

## An Evaluative Study On Integrated Child Development Services In Urban Slums Of Jamnagar City, Gujarat

**Lodhiya Kaushik K \***, **Gandha Kapil M \*\***, **Pithadia Pradeep R\* \***, **Unadkat Sumit V\* \*\***, **Yadav Sudha B\*\*\*\***

\* Tutor, \*\* Assistant Professor, \*\*\* Associate Professor, \*\*\*\* Professor and Head Department of Community Medicine Department, M P Shah Medical College, Jamnagar

**Abstract:** Background: Integrated Child Development Services (ICDS) is one of the world's largest community based schemes running in India for over three decades. Frequent evaluations of the scheme have been conducted to make it more effective to promote early childhood care. Objectives: Comprehensive assessment of services provided under ICDS in urban slums of Jamnagar city of Gujarat state. Methods: It was decided to study 15% of the total 297 AWCs of the city through Simple Random Sampling technique. The AWCs visited were evaluated with respect to infrastructure facility of the centre, record keeping activity & knowledge of AWWs, availability of essential drugs & logistics. Results: A total of 48 centers were evaluated. 24 centers operated from Kutcha or semi-pucca buildings and toilet facilities were lacking at 20 of the centers. Only about 44% of the enrolled 3-6 years children were present at the AWC on the day of visit. Nearly 40% of the enrolled children had varying grades of malnutrition. Unavailability of medicine kits & other logistics, was observed. Three fourth of the AWW described providing non-formal preschool education & supplementary nutrition as their only responsibilities forgetting other essential components of their service. One fourth of the AWW did not know proper time to initiate Breast Feeding and over one third (37.5%) of them did not know the Universal Immunisation Program schedule fully. Less honorarium & poor quality of supplementary food were their main difficulties. Conclusion: the AWC currently acts merely as a food distribution centre with minimal provision of other services. Regular growth monitoring of the children along with supervision of the services provided would be far more effective in improving the nutritional status of the children than supplementary nutrition alone. [Lodhiya K et al NJIRM 2013; 4(1) : 62-66]

**Key Words:** Anganwadi Centers, Anganwadi Workers, Integrated Child Development Scheme, evaluation.

**Author for correspondence:** Dr. Lodhiya Kaushik ., Department of PSM, PDU Medical College, Rajkot.e- mail: kaushiklodhiya@gmail.com

**Introduction:** Children are the first call on agenda of human resources development not because young children are the most vulnerable, but because the foundation for lifelong learning and human development is laid in the early years of life<sup>1</sup>. Early years of the life are the most crucial period for the physical, mental, social, emotional, language development and lifelong learning<sup>2</sup>.

This led to the birth of the Integrated Child Development Services (ICDS) in 1975, which is no doubt recognized as the world's largest early child health scheme. ICDS approaches child health holistically and comprises - health, nutrition and education component for pregnant women, lactating mother and children less than 6 years of age. The ICDS programme functions through a network of Anganwadi Centers (AWCs) which are the focal points for the delivery of services attached to the scheme and are managed by the Anganwadi Workers (AWWs)<sup>3</sup>.

The AWW is the community - based voluntary frontline workers of the ICDS Programme. Selected from the community, she assumes the pivotal role due to her close and continuous contact with the beneficiaries. The AWW monitors the growth of children, organizes supplementary feeding, helps in organizing immunization sessions, distributes vitamin A, iron and folic acid supplements, treats minor ailments and refers cases to medical facilities<sup>4</sup>.

Attainment of ICDS scheme goals depends heavily upon the effectiveness of the AWW, which, in turn, depends upon their knowledge, attitude and practice as well as various facilities available at the centre<sup>5</sup>. After 35 years of the implementation of ICDS, it is the time to look ahead. The vision for tomorrow is to reach all children from disadvantaged groups, so that each of them can realize full development potential, with learning opportunities in early childhood<sup>4</sup>. The present study aims at comprehensive assessment of ICDS services provided at the AWCs.

**Objectives:**

- To evaluate the infrastructure of the AWC along with availability of drugs, equipments & logistics.
- To assess the record keeping activity and the basic health related knowledge of AWW.
- To know various on the job difficulties faced by AWW.

**Material and Methods:** As the nutritional status of children residing in urban slums is poorer than their counterparts in rural areas<sup>6</sup>, the AWCs were selected from slums of Jamnagar city. This was an observational cross sectional study conducted during the period from September to December 2010. It was decided to study 15% (45) of the total 297 AWCs of the city. Sampling was done through Simple Random Sampling technique using table of random numbers method. So finally 48 (16%) AWCs were sampled to account for missing data & raise the precision

AWWs were interviewed with pre tested, semi-structured questionnaire. The aims of the study were clearly explained and anonymous data were collected. No ethical issues were involved as no intervention was carried out; however, verbal consent was obtained to proceed with the survey. The response rate was 100% as all the AWWs approached agreed to be a part of the study.

Data were entered and analysed using epi-info ver.3.5.3 and presented in tabular forms as percentage and 95% confidence intervals (CI). 95% CI for the results obtained were found by using the following formula for confidence intervals for a proportion of subjects as under.

$$\text{Standard error (S.E.)} = \sqrt{pq/n}$$

Where p = proportion of subjects with positive response,

$$q = 1 - p \quad \& \quad n = \text{sample size.}$$

The 95% confidence limits for the results are given by : Observed proportion  $\pm$  1.96  $\times$  S.E. of the observed proportion

$$= p \pm 1.96 \times \sqrt{pq/n}$$

**Result:** The mean age of AWWs was 39.9  $\pm$  8.5(mean  $\pm$  SD) years. They had 11  $\pm$  3 years of schooling and 11  $\pm$  9 years of work experience. On an average an AWC catered a population of 1009  $\pm$  246. About 81  $\pm$  29 children less than six years were enrolled in an AWC. Supplementary nutrition was served for 22  $\pm$  5 days in a month.

**Table 1: Infrastructure facility at the AWC**

	No. (%)	95% C.I.
No. of AWCs in pucca* building	24 (50.00)	38.85-64.15
No. of AWCs having sufficient space for sitting of children	27 (56.50)	42.47-70.53
No. of AWCs having drinking water facility	37 (78.30)	66.64-72.64
No. of AWCs having toilet facility	28 (58.70)	44.76-72.64

\*pucca – fully built of cement concrete

**Table 2: Availability of drugs, equipments & logistics**

Drugs, Equipments & Logistics	Not available	
	No. (%)	95% C.I.
IFA	18 (37.5)	23.80-51.20
ORS	29 (60.4)	46.56-74.24
OCP	29 (60.4)	46.56-74.24
Condoms	33 (68.8)	55.69-81.91
Growth charts	8 (16.7)	6.16-27.24
Iodized salt	44 (91.7)	83.90-99.50
Bal bhog	17 (35.4)	21.88-48.92
Thermometer & Shakirs tape	48 (100)	N.A.

**Table 3: Maintenance of various registers/records**

Various records	Not maintained	
	No. (%)	95% C.I.
Maintenance of growth charts	19 (39.6)	25.76-53.44
Maintenance of attendance register	8 (16.6)	6.08-27.13
Maintenance of records of Mamta	6 (12.5)	3.15-21.85

Divas* celebration		
Maintenance of list of unimmunized children in the area	45 (93.5)	86.52-99.79
Maintenance of records of any sick child referred to higher centers	48 (100)	N.A.

\*Mamta Divas – village health and nutrition day is called as Mamta Divas in Gujarat

**Table 4: knowledge of AWW on various elements**

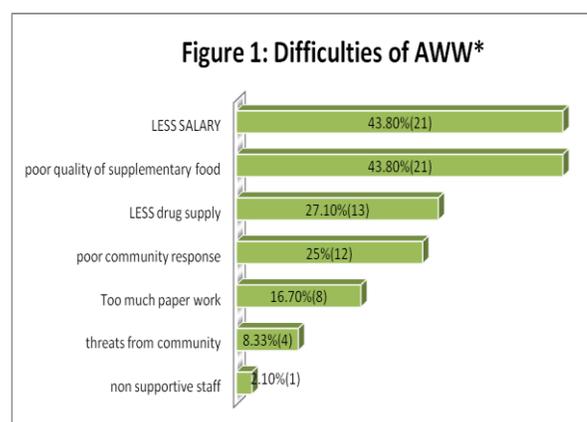
Indicator	Did not know	
	No. (%)	95% C.I.
Schedule for post-natal (PN) visits to be done	41 (85.40)	75.40-95.40
When to initiate Breast-Feeding	12 (25.00)	12.75-37.25
Universal Immunisation Program (UIP) schedule	18 (37.50)	23.80-51.20
Signs/ Symptoms of anaemia	34 (70.84)	57.98-83.70
Method of chlorination of drinking water	21 (43.75)	29.72-57.78

**Discussion:**On evaluating the infrastructure facilities of the AWCs it was found that half (50%) of the AWCs were in Kutcha or Semi pucca buildings. 44% of the AWCs did not have sufficient space for sitting of children. Basic facilities like drinking water & toilet facility were not available at 22% & 42% of the centers respectively. If we want to improve the health of children residing in slums, their attendance at the AWC is one of the essential pillars. However parents will send their children to these centers only if basic facilities are provided. Also an AWC is a centre for creating awareness regarding construction & use of toilets within the households. The AWC would be a poor role model if it itself does not have toilet facility (**Table 1**).

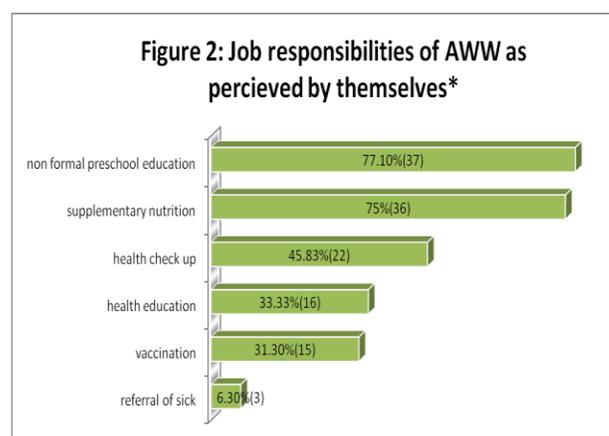
Dixit S. et al <sup>7</sup> mentions that out of 45 AWCs evaluated in project areas of Madhya Pradesh

there was an apparent shortage of space at 19 of the centers, separate room for cooking was unavailable at 19 centers, toilet facilities were absent at 13 centers.

Seema TN <sup>8</sup> in her study on performance of AWCs in Kerala mentioned that 25% of the AWCs did not have even a single spacious airy room & only 30% AWC had toilet facility. Supplementary nutrition was provided for only 15.49 days per month in anganwadis of kerala in 97



\*Multiple responses, Figures in parenthesis ( ) indicates number of AWW



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In a review on ICDS by Prof. A. U. Ahmed <sup>9</sup> it is mentioned that of the sampled AWCs, about 40 per cent were functioning from pucca buildings. Only 50 per cent AWCs reported adequate space, especially for cooking. AWCs functioned for 24 of 30 days in a month.

The non availability of various drugs & logistics at various AWCs as in the present study could prove to be a big setback for the success of various national programs concerning Maternal & child health like anaemia control program, diarrhea control program, family planning program, Iodine Deficiency Disorder Control Program & reducing malnutrition (Table 2).

Nidhi Chaudhary et al <sup>10</sup> mentions that after one year of IMNCI training, thermometer was available at none of the AWCs, ORS packets were available at only 18%(6/33) centers & IFA tablets were available at only 57%(19/33) of the AWCs. The study of Dixit S et al <sup>7</sup> and the review by Prof. A. U. Ahmed <sup>9</sup> confirms the above findings.

Expecting an AWC to deliver all the ICDS services in the presence of lack of sufficient logistics, drugs & equipments is questionable.

Except for maintenance of records of Mamta Divas activity (88%) & attendance register (88%), all other registers were poorly maintained. Since these records indicate the process & output of services provided at AWC they are very essential for monitoring the services. Non maintenance of growth charts was a big hindrance to the tracking of nutritional status of children. Similarly lack of data about unimmunized children was a set back to the universal coverage of vaccination program (Table 3).

We found that only about 43% of the enrolled children were present at the AWC on the day of visit and weights of 24% of the enrolled children were not recorded during the last month. This indicates lack of full utilisation of ICDS services by the community. In spite of various nutritional programs running, only 60% of the children had normal nutritional status (as per growth charts) while remaining had varying grades of malnutrition (Table 3).

Seema TN <sup>8</sup> in her study on performance of AWCs in Kerala mentioned that 60% of the children had normal nutritional status, 30-33% had mild malnutrition & 10% were moderately

malnourished. Dixit S. et al <sup>7</sup> mentions that though the weight of the children was being recorded on a regular basis, the plotting of growth curve on Mother to Child Protection (MCP) Cards was inadequate. An assessment of the scheme stated that growth charts were maintained in only 51% of the AWCs. Immunization records were incomplete and ill maintained at 13 out of 45 centers. Referral slips were present at 10 centers, which created problems while referring patients to health care settings.

Also the lack of knowledge of AWWs on various basic health related aspects, as seen in the present study, was a source of concern. This indicates an urgent need to train them on these issues, since it is these workers who will cause health awareness to the masses (Table 4).

Upon asking the difficulties faced by the AWWs it was found that less honorarium & poor quality of supplementary food were the main complaints followed by less drug supply, poor community response, too much paper work, community threats and non supportive staff (fig.1).

Seema TN <sup>8</sup> in her study on performance of AWCs in Kerala highlighted the problems of the AWWs which in the order of priority are 1.infrastructural problems, 2. Lack of sanitary facilities, drinking water, etc. 3. Lack of toys & teaching aid, 4. Inadequacy of proper diet, 5. Problems related to health programs, 6. Inadequate number of AWC, 7. Poor service conditions & lastly 8. Inadequate training.

Majority of the AWW were also not aware of their duties. Majority of them described providing non-formal preschool education & supplementary nutrition as their only responsibilities forgetting other essential components of their service (Fig.2). Finally, in the implementation of the ICDS scheme, it is noted that the priority is given for supplementary nutrition. Nutrition supplementation without adequate delivery of other ICDS services is of little benefit to the improvement of nutritional status of our children. It must be emphasized that an AWC is a place for

integrated service delivery and not merely a food distribution centre.

**Conclusion:** From this study it was evident that most of the AWCs were lacking in basic infrastructural facilities along with absence of essential drugs, equipment and logistics. Gross negligence in record keeping was observed. Knowledge of AWW on basic health issues was also poor.

**Limitation:** Evaluation of issues concerning IMNCI has been avoided.

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