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Knowledge and Utilization of Integrated Child Development Services (ICDS) scheme among women in an urban slum- a community based study

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Abstract

Background: ICDS is the largest government run health program for children with its foot spread across complete Indian Territory.
Objective: Study was aimed to obtain information about the knowledge, level of awareness and utilization of the services provided under ICDS among women living in the urban slum.
Methods: Study was a community based cross-sectional study, conducted through a preformed questionnaire and house interview of women of 151 households in a slum.
Results: The awareness level about Anganwadi and various services provided by ICDS through Anganwadi among women was 91.39%. Immunization, Supplementary Nutrition(SN) and Health checkup were the known services in contrast to Referral services, Nutrition and Health Education (NHE), and Preschool Non-formal Education(PNFE) which were lesser known. Utilization of these services was 77.48%. In our study 37.5%, 31.25% and 18.75% pregnant women respectively utilized facility of Take Home Rations THR), health checkup and immunization & 38.46%, 30.77% nursing mothers respectively took regular THR, regular checkup. Among children beneficiaries, the group of 6-36 month consisted of 80 children among whom 41.25% took irregular SN, 70% were completely immunized, 60% had regular health checkups. In the group of 3-6 years out of 67 children, only 22.39% took regular SN, 71.64% were completely immunized, 62.69 had regular health checkups and meager 9% attended PNFE.
Conclusion: Level of awareness was found to be good. Utilization was found to be better among children as compared to women.

Keywords: ICDS, Utilization of ICDS, Awareness of ICDS, Slum women, Anganwadi

Introduction

"The lives of children and women are the true indicators of the strength of communities and nations."[(1)] Therefore health and welfare of children and their mothers is the top priority of any nation to build a strong society. But even after all these measures every day 26,000 (below 5 years) children are dying in the world, out of which half die due to malnutrition alone.[(2)]

In India, according to 2011 census, nearly 13.12% of population consisted of children below 6 years.[(3)] Indian government launched Integrated Child Development Services (ICDS) scheme on 2nd October 1975. This scheme has been restlessly working for welfare of pregnant, lactating mothers and children up to 6 years of age. Girl child is given special benefits up to her adolescence in certain conditions. The general services such as immunization, supplementary nutrition, health checkup, Pre-school-non-formal education and Nutritional and Health information are provided for the beneficiary group.[(4)]

Today ICDS scheme is one of the largest Government run schemes for health in world. In 2010 year 6719 operational projects in 1,241,749 Anganwadi centers are maintained under ICDS.[(4)]

According to a study conducted by Biswas AB et al about awareness of ICDS scheme in West Bengal, 84.2%[(5)] women were aware about ICDS while another study conducted in rural area of Gulbarga, Karnataka by Madhavi H et al found that about 90.83%[(6)] of pregnant ladies utilized the ICDS scheme. But very few studies have been carried out in urban slum areas of cities in central India.

With this background, a study was conducted to assess and evaluate the awareness about this national scheme in the urban slums along with its utilization in the slum for benefits of women and children. We have also tried to find reasons for under- utilization or non-utilization of ICDS. Also to find out association between various socio- demographic factors such as socio-economic status, type of family, literacy etc. and utilization of ICDS scheme.

Materials & Methodology

A community based cross–sectional study was carried out in the field practice area under the Urban Health Training Centre (UHTC) attached to the Department of Community Medicine of a tertiary care hospital. The study subjects were the beneficiaries of ICDS scheme in the selected field practice area of UHTC.

A total of 30,000 populations are covered under Urban Health Training Centre. The field practice area is divided into 5 slum areas. Out of which one area that is Ramabai Ambedkar Nagar was selected by simple random sampling before the start of study. There are about 500 houses in this area.

Considering the value of **P** as 0.90,[(6)] value of **d** as 0.5 and 'Confidence Limit' as 95%, the sample size calculated was 138.[(7)] But for better coverage a total of 151 Households were visited and all the beneficiaries in sampled Households were covered in the study. List of

houses of Ramabai Ambedkar Nagar was obtained from UHTC and every 3rd house was selected by systemic random sampling. All the beneficiaries present in the house such as Pregnant women, Lactating mothers, Mothers of 0-6 years age group children, Adolescent girls of age group 11-18 and Reproductive age group women (i.e.15-45) were interviewed in the study. Total beneficiaries were 197 in 151 households.

After taking permission from the Institutional Ethical Committee (IEC), study was carried out for two months of April and May 2013. An informed consent was taken from the women to be interviewed from the household. A detailed socio-demographic information of her family, information regarding knowledge of the ICDS scheme and utilization of ICDS services such as immunization, supplementary nutrition, health checkup, referral services, preschool non-formal education and health education etc. by all beneficiaries from that house was collected in a predesigned and pretested questionnaire by questioning in the local language for better response and clarity.

Socio –Economic status was calculated by using B.G. Prasad Scale. All data was entered in Microsoft Excel sheet and Statistical Analysis was done by using Proportions and Chi-square test. Data was analyzed by using Epi-Info statistical software (version=3.5.4).[8]

During the study, the subjects with poor knowledge of ICDS were given proper information about this scheme through personal counseling in the local vernacular language. The subjects who have been enrolled but are under utilizing the ICDS scheme were motivated to take maximum benefit of the scheme. The subjects who fall under the beneficiary group but are not enrolled and not utilizing the scheme but are interested and needy were linked to the service provider (anganwadi worker) through proper channel.

Result

A. Socio-demographic Profile of the Population: The study population majorly comprised of people following Buddhism 123(81.46%) followed by Hinduism 26(17.22%). As the health of women and children was at stake, the education of mother played an important role and it was found that only around 37(25%) of women were Graduate, but still only 8(5%) women were reported to be educated less than primary schooling. Being an urban slum most of the women 127(84.11%) were housewives and stayed at home.

Only about 47(31%) husbands had higher education and men had lesser literacy rates than women. Occupation wise 64(42.38%) were working as an unskilled worker mainly labors at factories of construction sites while 83(54.97%) were working as skilled technicians.

Nuclear families were common 98(64.90%). And mainly single child families were more predominantly encountered 72(47.86%) followed by 49(32.45%) families with two children. Male and female children were almost equally present in the community. Majority of families 64(42.38%) belonged to Grade II of Modified B.G. Prasad Scale followed by 54(35.76%) families that belonged to Grade III.

B. Knowledge about services provided under ICDS: In our study 138(91.39%) women were aware about Anganwadi. They were aware about the AWW of their respected area. Majority women 135(89.48%) women knew about provision of supplementary nutrition, 124(82.12%) knew about immunization services and health checkups, 53(35.09%) & 19(12.5%) respectively knew about nutritional & health education & non formal education, but none of them were aware about Referral services. Major source of information about Anganwadi was the AWW herself as 94(68.11%) women received the information from her.

C. Utilization of services of ICDS: Utilization of Services provided under ICDS was around 77.48% in general, and only 152(77.15%) beneficiaries out of total 197 utilized the available services. Out of 103 houses with 1 beneficiary only 80(52.98%) houses utilized the services, and out of 45 houses with two beneficiary only 36(23.83%) houses utilized the services.

The study consisted of 16 Pregnant women and 13 Nursing mothers. Level of utilization was poor among pregnant and nursing mothers, Out of these 11(68.75%) pregnant ladies neither utilized the immunization services against tetanus nor the health check-up services, 10(62.5%) did not take supplementary nutrition and 13(81.25%) ladies did not attend the Educational programs. Nursing mothers too were ignorant regarding health checkup as only 4(30.77%) used it, only 5(38.46%) nursing mothers received supplementary nutrition and mere 3(23.08%) received Nutrition & Health education.[Table 1]

Table 1: Utilization of Various services by Different Groups of Beneficiaries.

Sr. No.	Beneficiary Category	No. of Beneficiaries (Frequency)	Services Provided Under ICDS	Utilization of Services					
				No utilization		Partial utilization		Complete utilization	
1.	Pregnant Women	16	Health checkup	11	68.75%	0	0%	5	31.25%
			Immunization Against Tetanus	11	68.75%	2	12.50 %	3	18.75%
			Supplementary nutrition	10	62.5%	0	0%	6	37.5%
			Nutritional and Health Education	13	81.25%	0	0%	3	18.75%
2.	Nursing mother	13	Health checkup	8	61.54%	1	7.69%	4	30.77%
			Supplementary Nutrition	5	38.46%	3	23.08 %	5	38.46%
			Nutritional and Health Education	8	61.54%	2	13.58 %	3	23.08%
3.	Children less than 3 years.	80	Supplementary Nutrition	21	26.25%	33	41.25 %	26	32.50%
			Immunization	18	22.50%	6	7.50%	56	70%
			Health checkup	28	35%	4	5%	48	60%
			Referral services	80	100%	0	0%	0	0%
4.	Children from 3-6 years	67	Supplementary Nutrition	16	23.58%	36	53.73 %	15	22.39%
			Immunization	12	17.91%	7	10.45 %	48	71.64%
			Health checkup	19	28.36%	6	8.96%	42	62.69%
			Referral services	67	100%	0	0%	0	0%
			Non Formal Education	59	88.06%	2	2.99%	6	8.96%
5.	Adolescent Girl 11-18 years.	8	Supplementary Nutrition	1	12.5%	2	25%	5	62.5%
			Nutritional and Health Education	2	25%	1	12.5%	5	62.5%
6.	Other Woman 15-45 years	13	Nutritional and Health Education	0	0%	0	0%	13	100%

ICDS being mainly for children of 6 months to 6 years Age, we divided them into two groups of 6 months-3 years and 3-6 years. In the first group 80 children were included in study while 67 in the second group. In the first group only 26(32.5%) children took complete supplementary nutrition while 33(41.25%) took partial nutrition. Among them 56(70%) children were completely immunized and 48(60%) received health checkups from time to time, & no children ever utilized the Referral services.

The second group of kids consisting from 3-6 years showed decline in utilization as only 15(22.39%) children took complete supplementary nutrition provided to them and 48(71.64%) were completely immunized, 42(62.69%) children had regular health checkups, none utilized the referral services and meager 6(8.96%) knew about Non Formal Education. [Table 1] Being in urban area many parents preferred to put their children in school so a decline in utilization can be seen accordingly.

Among group of adolescent girls, out of 8 adolescent girls between the age of 11-18 years, 5(62%) took supplementary nutrition completely and nearly same amount of those girls attended the Educational programs. Other women between 15-45 ages (reproductive age group) were 13 in number out of which all attended educational sessions arranged by the anganwadi worker. Most common reasons of under-utilization as stated by the women were lack of awareness (28%), household work (24%) etc. [Fig. 1]

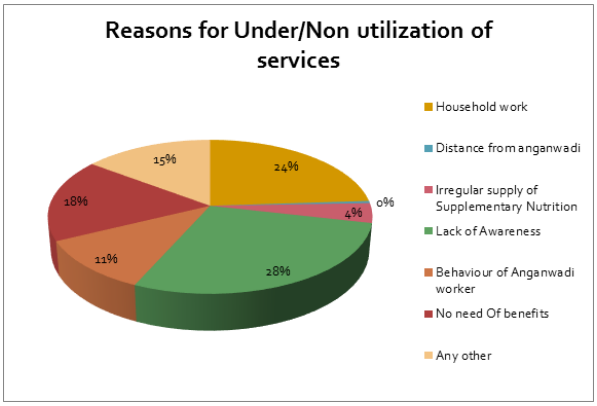

Fig. 1: Reasons for under-utilization /Non utilization of services

D. Association between Socio-demographic profile and Utilization of ICDS: No association was found out between education of women and utilization of ICDS services ($p>0.05$). Similarly no significant association was found between occupation and utilization of ICDS ($p>0.05$). Type of Family too had no significant association with utilization of ICDS services ($p>0.05$).

Socio-Economic Status whereas had a highly significant association with the utilization of ICDS services. The families with more Per-Capita Income showed less utilization in compared to families with less PCI. Therefore an inverse relation can be seen between SES and Utilization of ICDS services. [Table 2]

Table 2: Association between Socio-Demographic Variables and Utilization of ICDS

Sr. no.	Socio- Demographic Factors	Utilization of Beneficiary			Chi Square Test Results	
		Present	Absent	Total	x^2	p*
I].	Education of the Women.					
	1. ≤ SSC	57	17	74		
	2. >SSC	60	17	77		
	Total	117	34	151	0.017	0.895
II].	Occupation of the Women.					
	1. Housewife	98	29	127		
	2. Working	19	5	24		
	Total	117	34	151	0.046	0.8295
III].	Type of Family.					
	1. Nuclear Family	77	21	98		
	2. Joint Family/ Three Generation Family	40	13	53		
	Total	117	34	151	0.18	0.663
IV].	Socio-Economic Status. (Modified B.G. Prasad Scale.)					
	1. Grade I & II	59	26	85		
	2. Grade III, IV & V	58	8	66		
	Total	117	34	151	7.2622	**0.007043**

***significant if p<0.05**

Discussion

In our study 91.39% women knew about ICDS services but certain services were well known while other weren't. Similar aspect was looked into by *Biswas AB et al*[5] in a study conducted in Howrah and Purulia districts of West Bengal in 2007, in that study results lower than the current study were found as 84.2% of women were aware of any ICDS services. Another study conducted in Udupi district by *Jawahar Preethy et al*[9] focused that 49.3% had average knowledge of ICDS while 46.7% had poor knowledge about ICDS services. The better knowledge maybe due to the fact that the study was conducted in a urban slum in which better access to mass media.

Utilization of ICDS services was found to be 77.48%. A study conducted in Udupi district by *Jawahar Preethy et al*[9] had contrasting results with around 74.1% and 7.4% utilization of supplementary nutrition and immunization respectively which is more than the current study. Another study conducted in rural area of Gulbarga, Karnataka by *Madhavi H et al* found that about 90.83%[6] of pregnant ladies utilized health checkup services while 94.23% took SN which was more than the current study. Another study that took place in urban slums of Lucknow by *Madhu Agrawal*[10] stated that 79% pregnant women had proper antenatal care because they were registered beneficiary of ICDS. This difference maybe because this study was conducted in the urban setup where lots of options are always available for the pregnant ladies.

Nursing mothers in this study 38.46% took regular THR, 30.77% had regular checkup and 23.08% attended NHE meets. A study conducted in Udupi district by *Jawahar Preethy et al*[9] had varying results with 76.2% taking regular SN while only 4.8% attended the NHE meets. Another study conducted in rural area of Gulbarga, Karnataka by *Madhavi H et al* found that

about 71.63%[6] lactating mothers had regular health checkups while 94.30% of them took regular SN. Being urban area, the need of ICDS services must be low in this group. Other reason maybe that most of the women consider Anganwadi to be completely devoted to the service of small children and awareness of maternal services is low in them.

In the group of adolescent girls majority of them utilized schemes of SN and NHE to the fullest (62.5%), this seems better when stated that only 10% of Adolescent girls population has been covered under the ICDS scheme in Planning commission report formulated in march 2011.[11] The category of other women showed 100% utilization of NHE services which was better when compared to the results of study conducted in rural area of Gulbarga, Karnataka by *Madhavi H et al* that found about 43.5%[6] utilization of NHE services by the women in reproductive age group. This maybe because of lesser distance and proper communication coverage majority of women are able to contact timely for such NHE meets.

Among children beneficiaries, a study conducted in Udupi district by *Jawahar Preethy et al*[9] had varying results in which 71.1% utilization of supplementary nutrition, 58.3% of health checkup, 69.3% of Non-formal education, 26.7% of immunization was seen in children in beneficiary age group.[9] Another study conducted in rural area of Gulbarga, Karnataka by *Madhavi H et al* found that 50.88% had regular checkups, 91.58% utilized services of PNFE and 70.33% took regular SN.[6] These results contrasting study conducted in Latur district by *Jitendra Surwade et al* in which the urban SN utilization (48%) was more than the Rural (37.7%).[12] But according to current study the utilization is less when compared to that of Udupi[9] and Gulbarga[6] districts. Better immunization was seen in study conducted by *Sangita Trivedi et al*[13] in Sanwer (MP) among ICDS children. Utilization is less than rural because kids start going to schools early.

The major reasons put forward for under-utilization/non utilization were lack of awareness (28%) regarding certain services, household work or outdoor work did not allow regular usage of ICDS services in 24% cases, irregular supply (18%) was also the a reason. Other reasons (15%) put forward were non registration and going to school in place of an anganwadi. Similar case scenario was found out in study conducted in Udupi district by *Jawahar Preethy et al*[9] where results were different than the current study as 43% stated household work, 40% stated longer distance from anganwadi and 13% lacked awareness as the reason of not utilizing the ICDS services. The reason behind this maybe because the distances in urban area are not long enough but children start going to schools at an early age and thus decreasing the usage of services provided.

Conclusion

Level of awareness (91.39%) of ICDS scheme and its services was found to be good. 77.48% utilization of these services was recorded. Utilization was better among children as compared to women. Reasons of under-utilization as stated by the women were lack of awareness (28%), household work (24%), no need of benefits (18%) etc. There was an inverse relation between Socio-Economic Status and Utilization of ICDS services.

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