



ASSESSMENT OF BASIC INFRASTRUCTURE IN ANGANWADI CENTRES UNDER INTEGRATED CHILD DEVELOPMENT SERVICES SCHEME IN DISTRICT ROHTAK OF HARYANA

Community Medicine

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ABSTRACT

Background: In India, Integrated Child Development Services (ICDS) Scheme was launched on 2nd October, 1975 as an effort to meet the holistic needs of children below 6 years, adolescent girls, pregnant and lactating mothers through the network of Anganwadi Centres (AWCs). An AWC is the focal point for the delivery of services to the community. Hence, the current study was planned to assess the basic infrastructure in AWCs of Haryana.

Methods: A cross-sectional study was conducted in the 20 AWCs, included by adopting simple random sampling method, in block Lakhan Majra, a rural field practice area attached to the Department of Community Medicine, Pt. B. D. Sharma PGIMS, Rohtak from October 2016 to September 2017. The data was compiled and analysed by using SPSS 20.0 version.

Results: It was observed that all AWCs were located within 400metres of village. Almost half (45%) of the AWCs were rent free government building. Most of the buildings (70%) were Pucca type, remaining (30%) were open spaced and none of the building was Kutcha type. More than half i.e. 60% of the AWCs had adequate built size, 70% of the AWCs had availability of separate kitchen and 60% of AWCs had availability of separate space for storage. Most of AWCs (75%) had tap water supply for drinking while rest 25% had deep hand pump facility for same purpose. Half (50%) of AWCs didn't have availability of toilet facility.

Conclusions: Adequate infrastructure needs to be ensured for proper functioning of AWCs which are the nodal point for service delivery under ICDS Scheme. The basic infrastructure is better in Haryana as compared to other states regarding the availability of electricity, kitchen, storage space, water supply and toilet facilities. However, the government constructed AWCs are less in Haryana as compared to other states.

KEYWORDS

Anganwadi centre, Assessment, Basic Infrastructure

INTRODUCTION

Education, health and well-being are the birthright of every child. The Integrated Child Development Services (ICDS) scheme was launched on 2nd October, 1975 with the aim of promoting child welfare by providing a package of services to children between 0-6 years, pregnant and lactating mothers and women 15-49 years of age.[1] Each AWC is run by anganwadi worker (AWW) supported by a helper to provide integrated service delivery and to improve the linkage with the health system.

In spite of efforts by the Government to improve the nutritional status of children, especially through ICDS scheme, there has not been much improvement in the nutritional status of children under five years of age.[2] As per NFHS-IV, 35.7% of under 5 years age children have been found underweight whereas as 21% are wasted.[3] Poor and inadequate infrastructure can create many challenges in the delivery of ICDS scheme, can create hazards and health problems for the anganwadi children and can cause loss of beneficiaries. This study aimed at evaluating the basic infrastructure available at the AWCs, which even though a minor component, can pose a serious threat to the existence of ICDS project.

METHODS

An observational study with cross-sectional design was conducted in the 20 AWCs, included by adopting simple random sampling method, in block Lakhan Majra, a rural field practice area attached to the Department of Community Medicine, Pt. B. D. Sharma PGIMS, Rohtak from October 2016 to September 2017. Permission from the child development project officer (CDPO) of study area was obtained for carrying out the study. The study was carried out with consent and cooperation of AWW after explaining the nature and purpose of the study. Data was collected by visiting the AWCs between 10 am to 1 pm. The basic infrastructure of AWCs was assessed using a pre-validated checklist. Data was analysed using SPSS version 20. Statistical methods used include descriptive statistics (percentages and mean) and chi-square test.

RESULTS

The study was conducted in the 20 AWCs and following observations were made.

TABLE 1 DISTANCE OF AWC FROM THE VILLAGE (N=20)

Within village	15(75%)
Less than 100 Mts	3(15%)
100-200 Mts	1(5%)
300-400 Mts	1(5%)

TABLE 2 STATUS OF SIGN BOARD AT AWC (N=20)

	Yes	No
Sign board displayed	12 (60%)	8 (40%)
Sign board visible from road out of displayed	3 (25%)	9 (75%)

It is evident that 75% of AWCs were located within the village. Other locations were at distance less than 100 meters (Mts), within 100-200 Mts and 300-400 Mts in 15%, 5% and 5% of AWCs respectively. (Table 1)

Sign boards were displayed in 60% of the AWCs. Twenty five percent of AWCs had visibility of sign board from road. Condition of sign boards was found to be in good, satisfactory and poor condition in 16.7%, 58.3% and 25% of the AWCs respectively. (Table 2)

TABLE 3 INFRASTRUCTURE FACILITY AT AWC (N=20)

Ownership of AWC building	Constructed by government	2(10%)
	Rent free government building	9(45%)
	School building	6(30%)
	Community/Panchayat building without rent	3(15%)
Type of Building	Kutcha	0
	Pucca	14(70%)
	Open Space	6(30%)
Availability of electricity	Present	9(45%)
	Absent	11(55%)

TABLE 4 PHYSICAL INFRASTRUCTURE AT AWC (N=20)

Total built size of AWC	Adequate	12(60%)
	Inadequate	8(40%)
No. of rooms in AWC	One	4(20%)
	Two	4(20%)
	Three	12(60%)

Almost half (45%) of the AWCs were rent free government building, 30% were school buildings, 15% were community/panchayat building without rent and the lowest percentage was of the AWC that were constructed by government (10%). Most of the buildings (70%) were Pucca type, remaining (30%) were open spaced and none of the building was Kutcha type. Near about half (45%) of the AWCs had availability of electricity.(Table 3)

More than half i.e. 60% of the AWCs had adequate built size. Same number (60%) of AWCs had three room facility followed by 20% had two room facility while rest 20% had only one room facility in their AWC. (Table 4)

TABLE 5 COOKING ARRANGEMENT AT AWC (N=20)

Availability of Separate kitchen	Yes	14(70%)
	No	6(30%)
Provision of Cooking gas	Yes	16(80%)
	No	4(20%)

Almost all i.e. 70% of AWCs had availability of separate kitchen. In remaining 30% of AWCs, cooking was being done under covered space (20%) or open space (10%). There was provision of cooking gas in 80% of AWCs. (Table 5)

TABLE 6 STORAGE FACILITY AT AWC (N=20)

Separate space for storage	Available	12(60%)
	Not available	8(40%)
Alternate arrangement for storage	In the AWC	5(25%)
	AWW/AWH house	3(15%)

Sixty percent of AWCs had availability of separate space for storage. Remaining 40% of AWCs had alternate arrangement for storage in AWC (25%) or AWW/AWH house (15%). (Table 6)

75% of AWCs had tap water supply for drinking while rest 25% had deep hand pump facility for same purpose. Drinking water was stored in covered utensil with ladle in 75% of the AWCs followed by 15% in uncovered utensil while in rest 10% water was stored in unhygienic condition. (Table 7)

TABLE 7 DRINKING WATER FACILITY AT AWC (N=20)

Source of Drinking Water	Deep hand pump available nearby AWC	5(25%)
	Tap water supply from Public Health Department (PHD)	15(75%)
Storage of Drinking Water	Stored in covered utensil with ladle	15(75%)
	Stored in uncovered utensil	3(15%)
	Stored in uncleaned utensil in unhygienic condition	2(10%)

TABLE 8 TOILET FACILITY IN AWC (N=20)

Toilet available	8(40%)
Not available	10(50%)
Available but not usable	2(10%)

Half (50%) of AWCs didn't have availability of toilet facility and 40% had such availability while in remaining 10% had same facility but it was not usable by beneficiaries.

DISCUSSION

The present study was carried out to evaluate the basic infrastructure of AWCs in a rural area. All AWCs were located within 400metres of village and 90% of AWCs were located within 100metres. Sign boards were displayed in 60% of AWCs. Twenty five percent of AWCs had visibility of sign board from road. Visibility of sign board was found to be in satisfactory condition in most (75%) of the AWCs. In a study by Chudasama et al in Gujarat, majority of AWCs (76.2%) were within a distance of 500m to the farthest house in the locality.[4]

Infrastructure plays a key role in functioning of an AWC. In the present study, it was observed that out of 20 AWCs, only 10% were constructed by the government. The major share of the anganwadi buildings i.e. 45% were rent free government buildings. Other AWCs were being managed in school buildings (30%) or in community/Panchayat buildings (15%) without rent. Jena et al (2013, Odisha) reported 33% of AWC buildings belong to government quarters.[5] Regarding the type of buildings, there were no kutcha anganwadi building; 70% were

pucca buildings and 30% were open space. While study conducted by Ahmed et al (2016, Bareilly) reported that 63.60 % of AWCs were having pucca type construction, 36.40% were running in their own building and in the study done by Rathore et al (2015, Rajasthan) it was found that 88.90% of AWCs were running in pucca building.[6,7]

Electricity, even after being a basic need, was absent in most of the AWCs. The present study showed that 55% of the anganwadi did not have access to electricity. While in the study by Rathore et al (2015, Rajasthan) 38.90% had an access to electricity. While in the study by Ahmed et al (2016, Bareilly) none of the AWC had an access to electricity.[7,6] It shows that electricity facility is better in AWCs of Haryana as compared to other states. In our study 45% of AWCs had an access to electricity which is relatively better than other mentioned studied areas, but looking at recent trends of government it has to be 100%. Presence of electricity is necessary for good attendance of Children at AWCs in summer.

In our study 80% of AWCs had a separate kitchen for preparation of meals. Study by Ahmed et al (2016, Bareilly) showed that 45.50% AWCs had a separate kitchen for the preparation of food in comparison to the present study results.[6] Sahoo et al (2014, Odisha) showed that only 16.7% AWCs had cooking space available for the same.[8] It was concluded that place for preparation of meal for the beneficiaries was separate and hygienic and thus it was easier to maintain the kitchen and therefore beneficiaries were satisfied by food provided to them by AWWs. Our study showed that kitchen facility was better in Haryana as compared to this facility in other states.

For storage facility, in our study we found that 60% of AWCs had facility for storage of ration. Haque S et al (2013, Kashmir) in their study showed that 29% of AWCs had separate space for storage.[9] Ahmed et al)showed that storage facility were present in 22.7% of AWCs.[6] It was concluded that the storage facility in AWCs of Haryana was much better as compared to above mentioned study areas. But there is still need to construct more rooms in AWCs for storage of ration.

Water is one of the basic needs and must be available at all AWC but in our study we found that 75% AWCs were sourcing water from tap water supply from public health department while rest 25% were using deep hand pumps nearby AWC. Jena et al (2013, Odisha) showed that drinking water facility present at 83% of AWCs.[5] An evaluation of ICDS done by the Program Evaluation Organization of the Planning commission in 2009 reported that 87% of the AWCs had some drinking water supply, which is in agreement with the current study.[10] To control the spread of water-borne infections, which are one of the leading causes of mortality and morbidity in the children not only the availability of safe drinking water is important but also its hygiene.

Toilet is deemed as the most important factor in any building. In our study we found that only 40% AWCs had toilets available and ready for use. Half (50%) of AWCs did not have toilets and 10% of AWCs had toilet but they were not in working condition. In the study by Ahmed et al (2016, Bareilly) showed that 18.20% of AWC had toilet facilities.[6] Sahoo et al (2014, Odisha) showed that 94.4% of AWCs did not have toilet.[8] Availability of toilets has a direct bearing on the surrounding environment of AWC and is also a critical indicator for assessing their sanitation status. It is unfortunate that despite vigorous efforts by the government regarding Swachh Bharat Abhiyan, majority of AWCs do not have access to functional toilets. Absence of toilet facility at AWCs may be one of the major reasons for poor attendance of children.

CONCLUSION AND RECOMMENDATIONS

The main objective of ICDS programme is to assess and prevent malnutrition which is not feasible without strengthening the infrastructure of AWCs. It was concluded that the basic infrastructure is better in Haryana as compared to the studied areas of other states regarding the availability of electricity, kitchen, storage space, water supply and toilet facilities. However, the government constructed AWCs are less in Haryana as compared to other states.

So there is need to construct more AWCs in remote as well as in rural areas of Haryana. Government must focus on transforming the open space buildings into pucca type building. Electricity being basic need should be provided in all AWCs. Presence of electricity is necessary for good attendance of Children at AWCs in summer. There is need to construct more rooms in anganwadi centers for storage of ration. All

the AWCs should have toilet facility and if possible there should be a provision of separate toilet for girls. There should be regular visits of AWCs by Health Workers, Supervisors and CDPO.

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