21.5%)
3.	If yes, how often?	Almost daily	5 (38.4%)		7 (63.6%)	0
		Weekly once	5 (38.4%)		3 (27.2%)	0
		Monthly once	3 (23.2%)		0	1 (9%)
		Less often	0		1 (9%)	10 (91%)
4.	If not, reason?		Going to school (1)	Near-by Govt. facility	Going to school (1) Don't know (2)	Private (1) Don't know (2)

## ICDS SERVICES UTILIZATION

### Regarding overall utilization of services

The study results revealed that only 16.7% of the children were registered and utilising any of the services provided under the scheme. A similar study done in Tripura, showed 77.4% of children under 6 years of age were utilizing any of the ICDS services.<sup>[4]</sup> A study done in Nagpur, showed that utilization of services provided under ICDS was around 77.48%.<sup>[6]</sup> NFHS 3 – Tamil Nadu data shows that about 33% received any of the services.<sup>[7]</sup>

### Regarding individual services utilization

The study results revealed that 15.5% children were taking supplementary nutrition, 13.1% children were availing health check-up services and 13.1% children were taking non formal preschool education and none of them were availing immunisation services from ICDS. A study done in Tripura, showed 67.5 % were getting supplementary nutrition from ICDS.<sup>[4]</sup> A study done in Karnataka, showed 95.9% children were getting supplementary nutrition, 99.3% getting immunization services, 83.4% were getting preschool education and 66.% were getting regular health check-up.<sup>5</sup> NFHS 3 Tamil Nadu data shows that 26% received supplementary nutrition, 20% received immunization services from AWC, 23% received non-formal education and 18% received health checkup.<sup>[7]</sup>

### Regarding reasons for non-utilisation of services

In our study, majority (69.4%) said that they don't know about the services provided in ICDS, 19.4% were utilising private facilities. A study done in Tripura, showed that 53.84% of the non-utilizers cited that they send their children to private nursery school whereas 42.30% parents had no knowledge regarding the services for children below 3 years.<sup>[4]</sup> Compared to all the other studies and NFHS 3 data, the percentage of utilization was far less in our study, the reason may be limited information, education and counselling (IEC) activities related to ICDS services, as reasoned out by ma-

jority of respondents.

## CONCLUSION

This study indicated that the utilisation of ICDS providing child health services needs to be improved in the study area. Also, indicates that there is a gap in awareness regarding the services and beneficiaries under the scheme.

## RECOMMENDATIONS

- To strengthen the IEC activities regarding the services available under ICDS scheme.
- To induce behaviour change communication to use the services available.

## REFERENCES

1. 9/24/13 Untitled Page [Internet]. [cited 2017 Jul 16]. p. 2005. Available from: <http://icds-wcd.nic.in/icds/icds.aspx>
2. Park K. Park's Preventive & Social Medicine - 23E .pdf. In 2015. p. 1–936.
3. Welcome to Tamil Nadu ICDS Department of Social Welfare and NMP [Internet]. [cited 2017 Jul 17]. Available from: [http://icds.tn.nic.in/IMR-MMR\\_Achievement.html](http://icds.tn.nic.in/IMR-MMR_Achievement.html)
4. Das Rituparna, Bhattacharjee P. A Study on Utilization of ICDS Scheme Among Children Bellow 6 Years Age, in an Urban Area of Agartala, Tripura. *Indian J Appl Res* 2016;5(7):494–6.
5. Sivanesan S, Kumar A, Kulkarni MM, Kamath A, Shetty A. Utilization of integrated child development services (ICDS) scheme by child beneficiaries in Coastal Karnataka, India. *Indian J Community Heal* 2016;28(2):132–8.
6. Patil KS, Kulkarni M V. Knowledge and Utilization of Integrated Child Development Services ( ICDS ) scheme among women in an urban slum- a community based study. 2016;3:267–71.
7. Early H. centres. • Nationwide, 72 percent of the NFHS-3 sample enumeration areas are covered by an. [cited 2017 Jul 17];(1):20–1. Available from: <https://hetv.org/india/nfhs/nfhs3/NFHS-3-ICDS-Services.pdf>