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ASSESSMENT OF THE ANGANWADI CENTRES IN THE RURAL FIELD PRACTICE AREA OF MAHARAJA AGRASEN HIMALAYAN GARHWAL UNIVERSITY, POKHRA, PAURI GARHWAL-246169, UTTARAKHAND

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ABSTRACT
Anganwadi centers are the focal units for the implementation of the Integrated Child Development Services projects in each block. Anganwadi centres cater to the children up to the age of 6 years, pregnant and lactating mothers, adolescent girls and women in the reproductive age group. Anganwadi centres (AWCs) under Integrated Childhood Development Services (ICDS) scheme are the foremost symbol of the country's commitment to its children and nursing mothers, as a response to the challenge of providing pre-school non-formal education on one hand and breaking the viciouscycle of malnutrition, morbidity, reduced learning capacity and mortality on the other. There are 77 anganwadi centres in the pokhra block, pauri garhwal-246169, uttarakhand rural field practice area of Maharaja Agrasen Himalayan Garhwal University, Pokhra, Pauri Garhwal-246169, Uttarakhand, India. Under the public private partnership model our institution provides immunization, health education, health check-up and referral services to these anganwadi centres. **Material and Methods:** 77 AWCs of rural areas were visited to assess their infrastructure and facilities provided by them to the beneficiaries. Data was collected by interviewing Anganwadi workers (AWWs) in a pretested, semi structured proforma and results were expressed as frequency and percentage. **Results:** AWCs were running through rented, inadequate accommodation facility. There were no separate kitchen and storage facilities. AWWs have not received refresher training. Nearly half of the AWCs don't have medicine kit. **Conclusion:** There is need for improved infrastructure and facilities in AWCs along with regular supervision on services provided to the beneficiaries. Basic amenities like space for storage, kitchen and toilet and playing area for the children should be there in all the anganwadis. Pregnant and lactating mothers should be followed up to confirm whether they have been registered at any health centre and have received the requisite number of IFA and TT doses.

KEYWORDS: Garhwal; rural areas, Integrated Childhood Development Services (ICDS), Anganwadi Centre (AWC), Anganwadi Worker (AWW).

INTRODUCTION
Integrated child development services (ICDS) program continues to be the world's most unique early childhood development program, which is being satisfactorily operated since more than 3 decades of its existence. The Ministry of Women and Child Development (MWCD) of India established ICDS in 1975. The roles of ICDS are providing pre-school education and primary healthcare for mothers and children to break "the vicious cycle of malnutrition, morbidity and reduced learning capacity and morality."ICDS has served as a flagship program for India's healthcare system, and has received financial and technical support from UNICEF and the World Bank.[1] The ICDS scheme is a long term development program for community and all efforts should be continued to strengthen to make it more successful. It serves as an excellent platform for several development initiatives in India. The ICDS target population includes poor and malnourished people at risk for malnutrition and mortality, especially the vulnerable groups including

children below six years old, pregnant and lactating mothers, and women in the age group between fifteen and forty five years of age.[2] The program includes a network of Anganwadi center (AWC) literally courtyard play center, provides integrated services comprising supplementary nutrition, immunization, health checkup, referral services to children below 6 years of age and expectant and nursing mothers. Non-formal PSE is imparted to children of the age group 3-6 years and health nutrition education to women in the age group 15-45 years. It delivers services right at the doorsteps of the beneficiaries to ensure their maximum participation.[3]

The program is executed through dedicated cadre of female workers named Anganwadi workers (AWWs), who are chosen from the local community and given 4 months training in health, nutrition and child-care. She is in charge of an AWC and is supervised by a supervisor called Mukhyasevika.[4] AWW is also assisted by helper who works with AWW and helps in executing routine activities at AWC. Statistical association was found between nutritional status and immunization status of <3 years age, with ICDS services in some studies but some studies refuted the same.[5] According to National Family Health Survey-3, countrywide though 81.1% children under age 6 years were covered by AWCs, children who received any service from AWC were only 28.4%.[6]

Overall various scientific studies have been conducted at evaluating its impact for nutritional status and child morbidity but the status of these AWCs and their service constraints are not assessed much.[7] The present study was done to assess the infrastructural facilities of the anganwadis and quality of services provided.

In Uttarakhand state, a total of 105 ICDS projects are operational at present, out of which 100 are in rural/tribal areas and 5 are in urban areas.[8] Under these ICDS projects, total numbers of Anganwadi Centres (AWCs) operational as on 31st March 2019 are 20067.[9] All the AWCs have been assigned 11 digit unique codes for sending Anganwadi Monthly Progress Report (AW-MPR) through Rapid Reporting System (RRS), which is sad to say, has not been followed strictly, as the reporting has been decreased from 18032 AWCs to 13972 AWCs in the past one year. The objective of the present study was to as- sess the facilities available at Anganwadi centres in rural areas of Pokhra block, pauri Garhwal, Uttarakhand.[10]

OBJECTIVES

- Assessment of facilities available for child development at anganwadi centres in rural areas of uttarakhand garhwal region.
- To estimate the level of nutrition in children attending Anganwadi centers of Pokhra block.

METHODOLOGY

Study design: Cross-sectional study.

Study Site: The study was conducted in the rural field practice area; Pokhra block pauri garhwal of the Maharaja Agrasen Himalayan Garhwal University, Pokhra, Pauri Garhwal-246169, Uttarakhand, India in From May 2024 to October 2024. It is located about 10 kms from the University. The rural field practice area includes one notified slum of Municipal Corporation pauri garhwal uttarakhand.

Study Duration: The study duration was 6 months.

Study Procedure: Cross sectional study was conducted across 77 Anganwadi centres (AWCs) located in the rural area of pokhra block of district Pauri Garhwal. The functioning of AWC was assessed by interviewing Anganwadi workers (AWWs) using pretested semi structured proforma. It was also assessed by means of records, reports, the infrastructure, and logistics available at the centre. Workers were enquired about regular & adequate supply of different logistics in previous one year.

Data Collection: Data collected was entered into Microsoft excel and results in the form of frequency and percentage was expressed.

Data Analysis: Data was analyzed by preparing tables using Microsoft excel.

RESULTS

❖ Infrastructure and Staff

Total numbers of AWCs established in urban areas are 29. Total population covered under these AWCsas per the survey done in October 2024 by AWWs is 73 (94.80%).

Majority 28 (36.36%) of the AWWs were educated up to graduation and 52 (67.53%) of AWWs have more than 5 years of experience working in an AWC. All the AWCs has Anganwadi helper (AWH) except one, most of the AWH has educational qualification of 12th standard and work experience of more than 5 years. Majority 23 (29.87%) of the AWCs were covering population in the range of 20-30. (Table 1)

All the AWCs were running in a rented one room accommodation with no separate kitchen facility. 70 (91%) has adequate ventilation and 73 (94.80%) has adequate day light while artificial light was present in 76 (98.70%). Drinking water with candle filter was present in 71 (92.20%) AWCs. Toilet facility was present at all 77 (100%) AWCs. Sitting arrangement was available in 03 (3.89%) AWCs, where children were sitting on mats lay on the floor. None of the AWCs have table and chair for the children. 70 (90.90%) AWCs have both Salter and bathroom scale (adult). Non formal preschool education (NFPSE) tools were present in all the 77 (100%) AWCs.

Table 1: Baseline characteristics of workers at Anganwadi centers (N=77).

Baseline characteristics of workers at Anganwadi centers (N=77)	
Variables	**Frequency (%)**
Number of Anganwadi worker (AWW):	73 (94.80%)
Educational qualification of AWW:	
10^{th}	13 (16.88%)
12^{th}	16 (20.77%)
Graduate	28 (36.36%)
Post Graduate	16 (20.77%)
Work experience (in years):	
<1	01 (1.29%)
01-05	20 (25.97%)
06-10	52 (67.53%)
Trainings since selected as AWW:	
1	77 (100%)
No of anganwadi helper (AWH)	47 (61.03%)
Educational qualification of AWH:	
8^{th}	02 (2.59%)
10^{th}	11 (14.28%)
12^{th}	29 (37.66%)
Graduate	03 (3.89%)
Post Graduate	02 (2.59%)
Work experience (in years):	
<1	03 (3.89%)
01-05	08 (10.38%)
06-10	36 (46.75%)
Population covered by each AWC:	
<10	07 (9.09%)
10-20	19 (24.67%)
20-30	23 (29.87%)
30-40	17 (22.07%)
40-50	10 12.98%)
>50	01(1.29%)

Table 2: Infrastructure and facilities available at Anganwadi centers (N=77).

Infrastructure and facilities available at Anganwadi centers (N=77)	
Variables	**Frequency (%)**
AWC S building:	
Govt. Owned	12 (15.58%)
Rented	12 (15.58%)
School building	27 (35.06%)
Panchayat building	19 (24.67%)
Mahila Milan building	04 (5.19%)
Community building	03 (3.89%)
No. of rooms each AWC:	
1	77 (100%)
2	00 (0%)
Separate kitchen:	
Present	00 (0%)
Absent	77 (100%)
Ventilation:	
Adequate	70 (91%)
Inadequate	07 (9.09%)
Day light:	
Adequate	73 (94.80%)
Inadequate	04 (5.19%)
Artificial light facility:	
Present	76 (98.70%)

Absent	01(1.29%)
Drinking water facility with candle filter:	
Present	71 (92.20%)
Absent	06 (7.79%)
Toilet facility:	
Present	77 (100%)
Absent	00 (0%)
Cleanliness in and around the AWC:	
Unhygienic	02 (2.59%)
Satisfactory	12 (15.58%)
Good	63 (81.81%)
Sitting arrangement for children:	
Available	03 (3.89%)
Not available	74 (96.10%)
Weighing machine:	
Salter scale only	07 (9.09%)
Both bathroom (adult) and salter scale	70 (90.90%)
Tools for preschool education (PSE) kit:	
Present	77 (100%)
Absent	00 (0%)
Medicine kit:	
Available	40 (51.94%)
Not available	35 (45.45%)
Growth chart:	
Present	75 (97.40%)
Absent	02 (2.59%)

Table 3: Beneficiaries in Anganwadi (n=511).

Beneficiaries in Anganwadi (n=511)	
Category of beneficiaries	**Beneficiaries (%)**
No. ANC registered	77(15.06%)
No. of Lactating mothers registered	29 (3.71%
No. 6 months – 3years surveyed	301 (58.90%)
No. of 3years – 6years surveyed	181(35.42%)

Medicine kits were available in 40 (51.94%) AWCs while Growth charts were present in 75 (97.40%). (Table 2)

Total number of beneficiaries in 77 AWCs was 511 including pregnant females, lactating mothers, children from 6 months - 6 years, adolescent girls. Rec ords of reproductive age group (15-45years) females other than pregnant females and lactating mothers were not available. Adolescent girls were not enrolledin any of these AWCs.

Out of the 181 children in 3-6years age group only 163 (90.05%) were enrolled in AWCs and out of these 163 only 67 (41.10%) were present on the day of visits. (Table 3)

It was observed that none of the children in 3 - 6yearsage group were registered/enrolled in 3 (3.89%) of the AWCs while on the day the investigators visits AWCs no children was present in 11 (14.28%) of the AWCs. Maximum number of children found in AWC was 8. Many children of this age group are sentto private school having pre-nursery and kinder garden facilities.

The immunization service was provided only in 4 AWCs situated in the rural slum. Most of the beneficiaries received the immunization service through Maternal and Children Welfare Centre which is located at the nearby Government Hospital and where people can easily reach. Poshandivas is celebrated on the 5th of every month at every AWC when Take Home Ration (THR) was distributed to the beneficiaries and weights of the children are recorded.

❖ **Health Check up & Referral Services**

Health cards of the cards were maintained properly and kept updated in 39 anganwadis. After observing the immunization records it was found that all kids registered in the 67 anganwadis were immunized up to date. But one of the anganwadis, the records was not available on the day of the visit. Mean number of children examined in the previous health checkup was found to be 34. Though pregnant women were registered with the anganwadi centres but none of them were coming for health check up to the anganwadi centre. Even all the pregnant women who were registered for supplementary nutrition were not receiving the IFA

tablets. At 52 of the anganwadi centres only the pregnant women were being given the IFA tablets and further at only 47 anganwadis pregnant women had received the TT injections in the past 6 months. Again not all the pregnant women registered at the anganwadi centre were receiving the TT or IFA from the anganwadi centre. Only at 5 and 7 anganwadis adolescent girls were receiving IFA and deworming tablets respectively. All the kids were being examinedby the doctors from our own institution on bimonthly basis and immunization was being conducted in the anganwadis on a monthly basis depending upon the beneficiaries.

In case the children were found to be severely ill, the anganwadi worker was being given referral card for diagnosis & treatment of the respective children.

❖ **Supplementary nutrition**

Almost all the anganwadis had sufficient cooking utensils available for cooking the ready to eat food or rice and sambhar. All the anganwadi workers said there was no problem with respect to supplementary nutrition. There were no interruptions in the food supply from ICDS office in the past 3-4 months and hence no shortage of food was reported. On observation itwas found that food was of good quality in all the anganwadi centres. It was found to be acceptable to the pregnant women as well as the children. Furtherit was found that 56 of the anganwadis had community support with respect to supplementary nutrition e.g. some of the areas they were providingeggs and milk on few days from the local community support. All the anganwadis visited were receiving the water from Municipal Corporation through taps. The water was being boiled before being used for drinking purposes on a daily basis.

❖ **Nutrition and Health education**

All the 61 anganwadis were regularly conducting the nutritional education and health education sessions for the pregnant, lactating mothers, mahila mandals etc as observed in the registers. But adolescent girls were coming for health education only at 12 anganwadis.

❖ **Growth monitoring**

63 of the anganwadis were using Salter weighing scale for monthly weight measurements of the children. The remaining 70 anganwadis were using the adult weighing machines. All the anganwadi workers were found to be accurately recording the weight of the children in the growth charts. The age of children also was being determined accurately using the date of birth. All the anganwadi workers had organized the group counseling session on growth monitoring and its importance for the women in the respective areas.

❖ **Non Formal Pre School Education**

On an average 29 kids were registered for preschool education in the anganwadis. All the anganwadi workers were following the timetable given by ICDS office for the same which was followed uniformly throughout the state. But in all the anganwadis the play materials were not in good condition. Most of the play materials were found to broken ordamaged. It was observed that 14 of anganwadis only had sufficient space for preschool education.

14 of the anganwadi workers did not report any problems. Others reported problems varying from shortage of space, absence of helper and no water facilities in the toilet etc. The commonest problem reported was shortage of space either in kitchen or storage area or area for preschool education.

DISCUSSION

In the present study, 36.36% of AWWs were graduate and have work experience of 6-10 years. In study conducted by Dixit S et al[11] and Saha M et al[12] observed majority of the AWWs were educated up to higher secondary while Chudasama RK et al[13] reported that majority of AWWs were matric passed.

In this study, most 52 (67.53%) of the AWWs had an experience of 6-10 years of running an AWC. In the research conducted by Dixit S et al[11], Saha M et al[12] and Chudasama RK et al[13], 25.97% of AWWs for 1-5 years.

In the present study, all the AWWs were given training following their appointments, thereafter no training has been provided to them. Chudasama RK et al[13] reported in their studies that induction training was received by 100%, 23% and 31.7% of AWWs respectively while on Job training was received by 80%, 96.7% and 86.7% of AWWs as reported by Dixit S et al[11] and Saha M et al[12] respectively in their studies. The refresher training was received by 62%, 93.3%, 21.8% and 63.3% as reported by Dixit S et al[11], respectively.

In the present study, 15.58% of the AWCs were running from rented one room accommodation.[14] There was no separate kitchen and storage facility available in any of these AWCs. In other studies also, re- searchers reported that AWCs were running in rented building, ranging from 4.8% to 100%.[4- 10] and separate kitchen was available in 60% and 68.3% of the AWCs respectively as reported by Saha M et al.[12]

In our study, ventilation and daylight was adequate in 94.80% of the AWCs. Malik A et al[15] reported in their studies presence of 65.2% and 65.9% of adequate ventilation while 60.9% and 14.6% of day light, respectively.

In this study, the artificial light facility was present in 98.70%. It was present in 60% to 91.3% of AWCs as reported by various other researchers.

In the present study drinking water facility with candle filter was present in 92.20%. According to the evaluation report submitted by NITI Aayog[16] and Malik A et al[15]

83.6% and 78% AWCs respectively had drinking water facility.

In our study, the toilet facility was present in 100% of the AWCs while it was observed to be present in 53.5% to 80.5% of AWCs as reported by other researchers.[17]

In this study, sitting arrangement was available in 96.10% AWCs while Malik A et al[18] reported that it was present in 90.24% of AWCs in their study.

In this study, good hygienic condition was found in 81.81% of AWCs. According to the NITI Aayog report[16], hygienic condition was seen in 48.2% of AWCs.

Both adult and Salter type weighing scale were available and functioning in 90.90% of AWCs in our study. According to Saha M et al[12], 100% and 70% AWCs have salter and adult type weighing scale respectively and Gill KPK et al[18] observed availability of weighing machine for adults and children in 38.2% AWCs, while NITI Aayog report[16] reports availability of Salter and bathroom scale in 27.27% and 81.86% AWCs located in urban areas respectively.[19]

In present study, medicine kit was available at 51.94% AWCs while Saha M et al[12] and NITI Aayog report.[16] 90% and 77.5% AWCs respectively have medicine kit.[20]

CONCLUSION

The performance of AWCs and maternal and child health services delivered by AWCs still needs improvement. The findings help in providing some insight into the existing infrastructural situation and quality of services. Basic amenities like space for storage, kitchen and toilet and playing area for the children should be there in all the anganwadis. Increased focus should be on providing services other than supplementary nutrition to adolescents.

Pregnant and lactating mothers should be followed up to confirm whether they have been registered at any health centre and have received the requisite number of IFA and TT doses. We need to look forward for a holistic approach involving various departments.

The assessment of infrastructure and facilities revealed AWCs are not build according to norms. There is need for regular supervision to gather facts about the reason behind decreased number of beneficiaries attending AWCs.

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