

## Original Article

# A CROSS-SECTIONAL STUDY ON CLIENT SATISFACTION OF ANGANWADI CENTRES UNDER INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) SCHEME IN A SLUM OF KOLKATA

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## ABSTRACT

**Background:** The ICDS program is one of the largest child development programs in the world. The client satisfaction about the quality of services, functioning of Anganwadi workers, quality of food provided has an impact on the acceptance and utilization of the services.

**Methods:** A Cross-Sectional study was undertaken on 135 beneficiary mothers of children attending 27 ICDS centres in Chetla. The level of satisfaction of mothers was graded as Good (21-30), Average (11-20) and Poor (0-10) based on scoring of their responses.

**Results:** Majority (63%) had average level of satisfaction. While only 1.4% of mothers were well satisfied about 35.6% were poorly satisfied with the services provided by ICDS centres and Anganwadi workers

**Conclusion:** Stringent supervision of the ICDS centres must be done which ensures provision of all the services and maintenance of quality for each service. This will play a long way in improving maternal and child health.

**Keywords:** Anganwadi, mothers, satisfaction, services, slum.

## INTRODUCTION

The Integrated Child Development Services (ICDS) Scheme is one of the largest child development programs in the world. The focal point for the delivery of ICDS services for mothers and children is an Angan (literally meaning "the courtyard shelter") which is run by an Anganwadi worker and a helper. As of March 2012, West Bengal has a total of 1,12, 432 functional AWCs.<sup>1</sup>

The utilization of ICDS services depends on various factors like infrastructure, availability of resources and the client's satisfaction. In ICDS scheme, mothers are considered to be the major clients as they play a vital role in improving the growth, nutrition and overall development of their child. Better satisfaction level of mothers with respect to the functioning of Anganwadi centres naturally has a positive impact on acceptance and utilization of services. Various studies in Kolkata have mainly concentrated on health impacts and effectiveness of ICDS but views of beneficiaries about various services of ICDS have been largely overlooked. Therefore the present study was aimed in assessing

the level of satisfaction of mothers of children (0-6 years) attending ICDS centres in Chetla. This study was done in an urban slum of Kolkata where ICDS services are indispensable yet under-utilized.

## METHODS

There are 27 ICDS centres functioning in Chetla, the largest slum of Kolkata. The present study was a community based cross sectional study carried out among mothers of children (0-6 years) attending these ICDS centres. Institutional Ethics Committee of All India Institute of Hygiene & Public Health reviewed the proposal for ethical consideration and approval was obtained prior to the study. The study was conducted from 15<sup>th</sup> June-14<sup>th</sup> August 2012. About 5 children per ICDS centre were randomly selected from the register of services for children. Then the mothers of those randomly selected children were approached house to house. Mothers who were absent during the house visit were approached later in the evening hours of the day. Thus a sample of 135 mothers (27 x

5) was recruited for the study. The mothers were interviewed using a pretested and predesigned schedule after an informed consent was obtained from them. The schedule consisted of two parts with the first part including information regarding age, education, occupation, religion and monthly per capita income (PCI) of the mothers. The level of satisfaction of mothers with respect to the services provided by the ICDS centres was assessed using the second part of the schedule. The second part consisted of 15 questions with each question containing three options and mothers were asked to select only one option among the three. All the three options were given scores as 0, 1 and 2 separately according to the responses for each question. The final summed up score was calculated and the level of satisfaction of mothers was graded as Good (21-30), Average (11-20) and Poor (0-10) based on their total scores. The Socio-economic status (SES) of the mothers was determined by using Modified Prasad's scale (modified for 2013)<sup>2</sup>. The data thus collected were entered and analysed using SPSS (Statistical Package for the Social Sciences) software v20.0.

## RESULTS

A total of 135 mothers were recruited for the study with age ranging from 18 to 38 years (mean 24.12 years). Most of them 87(64.4%) were in the age group of 20-29 years. Regarding educational status of the mothers, majority 49(36.3%) had completed middle level of education. About 7(5.2%) were illiterate. Among the mothers, about 115(85.3%) were unemployed and the rest were employed as housemaids, daily wagers, tailors, papad makers etc. Majority 54(40%) of the mothers belonged to Socio economic class IV based on Modified Prasad's scale 2013. Regarding religion, most of them were Hindus 109(80.7%) and the rest were Muslims 26(19.3%) as depicted in Table 1.

Table 2 charts out the percentages of responses given by mothers for the questions regarding services provided in their respective ICDS centres. All the mothers recruited in the study were aware about the services delivered in the ICDS centres. About 11.9% of the mothers reported that the Anganwadi worker (AWW) had never weighed their child. About 12.5% reported that their child's nutritional status or growth chart was never discussed with them by the AWW. Majority 77.8% reported that AWW had never visited their house for any kind of counselling or advice regarding health issues. Majority (82.2%) of the mothers found the information given by AWW regarding nutrition and feeding of their child was not useful.

Regarding information provided by AWW on common illnesses like Diarrhoea, ARI (Acute Respiratory Infections) etc and their management like ORS (Oral Rehydration Solution) preparation etc, majority (80.7%) of the mothers found them to be not useful. On describing about the attitude of AWW towards them or their children, most of the mothers (58.6%)

reported that the AWW were harsh. About 26.7% of the mothers reported that the AWW was absent maximum times in the centre. About 56.3% of the mothers reported that the quality of the food being served to their child was bad and 12.6% reported that the quantity was inadequate. About 11.9% reported that the food was provided irregularly at the Anganwadi centre (Table 2).

**Table 1: Sociodemographic characteristics of mothers attending ICDS centres (N=135)**

Sociodemographic characteristics	Number (%)
<b>Age</b>	
< 20 years	24 (17.8)
20-29 years	87 (64.4)
30-39 years	24 (17.8)
<b>Educational level</b>	
Illiterate	7 (5.2)
Below primary	15 (11.1)
Primary level completed	24 (17.8)
Middle level completed	49 (36.3)
Secondary level completed	20 (14.8)
Higher secondary completed	20 (14.8)
<b>Socioeconomic class*</b>	
Class I (PCI ≥5156)	4 (2.9)
Class II (PCI 2578-5155)	17 (12.6)
Class III (PCI 1547-2577)	44 (32.6)
Class IV (PCI 773- 1546)	54 (40)
Class V (PCI <773)	16 (11.9)
<b>Occupation</b>	
Employed	20 (14.8)
Unemployed	115 (85.2)
<b>Religion</b>	
Hindu	109 (80.7)
Muslim	26 (19.3)

\*based on Modified Prasad's scale 2013

About 41.5% reported that the AWC (Anganwadi centre) was rarely opened in their location. Majority 86.7% responded that they never received any medicines from their respective centres. Most of the mothers 93.3% reported that the PSE (Pre School Education) was never given to their children. About 79.3% reported that the mother's day meetings were never held in their location. Regarding referral services to nearby Health centres for immunisation of their child, 25.2% reported that they were referred mainly by Health worker females or Anganwadi helper or neighbours rather than the Anganwadi Worker (Table 2).

Summing up the scores for all responses given by the mothers, it was found that majority 85(63%) reported average (11-20) level of satisfaction followed by 48(36%) reporting poor (0-10) satisfaction level. Only 2(1%) of the mothers had good (21-30) level of satisfaction (Table 3). The mean score obtained by the 135 mothers was 11.17 (Table 4).

**Table 2: Percentage of responses given by mothers regarding services in ICDS centres.**

Questions	Score 2 (%)	Score 1 (%)	Score 0 (%)
Have the AWW* weighed your child?	Yes, monthly 108(80%)	Yes, sometimes 11(8.1%)	Never 16(11.9%)
Was the child's nutritional status or growth chart ever discussed with you?	Yes, every times 43(31.9%)	Yes, sometimes 75(55.6%)	Never 17(12.5%)
Has the AWW* ever visited your house for any type of counseling or advice regarding health issues?	Yes, regularly 15(11.1%)	Yes, sometimes 15(11.1%)	Never 105(77.8%)
How did you find the information given by AWW* regarding nutrition & feeding the child?	Very useful 15(11.1%)	Somewhat useful 9(6.7%)	Not useful 111(82.2%)
How was the information given by AWW* regarding common illnesses of child (ARI†, Diarrhoea) & management (ORS‡ preparation etc)?	Very useful 20(14.8%)	Somewhat useful 6(4.4%)	Not useful 109(80.7%)
How would you describe the attitude of the AWW* towards yourself and the children?	Kind 33(24.4%)	Indifferent 23(17%)	Harsh 79(58.6%)
How often the AWW* being present in the centre?	Present always 44(32.6%)	Present sometimes 55(40.7%)	Absent maximum times 36(26.7%)
How is the quality of the food being given to your child at the centre?	Good 27(20%)	Acceptable 32(23.7%)	Bad 76(56.3%)
How is the quantity of the food being given to your child at the centre?	Adequate 32(23.7%)	Somewhat adequate 86(63.7%)	Not adequate 17(12.6%)
How would you describe the regularity of provision of food to children at the centre?	Very regular 108(80%)	Somewhat regular 11(8.1%)	Very irregular 16(11.9%)
How often is the Anganwadi centre opened in your location?	Open regularly 16(11.9%)	Open from time to time but not regular 63(46.7%)	Rarely opened 56(41.5%)
Have you ever received any medicines from your respective Anganwadi centres?	Yes always 6(4.4%)	Sometimes only 12(8.9%)	Never 117(86.7%)
How frequent the PSE§ was given to the child?	Regularly 2(1.5%)	Sometimes 7(5.2%)	Never 126(93.3%)
How often the mother's day meeting held in your location?	Yes monthly 13(9.6%)	Yes sometimes 15(11.1%)	Never 107(79.3%)
By whom had you been motivated /referred to nearby Health centres for Immunisation of your child?	Mainly by AWW* 26(19.3%)	AWW* & others    75(55.6%)	Others    only 34(25.2%)

\*AWW- Anganwadi worker; †ARI- Acute Respiratory Tract Infections; ‡ORS- Oral Rehydration Solution; §PSE- Pre School Education

|| Others- Health Worker Female (UHC, Chetla) or Anganwadi Helper or neighbours etc

**Table 3: Distribution of mothers according to their level of satisfaction**

Level of satisfaction	Number (%)
Good (score 21-30)	2 (1.4)
Average (score 11-20)	85 (63)
Poor (score 0-10)	48 (35.6)
Total	135 (100)

**Table 4: Descriptive statistics of scores obtained by mothers**

Statistics	Values
Minimum attainable score	0
Maximum attainable score	30
Minimum attained score	4
Maximum attained score	24
Mean (Standard Deviation)	11.17(3.29)
Median (Inter Quartile Range)	11(4-24)

**DISCUSSION**

The opinion of mothers with regard to the Anganwadi centres chiefly depends on the working and behaviour of Anganwadi worker, quality of supplementary nutrition delivered to their child, frequency of home visits and particularly preschool education to their children. The present study shows that all the beneficiary mothers recruited were well aware about the services rendered by the Integrated and Child Development Scheme in Chetla. The possible reason could be the

small and compact area of the Chetla slum which aids each centre to cover the major number of residents within the locality. Similar findings were seen in studies done by Kumar R et al<sup>3</sup>, Pandey V et al<sup>4</sup> and Nagara-ja GM et al<sup>5</sup> where all the respondents were aware of the ICDS services and in study by Das B et al<sup>6</sup> where most of the mothers (98%) knew about ICDS and at least four of its services. This was in contrast to the findings in study in Howrah and Purulia district of West Bengal<sup>7</sup> where only 9.1% were aware about > 3 services of ICDS centres.

In the current study, the only positive outlook of the AWW was about 80% of the mothers reported that the AWW weighed their child monthly whereas in another study in Jammu and Kashmir<sup>8</sup>, weighing of the children was not being practiced in a regular manner. The AWW fairly discussed with the mothers about their child's nutritional status or about the growth chart in the present study. The situation was similar in study by Pandey V et al<sup>4</sup> study and Howrah -Purulia study<sup>7</sup> where about 79.2% and 87.5% of mothers did not receive any advice on child feeding and growth chart by AWW respectively. On the subject of home visits by AWW, more than 50% of mothers in Delhi study<sup>9</sup> revealed that AWW visited their home once in 3 months. Most of the mothers in the current study reported that the AWW had made visits to their households either at the time of special health cam-

paigms like Pulse Polio Campaign or during any kind of supervision by higher officials. Study in Jammu and Kashmir<sup>8</sup> also revealed that AWWs had just visited 45% the households during the last three months. The majority of mothers in Chetla revealed that they were well informed about the common illnesses, their home based management and nutritive aspects of their child by Health workers of UHC, Chetla rather than their respective AWWs. They also revealed that AWWs spent most of their time in maintaining records and registers rather than undertaking home visits or health education.

More than 58% of the mothers revealed that AWW were harsh with either them or their children while providing the services. To the extent that some mothers even complained that the AWWs make them do personal jobs like cleaning utensils, fetching water etc. Some reported that AWWs tend to beat their children. This was in contrast to finding in Howrah Purulia study<sup>7</sup> where about 71.6% found their AWW being friendly and in Jammu and Kashmir<sup>8</sup> where about 90 percent of the households were satisfied with the behaviour of the AWWs. Whereas in Nagaraja GM et al<sup>5</sup> study, there were negative perceptions towards the behaviour and working of AWWs.

Concerning about the quality and quantity of the food served in the AWC, a study in Delhi revealed that around 66.7% of mothers reported poor quality of food in their centres. In a study by Pandey V et al<sup>4</sup>, Supplementary Nutrition was acceptable to about 50 to 55% of mothers except for the taste and palatability of the supplementary nutrition is concerned, almost all of them were opined that food is not tasty; its taste is like raw atta with no sweetness. In a study by Das B et al<sup>6</sup>, about 42% and 45% of the mothers were dissatisfied with the quality and adequacy of Supplementary Nutrition respectively. In contrast, 88% and 72.7% of mothers in Howrah -Purulia study<sup>7</sup> opined favourably about the quality and quantity of food respectively. Similar scenario was seen in Jammu and Kashmir<sup>8</sup>, Kumar R et al<sup>3</sup> and Nagaraja GM et al.<sup>5</sup> Mothers of Chetla (56.3%) opined that the quality of food was bad. The reasons put forth by them were bad taste, improperly cooked food, food cooked in unclean environment and presence of insects in the food served in some of the centres. Only 23.7% maintained that the amount of supplementary food served was adequate. It was encouraging to observe that about 80% reported timely and regular provision of food to the children from the centres whereas in study by Nagaraja GM et al<sup>5</sup>, mothers opined that food was provided for only 10 to 20 days in a month.

Only 11.9% of the Chetla slum mothers reported that the AWC was opened regularly in their location. Similar circumstances were seen in Jammu and Kashmir<sup>8</sup> where AWCs were opened for only two hours in a day and in study by Nagaraja GM et al<sup>5</sup> where there was no fixed time in opening of AWC. In contrast, 73% of mothers in Howrah -Purulia districts<sup>7</sup> reported regular timing of their AWCs. Only 4.4% of Chetla mothers

received medicines from the centres as similar situation seen in Jammu and Kashmir<sup>8</sup> where almost all the mothers mentioned that they had never received any medicines or first aid from the AWCs. This might be due to insufficient provision of drugs to the AWCs and had lasted for one or two months only. Consequently, the AWCs had to function without the basic medicines and medical kits for most part of the year.

Pre School Education was a huge disappointment in Chetla where 93.3% of mothers mentioned that there was no proper PSE for the children and the AWWs spent majority of their time in writing registers, serving food, sitting idle or being absent. The other reasons might be inadequate pre requisite of teaching aids, poor accommodation or lack of enough space for children, lack of training of AWW and mainly tendency to put forth full emphasis on SN rather than PSE. About 57.1% of mothers in Delhi<sup>9</sup> reported improper PSE. Identical scenario was seen in Jammu and Kashmir<sup>8</sup> and Pandey V et al<sup>4</sup>. However in study by Das B et al<sup>6</sup>, PSE was considered as one of the most acceptable services and more than 95% of mothers there were satisfied with it. In another study by Sharma et al<sup>11</sup> in Raipur city, about 97% of mothers reported that their children received PSE.

Regarding mother's day meetings, only 9.6% reported that they were being held regularly. Moreover the mothers found the meetings monotonous and, boring and repetitive. Conversely 25% of mothers in Jammu and Kashmir<sup>8</sup> and 68% of mothers in study by Das B et al<sup>6</sup> reported regular implementation of mother's day meeting. In AWCs of Chetla, the mothers were advised to get their children immunised from the nearest health centres like in study by Pandey V et al.<sup>4</sup> It was found that only 19.3% of mothers reported that they were referred mainly by the AWW for immunisation. Majority were referred either by Health workers of UHC (Urban Health Centre), Chetla or Anganwadi Helper or by neighbours. A different picture was seen in study by Das B et al<sup>6</sup> where immunisation was the most appreciated service and almost universally utilised by the mothers. In Delhi<sup>9</sup>, about 15.9% of mothers reported that they had utilised immunisation services from their AWCs. Majority (63%) of Chetla mothers reported to have average level of satisfaction. Only 1% of mothers had good level of satisfaction in contrast to a study in Jammu and Kashmir study<sup>8</sup> which was 17.3%, and in a study by Nagaraja GM et al<sup>5</sup> the mothers were well satisfied with the overall functioning of their AWCs.

## CONCLUSION

The results of the present study put forth more emphasis on the fact that the satisfaction of the mothers tend to influence the acceptance and utilization of services. Moreover the functions of AWWs should not be restricted to distribution of supplementary nutrition only, but need to focus on raising the satisfaction level of end users by developing good rapport

through periodic survey and delivering optimum level of services. Stringent supervision and monitoring with timely feedback of the ICDS centres must be done so that it is ensured that all the services are provided and quality is maintained for each service. This will play a long way in improving maternal and child health.

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