

Original Research Article

ICDS: is it reaching the all child beneficiaries?

N. Pragathi Kumar¹, Tagaram Ramchandra^{2*}

Department of Community Medicine, ¹Ayaan Institute of Medical Sciences, Kanaka Mamidi, Moinabad, ²Government Medical College, Nalgonda, Telangana, India

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*Correspondence:

Dr. Tagaram Ramchandra,

E-mail: drarahul2k2@gmail.com

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ABSTRACT

Background: The beneficiaries under the scheme are children in the age group of 0-6 years, pregnant women and lactating mothers, women in the age group of 15-44 years and adolescent girls in selected blocks. Irrespective of caste, religion, socioeconomic status all beneficiaries are eligible for availing of services under the Integrated Child Development Services (ICDS) scheme. BPL is not a criterion for registration of beneficiaries under ICDS2. Present study is to recognize whether all categories of people are utilizing the services or not irrespective of economic status, religion etc.

Methods: Descriptive observational study done for period of one year, sampling done by multi stage (random) method. Study conducted in ICDS centers in the field practicing area of Kakatiya medical college Warangal, Telangana, India. 622 children from 31 anganwadi centres of 0 to 6 year age were included.

Results: Majority (71.7%) were belongs to '0 to 3' years of age group, male (50%) and female (50%) were equally in distribution. majority (78.3%) were Hindus. Majority parents (father-84.9, mother 84.2) were literates and mothers were unemployed/housewives, fathers were skilled workers (28%) followed by farmers (22%). Majority were (35.4%) belonged to middle, followed by lower middle (30.2%) level of socio economic status.

Conclusions: There were less number of 3 to 6 years age category population in the study, means that age group is not getting covered properly by ICDS. Two extremes (higher and lower categories) of education, occupation, socio economic status parents were not properly utilising the ICDS services for their children.

Keywords: ICDS, Anganwadi, Child beneficiaries

INTRODUCTION

Ministry of women and child development is implementing various schemes for welfare, development and protection of children.¹ The Integrated Child Development Services (ICDS) scheme is one of the flagship programmes of the Government of India and represents one of the world's largest and unique programmes for early childhood care and development.¹ It is the foremost symbol of country's commitment to its children and nursing mothers, as a response to the challenge of providing pre-school non-formal education on one hand and breaking the vicious cycle of

malnutrition, morbidity, reduced learning capacity and mortality on the other.¹

With wider spread of the scheme, plan allocation, which stood at Rs. 44,400 crores for the eleventh plan has been increased to Rs. 1,03,003 crores for the twelfth plan.¹ For the 3rd year of the twelfth plan i.e. for 2014-15, an amount of Rs. 16581.82 crores has been released to States/UTs as on 31.03.2015 against originally budget allocation (BE) of Rs.18195.00 crore.¹ This clearly shows a large portion of budget is allotted for ICDS, and it has to reach the beneficiaries for the cost benefit.

The beneficiaries under the scheme are children in the age group of 0-6 years, pregnant women and lactating mothers, women in the age group of 15-44 years and adolescent girls in selected blocks with main focus on children below 6 years.¹ Irrespective of economic status, religion, socioeconomic status, all beneficiaries are eligible for availing of services under the ICDS scheme.² BPL is not a criterion for registration of beneficiaries under ICDS.²

Rationale of study

Present study is to recognize whether all categories of people are utilizing the services or not irrespective of economic status, religion etc.

METHODS

Study design

This is descriptive observational study, done for period of one year (September 2017 to August 2018).

Study area

ICDS centers in the field practicing area of Kakatiya Medical College, Warangal, Telangana, India. The study was conducted in 31 anganwadi centres covered by 2 ICDS projects each one from urban and rural, out of 18 ICDS projects, in Warangal district.

Study population

622 children from urban (307) and rural (315) anganwadi centres. All 0-6 years of children attending/registered in 31 anganwadi centre were taken as study sample.

Inclusion criteria

Only registered beneficiaries of 0 to 6 years aged children who are present at the time of visiting.

Exclusion criteria

Those who are not presented at the time of study and not given consent and refused to participate in study are excluded.

Sampling method

Multi stage (random) sampling method was adopted for selecting 31 anganwadi centres.

Study tools

Pretested semi structured questionnaire was used. Informed consent was taken from each participant. Questionnaire was translated in local language for communication. Modified B.G. Prasad's classification

was used to calculate the socio economic status. Consumer price index of 288 was taken. Categories were V) lower- below 985, IV) lower middle- 986 to 1971, III) middle- 1972 to 3286, II) upper middle- 3287 to 6573, I) upper- above 6574 Rs. per month.

Education classification

Illiterate: who cannot read and write in any language were labelled as illiterate. Less than primary school is who attended school less than 5th class, who can read and write their names.

Primary school completed: subject's educated up to 5th class. High school completed- subject's education above 5th class up to 10th class.

Higher/secondary complete: subjects studied up to intermediate or 11th and 12th class.

Graduated: subjects completed graduation

Post-graduation: subjects who completed post-graduation.

Type of family classification

Nuclear: a married couple and their children while they are still regarded as dependent.

Joint family: number of married couples and their children who live together in the same household.

Three generation family: married children of the couple continue to stay with their parents and have their own children.

Data analysis

Data was entered in MS-excel 2007 and data was analysed using SPSS software Trail version 22. Results were displayed in numbers; percentages only. No statistical tests were done.

RESULTS

Age: Distribution among the total study population (total=622, urban=307 and rural=315) majority (71.7%) were belongs to '0 to 3' years of age group, and are equally distributed among themselves (24.1%, 24.1%, 23.5%), with minor predominance of '1 to 2' age group (15.6%) in urban population. Study population decreases with age after 3 years.

Sex: Among the total study population male (50%) and female (50%) were equally distributed. Minor male predominance (56.4) in urban, female predominance (56.2) in rural is seen in the study population.

Religion: Among the total study population majority (78.3%) were Hindus followed by (13.3%) Christians and (8.4%) Muslims. Rural area has more of Hindus (86.03%) when compared to urban. Urban area constitutes more of Muslims and Christians (15%, 14.7%) when compared to rural study population.

Type of family: Among the total study population majority (72.7%) were belonging to nuclear family type. Urban study population constitutes more (79.15%) of Nuclear families when compared to rural study population (Table 1).

Table 1: Distribution of age, sex, religion, type of family among study population.

Socio-demographic factors		Urban		Rural		Total	
		N	%	N	%	N	%
Age (in years)	>1	69	11	81	13.00	150	24
	1-2	97	16	53	8.50	150	24
	2-3	82	13	64	10.30	146	24
	3-4	22	4	56	9.00	78	13
	4-5	23	4	37	5.90	60	10
	5-6	14	2	24	3.90	38	6
	Total	307	49	315	50.60	622	100
Sex	Male	173	28	138	22.20	311	50
	Female	134	22	177	28.50	311	50
	Total	307	49	315	50.60	622	100
Religion	Hindu	216	35	271	43.60	487	78
	Muslim	46	7	6	1.00	52	8
	Christian	45	7	38	6.10	83	13
	Total	307	49	315	50.6	622	100
Type of family	Nuclear	243	39	209	33.60	452	73
	Joint	19	3	34	5.50	53	9
	Extended	45	7	72	11.60	117	19
	Total	307	49	315	50.60	622	100

Table 2: Literacy level among study population.

		Urban		Rural		Total	
		N	%	N	%	N	%
Father's literacy	Illiterate	18	2.90	76	12.20	94	15.10
	Primary school	4	0.60	8	1.30	12	1.90
	Middle school	22	3.50	51	8.20	73	11.70
	High school	112	18.00	82	13.20	194	31.20
	Intermediate	50	8.00	54	8.70	104	16.70
	Graduate	93	15.00	44	7.10	137	22.00
	Post graduate	8	1.30	0	0.00	8	1.30
Mother's literacy	Illiterate	22	3.50	76	12.20	98	15.80
	Primary school	7	1.10	7	1.10	14	2.30
	Middle school	44	7.10	37	5.90	81	13.00
	High school	88	14.10	111	17.80	199	32.00
	Intermediate	79	12.70	58	9.30	137	22.00
	Graduate	67	10.80	26	4.20	93	15.00
	Post graduate	0	0.00	0	0.00	0	0.00

Father's literacy: Among fathers of the study, total population majority (84.9) were literates and studied up to high school (31.2%), followed by graduation (22.0%) education level. Rural study population constitutes more (24.1%) of illiteracy level compared to urban.

Mother's literacy: Among the mothers of total study population, majority (84.2) were literates and studied up to high school (32%), followed by intermediate (22.0%)

education level. Rural study population constitutes more (24.1%) of illiteracy level compared to urban (7.16%) (Table 2)

Father's occupation: Among fathers of the total study population, majority (28.0%) were skilled workers followed by farmer (21.7%), semiskilled (18%), skilled (17.8%) rural study population constitutes more of farmers (35.2).

Table 3: Occupation level distribution among study population.

		Urban		Rural		Total	
		N	%	N	%	N	%
Father's occupation	Unemployed	1	0.20	12	1.90	13	2.10
	Unskilled	43	6.90	68	10.90	111	17.80
	Semi skilled	72	11.60	40	6.40	112	18.00
	Skilled	116	18.60	58	9.30	174	28.00
	Farmers	24	3.90	111	17.80	135	21.70
	Semi professional	31	5.00	20	3.20	51	8.20
	Professional	20	3.20	6	1.00	26	4.20
Mother's occupation	Unemployed/housewife	247	39.70	175	28.10	422	67.80
	Unskilled	27	4.30	48	7.70	75	12.10
	Semi skilled	8	1.30	10	1.60	18	2.90
	Skilled	14	2.30	0	0.00	14	2.30
	Farmer	3	0.50	73	11.70	76	12.20
	Semi professional	2	0.30	6	1.00	8	1.30
	Professional	6	1.00	3	0.50	9	1.40

Table 4: Socio economic status distribution of study population.

Socio economic status	Modified B.G. Prasad classification					
	Urban		Rural		Total	
	N	%	N	%	N	%
Upper	23	3.7	3	0.5	26	4.2
Upper middle	37	5.9	35	5.6	72	11.6
Middle	118	19.0	102	16.4	220	35.4
Lower middle	79	12.7	109	17.5	188	30.2
Lower	50	8.0	66	10.6	116	18.6
Total	307	49.4	315	50.6	622	100.0

Mother's occupation: Among mothers of the total study population, majority (67.8%) were housewives or unemployed followed by farmers (12.2%) unskilled (12.1%). Urban study population constitutes more of housewives (80.5%) than rural (55.6%) study population (Table 3).

Socio economic status: Among the study population, majority were (35.4%) belonged to middle, followed by lower middle (30.2%) socio economic status level. Among the rural study population majority (34.6%) belonged to lower middle followed by lower (21%) (Table 4).

DISCUSSION

In the present study, majority (71.7%) of the population belongs to <3 years of age group, and almost equally distributed in between 0-1, 1-2, 2-3 years (24.1%, 24.1%, 23.5%), with slight rise in '1-2' years of age group (15.6%) in urban population. Gradual decrease in population in >3 years is observed. In the present study, ICDS project is meeting the goals of NFHS-3 report³ by having large population of <3 years of age group, it's may be because of salutary custom of sending them to

kindergarten school or pre nursery school. A similar study done by Jitendra et al was not supporting the present study age distribution, where 3-6 age group was more.⁴ Another study done by Yesmin et al has most (60%) of the children in rural and urban area belonged to the age group of 12-23 months, this supports present study.⁵ Take home ration is limited to age group of 0-3 years in icds programme.² This might be a reason for Gradual decrease in population after 3 years.

In the present study population, male and female were equally (50%) distributed. The gradual correction of missing females are identified, may be because of well implementation state government sponsored programme Bangaruthalli scheme (2013-2016) and existing programme Kalyana Lakshmi/ Shadi Mubarak (a money assisting programme for marriage for women) which gives confidence to the parents of female child that she is no more a burden.⁶ This also denotes pre-conception and pre-natal diagnostic techniques (PCPNDT) act is getting implemented properly in Warangal district. More or less yardstick of Kerala state are seen under this issue. In a study done by Shanawaz et al on immunization coverage in ICDS centers of Hyderabad stated that they found 49.5% were boys and 50.5% were girls, means equally

distributed, this finding is very much similar to the present study.⁷ Another study done by Mohammed et al in ICDS centers in rural Bangalore to on children aged 2- 6 years it was found that 49.4% were boys and 50.6% were girls this finding also supports the present study.⁸ NFHS-3 report also supports the present study, where in ICDS projects male and female were equally (male-86.2% female 86.3%) registered.³

Among study population, majority (78.3%) were Hindus, rural area has more number of Hindus (86.03%) when compared to urban. 2011 India census data says 79.8% were Hindus, thus the present study is similar to the general population of India.⁹ This is because Hinduism is the major religion in India (also known as 'Hindustan'). In a study done by Mohammed et al in ICDS centers in rural Bangalore on children aged 2- 6 years has 81.6% of Hindus, which supports the present study rural population.⁸

Among the total study population, majority (72.7%) belong to nuclear family type. Urban study population constitutes more (79.15%) of Nuclear families when compared to Rural (66.35) study population. This trends shows population leaning forward towards nuclear family, due to many reason like migration for education, employment to a new place where they live as nuclear family. In a study done by Brahman et al of under five year rural children in the districts of Madhya Pradesh state- panna in associated with NIN Hyderabad has results with majority (59%) were nuclear family, which support the present study especially family type proportion of rural population. A study done by I.V. Mamatha et al, on Nutritional Status of Pre-School Children Attending Anganwadi Centres in Tirupati, Andhra Pradesh, About 64% of children were from nuclear family in the rural areas majority children 66% were from joint family.¹¹ This supports the present study urban population but differs with rural population where nuclear families are more.

Regarding educational status of parents, majority (father 84.9, mothers 84.2) were literates and studied up to high school (father 31.2% mother 32%), rural study population constitutes more (24.1%) of illiteracy level compared to urban. In a study done by Brahman et al on assessment of nutritional status of under five year rural children in the districts of Madhya Pradesh in association with NIN Hyderabad has nearly similar results in relation to literacy status of father.¹⁰ About 65% of the fathers of the index children were literates. About 42% had schooling of 6th-10th class, but 45% of the mothers of the index children were literates. About 15% of them had an education level of 1-5th class, which does not support the present study. In another study conducted by Bant et al, on prevalence of protein energy malnutrition among anganwadi children of Hubli, 30.8% of mother were illiterate, 28.9% studied up to high school.¹² A total 35.44% of fathers were educated up to high school and around 26.17% were illiterate. A majority, 91.7% of mother occupation were

housewife, illiteracy rate was higher than the present study, but it supports the percentages of fathers and mothers education up to high school level. Study done by Mittal et al in under five says education of mother significantly influenced the nutritional status of under-fives as the prevalence of under nutrition was 60.9% where mother was illiterate and it was only 21.2% where education level was more than high school, this support the present study.¹³

In the present study, among the total study population majority of fathers (28.0%) were skilled workers followed by farmer (agricultural labourer) (21.7%), semi-skilled (18%), skilled (17.8%). Rural study population constitutes more of Farmers (agricultural labourer) (35.2%). In a study done by Dattatreya et al, 56.47% of fathers were labourers (agricultural labourer) by occupation, which support the present study.¹² In the present study population majority of mothers (67.8%) were housewives/unemployed followed by farmer (agricultural labourer) (12.2%), unskilled (12.1%). Urban study population constitutes more of housewives (80.5%) than rural (55.6%) study population. In a study done by Brahman et al on assessment of nutritional status in under five year rural children, majority (56%) of mothers were housewives, which supports the present study.¹⁰ In other study done by Nagaraja et al, on anganwadi children and ICDS programme in Karnataka state major strata in (58.3%) fathers occupation was under farmer category which supports the present study.¹⁴

Socio economic status was calculated by using modified B. G. Prasad scale. Majority (38.4%) belonged to middle, followed by lower middle (30.2%) socio economic status level. Among the rural study population majority (34.6%) belonged to lower middle followed by lower (21%). Due to limitations of Modified B.G. Prasad classification the socio economic status is distributed in middle and lower middle levels equally, actually all are may be in the same level.

In study done by Masthi et al on socio economic status scales in a rural and urban setting says, it was observed that the standard of living indices had categorized majority (67%) of the families as high class; however, majority of the same families were grouped as middle class when Pareek's scale and Prasad's (upper and lower middle) scale was applied.¹⁵ This study states that different scales give different socioeconomic states. According to NFHS-3 Wealth index ICDS Beneficiaries are distributed as following-lowest 88.5%, second 93.5%, middle 91.9%, fourth 84.9%, highest 65.1%. This supports the present study.³ A study done by Yasmine et al, most of the respondents in rural areas belonged to Class IV, (lower middle 22.5%) and in urban area to Class V (lower 38.5%), this supports the present study rural area socio economic status, but not urban population level.⁵ This is may be because of defaults in socio economic scales, Modified B. G. Prasad scale is one of them. Each scale gives a different status of population. In

study done by Dinna et al about 32% belongs to class 3 (middle) this supports the present study.¹² In ICDS, only supplementary nutrition is given, and that is not replacement of whole nutrition. Major part of nutrition is given at home. Due to their low economic status they can't afford to meet the dietary requirement of the child.

CONCLUSION

There were less number of 3 to 6 years age category population attending ICDS/Anganwadi centre in the present study, means that age group is not getting covered properly by ICDS. Two extremes (higher and lower) categories in education, occupation, socio economic status levels of parents were not showing interest in utilising the ICDS services for their children.

Recommendations

It can be improved by extending the supplementary nutrition 3-6 years age category children. Awareness of ICDS/Anganwadi services in parents of two extremes (higher and lower) of education, occupation, socio economic status level of categories by frequent awareness programmes.

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