

ORIGINAL ARTICLE

A Study to Assess the Knowledge, Attitude, and Practices Regarding Integrated Child Development Services among Mothers in the Field Practice Area of Urban Health Centre, Kalburgi

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ABSTRACT

Introduction: Children are the backbone of a country and their protection is the greatest investment for the country's economic and political stability. The first 6 years of a child's life are the most crucial as the foundations for physical, emotional, social, psychological, and cognitive development are laid down at this stage. **Objectives:** The objectives of the study were to assess the awareness and utilization of selected child welfare services among parents. **Materials and Methods:** A cross-sectional study was conducted. Study includes 300 mothers of children aged 0–6 years and registered at AWC in the field practice area of Urban Health Centre, Kalburgi. **Results:** In the current study, 51% were male and 49% were female. Majority of the children 46.33% belongs to 1–3 years age group. About 54% of children were underweight followed by 28.67% were normal and 17.33% overweight. Majority of participants (72% of children) were fully immunized. Awareness regarding integrated welfare measure for mothers and children through ICDC center was seen in 67% of mothers. Main source of Integrated Child Development Services (ICDS) information to mothers was neighbors followed by TV. About 30.33% and 28% of children were taken to Anganwadi 4 days/week and 3 days/week respectively. About 98.33% of mothers utilized various services rendered by ICDS. **Conclusion:** The study found that awareness and utilization of Anganwadi services are quite low. Coverage performance of ICDS centers regarding various child health services needs improvement. There is a definite need to strengthen the Information, Education and Communication (IEC) and Behavior Change Communication (BCC) activities regarding the ICDS scheme and to reflect the awareness in utilization of child health services.

Key words: Anganwadi, integrated child development services, knowledge, practice

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 6 years of a child's life are the most crucial as the foundations for physical, emotional, social, psychological, and cognitive development are laid down at this stage.^[2] Pre-school education and supplementary nutrition play a key role in these formative years of life.^[3] Lack of adequate nutrition during this vulnerable period results in hampering of development and growth faltering.^[4]

Children are in a constant phase of development. Their body is in a phase of constant wear-tear and repair, their brain is

developing, and bones are growing. These growing children require constant supplementation of calories, proteins, and micronutrients to keep the pace of increased demands of the body. Since childhood is the most vulnerable phase in the life of human being, nutritional inadequacies will result in the hampering of the development of the body. If this nutritional inadequacy is continued for a long period of time, it results in the growth faltering manifested in the form of low weight,

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small height, and low IQ. Future of the country is determined by the growing generation of the country. It is the health status of children of any country that represents the health status of people of that country. Since this growing generation is going to be the future productive citizens, they should be healthy enough to make use of the full potential of their productive age. Scientific evidence has shown that beyond the age of 2–3 years, the effects of chronic malnutrition are irreversible. Child malnutrition is the single biggest contributor to under-five mortality due to greater susceptibility to infections and slow recovery from illness. Misconception prevalent in the present time is the unavailability of the enough food. Between 6 and 18 months, young child requires only 200 and 300 kcal food to maintain normal growth and development; but because of insufficient knowledge of parents about feeding practices, they do not provide enough food to their children leading to faltering of growth and consequently illness and death of child.^[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 most important 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] To achieve this objective, a network of Anganwadi centers was developed which provides supplementary nutrition, health check-up, and pre-school non-formal education for children under 6 years of age.^[6] Knowledge, attitude, and practice (KAP) of mother regarding supplementary feeding, immunization, and ICDS play a very important role in the health status of the child. With this background, the present study was planned with the following objective.

Objective

The objective of the study was to assess the awareness and utilization of selected child welfare services among mothers.

MATERIALS AND METHODS

A cross-sectional study was conducted in Anganwadi center of field practice area of Kalburgi. Study population involves mothers of the children registered at the Anganwadi centers in field practice area of Kalburgi.

A specifically designed questionnaire was used to record all necessary information.

Consent from the parent was obtained. The available information kept confidential. All the data were entered into MS Office Excel software and descriptive statistics were applied in the analysis of the study.

Mothers of child who gave consent for the study and child registered at AWC were included in the study. Mothers of child who was not registered at Anganwadi center, non-cooperative parents were excluded from the study.

The optimal sample size of 300 study subjects was calculated on the basis of 57% of mothers were aware regarding various services provided through Anganwadi found in pilot survey. $n = 4pq/L^2$ where p = positive character, $q = 100-p$ L = allowable error 10% of “p.”

RESULTS

In the current study, 153 (51%) participants were male and 147 (49%) were female.

It was observed that out of 300 study participants, 139 (46.33%) belong to 1–3 years age group followed by 116 (38.67%) participants in 3–6 years age group and 45 (15%) in ≤ 1 year of age group [Table 1].

Most of the study participants, that is, 162 (54%) were underweight followed by 86 (28.67%) were normal and 52 (17.33%) were overweight. Regarding immunization status of study participants, it was observed that 216 (72%) were fully immunized, 74 (24.67%) were partially immunized, and 10 (3.33%) were unimmunized [Table 2].

Above table shows awareness among mothers regarding various services provided at the Anganwadi center [Table 3].

Awareness regarding good nutrition during pregnancy for delivery of healthy baby was seen in only 6 (2%) of mothers, awareness regarding supplementary nutrition for the infant at the time of initiation of complimentary feeding is seen in 13 (4.33%) mothers, awareness regarding need of TT vaccination during pregnancy was seen in 45 (15%) of mothers, awareness regarding need of vaccination against tetanus, polio, diphtheria, pertussis, and measles was seen in 141 (77%) of mothers, and awareness regarding integrated welfare measure for mothers and children through ICDC center was seen in 201 (67%) of mothers.

Most important source of information regarding ICDS center was neighbors in 172 (57.33%) mothers, followed by TV in 52 (17.74%) mothers, health personnel in 39 (13%) mothers, newspaper in 21 (7%) mothers, and radio in 16 (5.33%) mothers [Figure 1].

It was observed that out of 300 mothers, 259 (86.33%) were sending their children to Anganwadi regularly [Figure 2].

It was observed that 91 (30.33%) children attending Anganwadi center 4 days per week, followed by 84 (28%)

children attending Anganwadi center 3 days per week, 50 (16.67%) children 2 days per week, 42 (14%) children 1 day per week, 22 (7.33%) children attending Anganwadi center 5 days per week, 9 (3%) children attending 6 days per week, and 2 (0.67%) children 7 days per week [Figure 3].

Out of 300 study participants, 295 (98.33%) utilized various services rendered by ICDS [Figure 4].

Out of total study participants, 290 (96.67%) utilized immunization services, followed by 174 (58%) utilized nutritional services, 106 (35.33%) utilized non-formal pre-school education, and 98 (22.67%) utilized health check-up services provided through ICDS.

DISCUSSION

In the present cross-sectional descriptive study, a total of 300 mothers were enrolled to assess their KAPs regarding ICDS.

It was observed that out of 300 study participants, 139 (46.33%) belong to 1–3 years age group followed by 116 (38.67%) participants in 3–6 years age group and 45 (15%) in ≤ 1 year of age group. Out of 300 study participants, 153 (51%) were male and 147 (49%) were female. A study conducted by Sivanesan *et al.* observed that 42.4% of the subjects were male.^[7] A study done by Patni *et al.* and Surwade *et al.* reported 57.7% and 54.9%, respectively, were male.^[8,9]

The overall prevalence of malnutrition in study area was 54%, which was similar to the prevalence reported by Avachat *et al.* (50.46%).^[10] The prevalence of malnutrition was less in the present study compared to the findings in the studies conducted by Bhatia *et al.* (65.87%) and Mitra (61.11%).^[11,12] A study conducted by Surwade *et al.* observed that the prevalence of malnutrition was 46.46% in urban area.^[9] Regarding immunization status of the study participants, it was observed that 216 (72%) were fully immunized, 74 (24.67%) were partially immunized, and 10 (3.33%) were unimmunized. Findings in the present study were similar to

the observation by Ratta and Meshram showed that out of 194 children, 128 (65.98%) were completely immunized, 45 (23.2%) were partially immunized.^[13] A study conducted by Visweswara Guthi and Rallapalli observed that 90% of the children were fully immunized.^[14]

Awareness regarding good nutrition during pregnancy for delivery of healthy baby was seen in only 6 (2%) of mothers, awareness regarding supplementary nutrition for the infant at the time of initiation of complimentary feeding is seen in 13 (4.33%) mothers, awareness regarding need of TT vaccination during pregnancy was seen in 45 (15%) of mothers, awareness regarding need of vaccination against tetanus, polio, diphtheria, pertussis, and measles was seen in 141 (77%) of mothers, and awareness regarding integrated welfare measure for mothers and children through ICDC center was seen in 201 (67%) of mothers. A study conducted by Rajsinh and Vinayak observed that the mothers of children in the Anganwadi attending group had average to good KAP regarding supplementary feeding, immunization and ICDS.^[15] A study conducted by Mahalingam *et al.* observed that when the awareness regarding vaccination was assessed, it was found that all mothers from the urban area were aware about childhood vaccination and 89.2% of the mothers in the urban area felt vaccination were important.^[16] A study conducted by Enuke and Orru observed that about 252 (84%) of the mothers were aware of TT vaccination.^[17] A study conducted by Khan *et al.* in women of child-bearing age observed that maximum of 80.6% ($n = 141$) participants are agreed that they need to eat healthy food every day during pregnancy.^[18] A study conducted by Patil and Kulkarni observed that awareness level about Anganwadi and various services provided by ICDS through Anganwadi among women was 91.39%.^[19]

Most important source of information regarding ICDS center was neighbors in 172 (57.33%) mothers, followed by TV in 52 (17.74%) mothers, health personnel in 39 (13%) mothers, newspaper in 21 (7%) mothers, and radio in 16 (5.33%) mothers. Gulati *et al.* stated that the sources of information regarding immunization services among completely

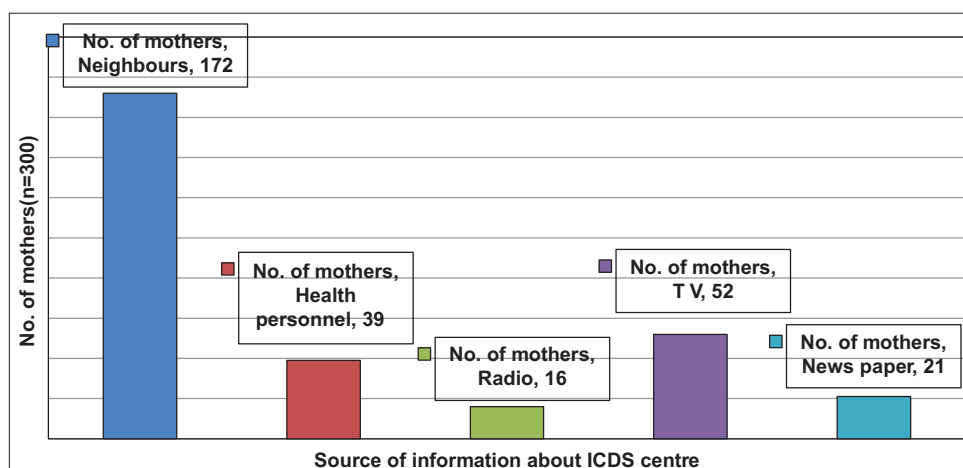


Figure 1: Bar diagram: Distribution of mothers regarding source of information about Integrated Child Development Services center

immunized children were found to be mainly health personnel and Anganwadi workers.^[20]

It was observed that out of 300 mothers, 259 (86.33%) were sending their children to Anganwadi regularly. A study conducted by Hossain Mehedi Rehman *et al.* observed that 60.5% of the parents send their children to the Anganwadi centers.^[21] A study conducted by Nath in his study in which only 59% of mothers were sending their under-five children to Anganwadis and utilizing the services regularly.^[22] A study conducted by Saranya Sivanesan *et al.* observed that the 204 (75.2%) children were regularly attending AWCs.^[7]

It was observed that 91 (30.33%) children attending Anganwadi center 4 days per week followed by 84 (28%) children attending Anganwadi center 3 days per week, 50 (16.67%) children 2 days per week, 42 (14%) children 1 day per week, 22 (7.33%) children attending Anganwadi center 5 days per week, 9 (3%) children attending 6 days per week, and 2 (0.67%) children 7 days per week.

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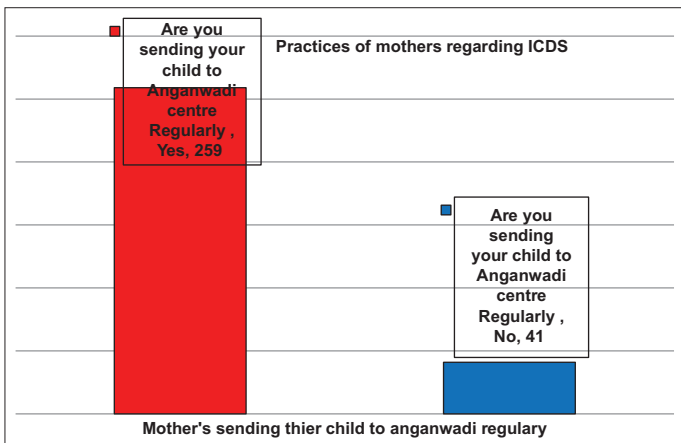


Figure 2: Bar diagram: Practices of mothers regarding Integrated Child Development Services (n=300)

Patel *et al.* observed that average utilization was of ICDS by maximum parents 248 (82.6%).^[23] A study conducted by Sivanesan *et al.* observed that among the registered children, only 744 (60.9%) children were availing ICDS.^[7]

Out of total study participants, 290 (96.67%) utilized immunization services, followed by 174 (58%) utilized nutritional services, 106 (35.33%) utilized non-formal pre-school education, and 98 (22.67%) utilized health check-up services provided through ICDS [Table 4].

A study conducted by Sivanesan *et al.* observed that the most common service utilized by the study subjects were supplementary nutrition (95.9%), followed by pre-school education (83.4%) and health check-up (66.1%), and 99.3%

Table 1: Demographic characteristics of children (n=300)

Demographic characteristics	Number (%)
Gender	
Male	153 (51)
Female	147 (49)
Age of child (year)	
≤1	45 (15)
1-3	139 (46.33)
3-6	116 (38.67)

Table 2: Nutritional and immunization status of children (n=300)

Nutritional status	
Normal	86 (28.67)
Malnourished	162 (54)
Overweight/obese	52 (17.33)
Immunization status	
Fully immunized	216 (72)
Partially immunized	74 (24.67)
Unimmunized	10 (3.33)

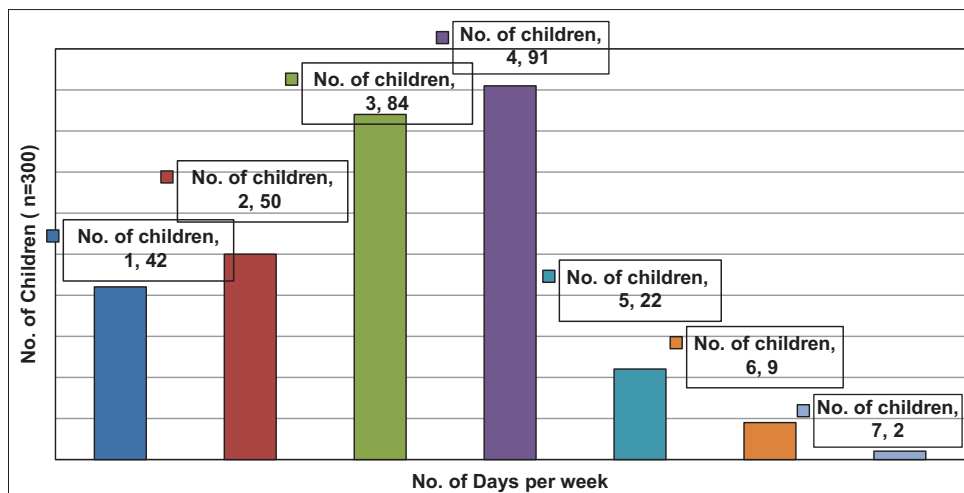


Figure 3: Bar diagram: Distribution of no. of days children attending Anganwadi per week (n=300)

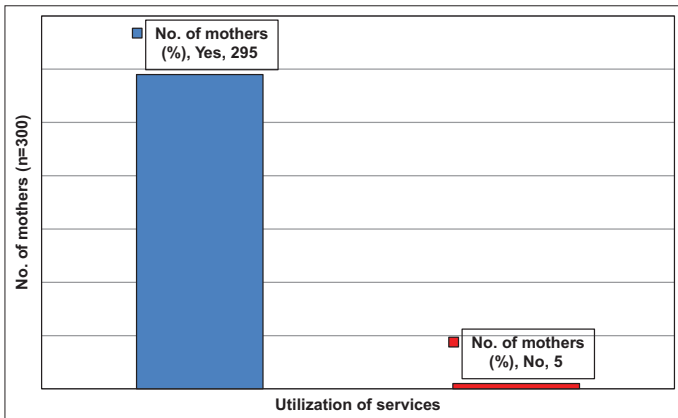


Figure 4: Bar diagram: Utilization of services rendered by integrated child development services ($n=300$)

Table 3: Knowledge of mothers regarding Integrated Child Development Services ($n=300$)

Services through Anganwadi center	Number (%)	
	Yes	No
Do you know good nutrition during pregnancy is necessary for the delivery of healthy baby?	6 (2)	294 (98)
Do you know supplementary nutrition is necessary for the infant at the time of initiation of complimentary feeding?	13 (4.33)	287 (95.67)
Do you know that vaccination against tetanus is necessary for mother during pregnancy?	45 (15)	255 (85)
Do you know that vaccination against tetanus, polio, diphtheria, pertussis, and measles is necessary?	141 (47)	159 (53)
Do you know that there is an Integrated Child Development Services center to provide integrated welfare measures for mother and children?	201 (67)	99 (33)

Table 4: Type of Integrated Child Development Services utilized by mothers ($n=300$)

Type of service	Number (%)
Supplementary nutrition	174 (58)
Immunization service	290 (96.67)
Non-formal preschool education	106 (35.33)
Health check-up	98 (22.67)

of study subjects were immunized for age.^[7] A similar study by Helena *et al.* among child beneficiaries reported 92% of children had received supplementary nutrition, 93.8% (2.5 years–<6 years) children were imparted pre-school education.^[24] A study conducted by Rituparna *et al.* observed that 67.50% of the children were taking supplementary nutrition from the ICDS center, whereas non-formal pre-school education was taken by 28.10% of respondents, immunization services were utilized by 17.40% of children, and health check-up facility was utilized by 30.70% of children.^[25] In a study conducted in Latur district by Surwade *et al.*, utilization of supplementary nutrition was 48.03%,

immunization services utilization was 90.91%, non-formal preschool education service utilization was 57.72%, and utilization of health check-up facility was 21.65%.^[9] A study conducted by Chudasama *et al.*^[26] observed that supplementary nutrition coverage was reported in 48.3% in children.

CONCLUSION

This study found that awareness and utilization of Anganwadi services are quite low. Coverage performance of ICDS centers regarding various child health services needs improvement.

Recommendation

There is a definite need to strengthen the IEC and BCC activities regarding the ICDS scheme and to reflect the awareness in utilization of child health services.

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