

Utilisation of Anganwadi Services among Nursing Mothers in Rural Telangana: A Cross Sectional Study

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ABSTRACT

Background: Integrated Child Development Services (ICDS) is an important scheme which delivers a package of services to improve the health status of mother and child. In spite of providing useful services for free of cost, there is a gap in utilisation of services from the beneficiaries.

Methods: A cross-sectional study was conducted among 103 nursing mothers with a pre-tested, semi structured questionnaire in order to assess utilisation of anganwadi services. Data collected was analysed using SPSS software.

Results: Supplementary nutrition (91.3%) was the most common anganwadi service utilized by nursing mothers followed by, health check-ups (89.3%), Nutrition & health Education (84.5%) and referral services (70.9%).

Conclusions: Apart from supplementary nutrition and health check-up, there is a need to sensitise and motivate beneficiaries to utilise the other services offered by anganwadi centre.

Keywords: Anganwadi centre, Health check-up, Nursing mothers, Supplementary nutrition

INTRODUCTION

Government of India has launched many health programs for nursing mothers and Integrated Child Development Services (ICDS) was the one, started in 1975. The ICDS programme includes a network of

Anganwadi centres, with Anganwadi workers (AWW) providing integrated package of services comprising supplementary nutrition, immunization, health check-up, medical referral services, nutrition and health education for women and non-formal education for children of the age group 3-6 years and the beneficiaries are pregnant women, nursing mothers, children up to 6 years age, adolescent girls and other women in reproductive age.¹ But merely increasing the infrastructure and availability of services does not increase the utilization of services from the AWC. The utilization of ICDS scheme varies from place to place and depends on involvement of the community in the programme.² Maternal and child mortality is a public health challenge in developing countries, especially India. Currently, maternal mortality rate remain unacceptably high with at 122 per 1, 00,000 live births.³ Though antenatal care and supplementary nutrition are evidence-based strategies to improve neonatal outcomes and birth weight, and even though these are currently provided free of cost by the government in every village through the ICDS, there is a question of whether mothers actually utilize these services, and more importantly if they do not, then what could be the reasons for non-utilization.⁴ Therefore, this study aims

to assess the utilization of Anganwadi services by nursing mothers in a rural area and to assess the various barriers to utilization of Anganwadi services, in order to address these issues at the policy and service level, with the ultimate aim of improving utilization of Anganwadi services by mothers.

METHODS

Study Design: Cross Sectional Study.

Study Period: March 2018 to February 2019.

Study setting: 10 randomly selected anganwadi centres among 25 anganwadi centres out of 11 villages attached to rural health centre of a medical college in Telangana state.

Sample size: A total of 103 nursing mothers were enrolled in all the anganwadis at the time of our study so all of them are included in the study

Study Subjects: Nursing mothers residing in the study area.

Sampling Method: Census method in which all the 103 eligible study subjects enrolled in the anganwadi centre were included. Hence the sample size is 103.

Study Tool: A semi-structured questionnaire was prepared and suitable modifications were made after administering in a pilot study. The questionnaire consists of the demographic information and a series of questions to assess the utilization of anganwadi services.

Method of Data Collection: Data was collected from nursing mothers by face to face interview method after obtaining consent. The importance of this study was explained and ensured that confidentiality of the participant's responses.

Statistical Analysis: Data was analysed using Microsoft Excel and SPSS Statistical Package version 22. Data was expressed in proportions and Pearson's chi-square test was applied as test of significance considering $P < 0.05$ as statistically significant.

RESULTS

Supplementary nutrition (91.3%) was the most common Anganwadi service utilized by nursing mothers followed by, health check-ups (89.3%), Nutrition & health Education (84.5%) and referral services (70.9%). (Table 1)

Nursing mothers in the age group of 21-25 years (95.2%), middle class (97.5%) and 95.5% residing nearer to anganwadi centre are majorly utilizing the supplementary nutrition services and association with other corresponding groups was found to be statistically significant. (Table 2)

Utilization of Health education was found to be higher among nursing mothers of age 21-25 years (93.5%), Housewives (87.2%), and association was statistically significant when compared with other groups. (Table 3)

Majority of nursing mothers in the age group 15-20 years (78.9%), housewives (71.3%), illiterates (75%) are utilizing the medical referral services and the association was statistically not significant when compared with other groups. (Table 4)

Utilization of Health check-up services was higher among Hindus (91.3%), Housewives (91.5%) lower Middleclass (97.7%) Nursing mothers and association was statistically significant with other groups. (Table 5)

Table 1: Distribution of Nursing mothers based on utilization of ICDS services (n=103)

Anganwadi services(ICDS)	Utilized (%)	Not utilized (%)	Total (%)
Supplementary Nutrition	94(91.3)	9(8.7)	103(100)
Nutrition & Health education	87(84.5)	16(15.5)	103(100)
Referral services	73(70.9)	30(29.1)	103(100)
Health check up	92(89.3)	11(10.7)	103(100)

Table 2: Association between socio demographic variables and utilization of supplementary nutrition services among nursing mothers (n=103)

Socio demographic variables		Supplementary nutrition		Total (%)	p value
		Utilized (%) (n=94)	Not utilized (%) (n=9)		
Age (years)	15-20	18(94.7)	1(5.3)	19(100)	0.03
	21-25	59(95.2)	3(4.8)	62(100)	
	26-30	17(77.3)	5(22.7)	22(100)	
Religion	Hindu	86(93.5)	6(6.5)	92(100)	0.06
	Muslim	6(75)	2(25)	8(100)	
	Christian	2(66.7)	1(33.3)	3(100)	
Occupation	House wife	86(91.5)	8(8.5)	94(100)	0.79
	Labour	8(88.9)	1(11.1)	9(100)	
Literacy status	Literate	62(92.5)	5 (7.5)	67(100)	0.53
	Illiterate	32(88.9)	4(11.1)	36(100)	
Socio economic status	Upper	2(66.7)	1(33.3)	3(100)	0.04
	Upper middle	5(71.4)	2(28.6)	7 (100)	
	Middle	39(97.5)	1(2.5)	40 (100)	
	Lower middle	41(93.2)	3(6.8)	44 (100)	
	Lower	7(77.8)	2(22.2)	9(100)	
Distance of AWC from house	Near*	85(95.5)	4(2.5)	89(100)	0.01
	Far	9(64.3)	5(35.7)	14(100)	

* Near – 2kms and less

Table 3: Association between socio demographic variables and utilization of Health education services among nursing mothers (n=103)

Socio demographic variables		Health education		Total (%)	p value
		Utilized (%) (n=87)	Not utilized (%) (n=16)		
Age (years)	15-20	16(84.2)	3(15.8)	19(100)	0.01
	21-25	58(93.5)	4(6.5)	62(100)	
	26-30	13(59.1)	9(40.9)	22(100)	
Religion	Hindu	79(85.9)	13(14.1)	92(100)	0.49
	Muslim	6(75)	2(25)	8(100)	
	Christian	2(66.7)	1(33.3)	3(100)	
Occupation	House wife	82(87.2)	12(12.8)	94(100)	0.01
	Labour	5(55.6)	4(44.4)	9(100)	
Literacy status	Literate	59(88.1)	8(11.9)	67(100)	0.16
	Illiterate	28(77.8)	8(22.2)	36(100)	
Socio economic status	Upper	2(66.7)	1(33.3)	3(100)	0.06
	Upper middle	4(57.1)	3(42.9)	7(100)	
	Middle	37(92.5)	3(7.5)	40(100)	
	Lower middle	38(86.7)	6(13.6)	44(100)	
	Lower	6(66.7)	3(33.3)	9(100)	
Distance of AWC from house	Near*	76(85.4)	13(14.6)	89(100)	0.51
	Far	11(78.6)	3(21.4)	14(100)	

* Near – 2kms and less

Table 4: Association between socio demographic variables and utilization of Referral services among nursing mothers (n=103)

Socio demographic variables		Referral services		Total (%)	p value
		Utilized (%) (n=73)	Not utilized (%) (n=30)		
Age (years)	15-20	15(78.9)	4(21.1)	19(100)	0.051
	21-25	47(75.8)	15(24.2)	62(100)	
	26-30	11(50)	11(50)	22(100)	
Religion	Hindu	66(71.7)	26(28.3)	92(100)	0.34
	Muslim	6(75)	2(25)	8(100)	
	Christian	1(33.3)	2(66.7)	3(100)	
Occupation	House wife	67(71.3)	27(28.7)	94(100)	0.77
	Labour	6(66.7)	3(33.3)	9(100)	
Literacy status	Literate	46(68.7)	21(31.3)	67(100)	0.49
	Illiterate	27(75)	9(25)	36(100)	
Socio economic status	Upper	2(66.7)	1(33.3)	3(100)	0.45
	Upper middle	3(42.9)	4(57.1)	7(100)	
	Middle	28(70)	12(30)	40(100)	
	Lower middle	34(77.3)	10(22.7)	44(100)	
	Lower	6(66.7)	3(33.3)	9(100)	
Distance of AWC from house,	Near*	65(73)	24(27)	89(100)	0.22
	Far	8(57.1)	6(42.9)	14(100)	

* Near – 2kms and less

Table 5: Association between socio demographic variables and utilization of Health check-up services among nursing mothers (n=103)

Socio demographic variables		Health check up		Total (%)	P value
		Utilized (%) (n=92)	Not utilized (%) (n=11)		
Age (years)	15-20	18(94.7)	1(5.7)	19(100)	0.37
	21-25	56(90.3)	6(9.7)	62(100)	
	26-30	18(81.8)	4(18.2)	22(100)	
Religion	Hindu	84(91.3)	8(8.7)	92(100)	0.01
	Muslim	7(87.5)	1 (12.5)	8(100)	
	Christian	1(33.3)	2(66.7)	3(100)	
Occupation	House wife	86(91.5)	8(8.5)	94(100)	0.02
	Labour	6(66.7)	3(33.3)	9(100)	
Literacy status	Literate	59(88.1)	8(11.9)	67(100)	0.57
	Illiterate	33(91.7)	3(8.3)	36(100)	
SES(socio economic status)	Upper	1(33.3)	2(66.7)	3(100)	0.01
	Upper middle	6(85.7)	1(14.3)	7(100)	
	Middle	36(90)	4(10)	40(100)	
	Lower middle	43(97.7)	1(2.3)	44(100)	
	Lower	6(66.7)	3(33.3)	9(100)	
Distance of AWC from house,	Near*	81(91)	8(9)	89(100)	0.16
	Far	11(78.6)	3(21.4)	14(100)	

* Near – 2kms and less

DISCUSSION

In present study, Supplementary nutrition (91.3%) was the most common Anganwadi service utilized by Nursing mothers followed by Health check-ups (89.3%), health education(84.5%) and referral services (70.9%). According to studies conducted by Jayasheela E et al and Bariya et al, about 85.6% and 94% of nursing mothers utilized supplementary nutrition services respectively.^{5,6} According to studies conducted by Khan AA et al, Sharma M et al, Singh D et al, majority of lactating mothers utilized supplementary nutrition services.^{7,8,9} In Bhagat VM et al study, 90.3% of the mothers received health check-ups like growth monitoring, immunization which was similar to our study.¹⁰ Another study conducted in Karnataka by Madhavi H et al found that, 71.63% of lactating mothers had regular health checkups.¹¹ In Chudasama RK et al study, 97.8% lactating mothers were availing these services which are higher than our study.¹² Jose MJ et al study reported that 61.4% of lactating mothers had received health education from Anganwadi teacher which is less compared to the present study.¹³ The current study reveals that age, socioeconomic status & distance from anganwadi center found to have significant association with more utilization of supplementary nutrition services and also

age and occupation of nursing mothers was found to have significant association with utilization of health education services. In the present study, women of age group 21-25 years were utilizing more referral services; however there is no significant association between age group. A study conducted in Uttar Pradesh by Roy MP et al, found that <25 years of age women had 0.622 odds of going to government hospitals compared to >25 years and low educated mothers, women belonging to low Socio-economic status had higher chances of going to government hospitals.¹⁴ In Thind A et al study conducted in Maharashtra found that age above 30 years are more likely to go to government hospitals compared to less than 30 years age group.¹⁵ Maternal and paternal education status is the predisposing factors that determine the choice between private facilities and public or home deliveries. In the present study literates, mothers belonging to lower middle class and house wives were utilizing health check-up services when compared to other groups and this difference was found to be statistically significant. Digambar A et al study in Uttarakh and found that literates were taking more postnatal check-ups compared to illiterates.¹⁶ In Neeraj A et al study conducted in Chandigarh, the likelihood of a birth being followed by a postpartum check-up was higher for literate

mothers than illiterate mothers.¹⁷ A study done by Agha S et al in Pakistan showed that mother's education was associated with dramatic increase in levels of use of post-natal check-ups.¹⁸

CONCLUSION

Apart from supplementary nutrition, health check-ups, there is a need to sensitise and motivate beneficiaries to utilise the other services offered by anganwadi centre.

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Declarations

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