ORIGINAL RESEARCH PAPER
Volume-9 | Issue-3 | March-2020 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A STUDY ON FUNCTIONING OF THE NUTRITIONAL SERVICES IN ANGANWADIS FOR 0 – 3 YEARS CHILDREN UNDER ICDS PROGRAMME IN DELHI FROM USER'S PERSPECTIVE.

Community Medicine

Dr Nitin Dutt Bhardwaj* Assistant Professor, Department of Hospital Administration, KGMU, Lucknow *Corresponding Author

Dr Supriya Singh Resident, Department of Hospital Administration, KGMU, Lucknow

Dr Amit Kumar Resident, Department of Hospital Administration, KGMU, Lucknow

Professor K. Kalaivani Professor, National Institute of Health and Family Welfare, New Delhi

ABSTRACT

Introduction: Nutritional services under the ICDS programme aims to improve nutritional status of children in India. Perception of the user regarding the nutritional services provided by the anganwadi, reasons for non-utilization of services is important to understand to achieve its aim.
Objective: To assess perceptions of users regarding nutritional services provided in anganwadi of urban area and reasons for non-utilization of the nutritional services by anganwadi among non-users.
Methdology: Cross sectional and descriptive study conducted at Mehrauli Project of South District and Hastsal Project of West District. Mothers were interviewed based on the pre-tested interview schedule.
RESULTS: Significant differences were observed in profile of user and non-user, population with years of stay less than 2 years are utilizing the services less as compared to those who have comparatively more years of stay in the area. Utilization of anganwadi services is less among families with children in age group up to 12months, lower birth order and families with relatively higher monthly income of household. Awareness about anganwadi services for pregnant women was low (83.3% for supplementary nutrition and 68% for NHE). Utilization of supplementary nutrition and NHE services for pregnant women was also low 57.5% and 9.6% respectively. Among the non-users 34% were not aware of the location of AWC and awareness level for the growth monitoring services was 57.5% and 62.7% for supplementary nutrition / Take Home Rations. Among users 23 (13%) were not aware of importance of growth monitoring and 17 (9%) were not aware about importance of SNP/THR. Awareness among the user about feeding the child during illness and after illness was 72.8% as compared to 33% in the non-user.
Conclusion And Recommendation: Active efforts to include the migrant young population, families with relatively higher household monthly income in the nutrition and health services for growth monitoring to enable detection of under or over-nutrition in these children and appropriate advice for corrective measures.

KEYWORDS

ICDS, User Perspective, Supplementary Nutrition

INTRODUCTION

Poor growth and development can have a lifelong effect on health and nutritional status of the individual. Adverse nutrition-infection interaction results in a vicious cycle with serious consequences to the life of the infant/young child. Stunted and underweight children grow up into short adults and women who are short and under-weight and are more likely to give birth to Low Birth Weight babies. The result is an intergenerational cycle of under-nutrition since low birth weight infants tend to attain smaller stature as adults [(1)]. The need for appropriate growth in childhood is necessary to protect against both under and over-nutrition and consequent health hazards. Right from the Bhore Committee the inter-relationship between health and nutrition was understood; this has been emphasised in India's Five-year Plans. Realising the need for a programme to promote adequate nutritional status and prevent under-nutrition especially in the vulnerable groups like pregnant and lactating women and pre-school children the Government of India started the Integrated Child Development Services (ICDS) as a Project in 1975 focussing on "Nutrition, Assisting Health Services. Pre-school Education".

Even after three decades of implementation of nutritional services under the ICDS programme, poor nutritional status of children in India is seen. The percentage of children who are too short for their age (stunted) decreased by less than one percentage point per year over the seven years between the two surveys, from 51 percent in NFHS-2 to 45 percent in NFHS-3. The percentage of children who are underweight also decreased, but only by three percentage points [(2)].

In Delhi 42% of children under age five are stunted, or too short for their age, which indicates that they have been undernourished for some time. 15% are wasted, or too thin for their height, which may result from inadequate recent food intake or a recent illness. 25% are underweight, which takes into account both chronic and acute under-nutrition. Even in the wealthiest households, one-third of children are stunted, 17% are wasted, and 20% are underweight. The nutritional status of children in Delhi has improved slightly since NFHS-2 by one indicator (the prevalence of underweight), but not by other two indicators. In Delhi children under age three years (the age group for which nutritional status data are available in NFHS-2) are less likely to be too thin for their age, which means that acute under-nutrition among children is less widespread today than it was seven years ago. However, the likelihood of children being too short for their age is same as they were at the time of NFHS-2, and they are slightly more likely to be too thin for their age [(3)].

Children in slum areas are much more likely to be stunted and underweight than children in non-slum areas. The focus has also been on distributing food rather than changing family-based feeding and caring behaviour. Variety of reasons resulting in low community participation and poor coordination between Health and Social Welfare Department has resulted in limited impact and slow pace of improvement.

In view of few studies addressing these issues this study will try to find out: perception of the user regarding the nutritional services provided by the anganwadi, reasons for non-utilization of services. The study will also suggest locally feasible remedial measures for gaps identified.

The National Family Health Survey (NFHS-3), India, 2005-06 showed that only 8-10% of children aged 0-71 months received any service from an AWC in the 12 months preceding the date of the survey in Delhi, Bihar, and Arunachal Pradesh. It also showed equally clearly that children living in urban slums in metros and big cities had very high proportion of under-nourished children. Hence the study was planned in Delhi in a slum/unauthorised colony/underserved area of Delhi.

OBJECTIVE

To assess the perceptions of users regarding the nutritional services provided in anganwadi of urban area and the reasons for non-utilization of the nutritional services by anganwadi among non-users.

METHDOLOGY

Operational Definitions:

User: Mother of (0 to 3 years) child using Anganwadi services (growth monitoring or supplementary nutrition)

Non – User: Mother of (0 to 3 years) child not using Anganwadi services (growth monitoring & supplementary nutrition) matched for user for same geographical area.

The study was conducted at Mehrauli Project of South District and Hastsal Project of West District. In South District CDPO of Mehrauli Project granted permission for 12 centres and in West District CDPO of Hastsal Project granted permission for areas 10 centres. It was a cross sectional and descriptive type of study. The study population includes User (as per operational definitions of this study) and Non–User (as per operational definitions of this study) for each anganwadi. Variables such as awareness about location and services provided by AWC, services utilized at AWC for the child, reasons for satisfaction or dissatisfaction with the AWC services of users, reasons for non-utilization of anganwadi services by nonusers, awareness about Infant and Young Child Feeding Practices, awareness of services provided by anganwadi for pregnant women, utilization of services provided by anganwadi for pregnant women during pregnancy were taken for study.

For assessing the perception of user and non-user the researcher went to the residence of each of the identified user as well as non-user from the same locality and the mother of the child was interviewed. Mothers were interviewed based on the pre-tested interview schedule

Sample size calculation:

According to National Family Health Survey (NFHS-3), India, 2005-06 among the 46 percent of children under six years in Delhi who are in areas covered by an *anganwadi* centre, only 12 percent receive services of any kind from a centre. The most common services that children age 0-71 months in areas covered by an *anganwadi* centre receive are supplementary food (12%), followed by immunizations (5%) and health check-ups (3%).

The sample size was calculated taking the NFHS -3 data of 12.4% of under five children who received any service from an AWC in the previous 12 months and confidence level of 95% (probability), margin of error accepted (d) 10% i.e. 0.05 and by the following formula.

$$\text{Sample size (N)} = \frac{(Z\,2) * P(1-P)}{d^2}$$

$p = 0.12$

$q = (1-p) = 0.88$

$z = 1.96$ as per table of area under normal curve for confidence level of 95 %

d = allowable error, since estimate should be within 5% of true value=0.05

$$\text{Sample size (N)} = \frac{(1.96)2 * 0.124\,(1 - 0.124)}{(0.05)^2} = 166.9 \sim 167$$

For users 228 children were selected randomly from the list of users available with the Anganwadi Workers of selected Anganwadis, thus 4 children from each anganwadi were randomly selected from the enrolment register of AWC. Corresponding 228 children (matched for the same geographical area) not using Anganwadi services (growth monitoring & supplementary nutrition) were selected as non-user.

Data collection was done in duration of two months, April – May 2011. Data was analyzed by using Statistical Package for the Social Sciences 19 (SPSS 19) and Microsoft Office Excel 2010 and 97-2003 for windows software as follows: Descriptive statistics and Test of significance

RESULTS

This study was conducted in Delhi, in the anganwadi centres of Neb Sarai (12), Lado Sarai (8), and Andheriya Mod (10) (Mehrauli Project, South District) and Shiv Vihar (10) and Vikas Nagar (17) (Hastsal Project, West District) were covered.

Socio – demographic profile of user and non-users

Years of stay in area:

Table 1. Distribution of users and non-users according to year of stay in area

Years of stay in area	User	%	Non-User	%	Total	$X^2(4)$	P-value
up to 2 years	37	38.5	59	61.5	96	9.804	0.044*
2 years one day to 5 years	57	46.3	66	53.7	123		
5 years one day to 8 years	40	55.6	32	44.4	72		
8 years one day to 12 years	43	56.6	33	43.4	76		
more than 12 years	51	57.3	38	42.7	89		
Total	228	50.0	228	50.0	456		

Details of distribution of users and non-users according to year of stay in area are given in **Table 1**. The proportion of users increases with increasing duration of stay in the area as compare to non-user within each group. This can be because those with shorter duration of stay are recently migrant population who may not be familiar with all services available in the area. Families staying for less than two years are largely composed of unskilled or poorly skilled migrant population who are more vulnerable as they are new to cities and are unaware of location of AWC and services provided by the AWCs, no regular source of income and social security, and nuclear families with no elders accompanying them who are able to guide the young parents.

Table 2. Distribution of users and non-users according to age of the child

Age of child	User	%	Non-User	%	Total	X2(2)	P-value
Less than 12 months	77	42.5	104	57.5	181	8.037	0.018*
13 - 24 months	77	51.7	72	48.3	149		
25 - 36 months	74	58.7	52	41.3	126		
Total	**228**	**50.0**	**228**	**50.0**	**456**		

Age of child: Details of distribution of users and non-users according to age of the child is given in Table 2. The proportion of users was more with increasing age of the child. Less than 12 months age group is the most crucial segment as there is a steep increase in under-nutrition as assessed by weight-for-age in this age group; the children will benefit by regular weighing and growth monitoring and advice to mothers if required on necessary IYCF practices

Table 3. Distribution of users and non-users according to birth order of the child

Birth order of child	User	%	Non-User	%	Total	$X^2(2)$	P-value
1	55	37.2	93	62.8	148	21.79	0.000*
2	94	50.0	94	50.0	188		
3 & >3	79	65.8	41	34.2	120		
Total	**228**	**50.0**	**228**	**50.0**	**456**		

Birth order of child: Details of distribution of users and non-users according to age of the child is given in **Table 3**. As the birth order increases there is statistically significant increase in proportion of family using anganwadi services for the child from 37.2% with birth order one to 65.8% with birth order of three or more. Mothers with children of lower birth order requires more support for feeding the infant and young child, child care and for management of childhood illness as they are young and due to increase in nuclear families no one to guide them in child care.

Table 4. Distribution of users and non-users according to monthly income of the household

Monthly income of household	User	%	Non-User	%	Total	$X^2(2)$	P-value
Low up to Rs 4000	103	55.4	83	44.6	186	6.656	0.036*
Medium Rs 4001 - 6000	77	51.0	74	49.0	151		
High > 6000	48	40.3	71	59.7	119		
Total	228	50.0	228	50.0	456		

Monthly income of household: Details of distribution of users and non-users according to age of the child is given in T**able 4**. There was decrease in proportion of family utilizing anganwadi services (both growth monitoring and supplementary nutrition) for their child in

respect of monthly household income from 55.4% with household income less than Rs 4000 per month to 40.3% with household income of more than Rs. 6000 per month as compare to families of non-user. Families with relatively higher income are self-excluding themselves which is dangerous as growth monitoring of these children are not done resulting in delay in detection of growth flattening.

Table 5. Distribution of users and non-users

Sex of child	Users	%	Non-Users	%	Total	$X^2_{(1)}$	P-value
Male	118	52.7	106	47.3	224	1.264	0.261
Female	110	47.4	122	52.6	232		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Place of delivery of child	**Users**	**%**	**Non- Users**	**%**	**Total**	$X^2_{(1)}$	**P-value**
Hospital	136	49.5	139	50.5	275	0.082	0.774
Home	92	50.8	89	49.2	181		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Age of Mother	**Users**	**%**	**Non-Users**	**%**	**Total**	$X^2_{(3)}$	**P-value**
17 – 22 years	55	47.0	62	53.0	117	0.951	0.813
23 – 28 years	135	51.7	126	48.3	261		
29 – 34 Years	30	50.0	30	50.0	60		
35 – 40 Years	8	44.4	10	55.6	18		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Education of mother	**Users**	**%**	**Non-Users**	**%**	**Total**	$X^2_{(3)}$	**P-value**
Illiterate	103	53.6	89	46.4	192	4.293	0.231
literate but less than tenth	75	51.4	71	48.6	146		
Tenth and less than twelfth	38	44.2	48	55.8	86		
graduate and above	12	37.5	20	62.5	32		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Working status of mother	**Users**	**%**	**Non-Users**	**%**	**Total**	$X^2_{(1)}$	**P-value**
Working	19	43.2	25	56.8	44	0.906	0.341
Housewife	209	50.7	203	49.3	412		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Type of family	**Users**	**%**	**Non-Users**	**%**	**Total**	$X^2_{(1)}$	**P-value**
Nuclear	128	48.3	137	51.7	265	0.73	0.393
Joint	100	52.4	91	47.6	191		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Religion	**Users**	**%**	**Non-Users**	**%**	**Total**	X^2_{0}	**P-value**
Hindu	196	49.5	200	50.5	396		
Muslim	27	54.0	23	46.0	50		
Sikh	2	40.0	3	60.0	5		
Christian	3	60.0	2	40.0	5		
Total	**228**	**50.0**	**228**	**50.0**	**456**		
Occupation of head of family	**Users**	**%**	**Non-Users**	**%**	**Total**	X^2_{0}	**P-value**
Legislators, senior officials and managers	2	28.6	5	71.4	7		
Professionals	2	18.2	9	81.8	11		
Technicians and associate professionals	9	33.3	18	66.7	27		
Clerks	21	43.8	27	56.3	48		
Service workers and shop & market sales workers	22	59.5	15	40.5	37		
Skilled agricultural and fishery workers	0	0.0	1	100.0	1		
Craft and related trades workers	62	59.0	43	41.0	105		
Plant and machine operators and assemblers	49	55.7	39	44.3	88		
Elementary occupations	60	45.8	71	54.2	131		
Workers not classified by occupations	1	100.0	0	0.0	1		
Total	**228**	**50.0**	**228**	**50.0**	**456**		

Details of distribution of users and non-users according to sex of child, place of delivery of child, age of mother, education of mother, working status of mother, type of family, religion and occupation of head of family are given in **Table 5**. There was no significant difference in proportion of user as compared to non-user in relation to sex of child, place of delivery, age of mother, education level of mother, working status of mother and type of family. However, the study by **NIPPCD 2006**[4] observed more registration of male children (59.1%) than those of female children (55.2%). percentage of female children availing supplementary nutrition was (82.5%), as against male children (74.4%).

Awareness, utilization and satisfaction for AWC services among the users

Table 6. Utilization and Satisfaction For Growth Monitoring Supplementary Nutrition / Take Home Ration And Referral Services Provided By Anganwadi Among The Users.

Service	Utilize	% (N=228)	Satisfied	%
Growth monitoring service	228	100.0	174	76.3
Supplementary nutrition/ THR	228	100.0	190	83.3
Referral	188	82.5	184	97.9

* All 228 users were aware of growth monitoring service supplementary nutrition/THR and Referral services.

Table 6 shows that satisfaction for the growth monitoring services was 76.3% followed by 83.3% satisfaction for supplementary nutrition and 97.9% satisfaction for referral services provided by anganwadi among their users. The users understand very clearly the importance of growth monitoring as the most crucial services of AWC required for early detection of growth flattening and corrective actions and appropriate growth of the children, in view of service being not complete, comprehensive and regular satisfaction level for the growth monitoring services was low among all services.

Table 7. Reasons for satisfaction/dissatisfaction for growth monitoring services provided By Anganwadi Among the Users.

Reasons for satisfaction		
Group I	**F**	**% N=174**

Know about weight gain	64	36.78
Know about growth of the child	29	16.66
Get feedback on growth of child	20	11.50
Know monthly growth	10	5.75
If child is weak then get advice what to do and where to go	9	5.17
Know the status of child nutrition	9	5.17
If child is ill weight decreases	6	3.45
Know early if child is weak take action accordingly	3	1.72
Told that the child was weak so referred him/her now child is normal	3	1.72
If weight of the child is less increasing the food quantity	2	1.15
Know the status after illness	2	1.15
Came to know that child was weak after diarrhoea	1	0.57
Group II	**F**	**% N=174**
Come to know about weight of the child but weight does not increase and is same as last month	25	14.37
Group III	**F**	**% N=174**
Not aware of importance or reason of growth monitoring of child	23	13.22
Group IV	**F**	**% N=174**
AWH take child from home	3	1.72
Easy to get weight done	5	2.87
Reasons for dissatisfaction		
Reasons	**F**	**% N=54**
Not Regular	48	88.89
No Machine available	43	79.63
No feedback so no importance	12	22.22

Table 8. Reasons for satisfaction/dissatisfaction for Supplementary Nutrition and take-home ration services provided By Anganwadi Among the Users.

Reasons for satisfaction		
Group I	**F**	**% N=190**
Added food to child	127	66.84
Added good food we cannot afford	1	0.53
Group II	**F**	**% N=190**
Food provided helps in growth of child	31	16.32
Child can play and eat	18	9.47
Child likes the food	14	7.37
The food provided helps to increase the weight gain	12	6.31
At least child eats in competition / company of another child	8	4.21
If do not feed the child then there is less growth	4	2.10
Group III	**F**	**% N=190**
Not aware of importance or reason of providing supplementary nutrition or THR	17	8.95
Group IV	**F**	**% N=190**
Food is good for child growth but sometimes child do not like food	9	4.74
Reasons for dissatisfaction		
Group I	**F**	**% N=38**
Child does not like food	9	23.68
Group II		**% N=38**
There is no variety, only panjiri, sometimes child do not like	4	10.53
There is no variety, fixed menu children are bored	3	7.89
Nothing like dal and rice or puri and sabji	2	5.26
There should be fresh vegetables	1	2.63
Group III	**F**	**% N=38**
Dry ration to be given	7	18.42
Should be dry ready to eat food which child can eat any time in day	12	31.58
Group IV	**F**	**% N=38**
Poor quality of grains	15	39.47

Table 9. Reasons for not utilizing Growth Monitoring services provided By Anganwadi Among the Users.

Group I	**F**	**% N=228**
No use of weighing for the child	34	14.91
No need of weighting the child	33	14.47
If the weight is done then Nazar lag jayege (evil-eye)	3	1.31
This child was conceived after long t/t for infertility so fear something goes wrong to child	2	0.88
ASHA did not help us during pregnancy so do not use govt service	1	0.44
Child of elder brother died after vaccination so no faith in govt supplies	1	0.44
Elder child died of drowning at village so fear that anything wrong will happen to child	1	0.44
Elder child had "reaction" after immunization, so lost faith in govt supplies	1	0.44
Child is too young to be taken out	1	0.44
Group II	F	% N=228
Get weight of the child done at DDU Hospital whenever go to hospital	4	1.75
Get weight of the child done at SJH or AIIMS whenever go to hospital	1	0.44
Not require get weight of the child done at private clinic	14	6.14
Group III	F	% N=228
No feedback is given about the weight and growth of child	4	1.75
No machine is available at AWC thus no weight done	17	7.46
Weight is not done regularly	17	7.46
Even if weight is done, weight does not increase	5	2.19
Group IV	F	% N=228
Have to go to work thus, no one to accompany the child	9	3.95
Help husband in household business hence cannot accompany child to AWC	2	0.88
No time to accompany the child as busy in household work	21	9.21
Take the child at work site	3	1.31
Group V	F	% N=228
Not aware of the AWC	79	34.65
Not aware of the services of AWC	85	37.28
Group VI	F	% N=228
Weight of the child done when go for immunization	6	2.63
Group VII	F	% N=228
Child suffering from hydrocephalus	1	0.44
Other child may tease/beat the child as we are from northeast	1	0.44
Other child suffering from spinal bifida, and cannot leave the child alone	1	0.44

Table 10. Reasons for not utilizing Supplementary Nutrition and Take-Home Ration

Group I	**F**	**% N=228**
Child does not like panjiri	26	11.40
Child does not like taste of the food	29	12.71
Group II	F	% N=228
Child of elder brother died after vaccination so no faith in govt supply	1	0.44
Elder child died of drowning at village so fear that anything wrong will happen to child	1	0.44
Elder child had reaction after immunization, so lost faith in govt supply	1	0.44
Group III	F	% N=228
Child is suffering from hydrocephalus	1	0.44
Other child suffering from spinal bifida, cannot leave the child alone	1	0.44
Group IV	F	% N=228
Poor quality	27	11.84
Doubt about standard of raw material used	9	3.95
Doubt if food is fresh	4	1.75

Doubt about hygiene of cooking	1	0.44
Not given regularly	1	0.44
Group V	F	% N=228
Do not require SNP	35	15.35
No use for child	21	9.21
Group VI	F	% N=228
Not aware of the services of AWC	83	36.40
Not aware of the AWC	78	34.21
Group VII	F	% N=228
Child suffering from seizures	1	0.44
We are Brahmin cannot eat food from outside	1	0.44
ASHA did not help us during pregnancy so do not use govt service	1	0.44
Group VIII	F	% N=228
No time to accompany as busy in household work	17	7.46
Have to go to work no one to accompany the child	11	4.82
Take the child at work site	3	1.32

Referral Service: Reasons for **satisfaction** for Referral Services was that **"we get immunization done" (184) and "AWW guide where to go". (8)**, ***(N = 184)***. A reason for **dissatisfaction** for Referral Services was that **"behaviour of Govt health staff is rude so prefer to go to private clinic." (4), (N = 4)**

Table 11. Awareness for growth monitoring supplementary nutrition / take home ration and referral services provided by anganwadi among the non-users.

Service	f	% N=228
Growth monitoring service	131	57.5
Supplementary nutrition/THR	143	62.7
Referral	120	52.6

Table 11 shows that awareness for the growth monitoring services was 57.5% followed by 62.7% awareness for supplementary nutrition and 52.6% awareness for referral services provided by anganwadi among their non users. There is need of enhancing the IEC and IPC activities to increase in awareness level about the location and services of AWC among the community especially growth monitoring which is very crucial.

Reasons for not utilizing referral services

Reasons for not utilizing referral services are as follows: *(Multiple reasons were given by each user. Frequency of each response is given in bracket,* ***N = 268)***

1. **"ASHA did not help us during pregnancy so do not use govt service". (1)**
2. **"Go to private clinic". (176)**
3. **"Govt health staff is rude". (102)**
4. **"No medicines in dispensary". (88)**
5. **"Referrals are not honoured". (60)**
6. **"Not aware of referral service". (41)**

Infant and Young Child Feeding Practices (IYCFP).

Table 12. Awareness about IYCFP among users and non-users.

	Users		Non Users	
IYCF component	**Aware**	**% (N=228)**	**Aware**	**% (N=228)**
Early initiation of breast feeding	211	92.5	210	92.1
Exclusive breast feeding for six months	224	98.2	218	95.6
Continuing of breast feeding for two years	228	100.0	**224**	98.2
Complementary food started with soft food six month to one year	225	98.7	221	96.9
Adult food without spices from one year	228	100.0	220	96.5
Precautions while preparing food	228	100.0	221	96.9
Feeding during and after illness	166	72.8	33	14.5
Feeding malnourished child	16	7.0	3	1.3

Table 12 shows the details of awareness about components of IYCFP among the users and the non-users. Except for feeding the child during illness and after illness there was marginal difference in awareness among the users and the non-users. Awareness among the users about feeding the child during illness and after illness was 72.8% as compared to 33% in the non-users; this could perhaps be because this aspect is highlighted by AWW as part of nutritional and health education component of anganwadi services.

Services for pregnant women

Table 12. Awareness and utilization of services for pregnant women provided by AWC among the mother of users and non-users (for child services).

Type service for pregnant women		Users	% (N=228)	non users	% (N=228)
Supplementary Nutrition	Awareness	190	83.3	18	7.9
	Utilization	131	57.5	5	2.2
TT Immunization	Awareness	166	72.8	18	7.9
	Utilization	108	47.4	5	2.2
Referral service	Awareness	88	38.6	10	4.4
	Utilization	6	2.6	0	0.0
Nutrition and health education	Awareness	68	29.8	11	4.8
	Utilization	22	9.6	1	0.4

Though all the users were aware of and utilizing growth monitoring and supplementary nutrition services provided by AWC for the children, but their awareness about anganwadi services for pregnant women was low (83.3% for supplementary nutrition and 68% for NHE). Utilization of supplementary nutrition and NHE services for pregnant women was also low 57.5% and 9.6% respectively. Similar low awareness was also observed in non-users about anganwadi services for pregnant women (7.9% for supplementary nutrition and 4.8% for NHE), and utilization was as low as (2.2% for supplementary nutrition and 0.4% for NHE)

The study by **Adarsh Sharma et al 1992**[5] observed that 36% expectant mothers were registered for supplementary nutrition, 77% registered expectant women were receiving supplementary nutrition and in urban projects 83% expectant mothers were utilizing the services. Study by **NIPPCD 2006**[4] observed that maximum numbers of pregnant women (49.5%) were registered in AWCs run under World Bank-assisted ICDS projects, followed by AWCs under NGO-run ICDS projects (48.6%) and regular ICDS projects (47.2%). Interestingly, maximum coverage of pregnant women was found in tribal AWCs of regular ICDS projects (61.8%) and NGO-run ICDS projects (58.3%).

CONCLUSION AND RECOMMENDATION

Significant differences were observed in profile of user and non-user, population with years of stay less than 2 years are utilizing the services less as compared to those who have comparatively more years of stay in the area. Utilization of anganwadi services is less among families with children in age group up to 12months, lower birth order and families with relatively higher monthly income of household. Awareness about anganwadi services for pregnant women was low (83.3% for supplementary nutrition and 68% for NHE). Utilization of supplementary nutrition and NHE services for pregnant women was also low 57.5% and 9.6% respectively. Among the non-users 34% were not aware of the location of AWC and awareness level for the growth monitoring services was 57.5% and 62.7% for supplementary nutrition / Take Home Rations. Among users 23 (13%) were not aware of importance of growth monitoring and 17 (9%) were not aware about importance of SNP/THR. Awareness among the user about feeding the child during illness and after illness was 72.8% as compared to 33% in the non-user.

Active efforts are needed by the AWW to include the migrant young population with small children, the children of families with relatively higher household monthly income in the nutrition and health services for growth monitoring to enable detection of under or over-nutrition in these children and appropriate advice for corrective measures. AWW should enhance efforts to reach out to pregnant women for NHE and SNP, and highlight benefits of early initiation of breast feeding within 1hr of birth and feeding of colostrum. IEC and IPC activities should be envisaged to increase awareness regarding the services available at AWC and their importance for normal growth and development of the child from pregnancy till 6 years so that even marginalised families like recently migrated into city become aware of and utilise the

services available in the AWC.

In conclusion the people want the services of growth monitoring, advice on IYCF and health care and supplementary nutrition for their children however, they have some views on certain modalities which are different from what is provided in the programme.

REFERENCES

1. ACC/SCN (United Nations Administrative Committee on Coordination/ Standing committee on Nutrition). 3rd Report on the World Nutrition Situation. Geneva: ACC/SCN. 1997. [Internet] [last visited on 2011 Oct 02]Available from: http://www.unscn.org/layout/modules/resources/files/rwns3.pdf
2. International Institute for Population Sciences (IIPS) and Macro International. 2007. National Family Health Survey (NFHS-3), 2005–06: India: Volume I. Mumbai: IIPS. [Internet] [last visited on 2011 Oct 02] Available from: http://www. nfhsindia. org/NFHS-3%20Data/VOL-1/India_volume_I_corrected_17oct08. pdf format.
3. International Institute for Population Sciences (IIPS) and Macro International. 2009. National Family Health Survey (NFHS-3), India, 2005-06: Delhi. Mumbai: IIPS. [Internet] [last visited on 2011 Oct 02] Available from:http://www. nfhsindia. org/NFHS3%20 Data/Delhi_printed_version_for_website.pdf format.
4. Three Decades of ICDS – An appraisal by National Institute of Public Cooperation and Child Development NIPCCD (2006). [Internet] [last visited on 2011 Oct 02] Available from: Available from: http://wcd.nic.in/3dicds.htm
5. Adarsh Sharma et al National Evaluation of Integrated Child Development Services, NIPCCD, New Delhi. New Delhi: 1992. 204p. Research on ICDS: An Overview (1986-1995) Volume 2 Research on ICDS: An Overview (1986-1995) Volume 2 National Institute of Public Cooperation and Child Development 5, Siri Institutional Area, Hauz Khas, New Delhi – 110016. [Internet] [last visited on 2011 Oct 02] Available from: http://www.nipccd.nic.in/reports/icdsvol2.pdf