



ASSESSMENT OF INFRASTRUCTURE, MANPOWER AND FUNCTIONING OF AN ANGANWADI CENTRE OF A RURAL AREA OF EASTERN INDIA

Community Medicine

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ABSTRACT

Background: The ICDS is one of the Government of India's flagship programmes. Infrastructure, accessibility, resource availability, and beneficiary satisfaction together play a major role in how well ICDS services are used. It plays a crucial role in lowering morbidity, mortality, malnutrition, and school dropout rates among the beneficiaries. **Methods:** A cross-sectional study was done in an Anganwadi centre in Kishanganj, Bihar, in 2021. One of the 1890 AWCs in the Kishanganj district was chosen by lottery method for the study. Data was gathered using an interview schedule that had been pre-designed, pre-tested, and semi-structured. **Results:** AWC was housed in a rented semi-pucca structure with suitable infrastructure having adequate manpower. Materials and equipment's were adequate, well maintained. Beneficiaries included 16 children in the age group of 0-6 months; 40 in the group of 6 months – 3 years; 84 in the age group of 3 – 6 years. Out of 10 pregnant women registered, 100% had early registration. 60 adolescents and 62 children were getting IFA tablets/ deworming services. **Conclusions:** A few shortcomings were found in the areas of growth tracking, beneficiary reporting, and service delivery. For the AWC to function better, the gaps must be filled.

KEYWORDS

ICDS, Anganwadi, Functioning, Infrastructure

INTRODUCTION:

Integrated Child Development Services Scheme was launched on 2nd October 1975 by the Government of India and is one of the world's most extensive community-based program for early childhood care and development. It was launched as a centrally sponsored scheme to address the gaps and challenges related to malnutrition among children aged 0-6 years with a particular focus on children under three years, pregnant women and lactating mothers.^[1]

Recently the Government of India took the historic decision to universalize the ICDS in all the 5652 blocks of the country. Nearly six hundred thousand Anganwadi centres are now in operation, providing daycare services to 63.81 lakh pregnant and lactating mothers and 295.89 lakh children below six years of age.^[2]

It is currently known as the umbrella ICDS Scheme, comprising various sub-schemes. Anganwadi Services Scheme, Pradhan Mantri Matru Vandana Yojana, National Crèche Scheme, Scheme for Adolescent Girls, Child Protection Scheme and The Prime Minister's Overarching Scheme for Holistic Nutrition (POSHAN) Abhiyaan are the authorized sub-schemes under the "Umbrella Scheme."^[3]

Infrastructure, accessibility, resource availability, and beneficiary satisfaction play a distinct role in how well ICDS schemes are being used. Mothers are regarded as key beneficiaries of the ICDS system as they play such a pivotal role in the growth and development of their children. People's active engagement and cooperation are vital to the success of the ICDS Programme. The ICDS scheme is critical for improving mothers' and adolescents' health and nutritional status and children's psychological, physical, and social development. Reduced morbidity, mortality, hunger, and school dropouts are essential goals for the recipients.^[4]

For the reasons stated above, cross-sectional study was done at an Anganwadi Center in the Kishanganj district of Bihar with the objective to assess the overall functioning of the center by interviewing the facilities and staff available in the Anganwadi centre under study. And evaluate the center's operation, identify shortcomings, and provide recommendations.

METHODS:

Study design: An observational, cross-sectional and descriptive study

was conducted in a randomly selected Anganwadi centre situated at Kishanganj district of Bihar, India.

Study period: From 1st July 2021 to 30th September 2021

Study population: All the beneficiaries attending the Anganwadi centre during the study period

Study area: Kishanganj District of Bihar

Study tools: pre-designed, pre-tested and semi-structured schedule.

Study sample: Out of 1890 number of Anganwadi centres present in the Kishanganj district of Bihar, 1 AWC was selected randomly for the study.

Data collection procedure-

Observing the centre's operations, interviewing an Anganwadi worker, and analyzing and evaluating the records.

Inclusion criteria

- Anganwadi worker of the chosen AWC willing to give her written informed consent for inclusion in the study.
- Those Anganwadi worker working in the jurisdiction of Kishanganj District.

Exclusion criteria

- Anganwadi worker outside the jurisdiction of Kishanganj district.
- Worker absent at the time of the survey
- Worker who will not give written consent

Ethical approval was obtained from the Institutional Ethics Committee of MGM Medical College and LSK Hospital, Kishanganj, Bihar, for conducting the study. Collected data was tabulated and analyzed using MS Excel.

RESULTS:

Infrastructure:

The Anganwadi centre was housed in a rented semi-pucca structure with appropriate infrastructure. The room had adequate floor space and ventilation, but there was insufficient illumination owing to the lack of electricity. There was enough space for storing water in a sanitary

manner. There was no separate kitchen or storage facility for cooking. There was no provision for a latrine. The municipality collected solid garbage, which was placed in a covered container, and disposed of regularly [Table 1]. Segregation of putrescible and non-putrescible wastes, however, was not done.

Human Resources:

The Anganwadi worker was 37 years of age and a local resident. She holds a master's degree in sociology. She had been working as AWW since 2010 and working for 4 hours daily, six days a week. A helper was also present at the centre [Table 2]. Mukhya Sevika (supervisor) used to visit once a month. Health checkup of children was done by ANM once every month.

Materials and equipment:

Family registers, Summaries (monthly and annually), Supplementary food stock registers, Supplementary nutrition and pre-school education registers, Immunization records, Village Health and Nutrition Day, Pregnancy and delivery registers, home visits planners, Vikas Samiti registers, take-home ration distribution registers, Milk distribution registers, and PM Kanya Uthan Yojana registers were all kept. The centre had an infantometer and a stadiometer for measuring length and height and bathroom weighing scales for weighing individuals. The instruments were all confirmed to be in good functioning order. WHO growth charts were used to assess nutritional status and track progress. There were also other educational resources accessible for non-formal pre-school education [Table 2]. **Beneficiaries:** The beneficiaries included 16 children in the age group of 0-6 months; 40 in the group of 6 months – 3 years; 84 in the age group of 3 – 6 years. Ten pregnant women and 16 lactating mothers were enrolled in this centre [Table 3]. Out of 10 pregnant women registered, 100% had early registration during first trimester, and 90% received one dose of Td injection. 9 out of 10 received the first ANC visit, while 7 received the second ANC visit. [Table 4]. Finally, 60 adolescents and 62 children were getting IFA tablets/ deworming services.

Table 1: Assessment Of Infrastructure

Space	Adequate
Lighting	Inadequate, no electricity
Ventilation	Adequate, cross-ventilation present
Hand washing facility	Present
Solid waste	Stored in a covered bin and disposed of regularly
Kitchen space	Inadequate
Latrine	Not available

Table 2: Assessment Of Manpower And Equipment.

Manpower	Anganwadi Worker	Present
	Helper	Present
Equipment	Height measurement	Stadiometer, Infantometer
	Weight measurement	Bathroom weighing scale
	Nutritional assessment	WHO Growth chart
	Non-formal pre-school education	Picture books, storybooks, building blocks, puzzles.
	Registers	Family register, Summaries (monthly and annually), Supplementary food stock register, Supplementary nutrition and pre-school education register, Immunization record and Village Health and Nutrition Day, Pregnancy and delivery register, home visits planner, Vikas Samiti register, take-home ration distribution register, Milk distribution register, PM Kanya uthan yojana register

Table 3: Distribution Of Beneficiaries

Beneficiary	Number of Beneficiaries
Children (0-6 months)	16
Children (6 months to 3 years)	40
Children (3-6 years)	84

Pregnant women	10
Lactating mothers	16

Table 4: Distribution Of Enrolled Pregnant Women Receiving ANC Visits

Number of pregnant women	Percentage received ANC visits	1 st ANC visit	Percentage	2 nd ANC visit	Percentage
10	100	9	90	7	70

DISCUSSION:

The AWC was accommodated in a rented building where we conducted our study. In a research performed in Darjeeling by Saha et al., it was revealed that 33.33 percent of AWCs were located in rented government facilities, whereas the state-owned 66.7 percent of structures in Gujarat^[4]

According to a study by Debata et al., 81 percent of 21 Anganwadi centres were operating in government-allotted facilities, 4.8 percent on rented premises, and 14.2 percent in other non-allotted government buildings such as schools or panchayat buildings^[5]. Only two - thirds of the AWCs in Amritsar had their own building, according to research by Gill et al^[6]. According to a survey by Debata et al, 81 % of 21 anganwadi centres were found to be operating in government-allotted facilities, 4.8 percent in rented premises, and 14.2 % in other non-allotted government buildings such as schools or panchayat buildings^[5].

Although the AWC in this research had an appropriate floor area, only 53.3 percent of AWCs in Gujarat were determined to have adequate interior space^[7]. This AWC did not have a separate toilet facility, similar to our findings Saha et al. discovered that toilet facilities were missing in 43.33 percent of AWCs in their study^[4]. According to Debata et al.'s study, toilet facilities were non-existent in 42.9 percent of AWCs, forcing youngsters to attend neighboring school buildings or cross roadways to satisfy their natural urges^[5].

The AWC in this study was well-equipped, and weight was measured using a bathroom weighing scale. The weighing scales and other anthropometric measuring devices were found to be in good functioning order. All of the AWCs in the Darjeeling area were determined to be adequately equipped in the study.^[4] In a research in Gujarat, 75 percent of AWCs used Salter's scale/spring balance to check children's weight, while 18.3% just used a weighing pan.^[7] In a study conducted in Amritsar, it was found that 42% AWC had functional Salter's weighing machine and weighing machine for adults and children in working condition was available in only 38.2% AWCs.^[6] In a study by Malik A et al in Northeast district of Delhi, weighing machine was present in 70.7% of the AWCs.^[8]

Singh et al revealed in his study, in the district of Jhansi, Uttar Pradesh, that there was 100 percent growth monitoring and all the growth records were kept up to date.^[9] In a study comparable to ours, Thomas N et al. found that growth tracking of children was non-existent in an urban region of Ludhiana, Punjab.^[10]

In this study, the beneficiaries included 16 children in the age group of 0-6 months; 40 in the group of 6 months – 3 years; 84 in the age group of 3 – 6 years. 10 pregnant women and 16 lactating mothers enrolled in this centre. According to Meenal M. Thakare's study, the beneficiaries included 7.54 percent of children aged zero to three, 7.86 percent of children aged three to six, and 25.87 percent of women of reproductive age, including pregnant women and breastfeeding mothers^[11]. This disparity was most likely related to demographic differences and the reporting of pregnant women and nursing moms to different health services.

In the current study, record keeping was fairly good. Surveys, immunizations, births and deaths, and ANC visits were all recorded in the centre's records. They also kept track of family planning and ANC records. However, there were no proper records of the enrolled children's growth. In previous studies, a lower percentage of records were kept. According to Thakare M et al, just 55% of AWCs kept accurate records^[11], compared to 75.7% in the NITI Aayog study^[12]. In a study conducted in Madhya Pradesh, it was also discovered that record-keeping was inadequate and that information reported about attendance and immunisation was substantially inaccurate^[13]. The immunisation status of the children in the Nidhi Thomas et al. study was unknown to any of the AWC.^[13]

CONCLUSION:

The present study shows that the AWC was running in a rented

building. The solid wastes were not segregated before storing in a covered bin. Beneficiaries enrolled in this centre were 16 children in the age group of 0-6 months; 40 in the group of 6 months – 3 years; 84 in the age group of 3 – 6 years; 10 pregnant mothers and 16 lactating mothers. This was most likely due to underreporting, a lack of community knowledge, or a lack of access to alternative health services. Out of the ten pregnant mothers, none of them had received 3rd or 4th ANC visits. That means proper counselling and necessary actions to ensure all the beneficiaries get the required ANC visits.

Enhanced usage of ICDS services requires increased beneficiary knowledge of the availability, accessibility, and need of using the programmes and community encouragement and mobilization. The proper use of ICDS services is also contingent on the ICDS centre's proper operation. As a result, the identified shortcomings need to be rectified in order to improve service quality further.

Limitation of the study:

The current study is a cross-sectional investigation. Some beneficiaries may be overlooked during their visit to the AWC due to the study's design. A longitudinal study may have yielded more accurate results. In addition, just one AWC is chosen at random for the investigation. If more centres were chosen, there could be a more significant opportunity to analyze the overall performance of the AWCs in the block, and the findings from different centres could be compared. Finally, because the study is purely observational, there is no way to intervene so as to enhance the AWC's deficiencies or overall function.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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