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Assessment of Infrastructural Facilities in Selected Aanganwadi Centres in Urban Project I and Ii of Raipur City

KEYWORDS: Infrastructural facilities, ICDS, Aanganwadi center, AWW, Grading

Dr. Mini Sharma	Dr. G.P. Soni	Dr. Nitin Sharma
Department of Community Medicine, Pt. JNM Medical College, Raipur, CG	Department of Community Medicine, Pt. JNM Medical College, Raipur, CG	Department of Pediatric Surgery, All India Institute of Medical Sciences, New Delhi

ABSTRACT *Introduction- It has repeatedly been found that there is discrepancy of the expected verses actually delivered services in ICDS. It has long being thought to be due to inadequate infrastructure. In this study we tried to evaluate the infrastructural facilities available at the aanganwadi centres.*

Aim –

To evaluate the availability of essential infrastructural facilities in the surveyed Aanganwadi centres

Materials and methods-

Cross sectional observational study conducted at Raipur district in selected 30 aanganwadi centres [by Systemic random sampling]. Selected centres were visited & their infrastructure, facility, beneficiaries registers were checked. Aanganwadi centres were grouped according to their infrastructural setup as per the scoring system. 10% of the beneficiaries were interviewed to check the adequacy of services.

Observations: 26/30 of the visited AWC were good, 4/30 average and none infrastructurally poor. All the centres had infrastructure for growth monitoring and preschool education but 172/342(50 %) of the beneficiaries were not weighted and only 54/86(63%) received preschool education. There was a deficit in record keeping in 15/30(50%) centres. All centres had adequate number of utensils and storage facility. Separate kitchen was absent in 1/30(3.33%). Cooking facilities were poor in 8/30(26.67%) and facility to clean utensils was absent in 11/30(36.67%).

Conclusions-

All the Aanganwadi centres were infrastructurally well equipped. Lags are due to the flaws in the implementation despite of adequate facilities. It is the moral responsibility of the AWW and the supervisor to adequately supervise the implementation of the scheme so that goals could be achieved as early as possible.

Introduction-

Integrated Child Development Services (ICDS) is welfare project run by the government. It has a comprehensive approach for all-round development of child up to six years of age. The functional and grass root level worker of the scheme is an Aanganwadi centres. Each Aanganwadi is supposed to cover a population of 500-1500 persons in Rural & urban area & 300-1500 in tribal area & in Mini AWC cover a population of 150- 500 persons (1). Work of an Aanganwadi worker is a key in the implementation of this scheme and she is supposed to carry over all the survey and services efficiently. For an aanganwadi worker to work efficiently it is necessary that she should be backed by proper infrastructural facilities. It has repeatedly been found that there is discrepancy of the expected verses actually delivered services. In order to decrease malnutrition, IMR, school dropout it is essential to cover every beneficiary in the respective locality of AWC (2). It has long being thought that inadequate infrastructure is a cause for this improper functioning. In this study we tried to evaluate the infrastructural facilities available at the aanganwadi centres.

Aim –

To evaluate the availability of essential infrastructural facilities in the surveyed Aanganwadi centres under urban project of Raipur district.

Material and methods-

This was a cross sectional observational study conducted at Raipur district in selected 30 aanganwadi centres distributed in urban project of Raipur I and Raipur II. The concerned centres were selected on the basis of systemic random sampling among a total of 301 aanganwadi centres.

Sampling Technique:

The total number of AWC in project I and II were 111 and 190 respectively. The AWC were arranged alphabetically with their individual population written in front. For the purpose of the study systematic random sampling was chosen. In this sampling technique initially a desired number is chosen. In the present study due to the lack of resources it was decided that 15 AWC will be surveyed from each project area. Then sampling interval was calculated by using this desired number i.e. 15.

Sampling interval =Number of AWC in Project divided by desired number of AWC to be visited

Project I -111/15= 7 & Project II-190/15 = 12

Thus 7 and 12 came to be the sampling interval of project I & II respectively.

We then selected a number between 1 and the sampling interval from the random number table. This selected number came out to be 6 and 11for Project I & II respectively. The first AWC for Project I was 6th of the list and 11th for project II and the sampling interval was added over till the desired number [15] of AWC were obtained in each Project.

The selected Aanganwadi centres were visited & their infrastructure, facility, beneficiaries registers were checked to check for their adequacy based on the indigenously designed scoring system [Table-1]

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Table-1 : Scoring System used to grade the AWC

Services/ criteria	Parameters		Score
General	Building	Kaccha	0
		Pukka	1
	Access to center	Poor	0
		Good	1
	Toilet facility	Absent	0
		Present	1
	Drinking water source	More than 100 meters	0
		Within 100 meters	1
	Dampness	Absent	0
		Present	1
	Ventilation	Poor	0
		Good	1
	Overcrowding	Absent	0
		Present	1
Growth monitoring	Weighing machine	Absent	0
		Present	1
	Condition of machine	Not working	0
		Working	1
	Growth chart	Not available	0
		Available	1
Preschool education	Teaching material (chalk, board, duster)	Not available	0
		Available	1
	Stationaries	Not available	0
		Available	1
	Toys	Not available	0
		Available	1
Supplementary nutrition	Utensils	Absent	0
		Present	1
	Kitchen	Absent	0
		Present	1
	Storage facility	Inadequate	0
		Adequate	1
	Cooking facility	Poor	0
		Good	1
	Facility to clean utensils	Absent	0
		Present	1
Total			18

***Poor – 0-6, average – 7-12, good- 13-18**

Those aanganwadi centres with a total score below 6 were graded as poor, those with a score between 7 -12 were graded as average and those above 13 were graded as good out of the total score of 18.

The coverage of services as per records was verified by visiting the population covered and interviewing randomly selected 10% of the registered beneficiaries using standard proforma.

Observation and results-

Grading of the aanganwadi centres. Out of the 30 aanganwadi centres assessed it was observed that none of them had poor grade with respect to the overall infrastructural facilities, 4 of them were average grade while all of the others i.e. 26 were infrastructurally good[Table-2].

Table- 2: Different Grades of the AWC with respect to the scores obtained

Type of center	Number
Poor	0
Average	4
Good	26
Total	30

Assessment of infrastructures

Assessment with respect to general parameters –

It included parameters as type of building, assess to the centres, toilet facilities, drinking water source, dampness, ventilation and presence of overcrowding. It was observed that 16/30(53.33%) of the centres were run at katchha houses, assess to the centres was poor in 1/30(3.33%). Toilet facilities were absent in 10/30(33.33%) of the centres, drinking water source was more than 100 meters distance in 12/30(40%) of the centres. Dampness was present in 13/30(43.33%) of the centres and these all were those which had a katchha set up. Ventilation was poor in 11/30(36.67%) of the aanganwadi centres. Overcrowding was present in 1/30(3.33%) of the centres [Table-3].

Table-3: Various Aanganwadi Centres with respect to the different parameters

Services/ criteria	Parameters		n =30
General	Building	Katchha	16(53.33%)
		Pukka	14(46.67%)
	Access to center	Poor	1(3.33%)
		Good	29(96.67%)
	Toilet facility	Absent	10(33.33%)
		Present	20(66.67%)
	Drinking water source	More than 100 meters	12(40%)
		Within 100 meters	18(60%)
	Dampness	Present	13(43.33%)
		Absent	17(56.67%)
	Ventilation	Poor	11(36.67%)
		Good	19(63.33%)
	Overcrowding	Absent	1(3.33%)
		Present	29(96.67%)
Growth monitoring	Weighing machine	Absent	0(0%)
		Present	30(100%)
	Condition of machine	Not working	1(3.33%)
		Working	29(96.67%)
	Growth chart	Not available	0(0%)
		Available	30(100%)
Preschool education	Teaching material (chalk, board, duster)	Not available	0(0%)
		Available	30(100%)
	Stationaries	Not available	0(0%)
		Available	30(100%)
	Toys	Not available	0(0%)
		Available	30(100%)
Supplementary nutrition	Utensils	Absent	0(0%)
		Present	30(100%)
	Kitchen	Absent	1(3.33%)
		Present	29(96.67%)
	Storage facility	Inadequate	0(0%)
		Adequate	30(100%)
	Cooking facility	Poor	8(26.67%)
		Good	22(73.33%)
	Facility to clean utensils	Absent	11(36.67%)
		Present	19(63.33%)
Total			30

***Poor – 0-6, average – 7-12, good- 13-18**

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Assessment with respect to the infrastructure for growth monitoring -
Infrastructures for monitoring the growth of the beneficiaries were assessed on the basis of the availability of the growth charts, weighing machine and the condition of the weighing machine. It was observed that all these centres had growth charts and weighing machines, while weighing machine was not working properly in 1/30(3.33%) centre [Table-3].

Assessment with respect to the infrastructure for preschool education-
Infrastructures which were considered essential for providing preschool education were availability of teaching material (chalk, board and duster), stationeries and toys. It was seen that all these three things were available in all the aanganwadi centres [Table-3].

Assessment with respect to the infrastructure for supplementary nutrition-
The parameters which were considered important for proper functioning of the supplementary nutrition facilities were the availability of utensils, kitchen, storage facilities, cooking facilities, and facility to clean utensils. It was observed that the entire centres had adequate number of utensils and storage facility for the raw grains. Separate kitchen was absent in 1/30(3.33%) of the centres. Cooking facilities were poor in 8/30(26.67%) AWC and facility to clean utensils was absent in 11/30(36.67%) centres [Table-3].

Assessement with respect to the services provided(done in 10% of benificiaries):
Growth monitoring-
On validation it was found that172/342(50 %) of the beneficiaries were not weighted when asked and 27/342(8 %) of the beneficiaries didn't know about the frequency of growth monitoring at their centre.

Preschool education-
All AWC were providing preschool education up to maximum days (250-300 days per year) as per their records but only 54/86(63%) actually received preschool education when interviewed.

Supplementary nutrition -
All AWC were providing supplementary nutrition up to maximum days (250-300) days per year. There was a deficit in record keeping in 15/30(50%) of Aanganwadi centres. According to 324/448(72%) beneficiaries AWC provided supplementary nutrition up to maximum days (21-25days a month).

Discussion-
Providing the desired services to the beneficiaries is what is expected from an aanganwadi center, the benefit of the beneficiary lies in the proper functioning of the aanganwadi center. Unfortunately integrated child development scheme has failed to achieve the noble goal for which it was established. Various studies done time to time such as those by Seema TN et al(3), Nayar D at el(4) and Bhasin SK at el(5) attributed lack of infrastructural facilities as the major culprit in this failure. Unfortunately they have not analysed the aanganwadi centres with respect to the individual parameters. In this study we tried to analyze the centres in detail with respect to various infrastructures which were grouped as general infrastructural facilities and those required for individual services like growth monitoring, preschool education and supplementary nutrition. Scores were given to individual parameters and based on this scoring system aanganwadi centres were graded as poor, average and good. It was observed that overall 26/30 aanganwadi centres were good with respect to the infrastructure while 4/30 were average. There were some deficit with respect to the general infrastructure like katchha centres in 16/30 (53.33%), presence of dampness, etc [Table-3] but infrastructure required to provide the specific services were adequate in all the centres.

While validating the services provided by the centres it was observed that according to 324/448(72%) beneficiaries AWC provided supplementary nutrition up to maximum days (21-25days a month){ though there was a deficit in record keeping in 50% of the centres}. This was probably so because of adequate infrastructural support to these centres though this could further be improved by adequate supervision. Nayar D et al (4) in their study found that only 20- 48% of beneficiaries received supplementary Nutrition. They tried to analyze the cause and found that the deficient coverage by Supplementary Nutrition in the projects was due to irregular supply and non acceptance of Supplementary Nutrition. However the mean coverage for the state as a whole was 29.6percent.

While assessing the centres for growth monitoring it was found that all the centres were having the essential infrastructure for growth monitoring. In only one of the 30 center weighing machine was not working. On validation it was observed that 172/342(50 %) of the beneficiaries were not weighted and 27/342(8 %) of the beneficiaries didn't know about the frequency of growth monitoring at their centre. Thus there was a deficit in growth monitoring despite of adequate infrastructural support. This was against the observation by Bhasin SK et al (5) who observed high extent of undernourishment and unsatisfactory performance of ICDS. They observed that providing of less than the prescribed supplementary food indicated the flawed implementation. They found that Weighing machines and growth charts were not available, regular growth monitoring was not done. As a conclusion they felt that a lot more has to be done to improve the efficiency of the program and ameliorate malnutrition and ill health. Fortunately this was not the case in our study. Similar lag in the infrastructure was also observed by Seema TN et al (3). We found that all the centres were well equipped infrastructurally but still there were flaws in their functioning. This deficit was more due to lag on the part of the AWW rather than the infrastructure this could be improved by proper motivation of the AWW and adequate supervisory activities.

Conclusion –
All the Aanganwadi centres have been well equipped with respect to the infrastructure required to provide the services. Lags are due to the flaws in the implementation despite of adequate facilities. It is the moral responsibility of the AWW and the supervisor to adequately supervise the implementation of the scheme so that goals could be achieved as early as possible.

Conflict of interest:
Nil.
Contribution of Authors:
Dr. Mini Sharma- chief investigator, Dr GP Soni- chief guide in the project

Dr Nitin Sharma- co investigator in survey.

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