



Community Medicine

A STUDY OF AWARENESS AND UTILIZATION OF URBAN ICDS SERVICES AMONG MOTHERS OF CHILDREN UNDER 3 YEARS OF AGE IN AN URBAN SLUM IN MUMBAI

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ABSTRACT **BACKGROUND:** Malnutrition is widely prevalent in India. Anganwadis are established under the ICDS programme to take care of basic health & nutritional needs of children up to 6 years of age.

OBJECTIVES: To assess the awareness and utilization of urban ICDS services among children under 3 yrs of age in an urban slum in Mumbai.

METHODS: A cross sectional observational study was conducted by interviewing Mothers of 470 children under 3 years of age selected by simple random sampling from the enrollment registers maintained in the anganwadis of an urban slum in Mumbai.

RESULTS AND CONCLUSION: 84.7% of Mothers had heard of anganwadis, 70.9% were aware of its location. 85.7% of the children had never visited anganwadis. 33% children in the study received immunization, 24.9% children were receiving food supplementation from anganwadis. Only 8.1% children had health check-ups.

KEYWORDS : Under 3 children, Anganwadi, Utilization.

INTRODUCTION

Nutrition is an input to and foundation for health and development. Pediatric malnutrition is a risk factor for 16% of the global burden of disease and for 22.4% of India's burden of diseases. About 50% of all childhood deaths are attributed to Malnutrition directly. Through precipitating disease and speeding its progression, malnutrition is a leading contributor to infant and child mortality and morbidity.⁽¹⁾

In India, 42.5% children under 5 yrs are malnourished. Even among under-5 children, the most vulnerable group for malnutrition, is the children under 3 yrs of age. In Maharashtra, the prevalence of underweight in less than 3 yrs age is 40% and prevalence of stunting is 38%.⁽²⁾

The NFHS-3 survey shows that in Mumbai Slums, the prevalence of underweight in under-5 is 36% that is 10% point more than non-slum areas (26%). The prevalence of stunting is 47% as compared to 42% in non-slum areas. The prevalence of wasting is same for both- the slums & non-slums that is 16%.⁽³⁾ The Government of India has started the Integrated Child Development Scheme (ICDS) for improving the health and wellbeing of new mothers and children under 6 yrs of age since 1975. Though successful in many ways, the ICDS Scheme has failed to make a significant dent in reducing the proportion of underweight children, which continues to be one of the highest in the world (46% in 2005-06 in 0-3 years age group)⁽⁴⁾

The present study aims to assess awareness and utilization of urban anganwadi services among the mothers of children under-3 years of age.

MATERIALS AND METHODS

Institutional Ethics Committee approval was taken for the study.

A Cross-sectional Observational study was conducted in an urban slum, which is the catchment area of Urban Health and Training Centre of KEM hospital & Medical College, Mumbai. The centre is located in North-western suburb of the city, with a population of 1.9 lakh, distributed among various settlement colonies and slums. The health services in the area is provided by the Urban Health centre, a municipal Maternity home, Municipal dispensary & 2 health posts. Anganwadi centres under ICDS programme are also established in the area.

The study participants constituted of children under-3 years of age residing in an urban slum. Based on the prevalence of underweight in children under-3 years age in India (46%) and allowable error 10% of prevalence, the calculated sample size was 470.

A list of children under-3 years was drawn from the enrolled

population survey register maintained at all the anganwadis in the area. The children for the present study were uniformly selected from all the anganwadis in the catchment area. From each anganwadi centre, 8 children were randomly selected by using random number table from the list.

These children were visited in their houses and after taking informed consent, mothers of these children were interviewed using a pre-tested semi-structured questionnaire. The questionnaire included demographic, socio-economic information and Morbidities in last 6 months. If any house was locked or if child's mother did not consent/was not available in the house, then that house was skipped and the next child from the list was included in the study.

RESULTS

Out of the total 470 children, 35.1% children were infants, 36.6% belonged to 1-2 yrs age and 28.3% of 2-3 yrs of age. (**Fig. 1**) There was male preponderance (57.9%) in all the age groups. Majority of children belonged to Muslim (73.8%) and Nuclear Families (65.3%). Educational profile of parents showed that 18.9% Mothers and 20% Fathers were illiterate. Among the literates, 38.7% Mothers and 30.5% Fathers were educated below 7th standard, while only 9.8% Mothers and 13.2% Fathers were educated beyond 12th standard. A large majority of Mothers were housewives (92.3%) and Majority of Fathers (73.2%) were unskilled and semi skilled workers. Majority of children (69.6%) were from families having monthly per capita income between Rs. 601 to 1800.

As seen in **Table 1 & 2**, 84.7% of Mothers had heard of anganwadis in their area, while 70.9% were aware of its location. Amongst them 35.5% have ever visited anganwadis with their children. Amongst the Mothers who had heard of Anganwadi, all of them were aware about the food supplementation services at anganwadis. Only 42.7% Mothers were aware about the immunisation, 29.9% of health check-ups and 23.1% of the pre-school education services. None of the Mothers mentioned Health and Nutrition education, Referral services as the services provided by anganwadis.

As seen in **Table 3**, amongst the various ICDS services, 33% children received immunisation from anganwadis and 24.9% children were receiving food supplementation. Only 8.1% children had health check-ups. Amongst the different age groups, food supplementation services were availed by more children from 1-2 years and 2-3 years (26.7% and 37.6% respectively). Similarly, immunisation services were commonly utilised by higher age group children. 14.3% children from age 2-3 years benefitted from health check-ups. Amongst both the sexes, anganwadi services were proportionately more utilised by female children compared to male children.

Reasons for not availing anganwadi services were cited by the mothers as childrens dislike for Take Home Rations given by anganwadis, children don't eat food at anganwadis, children refuse to sit in anganwadis. Household responsibilities and irregular timings at anganwadis were the other reasons mentioned.

As per **Table 4**, Most of the children had never visited anganwadis in their areas (85.7%). Only 7.5% of children were the regular attendees. The regular attendance at anganwadis was more for male children as compared to female children.

DISCUSSION

The present study included 35.1% infants, 36.6% children in 1-2 yrs age and 28.3% from 2-3 yrs of age. Majority belonged to nuclear muslim families. Educational profile of parents showed that 18.9% Mothers and 20% Fathers were illiterate. A large majority of Mothers were housewives (92.3%), while majority of Fathers (73.2%) were Unskilled and semi skilled workers.

In present study, 84.7% of Mothers had heard of anganwadis especially food supplementation services, while 70.9% were aware of its location. Amongst them, only 42.7% Mothers were aware about the immunisation, 29.9% of health check-ups and 23.1% of the pre-school education services. None of the Mothers mentioned Health and Nutrition education, Referral services as the services provided by anganwadis. Amongst the women who were aware about ICDS services, only 35.5% had ever visited anganwadis with their children. 33% children in the study received immunisation and 24.9% children were receiving food supplementation from anganwadis. Only 8.1% children had health check-ups. Amongst the different age groups, food supplementation services were availed by more children from 1-2 yrs and 2-3 yrs (26.7% and 37.6% respectively). Similarly, immunisation services were utilised by higher age group children. 14.3% children from age 2-3 yrs benefitted from health check-ups. Amongst both the sexes, anganwadi services were utilised by more female children than male children. Reasons for not availing anganwadi services were cited by the mothers as children dislike Take Home Rations given by anganwadis, children don't eat food at anganwadis, children refuse to sit in anganwadis. Household responsibilities and irregular timings at anganwadis were the other reasons mentioned.

The findings of present study coincide with **NFHS-3** data ⁽⁵⁾ which shows that 32.5% of children under 3 yrs of age had received any services from anganwadi, 75.6% had not received food supplementation at all. 22.3% children had received any immunisation services and 81.5% children had not been monitored at all for their weight at anganwadis.

Most of the children in the study had never visited anganwadis in their areas (85.7%). Only 7.5% of children were the regular attendees. The regular attendance at anganwadis was more for male children than females. **I.Pal, RN Chaudhari (2007)** ⁽¹⁰⁾ in rural area of west Bengal also found that a higher percentage of the girls when compared to the boys never attended the ICDS center.

Evaluation of urban ICDS program viz. regularity of attendance, performance monitoring and supervision of anganwadi services is not part of the study. Also, interviews of anganwadi workers to assess their knowledge, skills and the reasons for non-utilisation of anganwadi services by children in 0-3 years age group was not included in the study. The adequacy of infrastructure at the anganwadis (space, supplies, weight machines) was not assessed.

Fig. 1: Age and Sex Distribution of Children

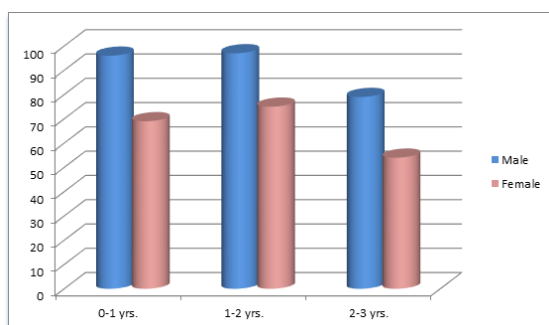


Table 1: Awareness about local Anganwadis among mothers

Awareness about local Aws	Yes	Percent	No	Percent
Heard of AW	398	84.7	72	15.3
Aware of Location	333	70.9	137	29.1
Ever Visited	167	35.5	303	64.5

Table 2: Awareness among mothers about Services available at Anganwadi

Awareness about services	Number	Percentage
Food supplementation	398	100
Immunisation	170	42.7
Health Check-up	119	29.9
Pre-school education	92	23.1

Table 3: Utilisation of Anganwadi services among Children by Age and Sex

Services	0-1 year	1-2 year	2-3 year	Grand Total	Percent
Immunisation	42 (25.4)	65 (37.8)	48 (36.1)	155	33
Food Supplementation	21 (12.7)	46 (26.7)	50 (37.6)	117	24.9
Health Check up	7 (4.2)	12 (7)	19 (14.3)	38	8.1

Services	Male	Female	Total
Food Supplementation	67 (24.1)	50 (26)	117
Examination	19 (6.8)	19 (9.6)	38
Immunisation	80 (28.8)	75 (37.9)	155

Table 4: Distribution of Children according to regularity of attendance at Anganwadi

Attendance at Anganwadi	Male	Percent	Female	Percent	Total	Percent
Daily	23	8.5	12	6.0	35	7.5
21-25 Days	0	0	1	0.5	1	0.2
10-20 Days	0	0	1	0.5	1	0.2
0-10 Days	17	6.2	13	6.6	30	6.4
Never	232	85.3	171	86.4	403	85.7
Grand Total	272	100	198	100	470	100

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