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Original Research Article

Knowledge and socio-demographic profile of Anganwadi workers in Mangalagiri rural Integrated Child Development Services project, Guntur

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ABSTRACT

Background: Integrated Child Development Services (ICDS) today represents one of the world's largest programmes for early childhood development. The Anganwadi workers and Anganwadi Helpers are the grass root level functionaries responsible for delivery of services.
Methods: A field based cross sectional observational study was conducted in Mangalagiri rural ICDS project to assess the knowledge levels and the socio-demographic profile of the Anganwadi workers, all the Anganwadi workers who are working in Mangalagiri rural ICDS project area have been included in the study.
Results: Out of 212 AWWs, majority of AWWs were from the age group of between 30-49 years; 123 (58%) AWWs have education qualification from 6th class to 10th class standard and 135 (63.7%) workers had an experience of more than 10 years. About 142 (67%) AWWs had a good knowledge assessment score. They had best knowledge about immunization (96.7%), referral services (93.4%), growth monitoring (82.5%), health check-ups (75.1%) and nutrition and health education (70%). AWWs complained problems like infrastructure related, excessive work overload and record maintenance.
Conclusions: The majority of the AWWs are in the age group of 30 to 49 years. More than half of them belong to lower middle socio-economic class. Maximum number of workers has experience of 10 years or more. All the AWWs in our study had 50% and above knowledge about Anganwadi services. Best knowledge is seen regarding immunization followed by referral services. Least knowledge is seen regarding supplementary nutrition. Major problems reported were excess work and record maintenance.

Keywords: ICDS, Anganwadi worker, Nutrition and health, Immunization, Growth monitoring

INTRODUCTION

ICDS is the world's largest community based outreach programme which offers a package of health, nutrition and education services to the children below 6 years and pregnant and nursing mothers and adolescent girls. The Integrated Child Development Services scheme (ICDS) launched on 2nd October 1975, on an experimental basis in 33 ICDS blocks, has been gradually expanded to 7072 projects comprising 13,46,186 Anganwadi Centres (AWCs) operational across 36 States/UTs, covering 1022.33 lakh beneficiaries under Supplementary Nutrition (SN) and 365.44 lakh 3-6 years children under pre-school component by the end of March 2015.[1] ICDS is India's response to challenge of breaking a vicious cycle of malnutrition. The welfare of pregnant women, nursing mothers, adolescent girls and children below 6 years has acquired a prime place in the programme. The

programme is a package of six services viz., supplementary nutrition, immunization, health check-up, referral services, and nutrition and health education for mothers/pregnant mothers, nursing mothers and to adolescent girls (kishoris). The Constitution of India itself provides a framework for care and protection of women and children. Article 47 of the Directive Principles of State Policy States that "The state shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the state shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health".[2]

ICDS is India's response to challenge of breaking a vicious cycle of malnutrition, inter-related needs of children below 6 years of age, pregnant women, lactating mother and adolescent girls in a comprehensive manner. The outreach of ICDS in recent years has increased enormously owning to increased government budgetary allocation to ICDS. Various international agencies such as UNICEF, World Bank, CARE India, USAID and many others have supported ICDS in improving quality services. Many new projects and several initiatives were taken to improve quality, the goal being universalization with quality. Training programs for ICDS functionaries has improved over the years, upgrading their skills at the field level.[3] Various studies in recent past has revealed that implementation of services under ICDS are not up to satisfactory standards and still more efforts are needed for improving the quality of services for the successful achievement of expected targets.[4]

Guntur district is one of the 13 districts in the southern state of Andhra Pradesh on the east coast of Bay of Bengal. The district has a coastline of around 100 kilometres. Guntur district covers an area of 11,391 km^2, and has a population of 4,889,230 of which 33.89% is urban as per the 2011 Census. The Krishna river forms the north-eastern and eastern boundary of the district, separating Guntur District from Krishna District. The district is bounded on the southeast by the Bay of Bengal, on the south by Prakasam District, on the west by Mahbubnagar District, and on the northwest by Nalgonda District. It is divided into 4 revenue divisions and 57 mandals for ease of administration.[5] With this background, the present study is carried out in Guntur district to assess the knowledge of Anganwadi workers (AWWs) and the operational problems faced by them. An attempt is also made to find out the availability of infrastructure and logistics for AWCs under ICDS and to find out the efficiency of Anganwadi centres in providing service to beneficiaries.

METHODS

A field based cross sectional observational study was conducted in Mangalagiri rural ICDS project area of Guntur district, Andhra Pradesh, for a period of six months between October 2015 to March 2016, to assess the knowledge levels and the socio-demographic profile of the Anganwadi workers. A total of 237 Anganwadi centres were functioning in the project area. Out of these, 10 Anganwadi centres do not have Anganwadi workers in place, which are being run by the Anganwadi workers of the adjacent centres. After excluding those AWWs who were not available/ unwilling to participate, a total of 212 Anganwadi workers were included in the study. Their knowledge was assessed by interviewing them using a pre-designed pre-tested semi-structured schedule, only after taking an informed consent from the participants. Institutional Ethical Clearance was obtained prior to the commencement of the study. The data was entered in Microsoft Excel. Statistical analysis was done by using percentages and Chi square test. Epi Info software version 7.1.5 was used for calculation of Chi square test and p value.

RESULTS

In the study group (n=212), 124 AWWs belonged to the lower middle socio-economic class, having good and very good knowledge regarding Anganwadi services in 60.48% and 32.26% of AWWs respectively and 55 AWWs belonged to the lower socio economic class having good and very good knowledge regarding Anganwadi services in 83.64% and 14.55% respectively, followed by middle class (Table 1 and Figure 5).

Out of 212 AWWs in the study, 135 AWWs were having work experience of more than 10 years, having good and very good knowledge about Anganwadi services in 69.63% and 27.41% of AWWs respectively and the remaining 77 AWWs having work experience of less than 10 years with 62.34% of AWWs having good and 27.27% of AWWs having very good knowledge (Table 2 and Figure 6).

In this study 86 AWWs falls under the age group ranging from 30 to 39 years and 77 AWWs belong to 40 to 49 age group followed by 32 AWWs belonging to 50 to 59 age group and only 3 AWWs belong to 60 and above age group (Figure 1).

In this study 86 AWWs were aged between 30 to 39 years. Those having good and very good knowledge regarding Anganwadi services were 59.30% and 32.56% respectively, and 77 AWWs were aged between 40 to 49 years age group with 68.83% AWWs having good and 27.27% AWWs having very good knowledge regarding Anganwadi services and only 3 AWWs were aged 60 years and above group, having good knowledge regarding Anganwadi services (Table 3 and Figure 7).

In the present study, majority of the AWWs 209 (98.6%) were having education qualification of 10th class and above, out of which 58 (27.4%) of AWWs are having degree qualification (Figure 2).

In this study majority of Anganwadi workers i.e. 135 were having work experience of more than 10 years (Figure 3).

Table 1: Socio-Economic status versus knowledge of Anganwadi services (n=212).

Socio-economic status	Knowledge Total			
	Average	Good	Very Good	
Below poverty line	0	2	0	2
(%)	0	100	0	100
Lower class	1	46	8	55
(%)	1.82	83.64	14.55	100
Lower middle	9	75	40	124
(%)	7.26	60.48	32.26	100
Middle	2	19	8	29
(%)	6.90	65.52	27.59	100
Higher middle	0	0	2	2
(%)	0.00	0.00	100.0	100.0
Total	12	142	58	212
(%)	5.66	66.98	27.36	100

Chi square-15.82, degree of freedom-8, probability-0.0449.

Table 2: Years of completed service versus knowledge of the AWWs (n=212).

Service	Knowledge			Total
	Average	Good	Very Good	
<10 years	8	48	21	77
(%)	10.39	62.34	27.27	100
≥10 years	4	94	37	135
(%)	2.96	69.63	27.41	100
Total	12	142	58	212
(%)	5.66	66.98	27.36	100

Chi square-5.1674, degree of freedom-2, Probability-0.0755.

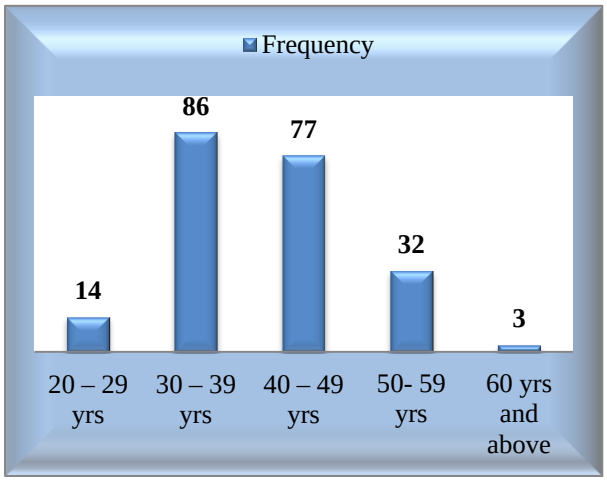

Figure 1: Age distribution of the AWWs (n=212).

Table 3: Age of the AWWs vs their knowledge (n=212).

Age Group	Knowledge			Total
	Average	Good	Very Good	
20 - 29	0	11	3	14
(%)	0.00	78.57	21.43	100.0
30 - 39	7	51	28	86
(%)	8.14	59.30	32.56	100.0
40- 49	3	53	21	77
(%)	3.90	68.83	27.27	100.0
50 - 59	2	24	6	32
(%)	6.25	75.00	18.75	100.0
60 & above	0	3	0	3
(%)	0.00	100	0.00	100.0
Total	12	142	58	212
(%)	5.66	66.98	27.36	100.0

Chi square-6.9294, degree of freedom-8, probability-0.5443.

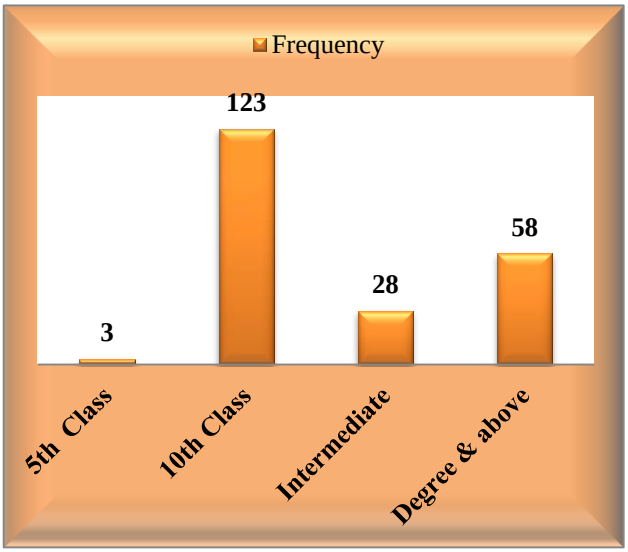

Figure 2: Distribution of AWWs based on Education (n=212).

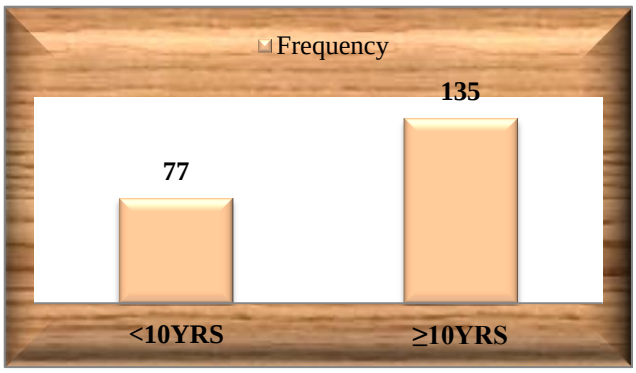

Figure 3: Distribution of AWWs based on years of service (n=212).

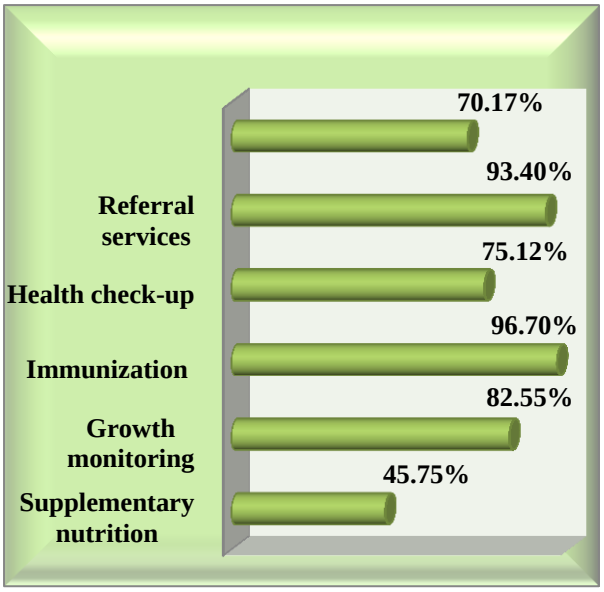

Figure 4: Distribution of knowledge of AWWs regarding different services provided.

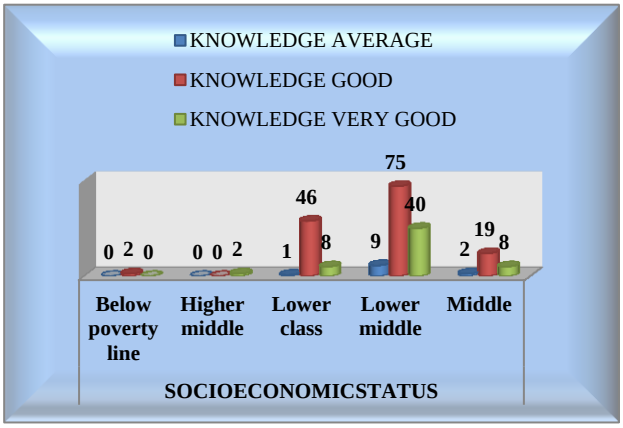

Figure 5: Distribution of knowledge versus socio-economic status.

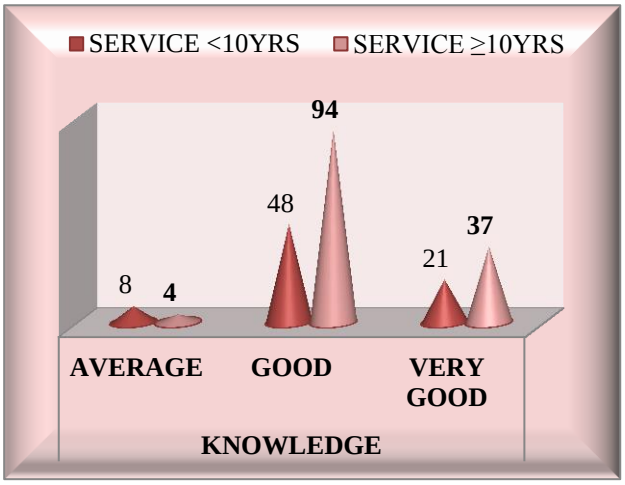

Figure 6: Distribution of experience vs knowledge.

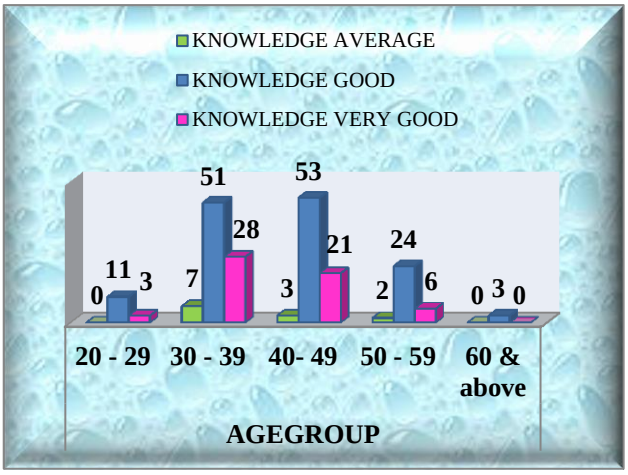

Figure 7: Distribution of age group versus knowledge.

AWWs in the present study had best knowledge regarding immunization (96.7%), followed by referral services (93.4%), growth monitoring (82.5%), health check-up (75.1%), nutrition and health education (70.2%) and least knowledge regarding supplementary nutrition (45.7%) (Figure 4).

DISCUSSION

Age of the AWWs

More than three-fourths (n=163, 76.9%) of the AWWs, who were made part of the study, were aged between 30 to 49 years (Figure 1). Meenal et al, observed that of the 28 AWCs studied, 39.28% of AWWs were in the age group of 41-50 years, 25% each in the age group of 31-40 years and more than 50 years in the urban ICDS block of Aurangabad city.[5] Patil et al, in 2 ICDS blocks of Aurangabad district observed that maximum number of workers, 17(34.69%) were in the age group of 41-50 years, 14 (28.57%) in the age group of 31-40 years, lowest number i.e., 6 (12.2%) belonged to the age group of 20-30 years.[6]

Education of the AWWs

In the present study, majority of the AWWs 209 (98.6%) having education qualification of 10th class and above, out of which 58 (27.4%) of AWWs are having degree qualification (Figure 2). Manzoor , Khurshid revealed that 70% of the 50 AWWs in their study in district Ganderbal of Kashmir were matriculate.[7] Parmar et al, observed that 26.7% of AWWs by education were 10th passed, 43.3% were 12th passed, 30% had education up to graduation level and above, among the 30 AWWs studied in 3 urban ICDS blocks of Ahmedabad district.[8]

Work experience of AWWs

In the present study majority i.e., 135 (63.7%) AWWs were having an experience of 10 years and more (Figure

3). Nagaraj et al, study states that majority (54.05%) of the AWWs had work experience of 10-13 years.[9] Thakur K et al, observed that 27.7% of the 60 AWWs studied in selected ICDS blocks of District Mandi were having a work experience more than 10 years.[10]

Knowledge of AWWs regarding various services provided at AWCs

AWWs in the present study had best knowledge regarding immunization (96.7%), followed by referral services (93.4%), growth monitoring (82.5%), health check-up (75.1%), nutrition and health education (70.2%) and least knowledge regarding supplementary nutrition (45.7%) (Figure 4). Kular study done in Barnala district observed that of the 30 AWCs studied, 54.66% AWWs have best knowledge about the component of immunization, while only 16.66% AWWs have knowledge about referral services.[11] Tripathy et al, in a cross-sectional study done in 66 AWCs in the year 2010 in Mangalore taluk of Karnataka, observed that pre-school education, house visits/surveys, and record-keeping were perceived as the 3 most important activities by 92.4%, 60.6% and 57.6% AWWs respectively.[12]

Distribution of knowledge vs socio- economic status

Socio- economic status is found to have a great influence on the knowledge of the AWWs, which was found to be statistically significant (p=0.0449). Higher the socio-economic status of the AWW, higher was their knowledge (Table 1 and Figure 5).

Distribution of experience vs knowledge

Experience of the AWWs is not having any statistical significance with their knowledge (p=0.075) (Table 2 and Figure 6).

Distribution of age group vs knowledge

Age of the AWWs has no impact on the knowledge levels of the AWWs. The association between them was found statistically insignificant (p=0.5443) (Table 3 and Figure 7).

CONCLUSION

More than 50% of the AWWs in the current study were having adequate knowledge regarding their work, best being immunization and least knowledge being about supplementary nutrition.

AWWs have poor knowledge regarding supplementary nutrition which will affect nutrition education activities among the beneficiaries. Corrective actions must be undertaken by means of regular continuing education and field-based refresher training programmes for Anganwadi workers to update their knowledge and skills, including their communication skills.

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