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Impact of structured awareness programme on behavioural outcomes regarding ICDS services and its utilization satisfaction among mother with children in selected rural and urban area of Bellary district, Karnataka

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ABSTRACT

Background: Health, nutrition, yet education are the three basic elements of human resource development, and they are all combined in a unique program known as the integrated development of children service Scheme.
Methods: A quasi experimental design where Pre and post-test with equivalent control group design was used to carry out the study. Mothers with children from selected rural and urban area who were fulfilling the inclusion criteria were selected by using non-probability convenient sampling technique. Total 40 samples were included in the study.
Results: The study findings revealed the utilization scores of mothers on ICDS service majority mother 335 (83.8%) were not satisfied followed by 65 (16.3%) were moderately satisfied, the pretest and post knowledge scores of subjects in experimental group mean percent of mother on utilization of ICDS service was 37.63% with mean score 14.3 was in pretest, where as in posttest 57.23% with mean score 21.75, the overall pretest and post attitude scores of subjects in experimental group mean percent of mother on utilization of ICDS service was 28.75% with mean score 28.75 and standard deviation 4.610 was in pretest, where as in posttest 46.35% was mean percent, with mean score 46.35 and standard deviation 4.487.

Conclusions: The structured awareness programme on ICDS services and its utilization among mothers proved its beneficial effects in terms of satisfaction, awareness and attitude level.

Keywords: Structured awareness programme, Mother, ICDS services, Utilization

INTRODUCTION

Children are the future pillar of any nation. It is now globally acknowledged that for economic development of any country, investment in the health and welfare of children is the supreme asset. UNICEF considers Child Mortality rate as the single best indicator of social development and well-being and Infant mortality rate is often regarded as a barometer for overall welfare of a community or country.¹ India is the second most populous country in the world where 13.12 percent of her population

lies in the tender age bracket of 0-6 years. Catering to this proportion of population needs an inordinate measure.²

Several specific programmes have been conceptualized and implemented since early fifties in India. These were gradually replaced by broad, multisectoral and developmental programmes with inter-sectoral coordination resulting in Integrated Child Development Services (ICDS) scheme. Today ICDS scheme represents one of the largest programs, a symbol of India's commitment to its children and mothers. Its beneficiaries include children up to 6 years of age, pregnant and lactating mothers, adolescent girls and all females of reproductive age group of 15 to 45 years. The Scheme offers a package of six services; supplementary nutrition, pre-school education, nutrition and health education, Immunization, basic health check-up and referral services.³

When health improves, life improves by every measure. We have to take the responsibility of the future in terms of making the world a 'better place' health wise and other wise. India being the second largest populated country in the world, and with a multitude of health problems encompassing both communicable and noncommunicable diseases and other public health related problems.

India's burden in terms of maternal, new born, and child mortality is one the highest in the world. India has witnessed significant changes in public health, despite significant achievements in some areas. There remain many public health issues that are of immediate concern. India has one of the highest percentages of the severe malnourished children in the world along with sub-Saharan Africa region.⁴

ICDS is a unique programme, which encompasses the main components of human resource development, namely- health, nutrition and education. The National Policy for children adopted in 1974 has emphasized the need to accord priority to children, in the country's developmental efforts.⁵

The Government of India initiated the ICDS scheme in 1975 to provide nutrition and education services for preschool children, and pregnant and lactating mothers. The objectives of the program are achieved through an integrated package of services including supplementary nutrition, immunization, health check-ups, referrals, non-formal preschool, and health and nutrition education.⁶

This integrated approach is delivered through Anganwadi centers located in poorer areas that are most in need of primary health care and nutrition. The program is coordinated at the village, block, district, state and central government levels. The primary responsibility for implementation lies with the Ministry of Women and Child Development. Although the ICDS scheme is the largest early childhood development program in the world, its success in achieving its primary goal of reduction in child malnutrition has remained uncertain. While the program intends to serve those most in need, there seems to be a gap between program objectives and implementation; even though the ICDS budget was 1.5 billion dollars in 2008.

The policy statement focuses on preventive and promotive aspects of child health and nutrition for expectant and nursing mothers. It aims to provide adequate services for children both before and after birth and throughout the period of growth to ensure their full physical, mental and social development.

The nations of the world are ranked according to their achievements in fulfilment of child rights and progress for women. A majority of children live in impoverished economic, social and environmental condition, which impedes their physical and mental development. Recognizing the India government has been greatly concerned about safeguarding and enhancing the development of children particularly those from the weaker sections of society.⁷

ICDS therefore takes holistic view of the development of the child and attempts to improve both his/her prenatal and postnatal environment. Accordingly, besides children in their formative years (0-6 years), women between 15 to 45 years are also covered by the programme as these are child bearing years in the life of a women and her nutrition and health status has a bearing on the development of the child. Welfare services for the young child therefore, have become an integral part of the country's developmental plans, at the heart of these lies the ICDS scheme.⁸

Children's development can be enhanced with appropriate timely and quality programme that provide positive experiences for children and support for parents. Early care and nurturing have a decisive and lasting impact on how children grow to adulthood and how they develop their ability to learn and their capacity to regulate their emotions. Reasonable learning opportunities provided during the early childhood years are crucial for the development of intellectual.⁹

The forms of social behaviour necessary for successful social adjustment appear and begin to develop at this age. The entire development of the child is very much influenced by its social contact. Physical development applies to all aspects of growth of human organism. Early childhood represents a remarkable period of physical and motor development. Physical development influences the child's behaviour directly or indirectly. Directly it determines what the child can do and indirectly it influences his attitude towards himself and others. Physical growth influences behaviour, thoughts, attitudes, ideals, emotional reactions and activities.¹⁰

It was launched in 1975 with 33 projects on an experimental basis, ICDS has expanded considerably in subsequent years and at present has 5614 projects in about 45 percent of the community development blocks of the country, comprising of 4571 rural, 733 tribal and 310 urban projects. It is perhaps the only countrywide programme in the world functioning on a large scale, requiring multi-sectoral operations and inter-sectoral linkages for its implementation. It reaches out to 40.37 lakhs expectant and nursing mothers and 214.5 lakh children in the age group 0-6 years through more than 7 lakh frontline workers. It reaches out to 4.83 million expectants and nursing mothers, and 22.9 million young

children (under 6 years of age) in disadvantaged community groups. Of these 12,45 million young children (3-6 years of age) also participate in early joyful learning activities through the AWCS spread across the country.

A wide network of distributed population based workers have enabled ICDS to emerge as the convergent interface between disadvantaged communities and other programmes such as primary education and health care. It is indeed for our national effort to achieve universalization of elementary education.¹¹

As on 1996, in Kerala there are 120 ICDS blocks (112 rural and 8 urban blocks). ICDS III Project, 2000, which is assisted by the World Bank will bring universalization of the ICDS programme in Kerala, by including 80 blocks spread over 14 districts of the state (40 rural, 3 urbans, 36 coastal and 1 tribal block). There are some studies made to state a following statement and objectives on the impact of ICDS.

Impact of structured awareness programme on behavioural outcomes regarding ICDS services and its utilization satisfaction among mother with children in selected rural and urban area of Bellary district, Karnataka, with objectives, to determined extent of utilization of ICDS service among mother with children, to assess the knowledge regarding ICDS services and its utilization among mother with children before the intervention.

To assess the attitude towards ICDS services and its utilization among mother with children before the intervention. To determine the effectiveness of structured awareness programme on ICDS services and its utilization. To find out correlation between knowledge and attitude regarding ICDS services and its utilization among mother with children.

Hypothesis

H01

The mean post-test knowledge scores will not be significantly higher than pre-test scores.

H02

The mean post-test attitude scores will not be significantly higher than pretest scores.

METHODS

The present study was evaluative research approach was adopted in ordered to assess the impact of ICDS. Impact of structured awareness programme on behavioural outcomes regarding ICDS services and its utilization satisfaction among mother with children in selected rural and urban area of Bellary district, Karnataka, Quasi experimental research design has been used to attain the objectives of the present study. Study was conducted at selected rural areas of Bellary district. The independent variable is structured awareness programme on ICDS services and its utilization and dependent variable is knowledge and attitude on ICDS services and its utilization. The target population of the present study comprises of mothers with children from selected rural and urban community of Bellary district. By adopting purposive sampling technique 40 mothers residing in selected rural and urban community of Bellary district was used to collect data. Data collection was carried out for a period of two months from February 2023 to April 2023. This data was entered into the excel sheets and analysed using SPSS for windows, version 16.0, Chisquare test was used for the evaluation of the level of significance.

The researcher adhered to several critical ethical considerations regarding obligations and responsibilities in the recruitment of participants and data collection (1) approval has obtained from Institutional human ethics committee, (2) formal administrative permission was obtained from a school administration, (3) informed printed agreement was taken from the subjects and parents, and (4) maintain the confidentiality of data.

Sampling criteria

The samples were selected with the following predetermined set of criteria.

Inclusion criteria

Inclusion criteria for sampling are as follows- mother with children who are (a) willing to participate in the study, (b) cooperative, (c) available throughout the study, and (d) capable to understand read and write English or Kannada.

Exclusion criteria

Mother with children who are (a) not alive, (b) confined to bed, and (c) newly immigrated mothers into the selected area of study.

Selection and development of the tool

The structured interview schedule was used to obtain data. It is regarded as the most ideal device for eliciting responses from both literates and illiterates. It is divided into two pieces. Section I includes demographic characteristics of mother. Section II consists of 38 knowledge topics relevant to the ICDS services and its utilization. Section III consist of attitude scale consists of thirty statements, such as by coding the demographic data, a scoring key for section I is created. Section-II scores of '1' and '0' are assigned to correct and incorrect responses.

As a result, the highest possible score is 38. For attitude scale the participant who rate positive questions strongly disagree get 0 marks, disagree get 1 mark, undecided get 2 marks, agree get 3 marks and strongly agree get 4 marks.

The participant who rate negative questions as strongly disagree get 4 mark, agree get 3 mark, undecided get 2 mark, disagree get 1 mark and strongly disagree get 0 marks.

Development of structured awareness programme

The first draft of the structured awareness programme on ICDS services and its utilization was developed based on the objectives of the study and was given to 13 experts in the field of nursing along with objectives, criteria rating scale based on their suggestions and recommendations (i.e. expansions of abbreviations used and correction of certain items), the final draft of Structured awareness Programme was prepared. The title of the structured awareness programme on ICDS services and its utilization.

Reliability

In order to establish reliability of the tool, the technique called Split Half method was used and reliability coefficient was calculated by using raw score formula. The calculated 'r' value is 0.83 for knowledge items and 0.85 for attitude statements and the developed tool was found to be highly reliable.

Method of data collection

After receiving official authorization from the relevant authority, data was gathered from 40 participants, with the mothers chosen using a purposive selection approach. The subject's willingness to engage in the study was determined after the investigator gave a self-introduction and described the objective of the investigation.²³ The individuals have been guaranteed of their anonymity and the confidentiality of the information they have supplied, and signed informed permission has been acquired. The pre-test was administered on the first day, followed by the structured interview schedule, followed with SAP on ICDS services and its utilization for experimental group only, on the seventh day, and the post-test was administered using the same tool on the eighth day, each subject took 30 minutes to answer the Interview schedule.

RESULTS

The data were analysed on the basis of the study objectives, using both descriptive and inferential statistics. The distribution of the subjects by age revealed in the experimental group were more likely to be 7 (35.0%) than control group mothers, who were more likely to be 8 (40.0%) than experimental group mothers, who were more likely to be 26-35 years old and less likely to be 3 (15.0%) than 46-55 years old.

Religion of the mothers in the experimental group, 14 (70%) were Hindu and 2(10%) were Christians, compared to 8 (40.0%) who were Muslims and 4 (20.0%) who were Christians in the control group. Age at marriage of the mothers in the experimental group, 13 (65.0%) married

between the ages of 18 and 25, while the lowest 98 (49.0%) married between the ages of 26 and 30, while the highest 12 (60.0%) of the moms in the control group married between the ages of 18 and 25, and the lowest 8 (40%) did so between the ages of 26 and 30. Age at first birth of the moms in the experimental group, 9 (40.0%) gave birth when they were 19-26 years old, while the lowest 4 (20.0%) did the same.

In contrast, of the mothers in the control group, 13 (65.0%) gave birth when they were 19-26 years old, while the lowest 5 (25.0%) did so when they were 27-34 years old.13 (65.0%) of the mothers in the experimental group belonged to a nuclear family, while the lowest 3 (15.0%) belonged to a joint family. In contrast, 15 (75.0%) of the mothers in the control group belonged to a nuclear family, while the highest 5 (25%) belonged to a joint family. Number of family members: 9 (45.0%) of the women in the experimental group had 3 family members, while the lowest 1 (5.0%) had 2. In contrast, 8 (40.0%) of the mothers in the control group had 3 family members, while the lowest 7 (35%) had 2.

Higher percentage of control group moms, 8 (40.0%), finished pre-university, while the lowest percentage of experimental group mothers, 1 (5.0%), had completed post-graduate studies. In contrast, the lowest percentage of experimental group mothers, 1, had completed postgraduate studies. occupation showed that more mothers in the experimental group, 7 (35%) worked in the public sector, and less, 1, were housewives, compared to more mothers in the control group, 9 (45%) who worked in the public sector and fewer, 2, (10.0%) who worked in the private sector. Greater percent of control group women 7 (35%) had Rs. 20001-30000 and lowest 1 (55%) had >Rs. 50001 and above, compared to greater percent of the test group mothers 6 (30.0%) who had Rs. 20001-30000 with lowest 3 (15.0%) who had Rs. 30001-40000. In terms of the number of children, women in the experimental group had an average of 11 (55%) children, whereas mothers in the control group had an average of 10 (50%) children, while moms in the experimental group had an average of 9 (45%) two children.

The majority of women in the experimental group, 10 (50.0%), had children aged 0 to 1, and the minority, 3 (15%), had children aged 6 to 14, whereas the majority of mothers in the control group, 11 (55%), had children aged 0 to 1, and the minority, 2 (10.0%), had children aged 6 to 14. The mothers in the experimental group made up of 10 (50.5%) were mostly from urban areas, whereas the mothers in the control group made up of 12 (60.0%) were mostly from urban areas and the mothers in the experimental group made up of 17 (50.5%) were mostly from urban areas.

A total 1 (55.0%) of the mothers in the experimental group had a vegetarian diet, whereas the lowest percentage of non-vegetarian moms was 12 (60.0%) of the control group mothers had a mixed diet. Source of information: More mothers in the experimental group, 6 (30%), received information from others, whereas fewer women in the control group, 8 (40.0%), received information from neighbours and fewer moms, 2, (10%), received it from TV/radio.

Table 2 demonstrate over all pre and posttest awareness scores of mothers in experimental group regarding ICDS services and its utilization satisfaction majority mothers 19 (95.0%) had inadequate knowledge followed by 1 (4.0%) had moderate knowledge and none of the mothers processed adequate knowledge. In post-test majority mothers 17 (85.0%) had moderate knowledge and none of the mothers processed adequate knowledge and none of the mothers processed adequate knowledge.

Table 3 demonstrates pre and posttest attitude level of mothers on utilization of ICDS services in experimental group majority mothers 20 (100.0%) had unfavorable feelings followed none of the participant had moderately favorable attitude and favorable feelings. In posttest 16 (80.0%) had unfavorable feelings followed 4 (20%) had moderately favorable attitude and none of the participants had favorable feelings. Table 4 is evident that the obtained t value 7.95 is greater than table value, hence the t value found significant it means there is increase in knowledge scores among mother after exposure to intervention. From Table 5 it is evident that the obtained t value 16.08 is greater than table value, hence the t value found significant it means there is increase among mother after exposure to an attitude scores among mother after exposure to intervention.

Table 1: Frequency and percentage distribution of demographic profile of mothers with children.

Variables	Experimental group		Control group		
variables	N	%	Ν	%	
Age (years)					
15-25	4	20.0	6	30.0	
26-35	7	35.0	8	40.0	
36-45	5	25.0	3	15.0	
46-55	4	20.0	3	15.0	
Religion					
Hindu	14	70.0	8	40.0	
Muslim	4	20.0	8	40.0	
Christian	2	10.0	4	20.0	
Age at marriage (years)				-	
18-25	13	65.0	12	60.0	
26-30	7	35.0	8	40.0	
Age at first birth (years)					
19-26	9	45.0	13	65.0	
27-34	7	35.0	2	10.0	
>35	4	20.0	5	25.0	
Type of family					
Nuclear family	13	65.0	15	75.0	
Joint family	3	15.0	5	25.0	
Extended family	4	20.0	0	0.0	
Number of members in family					
2	1	5.0	2	10.0	
3	9	45.0	8	40.0	
4	6	30.0	7	35.0	
More than 4	4	20.0	3	15.0	
Education				-	
Primary	1	5.0	2	10.0	
Secondary	5	25.0	8	40.0	
Pre-University	8	40.0	8	40.0	
Diploma	2	10.0	0	0.0	
Graduate	3	15.0	2	10.0	
Post graduate	1	5.0	0	0.0	
Occupation					
Private employee	6	30.0	2	10.0	
Government employee	7	35.0	9	45.0	
House wife	1	5.0	0	0.0	
Daily wager	6	30.0	9	45.0	

Continued.

Variables	Experimental group		Control group	
v ar rables	Ν	%	Ν	%
Family income (Rs.)				
<10000	2	10.0	6	30.0
10001-20000	5	25.0	5	25.0
20001-30000	7	35.0	6	30.0
30001-40000	1	5.0	0	0.0
40001-50000	4	20.0	0	0.0
50001 and above	1	5.0	3	15.0
Number of children				
One	11	55.0	10	50.0
Two	9	45.0	10	50.0
Subjects with children age (years)				
0-1	10	50.0	11	55.0
1-3	4	20.0	5	25.0
3-6	3	15.0	2	10.0
6-14	3	15.0	2	10.0
Residence				
Rural	10	50.0	8	40.0
Urban	10	50.0	12	60.0
Dietary pattern				
Vegetarian	7	35.0	12	60.0
Non vegetarian	2	10.0	8	40.0
Mixed	11	55.0	0	0.0
Source of information				
Family and relatives	4	20.0	4	20.0
Neighbours	5	25.0	8	40.0
Friends	3	15.0	0	0.0
TV/radio	2	10.0	2	10.0
Others	6	30.0	6	30.0

Table 2: Knowledge level of subjects in experimental group.

Level of knowledge	Pre-test group		Post-test group			
	Ν	%	Ν	%		
Inadequate knowledge	19	95.0	3	15.0		
Moderate knowledge	1	5.0	17	85.0		
Adequate knowledge	0	0.0	0	0.0		
Total	20	100	20	100.0		

Table 3: Attitude level of subjects in experimental group.

Level of attitude	Pre-test group		Post-test group		
	Ν	%	Ν	%	
Unfavourable attitude	20	100.0	16	80.0	
Moderately favourable attitude	0	0.0	4	20.0	
Favourable attitude	0	0.0	0	0.0	
Total	20	100.0	20	100.0	

Table 4: Comparison of pre-test and post-test knowledge scores of subjects in experimental group.

Groups	Pre-tes	Pre-test group Post-test group Me		Mean	Trobus	Df	Informa	
	Mean	SD	Mean	SD	difference	1 value	DI	merence
General concept	0.85	0.366	1.9	0.852	1.05	4.70	19	S
Supplementary nutrition	6.5	1.357	8	1.414	1.50	6.70	19	S

Continued.

Groups	Pre-test group		Post-test group		Mean	Troba	Df	Informa
	Mean	SD	Mean	SD	difference	I value	DI	merence
Nutrition and health education	1.55	1.395	2.95	1.276	1.40	3.82	19	S
Immunization	3.2	1.642	5.65	1.531	2.45	7.65	19	S
Pre-scholar non formal education	2.2	1.005	3.25	1.372	1.05	3.28	19	S
Overall	14.3	2.958	21.75	3.242	7.45	7.95	19	S

Note- S: significant.

 Table 5: Comparison of pre-test and post-test attitude scores of subjects in experimental group.

Groups	Pre-test group		Post-test group		Mean	Tyohyo	Df	Informa
	Mean	SD	Mean	SD	difference	1 value		Interence
General information on ICDS	5.85	2.134	9.45	3.052	3.6	6.79	19	S
Supplementary nutrition	6.1	1.917	10.2	1.704	4.1	7.55	19	S
Health check-up	3.9	1.483	6.5	2.212	2.6	5.57	19	S
Preschool non formal	78	1 704	10.8	1 222	3.0	6 70	10	S
education	7.8	1.704	10.8	1.322	5.0	0.70	19	3
Immunization	5.1	1.744	9.4	2.062	4.30	8.45	19	S
Overall	28.75	4.610	46.35	4.487	17.6	16.08	19	S

Note- S: significant.

DISCUSSION

Based on the data analysis, the following findings were reached: The current study sought to determine the Impact of structured awareness programme on behavioural outcomes regarding ICDS services and its utilization satisfaction among mother with children in selected rural and urban area of Bellary district, Karnataka.

The overall pretest and post knowledge scores of subjects in experimental group mean percent of mother on utilization of ICDS service was 37.63% with mean score 14.3 and standard deviation 2.958 was in pretest, where as in post-test 57.23% was mean percent, with mean score 21.75 and standard deviation 3.242. The study's findings corroborated those of Patil et al who assessed ICDS scheme understanding and use among mothers in an urban slum: community-based research. According to the report, there is strong awareness of the ICDS plan and its services (91.39%).¹² The use of such amenities was recorded at 77.48%. Children utilized more resources than women did. The women cited a lack of understanding (28%) household chores (24%) and a lack of need for benefits (18%) as the main causes of underutilization. Utilization of services provided by ICDS and socio-economic status were inversely related.

The overall pretest and post attitude scores of subjects in experimental group mean percent of mother on utilization of ICDS service was 28.75% with mean score 28.75 and standard deviation 4.610 was in pretest, where as in posttest 46.35% was mean percent, with mean score 46.35 and standard deviation 4.487. The study's findings corroborated those of Murthy et al who assessed effect of introducing homestead gardens & backyard poultry and health and nutrition education on improving the diet of

women and children in rural India.¹³ The KAP survey replies revealed, according to that study, that the proportion of households cultivating homestead gardens climbed from 30% initially to over 70% ultimately. Green leafy vegetable cooking grew from 1.9 to 2.4 times per week on average. From 21 in the original survey to 45 in the most recent study, more households were cooking GLV over three occasions per week. Egg consumption frequency and volume more than quadrupled weekly in homes using BYP. Over the course of the three-year trial period, data from the ICDS indicated a progressive decrease in the percentage of 6 to 24-month-old infants suffering from moderate-to-severe malnutrition.

Findings revealed that there stated hypothesis H01- the mean post-test knowledge scores will not be significantly higher than pre-test scores were rejected. H02- the mean post-test attitude scores will not be significantly higher than pre test scores was rejected.

Recommendations

The study shown that a short-term intervention program focusing on ICDS services and their use may be helpful to increase mother and child care users' satisfaction levels. A large sample cross-sectional investigation is required to generalize the findings and improve the supporting evidence. In a comparison analysis, the optimum method for teaching using various instruments may be discovered. Extension of community-based, culturally relevant prenatal screening programs and parental education in schools. Training programs need to be examined to make sure they equip health professionals with the necessary skills. In the rural community, all mothers and infants should always have access to a maternity and child health care practitioner who is suitably skilled and qualified. The discontinuity in healthcare for mothers has a number of negative effects, including death and morbidity. Care continuity is related to care quality, and it is unlikely that treatment will be secure, patient-centred, economical, or clinically successful without it.

Limitations

Only one domain that is knowledge ad attitude was considered in the present study. The study was conducted in one area, which restricts the generalization.

CONCLUSION

The structured awareness programme on ICDS services and its utilization among mothers proved its beneficial effects in terms of satisfaction, awareness and attitude level. This study made an impact on mothers in utilization of government services for maternal welfare in preventing infant mortality and appropriate growth and development.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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