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Assessment of Integrated Child Development Services Scheme in Select Districts of Uttarakhand

Kranthi Kumar Reddy Navuluri[1], Surekha Kishore[2], Smita Sinha[3], Yogesh Bahurupi[4], Pradeep Aggarwal[3], Bhavana Jain[5]

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Author's Affiliation:
[1]Junior Resident; [2]Professor and Head; [3]Associate Professor; [4]Assistant Professor; [3]Associate Professor; [5]Senior Resident, Dept of Community and Family Medicine, AIIMS Rishikesh, Rishikesh

Correspondence
Navuluri Kranthi Kumar Reddy
kranthi1237@gmail.com

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ABSTRACT

Introduction: ICDS scheme was launched on October 2nd 1975 to address high infant mortality, malnourishment and poor learning outcomes. Since its inception was playing its role effectively, but still there were some shortcomings which were needed to be addressed. Uttarakhand was one among the states with poor health indicators with respect to child and mother, there is need to search for reasons effecting the implementation of programs intended for woman and child development. The present study aims to asses functioning of ICDS scheme in select Uttarakhand.

Methodology: A cross sectional study was conducted selected areas of Uttarakhand state during October 2018 to June 2019, among 16 anganwadi centers from urban and rural areas of Dehradun and Haridwar districts. Results were expressed in percentages and proportions with 95% confidence interval. Relevant statistical tested applied wherever necessary.

Results: Functioning of ICDS scheme in Uttarakhand varied for different services provided under it. Supplementary nutrition service was uninterrupted but medicine kits and referral slips were not supplied to anganwadi centers at the time of study.

Conclusions: Study identified various insufficiencies regarding the functioning of ICDS scheme. There is a need to improve facilities at anganwadi centers for proper implementation of ICDS scheme.

Key words: ICDS, Implementation, Anganwadi, Uttarakhand

INTRODUCTION

Integrated Child Development Services (ICDS) scheme was launched on October2nd 1975[1]. It was intended to improve nutritional and health status of children between age group of 0 to 72 months along with improvement of physical and psycho social development[2]. It also focuses on reducing the incidence of mortality, morbidity, and malnourishment among children. It also aims to impact on health education to mothers to look after health and nutritional needs of the child. Though India has made improvement in maternal and child health, certain health indicators are still lagging behind[3]. Poor nutritional indicators[4] demand exploration of factors to understand why ICDS is unable to achieve satisfactory results even after 40 years of implementation. Present study aimed to assess functioning ICDS scheme in Uttarakhand.

MATERIALS AND METHODS

A Community based cross sectional study was done between October 2018 to May 2019 in urban and rural areas of Haridwar and Dehradun districts of Uttarakhand state, India. A total of 16 anganwadi centers 8 from each district were visited to access the functioning of ICDS scheme "Proforma for Monitoring of ICDS Project for

Anganwadi worker" was used which is a pretested and standardized format and has widely used to monitor functioning of anganwadi[5]. It gives information regarding facilities available at anganwadi and range of services provided by the anganwadi center. Prior permission from district program officers of Dehradun and Haridwar districts were taken before visiting anganwadi centers. Multistage random Cluster sampling technique was used to select anganwadi centers. From thirteen districts in Uttarakhand, Haridwar and Dehradun districts were randomly selected by simple random sampling using lottery technique. In the next step districts were divided into urban and rural areas as per 2011 census report[6]. A total of 16 anganwadi centers were visited with two anganwadi centers each from 8 randomly selected ICDS projects among 12 projects in Haridwar and Dehradun districts of Uttarakhand, taking care to include equal number of anganwadi centers from both urban and rural areas. District program officers of Haridwar and Dehradun districts were approached for obtaining permission to visit anganwadi centers. After obtaining of permissions visits were planned from October 2018 to May 2019. No prior information was given to anganwadi workers regarding the visit. On the day of visit infrastructure, facilities and functioning of AWC was assessed using the proforma developed by NIPCCD for monitoring anganwadi centers. If there are more than one anganwadi centers working in the same building, one anganwadi worker was selected randomly and was interviewed. Study was done after obtaining due approval from the Institutional Ethics Committee of AIIMS Rishikesh.

Statistics: Data analysis was done using SPSS version 23.0 for windows. Descriptive statistics was done using frequencies, proportions and mean± standard deviations. Categorical variables were reported as proportions and continuous data as means ±2 standard deviation and median (IQR). Statistical differences between continuous variables were assessed using independent T test and Mann Whitney U test. P-values less than 0.05 were considered to be statistically significant.

RESULTS

A total of 16 anganwadi centers were visited during the study period. In present study most of the visited anganwadi centers were established in 2008, the oldest anganwadi center was Khelpur in Haridwar district which was established in 2001. Majority (93.7%) of anganwadi workers had more than 10 years' experience. It was found that among 16 anganwadi workers most of anganwadi workers (87.5%) had an educational qualification of above 10+2 class.

Basic infrastructure of visited anganwadi centers

Out of 16 anganwadi centres in present study 87.5% of the anganwadi buildings were Pucca, and 50% of visited anganwadi were in rented buildings followed by government constructed building (31.2%) and least were in school (18.8%). In present study among anganwadi centres 87.5% of anganwadi centres had electrical supply and separate kitchen facility was available in 25% of anganwadi. Cooking gas was available almost all anganwadi centers, except for one in rural area where cooking was done by using firewood. Toilet facility was available in 43.8% of anganwadi centers. Present study found that anganwadi workers were performing home visits regularly as per their guidelines (14 per week) and purpose of visits was mostly regarding immunization, enrollment and health checkup. Problems mentioned by all anganwadi workers was low honorarium (100%) followed by lack of proper water facilities (87.5%), improper infrastructure (87.5%), excessive workload (75%), Unclean surroundings (25%). Problems mentioned by anganwadi workers were enlisted in Table.1. Most common suggestions given by anganwadi workers (Table.2) were increase in honorarium (100%), providing uniform to children (100%), no additional work to be given(100%) and regular supply of medicine kit(100%), release of funds for maintenance of anganwadi centers(87.5%), supply of PSE material on time (25%), and training required on newly revised MIS system(12.5).

Preschool education services: In present study among 16 anganwadi centers visited 68.8% were equipped with preschool education material. Nature walk was conducted in all anganwadi centers in the area of anganwadi center. None of the anganwadi have preschool education material developed by the kids. Support from local community and CDPO was nil.

Table.1 Problems mentioned by anganwadi workers

Problem mentioned by Anganwadi workers	Area		Total (n=16) (%)
	Urban (n=8)(%)	Rural (n=8)(%)	
Drinking water facility	7(87.5)	7(87.5)	14(87.5)
Inadequate toilet facility	7(87.5)	7(87.5)	14(87.5)
Lack of adequate space	1(12.5)	1(12.5)	2(12.5)
No proper infrastructure	8(100)	6(75)	14(87.5)
No fuel provided	2(25)	1(12.5)	3(18.7)
Lack of fund	8(100)	6(75)	14(87.5)
Lack of community support	2(25)	2(25)	4(25)
Inadequate supply of material/Kit	2(25)	2(25)	4(25)
Inadequate training	1(12.5)	3(37.5)	4(25)
Low honorarium	8(100)	8(100)	16(100)
Excess workload	6(75)	6(75)	12(75)
Unclean surroundings	1(12.5)	3(37.5)	4(25)

Multiple response table, Figures in parenthesis are percentages

Table.2 Suggestions by anganwadi workers for improvement of ICDS scheme

Suggestions by anganwadi workers	Area		Total (n=16) (%)
	Urban (n=8) (%)	Rural (n=8) (%)	
Increase honorarium	8 (100)	8(100)	16(100)
Provide uniform to children	8(100)	8(100)	16(100)
Funds for maintenance of anganwadi center	7(87.5)	7(87.5)	14(87.5)
No additional work should be given	8(100)	8(100)	16(100)
Supply of PSE material on time	2(25)	2(25)	4(25)
Training required in new revised MIS	1(12.5)	1(12.5)	2(12.5)
Regular supply of medicine kit	8(100)	8(100)	16(100)

Multiple response table, Figures in parenthesis are percentages

Table 3: Topics covered by anganwadi worker for nutrition and health education sessions

Topic Covered	Area		Total (n=16) (%)
	Urban (n=8) (%)	Rural (n=8) (%)	
Nutrition and care of Infants	8(100)	8(100)	16(100)
Immunization	8(100)	8(100)	16(100)
Personal hygiene and environmental sanitation	7(87.5)	7(87.5)	14(87.5)
ICDS services	8(100)	8(100)	16(100)
Health care of pregnant women and adolescent girls	8(100)	8(100)	16(100)
Infant death rate	0	0	0
Family planning and spacing	6(75)	5(62.5)	11(68.7)
Anemia	0	0	0
Balanced diet and use of green leafy vegetables	8(100)	8(100)	16(100)
Importance of vitamins	8(100)	8(100)	16(100)
Common illness	0	0	0

Multiple response table, Figures in parenthesis are percentages

Table.4 Beneficiary wise utilization scores of services available at AWC as per area of residence (N=505)

Variable	Area of residence		Total	Mean difference	P
	Urban Mean ± 2SD	Rural Mean ± 2SD	Mean ± 2SD	(95% CI)	value
% Utilization by Antenatal mother	83.3±36.7	74.4±34.5	79.2 ± 38.9	8.9 (3.9 - 13.9)	<0.01
% Utilization by nursing mothers	86.±21.6	81.6±29.7	85.± 23.9	4.4* (-1.2 - 10.1)	0.124
% Utilization children <3 years#	66.7 (66.7-88.9)	66.7 (44.4-66.6)	66.7 (66.7-66.7)		<0.01
% Utilization by children of 3 to 6 years#	100 (75-100)	50 (25-75)	75 (50-100)		<0.01
%Utilization by adolescent girls and female of reproductive age group#	50 (0-75)	50 (0-75)	50 (0-75)		0.818

Means were compared by using Independent T Test, * equal variances were not assumed
Data was represented as Median (IQR) and Mann Whitney U Test was applied.

Supplementary Nutrition: In present study all anganwadi workers stated that there is no interruption in supply of supplementary nutritional material for past six months. All the beneficiaries of take-home ration (antenatal, nursing mothers and children less than 3 years) were availing benefit from anganwadi center.

Health check-up and referral services: All anganwadi centers in present study were using WHO growth charts for tracking growth of child and all of them were equipped with suitable equipment for conducting growth monitoring at anganwadi center. Referral slips were not available in any of visited anganwadi centers in present study. Medical kit was not supplied for past two years.

Nutrition and Health Education: Nutrition and health education sessions were conducted in all anganwadi centers visited in present study usually on fifth of every month when take home ration was issued to beneficiaries. All anganwadi workers (100%) stated that only antenatal and nursing mothers, availing supplementary nutrition visits to anganwadi centers on that day and would stay there till their monthly take home ration was given. Topic covered in nutrition and health education sessions were given in table.3.

From table.4 we can see utilization of services by beneficiaries among which, antenatal women were utilizing most of the services (% utilization 79.2), while adolescent girls and women of reproductive age group were utilizing least amount (% utilization 50) of services.

DISCUSSION

In present study most of the visited anganwadi centers were established in 2008, the oldest anganwadi center was Khelpur in Haridwar district which was established in 2001. Educational qualification of majority of anganwadi workers was above 10+2 class which is comparatively higher than observations by earlier studies[7–9] from Himachal Pradesh in 2014 observed that only 17% of anganwadi workers had educational qualification of above 10+2 class.

Basic infrastructure of visited Anganwadi centers: Out of 16 anganwadi centres in present study most of the anganwadi buildings were Pucca, and half of visited anganwadi centres anganwadi were in rented while a study from Orissa it was very less[10].Most of anganwadi centres had electrical supply which in contrast to an earlier study showing that there is an improvement in infrastructure[10]. Present study revealed that toilet facility was available in less than half of anganwadi centers which was comparatively lower than earlier studies[7,9,11] which necessitates improvement of toilet facilities in anganwadi centers. Present study found that anganwadi workers were performing home visits regularly as per their guidelines which can be attributed to newly introduced mobile phone-based MIS system with GPS tagging. All of anganwadi workers were involved in additional activities like AADHAR enrollment, voter ID enrollment, and survey activities by government of Uttarakhand, and all of them complained that these additional activities were hampering their regular duties. Problems faced by anganwadis workers relating to functioning and suggestions to improve the scheme were taken from anganwadi workers.

Preschool education services: In present study among 16 anganwadi centers visited more than half of were equipped with preschool education material which was comparatively lower than that of earlier studies [7,12] Even though activities like nature walk were conducted none of anganwadi centers had preschool education material developed by children. It was also noted that cooperation from community was for which there is a need to take initiative to increase involvement of community so that activities were carried out smoothly.

Supplementary Nutrition: In present study all anganwadi workers stated that there is no interruption in supply of supplementary nutritional material for past six months due to decentralization of supply system similar better than that of earlier studies done [11,13,14]. All the beneficiaries of take-home ration (antenatal, nursing mothers and children less than 3 years) were availing benefit from anganwadi center but there is a need to ensure that ration was used for the beneficiary intended.

Health check-up and referral services: All anganwadi centers in present study were using WHO growth charts for tracking growth of child and all of them were equipped with suitable equipment for conducting growth monitoring at anganwadi center in contrast to findings of earlier studies [15]. In present study it was seen that weighing, plotting, interpretation and counselling skill were accurate among most of anganwadi workers which was better than the earlier study. Referral slips were not available in any of visited anganwadi centers in present study which makes it difficult to track cases referred which is challenging. Medical kit was not supplied for past two years due to which health services were limited to only growth monitoring and referral services in contrast to earlier observations[9,15].

Nutrition and Health Education: Nutrition and health education sessions were conducted in all anganwadi centers visited in present study usually on fifth of every month when take home ration was issued to beneficiaries. Even though nutrition and health education sessions were regularly conducted there is need to increase the number of topics covered under it. All anganwadi workers stated that only antenatal and nursing mothers, availing supplementary nutrition visits to anganwadi centers on that day and would stay there till their monthly take home ration was given which indicated lower interest among beneficiaries. There was a significant difference between percentage utilization scores of antenatal mothers, children < 3 years of age, and children of age group from 3 to 6 years among urban and rural area with more utilization scores in urban area.

CONCLUSIONS

Infrastructural deficiencies like rented buildings, non-availability of separate kitchen and toilet facilities, drinking water were observed which warrants timely action. Supplementary nutrition, nutrition and health education services were delivered better while health and referral services were limited to arthrometric assessment and referral as no medicine kits were available for two years. There was lack of support from local community and higher officials in organizing activities under ICDS scheme which needs to be addressed immediately.

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