

# ASSESSMENT OF PERFORMANCE OF ANGANWADI WORKERS ON INTEGRATED CHILD DEVELOPMENT SERVICES IN CHITRADURGA DISTRICT

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## Abstract

**Background:** The Integrated Child Development Services (ICDS) program has been operation for more than three decades in India. The success of ICDS program in tackling maternal and childhood problems still remain a matter of concern. The present study was conducted to assess issues related to Anganwadi Worker (AWW) and Anganwadi centre (AWC) including infrastructure facilities.

**Material and methods:** A cross sectional study was conducted in 56 Anganwadi centres (AWCs) of Chitradurga district using a predesigned questionnaire containing 42 questions by interns. The details regarding the infrastructure, process indicators and outcome indicators were collected and analyzed.

**Results:** All the AWCS visited provided 100% PSE and 100% SN coverage among children. A majority of pregnant and lactating mothers (73.3%) & adolescent girls (57.3%) were availing ICDS services. One third of AWCs reported an interruption in the availability of commodities by the government.

**Conclusion:** The study has reported gaps in terms of infrastructure facilities and safe and continuous drinking water supply. A number of issues pertaining to the ICDS scheme must be identified for the optimized functioning of AWC and it needs to be promptly addressed.

**Keywords:** ICDS, Anganwadi centres, evaluation, indicators, supplementary nutrition

## Introduction

The Integrated Child Development Scheme (ICDS) was initiated in October 1975, in response to the problem of persistent malnutrition especially among children under the age of 6 years in a phased manner. The program mainly emphasizes on improvement of nutritional status, health status and psychosocial development of the preschool children along with adolescent girls, pregnant women and lactating women<sup>[1]</sup>. The program includes a network of “Anganwadi Centres” (AWCs) which provides integrated services comprising supplementary nutrition (SN), immunization, health check-ups, non-formal PSE and referral services to children below 6 years of age and expectant and nursing mothers. The Anganwadi workers (AWW) are the community based voluntary frontline workers of the ICDS programme. Her educational level and knowledge of nutrition plays an important role in relation to her performance in Anganwadi centres<sup>[2]</sup>. The output of ICDS scheme to a great extent depends on the profile of the key functionary that is Anganwadi worker, her qualification, experience, skills, attitude, training etc.<sup>[3]</sup>

Most of the studies are concentrated on the nutritional and health status of the beneficiaries of ICDS. Less focus has been shifted over to assess the performance and awareness among AWW regarding recommended ICDS programmes, who are actually the main resource persons<sup>[4]</sup>. In this context, the present study has been planned to assess the performance of Anganwadi workers in the urban field practice area of Chitradurga.

## Materials and methods

A cross sectional study was undertaken in 56 Anganwadis of filed practice area of Department of Community Medicine of Basaveshwara Medical College and Hospital, Chitradurga by complete enumeration. This study was conducted between April 2019 to December, 2019. Pretested semi structured questionnaire which includes two parts including socio demographic characteristics of Anganwadi workers and performance of Anganwadi workers regarding different aspects of health services provided. The AWWs were interviewed and a review of the records was done by using a predesigned and pretested pro forma provided by the NIPCCD. Considering the usual program evaluation framework, the following information were collected.

1. Inputs, i.e., infrastructure of AWCs and baseline characteristics of AWWs.

2. Process, i.e., provision of various ICDS services to the beneficiaries.
3. Outcome, i.e., nutritional status of beneficiary children and coverage of services provided such as supplementary nutrition (SN), Pre-school education (PSE) and Nutrition and Health Education (NHED).

Permission was obtained from the Medical officer of PHC Chitradurga through proper channels and he appointed an Anganwadi inspector to guide and support us throughout our journey. All the 56 Anganwadi's under urban health centres were visited on pre-designed days. Informed consent was obtained from each Anganwadi worker and data was collected using pre-designed questionnaire.

A semi structured and pretested questionnaire was used to study the performance of the Anganwadi workers about Integrated Child Development Services. Data was obtained was entered in MS Excel sheet and analyzed using SPSS version 20 software. Qualitative data was expressed in frequencies and percentage, and quantitative data in terms of proportions and Chi square test was applied for qualitative data as test of significance.

## Results

**Table 1:** Input indicators-Infrastructure of Anganwadi centres

| Anganwadi centre infrastructure  | Frequency | Percent |
|----------------------------------|-----------|---------|
| Type of infrastructure (Pucca)   | 56        | 100.0   |
| Needs repair                     | 4         | 7.1     |
| Compound                         | 54        | 96.4    |
| Adequate ventilation             | 49        | 87.5    |
| Adequate lighting                | 45        | 80.4    |
| Adequate indoor space            | 38        | 67.9    |
| Indoor play equipment            | 49        | 87.5    |
| Electric fan availability        | 20        | 35.7    |
| Separate toilet facility         | 56        | 100.0   |
| Separate space for cooking       | 52        | 92.9    |
| Storage facilities for food      | 47        | 83.9    |
| Storage facilities for equipment | 47        | 83.9    |

|                            |    |      |
|----------------------------|----|------|
| Safe drinking water supply | 47 | 83.9 |
|----------------------------|----|------|

All the AWCS had concrete (pucca) type of building and had availability of separate toilet facility. About 54 (96.4%) of AWCs had a separate compound, 52 (92.9%) had separate space for cooking, 49 (87.5%) had adequate ventilation and indoor play equipment. About 47 (83.9%) AWCs had safe drinking water supply, storage facilities for food and equipment. 45 (80.4%) of AWCs had adequate lighting. About 38 (67.9%) had an adequate indoor space, 20 (35.7%) of AWCs had electric fan availability and 4 (7.1%) of AWCs needed repairs.

**Table 2:** Process indicators-various health services delivered under ICDS program at Anganwadi centres (AWC)

| Supplementary nutrition             |    |       |
|-------------------------------------|----|-------|
| Good quality                        | 56 | 100   |
| Type of SN                          |    |       |
| Cooked food (daily change)          | 4  | 7.1   |
| Cooked food (weekly menu)           | 52 | 92.9  |
| Preschool education                 |    |       |
| Time table used                     | 56 | 100.0 |
| Availability of material            | 56 | 100.0 |
| Nutrition & Health education (NHED) |    |       |
| 1-2 NHED meeting/quarter            | 18 | 32.1  |
| 3-6 NHED meeting/Quarter            | 38 | 67.9  |
| Prophylaxis against night blindness | 52 | 92.9  |
| Adequate vit-A supply               | 47 | 83.9  |
| Srushti&KsheeraBhagya scheme        | 56 | 100.0 |
| Mathrupoorna scheme                 | 56 | 100.0 |

Majority of AWCs reported that supplementary nutrition (SN) was of good quality (100%). Hot cooked food and take-home rations were given in all Anganwadi centres. All the AWCs were using time table for PSE (100%). About 38 (67.9%) AWCs conducted a 3-6 NHED meetings per quarter and 52 (92.9%) AWCs provided prophylaxis against night blindness due to Vit A deficiency and also 100% of all AWCs provided Srushti, KsheeraBhagya Scheme and Mathrupoorna Scheme.

**Table 3:** Outcome and Impact indicators-coverage and utilization of various services provided under the ICDS program

| Variables                                       | Frequency | Percent |
|---|-----------|---------|
| Supplementary Nutrition (SN) in children        | 605/739   | 81.8    |
| SN coverage in pregnant and lactating mothers   | 296/403   | 73.3    |
| Preschool education coverage                    | 609/739   | 82.4    |
| AWC celebrated Nutrition & Health education day | 56        | 100.0   |
| Adolescent girls receiving services             | 246/430   | 57.3    |

Majority of children (81.8%) were covered by supplementary nutrition. A three fourth of pregnant & lactating mothers (73.3%) and adolescent girls of (57.29%) were availing ICDS services. All the Anganwadi centres celebrated Nutrition and health education day.

### Discussion

ICDS program was formulated to enhance the health, nutrition and learning opportunities of infants, young children and their mothers and is especially targeted for poor and deprived. The goals of ICDS programme are reduction of Infant Mortality Rate (IMR) to less than 60/1000, reduction in Child Mortality Rate to less than 10/1000 and reduction in Maternal Mortality Rate (MMR) by at least 50%. The present study explains reasons for mismatch between planned design and actual implementation of ICDS program and some operational challenges preventing ICDS reaching its potential<sup>[5]</sup>.

### Training

In the present study, it was found that all the AWWs were trained (100%) in IMNCI, Job, Induction and Refresher trainings. Whereas, it was found that 97.7% of AWWs had received Anganwadi training and Refresher training. In a study conducted in Belgaum<sup>[6]</sup> while only 60% of AWWs had taken training in a study conducted in Kashmir<sup>[7]</sup>.

### Input Indicators: Infrastructure and Baseline characteristics of AWCs

In the present study, 100% of AWCs are having a concrete (pucca) type of building and 100% had availability of separate toilet facility. About 96.4% of AWCs had a separate compound, 92.9% had separate space for cooking, 87.5% had adequate ventilation and indoor play equipment. About 83.9% AWCs had safe drinking water supply, storage facilities for food and equipment. About 80.4% of AWCs had adequate lighting and 67.9% had an adequate indoor space, 35.7% of AWCs had electric fan availability and 7.1% of AWCs needed repairs. Whereas in a study conducted by Rathore, *et al.*<sup>[8]</sup> separate kitchen and separate space for storage was present in only 35.1% AWCs. Safe drinking water supply was seen in 66.7% AWCs and toilet facility was not available in 40.7% AWCs in Rajasthan. In a similar study conducted in Delhi<sup>[9]</sup>, 52.5% respondents were dissatisfied with the services provided from the AWC with most common reason being availability of less space.

### Process Indicators: Various services provided & its quality

In the present study, a majority of AWCs reported that supplementary nutrition (SN) was of good quality (100%). Hot cooked food and take-home rations were given in all Anganwadi centers. Majority of all AWCs were using time table for PSE (100%). 17(68%) AWCs conducted a 3-6 NHED meetings per quarter and 52 (92.9%) AWCs provided prophylaxis against night blindness due to Vit A deficiency and also 100% of all AWCs provided Srushti, KsheeraBhagya Scheme and Mathrupoorna Scheme.

Whereas in a study conducted in Rajasthan<sup>[8]</sup>, supplementary nutrition was satisfactory in all the AWCs. SN was acceptable to 98.1% beneficiaries. Timetable for PSE was available in 94.4% urban AWCs while PSE material was available in 38.8% in urban AWCs.

### Outcome & Impact Indicators: coverage & utilization of services

In the present study, majority of children (81.8%) were covered by SN. A three fourth of pregnant & lactating mothers (73.33%) and adolescent girls of (57.29%) were availing ICDS services.

Whereas in a study conducted in Rajasthan<sup>[8]</sup>, it was found that 86.9% registered pregnant women, 90.7% registered lactating women, 72.6% of registered adolescent girls, 95.4% registered 6 months to 3 years old children and 92.4% registered children 3 to 6 years were availing SN and in a study conducted in Delhi<sup>[9]</sup> showed 66.7% AWCs had a poor quality of SN.

In the present study there is a lack of facilities at the AWCs and poor knowledge among AWWs. Thus, a regular training and supportive supervision of the AWWs is recommended along with the availability of adequate facilities and infrastructures<sup>[10]</sup>. A paradigm shift in training is required, making communication processes and counseling skills central to the training to ensure enhanced interaction between the AWWs and caregivers on infant and young child feeding practices<sup>[11]</sup>.

The ICDS has a huge potential as a platform to provide comprehensive material and child services. Although there is a wide coverage under the ICDS blocks, many of them are not functioning optimally. Infrastructure and basic amenities and training components need to be strengthened<sup>[12]</sup>.

### 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 situation. The study has reported gaps in terms of infrastructure facilities and safe and continuous drinking water supply. Various issues concerning the scheme must be identified for the optimized functioning of AWC and it needs to be promptly addressed.

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