Assessment of Utilization of Integrated Child Development Services Scheme in Uttarakhand

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Abstract

Background: ICDS scheme has been playing its role effectively since 1975 when it was launched, but still there are some short comings which need to be addressed. Uttarakhand being one of the states with poor health indicators with respect to child and mother there is need to increase research on implementation of programs. Aims & Objectives: The present study was conducted to see utilization of services provided under ICDS scheme in Uttarakhand. Material & Methods: A cross sectional study was conducted in selected areas of Uttarakhand from October 2018 to June 2019. 505 households from 16 Anganwadi centers, from both urban and rural areas of Dehradun and Haridwar districts were included. Assessment of utilization of services was done by household interviews. Data was analyzed using SPSS V 23 software. Results: Availing supplementary nutrition services was the most utilized service (94.5%) followed by health education services (88.3%), health and referral services (83.2%), preschool education services (76.7%) and least utilized service was immunization service (69.3%). Conclusion: Various factors independently affecting utilization of services were identified. Overall utilization of services is highest among pregnant women and least among adolescent girls and women of reproductive age group.

Keywords

ICDS; Anganwadi; Utilization; Supplementary Nutrition; Preschool Education

Introduction

"The children of today will make the India of tomorrow. The way we bring them up will determine the future of the country", said Jawaharlal Nehru, first prime minister of India. This statement tells us importance of upbringing and wellness in children for a better India in future. In order to address high infant mortality, malnourishment and poor learning outcomes at that time, Government of India had launched Integrated Child Development Services

(ICDS) scheme on October 2nd, 1975 on an experimental basis with support from UNICEF (1). This program is one of the largest, most prestigious and premier national human resource development programs by Government of India under Ministry of Women and Child development (2). In Uttarakhand at present among 13 districts there are 105 ICDS projects of which 8 are urban and 97 are rural. Under these projects out of a total 19614 Anganwadi and mini Anganwadi there are 1174 in urban and 18442 in rural

areas respectively. For the functioning of these Anganwadi, 33055 Anganwadi workers/helpers are recruited. There is a need to explore factors to understand inability of ICDS to achieve expected results even after 40 years of implementation (3). A few published studies were available from Uttarakhand on ICDS (4-7). Uttarakhand being a state with poor health indicators especially with respect to child and mother health, there is need to augment research on implementation of programs that were focused on improving condition of children (8)

Aims & Objectives

- To assess utilization of services of ICDS by beneficiaries in Uttarakhand.
- 2. To assess factors affecting utilization of services of ICDS scheme.

Material & Methods

Study design and the participants:

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. Households of beneficiaries of ICDS scheme were taken as unit of sampling. Beneficiaries included pregnant and lactating mothers, children (0-6 years) adolescent girls (10-19 years), women of reproductive age group (15-45 years) along with Anganwadi workers of the selected Anganwadi (9). A multistage random Cluster sampling technique was used to select Anganwadi centers. From thirteen districts in Uttarakhand, two districts Haridwar and Dehradun were randomly selected by simple random sampling using lottery technique. Four Anganwadi centers each from urban and rural areas of both districts were randomly selected by simple random sampling for conducting study. House to house interview was done in selected areas for obtaining data on utilization of services by households and factors affecting it. Household visits were done in catchment area of selected Anganwadi centers. Care was taken to include farthest household from the AWC

Utilization of services and factors affecting it were assessed by interview using a semi structured questionnaire comprising of items such as demographic profile of the house hold, services available for the beneficiaries under ICDS and satisfaction rating of each service utilized. Sample size was calculated considering prevalence of utilization of services to be 28.6% (10) and a design effect of 1.5. Sample was calculated as 483 households which was rounded off to 500. But 505 households were covered. Households of eligible beneficiaries from each selected Anganwadi was included in the study. Those immigrants to the Anganwadi catchment area who were not enrolled in Anganwadi center and participants who did not give consent to participate in the study were excluded. The data was entered into MS Excel and analyzed using SPSS version 23.0 for windows. Descriptive data was presented as

frequencies, proportions and mean± standard deviations. Categorical variables were reported as proportions and continuous data as means ±2 standard deviation and median (IQR). To identify factors effecting utilization of services univariate analysis was done followed by binary logistic regression analysis. The categorical variables with multiple categories for which Cochran's criterion was not met and the continuous variables which were not in normal distribution were divided into two related categories. P-values less than 0.05 were considered to be statistically significant.

Results

Utilization of services under ICDS scheme in Uttarakhand varied for different services provided under it. (Table 1) shows at household level most utilized service was supplementary nutrition service (94.5%) followed by nutrition and health education services (88.3%), health and referral services (83.2%), preschool education services (76.7%) and least utilized service was immunization service (69.3%). Most common reason for not sending children for preschool education at Anganwadi center was that people opt to send their children to private school (61.8%). Most common reason for not taking supplementary nutrition was no felt need of taking supplementary nutrition (42.3%). Regarding immunization, availing this service at sub center than Anganwadi center was found to be most common reason (91.7%). Most common reason for not utilizing health and referral services under ICDS scheme was no felt need for these services (35.1%). Overall utilization was highest among nursing mothers followed by antenatal mothers, children between 3-6 years age, children less than 3 years age, and least utilization was by adolescent girls and women of reproductive age group. Most common reason for not utilizing nutrition and health education services under ICDS scheme as reported by beneficiaries was that Anganwadi worker never give any advice (44.45%). Satisfaction of households was with a median of 4 on a Likert scale of 0-5. Only factor that was significantly affecting preschool education activity was households having up to 3 total family members. Residing in urban area has an independent effect in utilization of supplementary nutrition services. Residing in rural area, belonging to Muslim religion, belonging to general caste, residing in <100 meters from Anganwadi center, households with ≤3 family members, households with ≤2 beneficiaries had significant independent effect on utilization of health and referral services under ICDS scheme. Residing in urban area, households with age of head of family ≤30 years were affecting utilization of nutrition and health education services under ICDS scheme independently. (Table 2) depicts that on conducting a unique scoring for utilization of services by beneficiaries as percentage utilization score and it was highest among nursing mothers was (85.0±23.9) followed

by antenatal mother (79.2±38.9). For rest of beneficiaries' median of utilization score of children of age between 3 to 6 years was (75), followed by Children < 3 years (66.7) and least by adolescents and female of reproductive age group (50). 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.

Conclusion

The utilization of services under ICDS in Uttarakhand was varying for different services, with supplementary nutrition among highest utilized service and immunization among the least utilized service. The overall utilization was highest among the pregnant women and least among adolescent girls and women of reproductive age group. The overall satisfaction regarding the available services was with a median of 4 out of 5 on a liker scale for the services utilized under ICDS.

Recommendation

Even though ICDS scheme proved to be effective by improving condition of Children in our country there is still a felt need to upscale the scheme. Initiatives to involve community in various activities of ICDS scheme should be introduced by creating awareness on importance and impact of scheme. Awareness should be generated regarding the importance of supplementary nutrition and take-home ration. There is need to develop a new cadre of workers for various other activities of government like surveys, enrolment drives, election duties which will reduce burden on Anganwadi workers so that there is no difficulty in delivery of services under ICDS scheme.

Limitation of the study

Household was taken as sampling unit which made individual assessment of utilization difficult, however utilization scores for each type of beneficiary was calculated.

Relevance of the study

Despite of this functional scheme since last 40 years of its implementation, results and outcomes are not as expected. There is a need to explore factors to understand inability of ICDS to achieve expected results even after 40 years of implementation.

Authors Contribution

All authors have contributed equally.

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Tables

TABLE 1 UTILIZATION OF SERVICES UNDER ICDS SCHEME IN UTTRAKHAND

S. No	Service	Utilization
1	Preschool education (N=146)	112 (76.7%)
2	Supplementary nutrition (N=471)	441 (94.5%)
3	Immunization (N=473)	328 (69.3%)
4	Health and referral (N=505)	420 (83.2%)
5	Nutrition and health education (N=505)	446 (88.3%)

TABLE 2 PERCENT UTILIZATION OF ICDS SERVICES BY THE BENEFICIARIES

S. No	Type of beneficiary	% Utilization (Mean±2SD)
1	Pregnant women (N=228)	79.2±38.9
2	Lactating mothers (N=137)	85.±23.9
3	Children below 3 years (N=277)	66.7*(66.7-66.7)
4	Children of age between 3 to 6 years (N=153)	75*(50-100)
5	Adolescent girls and women of reproductive age group (19-45 years) (N=204)	50*(0-75)

^{*}Median (IQR)