

# Assessment of Integrated Child Development Services (ICDS) at Grass Root Level in an Urban Area, Raigad District, Maharashtra

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## ABSTRACT

**Background:** ICDS is an integrated program intended for Maternal and Child Care which adopts a holistic, lifecycle approach. Its main focus is on health, nutrition and education. Urban ICDS caters to the vulnerable urban slum population. Despite the program running for four decades its impact on its beneficiaries is still slow. The Anganwadi worker and helper are the grass-root functionaries running this program through Anganwadi centre. Hence this study was conducted to assess the functioning of the Anganwadi centre.

**Methodology:** A Descriptive Cross-sectional study was conducted at all 15 urban-ICDS Anganwadi Centres of Khopoli during September-November 2019. The Anganwadi workers and helpers were interviewed regarding their sociodemographic details, knowledge and challenges perceived to run the centre. Observational Checklist designed based on guidelines and standard proforma for monitoring of the ICDS projects was used to assess infrastructure, equipment and registers.

**Results:** Out of 14, 11(78.57%) Anganwadi workers had more than a decade experience. Indoor space of 600 sq.ft was available in 7(46.67%) centres. Toilets with running water were available in 9(60%) Anganwadi Centres and 6(40%) were linked to the school. Functional Salter's weighing scale was available in 11(73.33%) Anganwadi centres. All 12 registers were available in 9(60%) Anganwadi centres. The utilization of services by pregnant women was the highest. Partially immunized children were present in 2(13.33%) Anganwadi

centres. The service gap was highest (100%) with health check-up.

**Conclusions:** There is a gap in the availability of infrastructure and utilization of some services.

**Key-words:** urban ICDS, Maharashtra, Service gap

## INTRODUCTION

Integrated Child Development Services (ICDS) was launched with a vision to provide a holistic package using a lifecycle approach under one roof. The main thrust is on the villages and slums which comprise 75% of the population. The impact of this scheme has made a difference in the health and development of the vulnerable groups in India. But even after four decades since the launch of this programme, NFHS-4 data states that 32.4% pregnant women received full antenatal care, 36 % children were malnourished and 56.2% children fully immunized in Maharashtra. <sup>[1]</sup>

The Anganwadi worker and Anganwadi helper through the Anganwadi Centre are responsible for bridging the service utilization gaps between the vulnerable groups and the healthcare system. Many studies over past years have brought to light that most of the problems revolve around the Anganwadi worker and the Anganwadi Centre itself. <sup>[2-4]</sup> Poor and inadequate infrastructure can create hazards and health problems for the children attending the Anganwadi and can cause loss

of beneficiaries. Lack of manpower and poor remuneration are additional factors that can affect the delivery of Anganwadi services.

Development and formation of the metropolitan regions have led to an increase in social and economic disparities within the urban communities which shelter one-fourth of its population in the slums. The health status of these people living in urban areas is no better than the rural areas. [5]

So, this study was conducted to assess the infrastructure, manpower and utilization of services provided by the urban-Anganwadi Centres.

## METHODS

A Cross-sectional study was conducted in the urban-ICDS of Khopoli, Raigad district, Maharashtra which is the field practice area of Urban Health Training Centre under the Department of Community Medicine, MGM Medical College, Navi Mumbai. All the 15 Anganwadi Centres were selected for the study. The study was conducted during September-November 2019 (3 months) after obtaining the approval from the office of Child Development Project Officer, Raigad district and the Institutional Ethics Committee.

A pre-tested semi-structured questionnaire was used to collect the data

through personal interview from the Anganwadi workers and the Anganwadi helpers regarding their socio-demographic profile, knowledge and perceived challenges regarding the services provided at the Anganwadi Centre after taking an informed written consent.

The data to assess the infrastructural facilities, services provided and record-keeping was collected using a pre-tested observational checklist prepared based on the guidelines and standard proforma for monitoring of the ICDS projects specific to Anganwadi workers set by the National Institute of Public and Child Co-operation Development (NIPCCD) and CBMP Maharashtra tool. [6-7]

The data obtained was analysed on MS Excel 2019 and expressed in proportions and percentages.

## RESULTS

Among the total 15 Anganwadi Centres, 2 were in tribal areas and the rest 13 were in urban slums. They catered to a population ranging from 850-1300 with a mean of 1099. There were 14 Anganwadi workers and 13 Anganwadi helpers. The sociodemographic profile of the Anganwadi workers and Anganwadi helpers are depicted in Table 1.

Table 1: Sociodemographic profile of the Anganwadi worker (n=14) and Anganwadi helper (n=12)

S. No	Sociodemographic profile		Anganwadi worker [14(100%)]	Anganwadi helper [12(100%)]
1	Age	18-44 years	10 (71.43%)	9(75%)
		45-60 years	4 (28.57%)	4(33.33%)
2	Education	≤ 8 <sup>th</sup> Pass	Nil	9(75%)
		10 <sup>th</sup> Pass	2 (14.29%)	4(33.33%)
		12 <sup>th</sup> Pass	6 (42.86%)	Nil
		Graduate	6 (42.86%)	Nil
3	Marital Status	Married	8 (57.14%)	10(83.33%)
		Widowed	6 (42.86%)	3(25%)
4	Religion	Hindu	11 (78.57%)	10(83.33%)
		Muslim	2(14.29%)	1(8.33%)
		Buddhism	1 (7.14%)	2(16.67%)
5	Caste	General	6 (42.86%)	1(8.33%)
		SC	3 (21.43%)	3(25%)
		ST	3 (21.43%)	3(25%)
		NT	Nil	2(16.67%)
		OBC	2 (14.29%)	3(25%)
6	Work Experience	≥10 years	11(78.57%)	8(66.67%)

All the Anganwadi Workers were female and only 5 (35.71%) Anganwadi

Workers were residents of the same community.

The distribution of beneficiaries of Anganwadi Centres are depicted in Table 2.

**Table 2: Total beneficiaries covered in all Anganwadi Centres (n=16586 total population covered)**

S. No.	Category of Beneficiaries	Total No. 16586 (100%)
1	Women 15-45 years	2918 (17.59%)
2	0-3 year children	568 (3.43%)
3	3-6 year children	728 (4.39%)
4	Adolescent girls	564 (3.40%)
5	Pregnant women	93 (0.56%)
6	Lactating women	95 (0.57%)
	Total	4966 (29.94%)

### Infrastructural status:

All the Anganwadi Centres were located within the village and away from drains and ponds. Out of the 15 Anganwadi Centres, 6(40%) were linked to a primary school. Ten (66.67%) Anganwadi Centres had pucca building and owned by the centre with water supply and electricity. Toilet facility with running water was present in 9(60%) Anganwadi Centres. An indoor space of 600 sq.ft was available in 7(46.67%) and outdoor space was available in 8(53.33%) Anganwadi Centres. Floor mats and benches were present in all the Anganwadi Centres along with a place for storage of equipment.

### Equipment status:

All Anganwadi Centres had a functional adult weighing scale, stadiometer and a growth chart. The equipment status is shown in Table 3.

**Table 3: Equipment status of the Anganwadi Centres (n=15)**

S.No	Available Equipment	Total No. 15 (100%)
1	Functional Salter's Weighing Scale	11(73.33%)
2	Wall Charts	9(60%)
3	Indoor Play Equipment	6(66.67%)
4	Medicine Kit	0

### Maintenance of Registers:

All the Anganwadi Centres had an updated visit register, daily diary and the CAS (Common Application Software) application mobile. Only 10(66.67%) Anganwadi Centres had an updated Survey register. The remaining 10 updated registers were available in 12(80%) Anganwadi Centres.

## Services provided by the Anganwadi Centres

### 1. Supplementary Nutrition:

All the Anganwadi Centres provided Supplementary Nutrition for children aged 3-6 years in the form of a Hot Cooked Meal twice daily based on a weekly pre-decided menu. Take Home Ration is provided once in 2 months in the form of sealed packets for children below 3 years, pregnant and lactating women and only 1(6.67%) Anganwadi Centre reported supply of Take-Home Ration for adolescent girls.

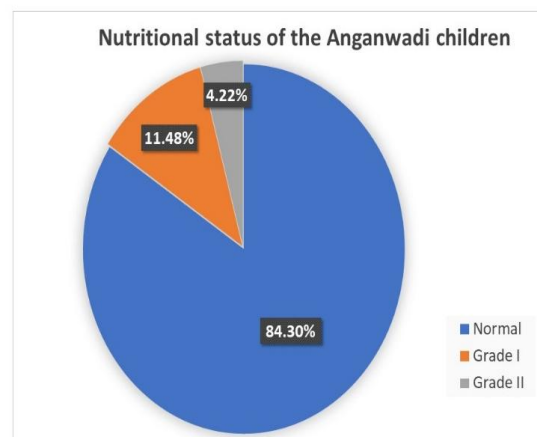
### 2. Early Childhood Care and Education

Early Childhood Care and Education was provided in the form of Pre-School Education for 3-6 year old on all working days. The children recited rhymes in a loud voice without any hesitation in 9(60%) Anganwadi Centres.

### 3. Nutrition and Health Education

Distribution of Iron and Folic Acid supplementation by the Anganwadi Worker was being done in 8 (53.33%) Anganwadi Centres. Special Days like National Nutrition Month, Breastfeeding week, ICDS Day and Jan Andolan were celebrated in all Anganwadi Centres. Discussion method was used by 7(46.67%) Anganwadi Workers and the remaining 8 (53.3%) Anganwadi Workers used both discussion and demonstration method.

### 4. Growth Monitoring



**Figure 1: Nutritional status of the enrolled children (0-5 years) (n=1019)**

Growth charts were available and updated in 12(80%) Anganwadi Centres. Out of 1257 enrolled beneficiaries, growth charts of 1019 (81.07%) 0-5-year-old children were plotted. Nutritional status of the 1019 beneficiaries is depicted in Figure 1.

### 5. Health Check-up

None of the Anganwadi Centres had conducted a health check-up in the past 3 months. The deworming session was conducted in all the Anganwadi Centres in the last 3 months.

### 6. Immunization Session

At least one immunization session was reported in 12(80%) Anganwadi Centres in the last 3 months of the study. Partially immunized children (0-2 years) were present in 2(13.33%) Anganwadi Centres.

### Utilization of Services:

Utilization of the individual services by the beneficiaries and the service gap is shown in Table 4. [Service gap = (Registered beneficiaries not utilizing the services/Total enrolled beneficiaries) x100]

Table 4: Utilization of Services in all the Anganwadi Centres

S. No.	Service	Category	Total Beneficiaries enrolled	Beneficiaries utilizing the service	Service Gap (%)
1	Supplementary Nutrition	Children between 6months-6 years	1296	921	28.94%
		Pregnant women	93	93	0%
		Lactating women	95	90	5.26%
2	Pre School Education	Children between 3-6 years	728	379	47.94%
5	Immunization	Children between 0-5 years	1257	1249	0.64%
		Pregnant women	93	93	0%
3	Growth Monitoring	Children between 0-5 years	1257	1019	18.93%
4	Health Check-ups & referrals	Children between 0-6 years	1308	0	100%
		Pregnant women	93	0	100%
		Lactating women	95	0	100%
6	Nutrition & Health Education	15-45 years	1135	781	31.19%

### Knowledge of the Anganwadi workers regarding the ICDS services:

All Anganwadi Workers knew the number of registers, the form of Supplementary Nutrition required for the beneficiaries, calorie requirement of the beneficiaries. However, only 3(21.43%) of the Anganwadi Workers knew the rate per beneficiary for the children i.e Rs. 8/child and 8(53.33%) Anganwadi Workers knew about ASHA's (Accredited Social Health Activist) contribution.

### Challenges perceived by the Anganwadi worker:

The challenges perceived by the Anganwadi workers were categorized and depicted in Table 5.

Table 5: Challenges perceived by the Anganwadi worker (n=14)

S. No.	Challenges perceived by the Anganwadi workers (Multiple Responses)	Total No. (n=14)	%
1	Equipment		
a)	Basic stationary	14	100%
b)	Indoor play equipment	9	64.29%
c)	Replenishment of Medical Kit	14	100%
2	Financial Constraint		
a)	Irregular salary	3	21.43%
b)	Lack of contingency fund	12	85.71%
c)	Delay in the reimbursement	13	92.86%
3	Community Involvement		
a)	Adolescent enrolment	13	92.86%
b)	Mobilization for Health Check-up	14	100%
3	Other Duties		
a)	Election Duty	4	28.57%

### DISCUSSION

The present study shows that all the Anganwadi workers and Anganwadi helpers were literate and most of them had a work experience of more than 10 years. Saha M and Biswas R in their study in West Bengal reported that all Anganwadi workers were

literate and 76.67% had more than 20 years of experience.<sup>[4]</sup> It was observed that the Anganwadi helpers too played a significant role in assisting the functioning of the Anganwadi Centres. Despite one Anganwadi Centre being without an Anganwadi worker, the necessary services were being provided to the beneficiaries through Anganwadi helper under supervision.

The recommended distribution of population in the Anganwadi Centre is as follows: Children aged 0-3 years should at least be 9%, 3-6 year old children should constitute 8% of the population.<sup>[8]</sup> Women in the age group of 15-45 years, along with pregnant women and lactating women should be 20%. While in our study the percentages were 3.43%, 4.39%, 17.59% respectively. The proportion of pregnant women and lactating women in the study was 1.11% against the normative 7%.<sup>[9]</sup>

In the present study, 10(66.67%) Anganwadi Centres had their own building unlike the study done in Amritsar district of Punjab by Gill KPK et al which reported that only 24% had their own building.<sup>[10]</sup> Debata I et al observed that toilet facility was non-existent in 42.9% Anganwadi Centres which is similar to our study.<sup>[11]</sup> The study in Gujarat reported that only 53.3% Anganwadi Centres had adequate indoor space.<sup>[12]</sup> In the present study, 7 (46.67%) Anganwadi Centres had adequate indoor space of 600 sq.ft recommended by NIPCCD.<sup>[6]</sup>

Malik A found that nearly 30% of the Anganwadi Centres did not have weighing scales, growth charts, drug kits and tools for pre-school education, which as per norms every Anganwadi Centre should have.<sup>[2]</sup> However, in this study it was found that 11(73.33%) Anganwadi Centres had functional weighing scale and stadiometer, wallcharts in 9(60%) and indoor play equipment in 10(66.67%) Anganwadi Centres.

Gurukartick J reported that digital weighing machine was used to weigh both infants and toddlers.<sup>[13]</sup> Singh H reported

that all Anganwadi Centres in Jhansi displayed wallcharts and paintings for educational purpose.<sup>[14]</sup> Drug kit was not present in all Anganwadi Centres of this study. Thomas N reported that 66.7% Anganwadi Centres lacked medicine kit and 11.1% had incomplete kits.<sup>[3]</sup>

In the present study, all the Anganwadi Centres were providing Supplementary nutrition in the form of Hot Cooked Meal and Take-Home Ration, and Non-formal Pre-School Education, Growth monitoring, Nutrition Health and Education sessions, Deworming sessions and vitamin A supplementation regularly. Immunization sessions were held in 12(80%) Anganwadi Centres and none of the Anganwadi Centres recorded Health check-up of their beneficiaries. The Nutrition Health and Education sessions were given through discussion method in 7(46.67%) Anganwadi Centres and the remaining 8 (53.3%) Anganwadi workers used both discussion and demonstration method. Thakare M reported that supplementary nutrition was provided in 66.67% Anganwadi Centres.<sup>[9]</sup> Saha M reported that 13.33% Anganwadi Centres used both demonstration and discussion method and the study in Gujarat reported that 81.6% Anganwadi Centres used discussion method.<sup>[4,12]</sup>

The present study found Grade I malnutrition in 114(11.48%) children and Grade II malnutrition in 43(4.22%) children. The study held in urban area of Maharashtra in 2013 reported 32.28% belonged to Grade I and 11.03% belonged to Grade II malnutrition.<sup>[5]</sup>

The service gap for Supplementary nutrition of children 28.94% and lactating women was 5.26%.<sup>[15]</sup> Sharma M reported a service gap of 5.29% in children aged 6 months- 6 years, pregnant women 8% and lactating mothers 7%. They also reported a service gap of 36% for Pre-School Education and 21.18% for Growth monitoring.<sup>[16]</sup>

Meena JK et al reported that fair knowledge regarding calorie norms but oblivious to protein norms and money



allocations. However, in our study all the AWWs knew the calorific requirement of the beneficiaries. Only 3(21.43%) knew the rate per beneficiary for children.

The challenges perceived by the Anganwadi worker to reduce service gap was categorized and it was found to be highest in financial constraints and community involvement. Haider S reported poor infrastructure 38(76%) and low honorarium 37(74%) as challenges of Anganwadi workers.

## CONCLUSION

Though the assessment of infrastructure and equipments revealed satisfactory improvement over the years, attention need to be given towards functioning toilets and drinking water facilities.

There is a wide service gap for all services but the Immunization session in the Anganwadi centres unlike the rural counterpart where the system of ASHA, ANM and VHN day are existing.

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