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A CROSS SECTIONAL STUDY TO ASSESS THE UTILISATION OF INTEGRATED CHILD DEVELOPMENT SERVICES AMONG CHILDREN AGED 6 MONTHS TO 6 YEARS IN CHENNAI – 2017

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Abstract

BACKGROUND: : An integrated package of early childhood services is provided under Integrated Child Development Services (ICDS) scheme, which lay the foundation for the development of nation's human resource. Services like supplementary nutrition,health checkup, immunization, health education, non-formal education and referral services are provided through the public health facilities, inorder to improve the health and nutrition of children 0-6 years.

OBJECTIVES : 1) To assess the ICDS utilisation by the Children aged 6 months to 6 years in Tamil Nadu. 2) To assess the nutritional status among the Children aged 6 months to 6 years

MATERIALS AND METHODS : A cross sectional study conducted in Zone V, Chennai from July to August 2017, among 90 mothers of child aged 6 months to 6 years, using a semi-structured pre-tested questionnaire which had questions related to socio demographic details, anthropometric measurements and utilization of services. Data was collected in MS excel and analysis done using SPSS 16 version software. Appropriate descriptive and inferential statistics were used, considering p value of < 0.05 as significant.

RESULTS : The results of the study showed that about 16.7% of the children were registered and utilising any of the services provided in the ICDS scheme, among those utilising services, 93.3% children were taking supplementary nutrition 80% children were taking non formal preschool education and 73.3% children were availing health check-up services. Among the mothers not utilising the ICDS services, 49.3% were aware but not making use of ICDS services and 50.7% were not aware of ICDS. In this study, the prevalence of underweight and stunting was found to be 26.3% and 25% accordingly. Overall, severe underweight in 5% and severe stunting was found in 13.8% of the children.

CONCLUSION : This study indicated that there is need of improvement in utilisation of ICDS providing child health services in the study area. Also, indicates that there is a gap in awareness regarding the availability of the services under the scheme. Hence, the IEC and BCC activities relating to the ICDS scheme has to be strengthened, so as to avail the services of ICDS scheme.

KEYWORDS : ICDS, Services, Supplementary nutrition, Utilisation, Non-formal education.

INTRODUCTION

In India, Integrated Child Development Services (ICDS), a flagship program under Ministry of Women and Child Development, was initiated to provide the supplementary nutritions, the preschool education to children less than 6 years of age, adolescent girls and their own mothers. Services under the scheme are provided by Anganwadi Worker through Anganwadi centre. ICDS was launched in 1975, in accordance with National Policy for Children. 1,2

The programme lays the foundation for proper the physical, social and psychological development of the child. Also, Enhance the capability of mother & nutritional health of child through nutrition and health education. The ICDS programme aimed at improving immunization, decreasing malnutrition,increasing birth weight, infant and child mortality.1

Malnutrition is one of the most widespread condition affecting the health of the children. Malnutrition increases the risk of infections and also affects the physical and mental abilities. The supplementary nutrition of 500 calories and 12-15 gms of protein per day for 300 days in a year is provided under ICDS programme.

Also, immunization services, regular health check-up (height, weight, milestones monitoring) and referral services are provided. The non-formal education to preschool children is given by ANganwadi workers. 2,3

Healthy mother delivers a healthy baby, with better chances of survival. Intrauterine period and period of weaning are very important from nutritional standpoint, because it leads to increased risk of infections, low birth weight. Expectant mothers receives Supplementary nutrition of 600 calories and 18-20 gms of protein per day, IFA tablets, TT injection, nutrition education under this programme.1 Growth monitoring like measurement of weight, height and mid arm circumference is done and their nutritional status is determined.

As per the census 2011, around 158 million Children are in the age group 0-6 years and they are the longer term resources of the country. The study is undertaken with this

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background.

REVIEW OF LITERATURE

A study done was in Tripura,which showed that about 77.4% of children under 6 years of age were utilizing any of the ICDS services and 67.5 % were getting supplementary nutrition.

A study was done in Karnataka, which showed 99.3% getting immunization services, 95.9% children were getting supplementary nutrition, 66.% were getting regular health check-up and 83.4% were getting preschool education.

A study done in Nagpur, showed that 77.48% utilises the services provided under ICDS.

NFHS 3 shows that 81% of children <6 years were covered by AWC, about 33% received any of the services, 20% have received immunization services from AWC, 26% have received supplementary nutrition, 18% have received health checkup and 23% have received non-formal education.

NFHS 4 – Tamil Nadu statistics, shows that about 27.1% of children were stunted, 23.8% were in underweight and 19.7% were inwasted category.

OBJECTIVES

1) To assess the ICDS utilisation by the Children aged 6 months to 6 years in Zone V, Chennai.

2) To assess the nutritional status among the Children aged 6 months to 6 years.

METHODOLOGY

A cross sectional study was conducted in Zone V, Chennai from July to August 2017 among mothers of children aged 6 months to 6 years. Sample size was calculated based on a NFHS 3 survey, which showed the prevalence (of utilization of services) was taken as 33%. Considering confidence interval of 95%, absolute precision of 10%, the sample size was calculated as 85. The required sample size was collected in the Zone V of Chennai Corporation. In Zone 5, a ward was randomly selected and in the selected ward, a street was randomly selected. In the selected street, house to house visit was done and all the household which had children between 6 months to 6 years of age where included in the study. The households who were not available during the 1st visit were revisited. If the household members were still not available, they were not included in the study. House to house visits were made until the required sample size of 85 children were seen. Mothers of children were interviewed using a semi structured pretested questionnaire, which comprised of 3 sections –

Section 1 has Demographic Details,

Section 2 has the Questions for utilization of services, Section 3 is the Anthropometric measurements

In this study, utilisation is defined as those children who had registered in ICDS and availed any of the ICDS services at-least once. Weight of the children were measured using a weighing scale in young children. The participants were asked to stand in the middle of the scale's platform with the body weight equally distributed on both feet. Weight of the patient was measured in kilograms corrected to the nearest 0.1 kg (100 grams). Stadiometer is used for the measurement of height in children aged 2 years and older. For the children aged less than 24 months, stature was measured using infantometer.

The official permission for the study was obtained from Institutional Ethics Committee, Madras Medical College. The informed consent from parents and assent from children was obtained and then using a semi-structured pre-tested questionnaire, the interview was conducted. Data was entered in Microsoft Excel and analysed using SPSS 16 version software. Relevant descriptive and inferential statistics like Chi-square test and Fischer exact test were used, considering the p value of < 0.05 as significant.

RESULTS

The study results were analysed and depicted below. (Table 1- 5). The mean age of the children and mothers was 3.4years and 27.8 years respectively with standard deviation

Table 1: Socio-demographic details of the respondents

S.No	Socio- demographic variables (n=90)		Frequency (Proportion)
1.	Sex of child	Male	38 (42.2%)
		Female	52 (57.8%)
2.	Child birth order	1	45 (50%)
		2	41 (45.6%)
		3	4 (4.4%)
3.	Religion	Hindu	89 (98.9%)
		Christian	1 (1.1%)
4.	Community	SC	85 (94.4%)
		MBC	5 (5.6%)
5.	No. of child <6 years in a household	1	38 (42.2%)
		2	41 (45.6%)
		3	11 (12.2%)
6.	Family type	Nuclear family	73 (81.1%)
		Joint family	15 (16.7%)
		3 generation family	2 (2.2%)
7.	Socio-economic status (B.G.Prasad Scale)	Upper middle	25 (27.8%)
		Lower middle	21 (23.3%)
		Upper lower	44 (48.9%)
8.	Residing in that area	Upper	15 (16.7%)
		< 1 year	21 (23.3%)
		1-5 years	10 (11.1%)
		5-10 years	6 (6.7%)
		>10 years	53 (58.9%)

Table 2: Utilisation of services among the respondents

S.No	Utilisation of services(n-90)		Frequency (Proportion)
1.	Heard about anganwadi/ICDS?	Yes	52 (57.8%)
		No	38 (42.2%)
2.	How heard about anganwadi/ICDS? (N=52)	AWW	21 (40.3%)
		Near-by home	27 (51.9%)
		Previous child	4 (7.6%)
3.	Anganwadi worker (AWW) visited? (N=52)	Yes	21 (40.3%)
		No	31 (59.7%)
4.	How often visited? (N=21)	Once a month	19 (90.4%)
		3 times/week	2 (9.6%)
5.	Registered in anganwadi/ICDS?	Yes	15 (16.7%)
		No	75 (83.3%)
6.	Reasons for utilising anganwadi/ICDS? (N–15)	Child care	4 (26.7%)
		For services available	11 (73.3%)
7.	Reasons for not utilising anganwadi/ICDS? (N–37)	Don't know about services	26 (70.2%)
		Private school	5 (13.5%)
		Other government health care facilities	3 (8.1%)
		AWW not visiting	3 (8.1%)

Table 3: Regarding the utilisation of individual services

S.No	Services		Supplementary nutrition	Immunisation	Pre-school education	Health check-up
1.	Do you know?	Yes	15 (100%)	10 (66.7%)	13 (86.7%)	12 (80%)
		No	0 (0%)	5 (33.3%)	2 (13.3%)	3 (20%)
2.	Do you avail?	Yes	14 (93.3%)	0	12 (80%)	11 (73.3%)
		No	1 (6.7%)	15 (100%)	3 (20%)	4 (26.7%)
3.	If yes, how often?	Almost daily	8 (57.1%)		11 (91.7%)	0
		Weekly once	3 (21.4%)		1 (8.3%)	0
		Monthly once	3 (21.4%)		0	2 (18.1%)
		Sometimes	0		0	9 (81.9%)
4.	If not, reason?		Going to school (1)	Near-by health post	Going to school (1)	Private (1)
					Don't know (2)	Don't know (3)

of 1.6 years and 4.4 years respectively.

The results of the study shows that 16.7% of the children were registered under this scheme and utilising any of the services, among them 100% children were taking supplementary nutrition, 80% children were taking non formal preschool education and 73.3% children were utilising the health check-up services. Among the mothers not utilising the ICDS services, 49.3% were aware but not making use of ICDS services and 50.7% were not aware of ICDS. Among the reason for non-utilization about 70,2% informed that they dont know about the services provided in ICDS.

Table 4: Anthropometric measurements of the study participants

S.No	Anthropometry (n=90)	Mean (SD)
1.	Weight (kgs)	12.21 (3.3)
2.	Height (cms)	91.8 (11.8)

Table 5: Nutritional status of the study participants

S.No	Nutritional status (n=80)		Frequency (Proportion)
1.	Weight for age	Underweight	21 (26.3%)
		No underweight	59 (73.8%)
2.	Height for age	Stunted	20 (25%)
		Not stunted	60 (75%)

In this study, the prevalence of underweight and stunting were 26.3% and 25% respectively. Severe stunting was found in 13.8% of the children; severe underweight in 5%.

DISCUSSION

An integrated package of early childhood services is provided under Integrated Child Development Services (ICDS) scheme, which lay the foundation for the development of nation's human resource. Services like supplementary nutrition,health checkup, immunization, health education, non-formal education and referral services are provided through the public health facilities, inorder to improve the health and nutrition of children 0-6 years.1,2

The study results revealed that 16.7% of the children were registered under this scheme and utilising any of the services provided. A similar study condicted in Tripura, showed that 77.4% of children were utilising of any the CDS services.4 Also, a study done in Nagpur, showed that77.48% were the utilization of services.6 NFHS 3 survey of Tamil Nadu data shows that about 33% received any of the ICDS services.7

This study results that 15.5% children were taking supplementary nutrition, 13.3% of children were taking non-formal preschool education, 12.2% children were availing health check-up services and most of them didn't have availed immunisation services from ICDS. A similar study condicted in Tripura, showed 67.5 % were receiving supplementary nutrition from ICDS.4 Also, a study done in Karnataka, 99.3% getting immunization services, showed 95.9% children were getting supplementary nutrition, 66.% were getting regular health check- up and 83.4% were getting preschool education.5 NFHS 3 Tamil Nadu data shows that 23% received non-formal education and 18% received health checkup, 26% received supplementary nutrition, 20%

received immunization services from AWC.7

In our study, about 70.2% said that they don't know about the services provided in ICDS and 13.5% children are attending private school. A similar study in Tripura, showed that 53.84% of the ICDS non-users said that they send their children to private nursery school whereas 42.30% parents had no knowledge about the services for children below 3 years of age.4

Compared to all the other research/studies and NFHS 3 data, the percentage of utilization was much less in our study, the reason may be inadquate information, education and counselling (IEC) activities pertaining to the ICDS services, as reasoned out by majority of the study participants.

The study showed that the prevalence of underweight and stunting were 26.3% and 25% accordingly. NFHS 4 – Tamil Nadu statistics, shows that 23.8% of children were stunted, 27.1% were in underweight category.8

As compared with survey data, the prevalence of underweight is higher, that is to be investigated with better child feeding and rearing practices in the community.

CONCLUSION

This study indicated that there is need of improvement in utilisation of ICDS providing child health services in the study area. Also, indicates that there is a gap in awareness regarding the availability of the services under the scheme. Hence, the IEC and BCC activities relating to the ICDS scheme has to be strengthened, so on to avail the services of ICDS scheme

Prevalence of under-nutrition among under-five children in our research/study is relatively high. It is necessary to intense the health education on promotion of proper nutrition, better infant and child feeding practices, healthy social and family life, respectful maternal and child care and strengthening the public health measures to overcome the malnutrition among under-five children in India.

RECOMMENDATIONS

- To strengthen the IEC activities regarding the services provided in the ICDS scheme.
- To induce the behaviour change communication to avail the services provided in scheme.
- To motivate towards practice.
- Health education has to be provided to promote nutrition, in-order to overcome the malnutrition.

LIMITATIONS

This study has been conducted on a small group of people but provides useful information regarding ICDS services utilisation in this area. Because of the small sample size, statistical test was not performed. Further studies need to be conducted to elaborate and confirm by triangulating the findings with other stakeholders like ICDS worker.

Conflict of interest : Dr. S. Sudharshini who is an author of this article is also a member of the editorial board and he was not involved with the processing and reviewing of this particular article.

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