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Original Research Article

Utilization and Parental Perception towards Anganwadi Services in Rural Lucknow- A Cross Sectional Study

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ABSTRACT

Introduction: Integrated Child Development Services, a flagship programme of the Government of India provides health, nutrition, and pre-school education to children aged three years to six years. Even after 35 years of implementation, the success of ICDS in tackling childhood and maternal problems remains a matter of concern. As per NFHS-3, in Uttar Pradesh, only 15.2% of the children received Supplementary Nutrition while only 13.3% of children in the age group of 3-6 years utilized Pre-school education services from AWCs, which is quite low.

Objectives:

- To assess the level of utilization of services from Anganwadi centres among children aged 3-6 years in the rural areas of Lucknow.
- To assess the perception and satisfaction of parents towards services being provided at the Anganwadi Centres.
- To assess the reasons for non-utilization and parental perception towards services being provided at the Anganwadi Centres.

Methodology: A Cross-sectional study was carried out in Lucknow. From the eight rural ICDS projects, one ICDS project was randomly selected. From the selected project, five Supervisor Zones were randomly selected and from each supervisor zone one Anganwadi Centre was randomly selected. The households of all the registered children (3-6 years) were visited and parents (mother / father) were interviewed using a pre tested questionnaire to obtain the sample size of 314. Data was analysed using SPSS.16.

Results: Almost two fifths (39.5%) of the parents did not send their children to the Anganwadi centres. Majority of the parents (75.2%) perceived Supplementary Nutrition to be beneficial whereas only about one third (36.0%) perceived Pre School Education to be beneficial for their child. More than one third (36.6%) the parents said that overall services at the Anganwadi centres were of poor quality. Lack of perceived benefit of Pre-school Education (96.7%), and no teaching or proper guidance to the children at the centre (91.1%) were the major causes of children not attending the centres. Perceived benefit of Supplementary Nutrition was found to be significantly associated with caste, mother's education and socio economic Status and perceived benefit of Pre School Education was found to be significantly associated with age of the child, religion, caste, mother's education and socio economic Status.

Conclusion: The study found utilization of Anganwadi services to be quite low. As compared to Pre School Education more of the Parents perceived Supplementary Nutrition to be beneficial. However most of them were not satisfied and on a whole perceived the services to be of poor quality. Therefore stringent supervision to ensure provision and quality of service of the ICDS centres must be done. Moreover the functions of AWWs should not be restricted to distribution of supplementary nutrition only, but a need based approach should be developed to improve the satisfaction level of the end users.

Keywords: Utilization, Parental Perception, Anganwadi services, Rural, Lucknow

INTRODUCTION

Children are the backbone of a country and their protection is the greatest investment for the country's economic and political stability. [1] The first six years of a child's life are the most crucial as the foundations for cognitive, social, emotional, physical, motor and psychological development are laid down at this stage. [2] Nutrition and Pre-school education play a key role in these formative years of life. [3] Inadequacies during this vulnerable period results in hampering of development and growth faltering. [4]

To ensure for holistic development of the child, Government of India launched the Integrated Child Development Services (ICDS) in 1975 with a package of services aimed at reducing child malnutrition, morbidity and mortality. [3] One of the major objectives of the scheme is to improve the nutritional and health status of children in the age group of 0-6 years and to promote optimal growth and development. [5] This objective is sought to be achieved through a network of Anganwadi Centres which provide nutritional support, healthcare and pre-school education for children under 6. [6]

But even after 35 years of implementation, the success of ICDS in tackling childhood and maternal problems remains a matter of concern. [7] As per the Fourth National Family Health Survey (NFHS-4), the prevalence of stunting, underweight and wasting in under five children was 38.4%, 35.7% and 21.0% respectively10. In Uttar Pradesh the situation is no less different, with the prevalence of stunting, underweight and wasting in under five children being 46.3%, 39.5% and 17.9% respectively10. As illustrated in NFHS-3, in Uttar Pradesh, only 15.2% of the children received Supplementary Nutrition while only 13.3% of children in the age group of 3-6 years utilized Pre-school education services from AWCs [8] which is quite low

Therefore the present study was aimed at assessing the utilization, perception and level of satisfaction of parents of children (3-6 years) enrolled at ICDS centres in rural areas of Lucknow towards the services being provided at the Anganwadi centres and its determinants. It will help delineate some of the major challenges and identify gaps as well as possible alterations that are needed in the ICDS programme to achieve its primary objective. [11]

OBJECTIVES:-

- To assess the level of utilization of services from Anganwadi centres among children aged 3-6 years in the rural areas of Lucknow.
- To assess the perception and satisfaction of parents towards services being provided at the Anganwadi Centres.
- To assess the reasons for non-utilization and parental perception towards services being provided at the Anganwadi Centres.

MATERIALS AND METHODS

- **Study Design:** Cross sectional study.
- **Study Setting:** Anganwadi centres in rural areas of Lucknow.
- **Study Period:** August 2015 to July 2016.
- **Study Population:** Parents of the children registered at the Anganwadi centres in rural areas of Lucknow.
- **Inclusion Criteria**: Parent of child of 3 years to 6years of age who gave consent for the study and child registered at AWC.
- **Exclusion Criteria:** Parent of child who was not registered at Anganwadi centre, Non-cooperative parents and parents not present in three visit periods.
- **Sample Size:** Taking prevalence of Wasting (Weight / Height) in Lucknow [CAB 2014] [12] as 13.9% and an allowable error of 4%, the total sample size (n) was calculated to be 288.As this study is a part of a thesis conducted to study the nutritional status of children in the Anganwadi centres of Lucknow that's why prevalence of wasting was

used to calculate the sample size of this study.

- **Sampling Design**: Two - stage Random Sampling Technique. From the Eight rural projects of ICDS in Lucknow district, one was randomly selected. From the selected ICDS project, five Supervisor's Zone was randomly selected. From each of these zones, one Anganwadi centre was randomly selected and all the registered children in these centres, fulfilling the inclusion and exclusion criteria, were selected to draw up the desired sample. A total of 314 cases fulfilling the inclusion and exclusion criteria were enrolled for the study.
- **Data Collection Procedure:** The parents of these registered children were contacted by the investigator during the visits to their households and an attempt was made to convince all the parents fulfilling inclusion criteria to participate in the study after informing them about the aims, objectives and likely benefits which would accrue from the study. Information was collected from the parent of the child beneficiary of the Anganwadi Centres with a predesigned and pretested questionnaire regarding Bio-social characteristics, Utilization of ICDS services, Reasons for not attending AWC and Parental perception and Satisfaction regarding Supplementary Nutrition and Pre-School Education.
- **Composite Satisfaction Score:** Nine Questions were used to assess the satisfaction of the parents with the Anganwadi Services. The Responses were graded on a Likert scale with values ranging from 0-2; with a maximum score of 18. The scale was tested on mothers of thirty children who were also asked about their overall satisfaction level. The total scores were then matched with the satisfaction level and classified as under:

SATISFACTION LEVEL	SCORE
Good	15-18
Average	08-14
Poor	00-07

- **Data Processing and Analysis:** Data was analysed using SPSS 16.0.

RESULTS

Bio-social characteristics of the Parents and children:

In the present study the children were uniformly distributed (Table 1) among all age groups with almost an equal proportion of male and female. Majority (95.2%) were Hindu by religion and more than half (52.9%) belonged to SC / ST category. More than half (58.9%) belonged to the socioeconomic class IV. Approximately two-fifth (37.9%) and one-fifth (17.2%) of the mothers and fathers respectively were illiterate and about one-fifth (22%) of the mothers were employed.

Table 1: Bio-social Characteristics of the Anganwadi children and their parents

Characteristics	Frequency (n=314)	Percentage (%)
Age-group (months)		
36-47	102	32.5
48-59	118	37.6
60-71	94	29.9
Gender		
Male	172	54.8
Female	142	45.2
Religion		
Hindu	299	95.2
Muslim	15	4.8
Caste / Tribe		
General	84	26.8
OBC	64	20.4
SC/ST	166	52.9
Educational status of the mother		
Illiterate	119	37.9
Primary	67	21.3
High school	86	27.4
Intermediate and above	42	13.4
Educational status of the father		
Illiterate	54	17.2
Primary	55	17.5
High school	141	44.9
Intermediate and above	64	20.4
Employment status of the mother		
Employed	69	22.0
Unemployed	245	78.0
Employment status of the father		
Employed	309	98.4
Unemployed	5	1.6
Socioeconomic status (modified BG Prasad classification – 2016)		
II	4	1.3
III	27	8.6
IV	185	58.9
V	98	31.2

Utilization and satisfaction with ICDS services:

Almost two fifths (39.5%) of the parents did not send their children to the Anganwadi

centers. Majority of the parents (75.2%) perceived Supplementary Nutrition to be beneficial whereas only about one third (36.0%) perceived Pre-school Education to be beneficial for their child. More than one third (36.6%) the parents said that overall services at the Anganwadi centers were of poor quality (Table 2).

Table 2: Utilization and satisfaction of parents with ICDS services

Characteristics	Frequency (n=314)	Percentage (%)
Average days of attendance (last three months)		
Don't attend	123	39.5
<10 days	27	32.5
10-20 days	185	25.8
>20 days	98	2.5
Beneficial perception towards services		
Supplementary Nutrition	236	75.2
Preschool Education	113	36.0
Health Education	12	3.8
Composite Satisfaction Score		
Good	15	4.7
Average	184	58.6
Poor	115	36.6

Reasons for not attending AWC:

Lack of perceived benefit of Pre-school Education (96.7%), and no teaching or proper guidance to the children at the center (91.1%) were the major causes of children not attending the centers. Centre not opening regularly, AWW not attending regularly and AWW not taking proper care of the children were some of the other reasons (Table 3).

Table 3: Reasons for not attending AWC

Reasons for not attending AWC	Frequency (n=314)	Percentage (%)
PSE given is not beneficial for the child	304	96.7
Except food no teaching or proper guidance	286	91.1
AWW not coming to the centre regularly	186	59.3
AWW not taking proper care of the children	143	45.5
Centre not opening regularly	140	44.7

Parental perception of Supplementary Nutrition:

The beneficial perception of Supplementary Nutrition (Table 4) was found to be more among parents of children of lower age groups but this association was not statistically significant. Though not found significant but the parental perception as beneficial was similar for both male and female children. The beneficial perception of Supplementary Nutrition was found to be more among Muslims but this association was not statistically significant. Majority (81.9%) of the parents of SC / ST category perceived Supplementary Nutrition to be beneficial however, majority of the parents of General and OBC category perceived it to be non- beneficial (40.5% and 21.9% respectively). This association of beneficial perception and caste was found to be statistically significant. Majority (89.1%) of the illiterate mothers perceived Supplementary Nutrition to be beneficial whereas only 54.3% of them with high school level of education perceived it to be beneficial. The beneficial perception of Supplementary Nutrition by parents decreased with increase in the level of educational of the mother and this association was found to be statistically significant. Majority (81.6%) of the parents from lower socio-economic class perceived Supplementary Nutrition to be beneficial whereas less than half (45.2%) of the parents belonging to upper socio-economic class perceived it to be beneficial. The beneficial perception of Supplementary Nutrition by parents was more in the lower socio-economic classes and this association was found to be statistically significant.

Parental perception of Pre School Education:

Majority (85.1%) of the parents (Table 5) of the children aged 60-71 months perceived Pre School Education to be non-beneficial. The beneficial perception of Pre School Education by parents decreased with increase in the age of the child and this association was found to be statistically significant. Though not significant but the parental perception as beneficial was found to be similar for both male and female children. About two-third (65.2 %) of the Hindu parents perceived Pre School Education to be non-beneficial and this association was found to be statistically significant. More than two-fifth (44.6%) of

the parents of SC / ST category perceived Pre School Education to be beneficial however, majority of the parents of OBC and General category perceived it to be non-beneficial (78.1% and 70.2% respectively). This association of beneficial perception and caste was found to be statistically significant. Majority (87.2%) of the mothers with an educational level of high school and above perceived Pre School Education to be non-beneficial. The beneficial perception of Pre School Education by parents decreased with increase in the level of educational of the mother and this association was found to be statistically significant. Almost all (96.8%) of the parents from upper socio-economic class perceived Pre School Education to be non-beneficial. The beneficial perception of Pre School Education by parents was more in the lower socio-economic classes and this association was found to be statistically significant.

Table 4: Association of Utilisation and Parental perception of Supplementary Nutrition with Biosocial Characteristics

Biosocial Characteristics	Perception of Supplementary Nutrition		Total (n=314)	p value
	Beneficial	Not Beneficial		
Age of the Child (months)				
36-47	74 (72.5)	28 (27.5)	102	0.193
48-59	85 (72.0)	33 (28.0)	118	
60-71	77 (81.9)	17 (18.1)	94	
Gender of the child				
Male	131 (76.2)	41 (23.8)	172	0.373
Female	105 (73.9)	37 (26.1)	142	
Religion				
Hindu	223 (74.6)	76 (25.4)	299	0.234
Muslim	13 (86.7)	2 (13.3)	15	
Caste / Tribe				
General	50 (59.5)	34 (40.5)	84	**0.000****
OBC	50 (78.1)	14 (21.9)	64	
SC / ST	136 (81.9)	30 (18.1)	166	
Mother's Education				
Illiterate	106 (89.1)	13 (10.9)	119	**0.000****
Up to Middle School	79 (78.2)	22 (21.8)	101	
High School and Above	51 (54.3)	43 (45.7)	94	
Socio-economic Class [*Modified B G Prasad*]				
III and below	14 (45.2)	17 (54.8)	31	**0.000****
IV	142 (76.8)	43 (23.2)	185	
V	80 (81.6)	18 (18.4)	98	

Table 5: Association of Utilization and Parental perception of Pre-School Education with Biosocial Characteristics

Biosocial Characteristics	Perception of Pre-School Education		Total (n=314)	p value
	Beneficial	Not Beneficial		
Age of the Child (months)				
36-47	47 (46.1)	55 (53.9)	102	**0.000****
48-59	52 (44.1)	66 (55.9)	118	
60-71	14 (14.9)	80 (85.1)	94	
Gender of the child				
Male	62 (36.0)	110 (64.0)	172	0.538
Female	51 (35.9)	91 (64.1)	142	
Religion				
Hindu	104 (34.8)	195 (65.2)	299	**0.046***
Muslim	09 (60.0)	06 (40.0)	15	
Caste / Tribe				
General	25 (29.8)	59 (70.2)	84	**0.002****
OBC	14 (21.9)	50 (78.1)	64	
SC / ST	74 (44.6)	92 (55.4)	166	
Mother's Education				
Illiterate	62 (52.1)	57 (47.9)	119	**0.000****
Up to Middle School	39 (38.6)	62 (61.4)	101	
High School and Above	12 (12.8)	82 (87.2)	94	
Socio-economic Class [*Modified B G Prasad*]				
III and above	1 (3.2)	30 (96.8)	31	**0.000****
IV	63 (34.1)	122 (65.9)	185	
V	49 (50.0)	49 (50.0)	98	

DISCUSSION

In the present study almost two fifths (39.5%) of the parents did not send their children to the Anganwadi centres and about one-third (32.5%) send them for less than 10 days. The finding is similar to that reported by Nath, L.R., (2015) [13] in his study in which only fifty nine % of mothers were sending their under-five children to Anganwadis and utilizing the services regularly.

Lack of perceived benefit of Pre-school Education (96.7%), and no teaching or proper guidance to the children at the center (91.1%) were the major causes of children not attending the centers. Centre not opening regularly, AWW not attending regularly and AWW not taking proper care of the children were some of the other reasons. This is similar to those reported by Qadiri, F. and Manhas, S., (2009) [9] who found unawareness of parents regarding ICDS scheme and Nagaraj, G.M., et. al., (2014) [16] who found that Anganwadi workers were spending most of the time in preparing supplementary nutrition and maintaining records and therefore it was difficult to concentrate on pre-school educational activities to be the reasons for not attending AWC.

In the present study more than one third (36.6%) of the parents said that overall services at the Anganwadi centers were of poor quality while about 58.5% had average level of satisfaction. Only 4.7% of the parents perceived the services to be of good quality. Similar findings were reported in a study by Maqbool, A., (2013) [17] which revealed that 38.88% parents were in favour of effectiveness of this scheme, while 25.55% parents were uncertain and 34.44% parents were opposite to this and Prabhakar V, R., et. al., (2014) [10] in which 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. This is lower than that reported by Biswas, A.B., et. al., (2010) [15] in whose study 63% of the mothers opined ICDS to be beneficial for their children.

About three fourth (75.2%) of the parents perceived Supplementary Nutrition to be beneficial which is similar to that reported by Patni, M.M., et. al., (2013). [14] Although mothers of children had good perception about Supplementary Nutrition in Anganwadi but considered it to be insignificant for growth of their child. This finding is lower as that compared to Biswas, A.B., et. al., (2010) [15] who in his study found quantity and quality of supplementary food to be acceptable to 88% and 72.7% mothers respectively. This can be attributed to the fact that as the study was done six years back and since then the status of living, purchasing power and food availability has increased and therefore the need and beneficial perception of Supplementary Nutrition being provided has significantly reduced.

Only about one third (36.0%) of the parents perceived Pre-school Education to be beneficial for their child which is considerably lower than that reported by Nagaraj, G.M., et. al., (2014) [16] who found that parents noticed improved health habits of children in 63.4% of the children and an overall improvement in the preschool activities, like outdoor activities, learning alphabets, singing, rhymes, speaking with others, identifying the color, size, shape, time, number and seasons. This can be attributed to high literacy rates resulting in more awareness regarding services and to the good quality of services being provided due to the availability of better infrastructural facilities there. Here the Anganwadi workers were found to be spending most of the time in preparing Supplementary Nutrition and maintaining records and therefore it was difficult for them to concentrate on the pre-school educational activities. Parents had high level of expectations from Anganwadi centre and they were found to be half-heartedly satisfied with Anganwadi services. But the

finding was more than as reported by Qadiri, F. and Manhas, S., (2009) [9] who in his study found that only25% parents felt that children who attend Early Childhood Development centers (ECD) cultivate good health and hygiene habits, only 19% felt that they develop preliteracy skills and only 16% felt that they develop communication skills. Most parents did not consider these centers to be adequately equipped to provide Preschool Education as the teachers are not properly trained and lay more emphasis on nutrition. There is no proper schedule or curriculum. Children do not learn all necessary concepts in these centres. Some parents (29.5%) thought that it plays an important role by developing preliteracy concepts among children and provide healthy foundation for lifelong learning. Those who sent their children in preschool centers were more negatively critical about the role of ICDS in early child hood centers. This may be due to the fact that in Kashmir the ICDS infrastructure might be sub-standard and services are being provided are very poor in quality.

Perceived benefit of Supplementary Nutrition was found to be significantly associated with caste, mother's education and socio economic status and that of Pre School Education was found to be significantly associated with age of the child, religion, caste, mother's education and socio economic status. This is similar to that as reported by Nath, L.R., (2015) [13] who found significant association between the utilization rate and variables like maternal awareness ($p<0.01$) and family income ($p<0.05$). Satisfaction of parents with respect to the functioning of Anganwadi centres has a positive impact on acceptance and utilization of services. Parents have high level of expectations from these centres but are not fully satisfied with the services leading to severe attendance shortage at these centres. This can be attributed to poor perception of quality of preschool education in anganwadi centres by many parents who feel that the anganwadi worker do not seem to make any effort to strengthen the component and lays more emphasis on nutrition and are not satisfied with it. [9]

Limitations of Study:-

Study was conducted in only five Anganwadi Centres of one Rural ICDS project in Lucknow, therefore the results of the study cannot be generalized.

CONCLUSIONS AND RECOMMENDATIONS

The study found utilization of Anganwadi services to be quite low. As compared to Pre School Education more of the Parents perceived Supplementary Nutrition to be beneficial. However most of them were not satisfied and on a whole perceived the services to be of poor quality. Therefore an urgent overhaul of the Anganwadi Centres is the need of the hour. Proper building to house the centre, play space and play materials should be provided. Changes in curriculum of Pre-school education and development of a grading system in accordance to Private schools should be explored. Continuous Education and Training of the Anganwadi workers with regular social audits and hand holding should be done. Stringent supervision to ensure provision and quality of service of the ICDS centres must be done.

Regular supply of good quality Supplementary Nutrition should be ensured. Public Private Partnership (PPP) in providing hot cooked meals should be explored. PPP with private schools, whereby the entire Anganwadi setup is housed in the school with the government providing Supplementary Nutrition and the school providing Pre-School Education can be delve into. Making use of IT through Digital India by showing Audio visual clips pertaining to various subjects to the children at the Anganwadi Centres can be tried. Moreover the functions of AWWs should not be restricted to distribution of supplementary nutrition only, but a need based approach should be developed to

improve the satisfaction level of the end users.

Thus, with the efforts directed towards improving the services being provided at the Anganwadi Centres, the level of its utilization can be increased and henceforth an attempt can be made to make the flagship programme of India for the betterment of mother and child health successful.

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