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A Study to Assess the Effectiveness of Structured Teaching Programme on Infant and Young Child Feeding (IYCF) Practices among Mothers at Paediatric Wards of S.V.R.R.G.G. Hospital, Tirupati

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Abstract

Background: Breast feeding practices play an important role in reducing mortality and morbidity among children. The optimal infant and young child feeding practices during the first 2 years of life is of paramount important. Infant need to be fed 5-6 times a day in addition to breast feeding.

Objectives of the Study: The objectives of this study was to assess the knowledge and knowledge on practices on IYCF among mothers of infants and young children, to assess the effectiveness of structured teaching programme on IYCF practices among mothers of infants and young children and to find the association between demographic characteristics and the knowledge on IYCF practices among mothers of infants and young children.

Material and Method: A pre experimental research design was adopted using non-probability convenient sampling technique among 50 respondents from 1st march to 31st march 2019.

Results: Of the total 50 mothers in pre test regarding knowledge on IYCF, 18(36.0%) had inadequate knowledge, 28(56.0%) had moderate knowledge, 4(8.0%) had adequate knowledge. And in post test 4(8.0%) had inadequate knowledge, 22(44.0%) had moderate knowledge, 24(48.0%) had adequate knowledge. Of the total 50 mothers in pre test regarding knowledge on practices related to IYCF, 10(20.0%) had inadequate knowledge, 30(60.0%) had moderate knowledge, 10(20.0%) had adequate knowledge. And in post test 6(12.0%) had inadequate knowledge, 23(46.0%) had moderate knowledge, 21(42.0%) had adequate knowledge.

Conclusion: This study proved that the knowledge of mothers had been markedly increased after providing health education. And health education needs to be strengthened for target population having sub-optimal breastfeeding indicators.

Keywords: Infant and young child feeding practices, complementary feeding, knowledge.

Introduction

Children constitute a major proportion of the global population today. They are truly the foundation of a nation. “A healthy child is a sure future” is one of the themes of WHO.[1] India registers the highest number of child deaths across the globe. The high prevalence of malnutrition contributes to over 50 percent of child deaths. Infants and young children are at an increased risk of malnutrition from six months of age onwards, when breast milk alone is no longer sufficient to meet all their nutritional requirements and complementary feeding should be started.[2]

Breast feeding should continue together with complementary feeding up to and beyond second year

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of life. However, infant feeding practices have cultural, social and economical roots making malnutrition more than a medical problem. It has been indicated in many studies all over the world that these practices are the subjects strongly influenced by customs, beliefs, superstitions, religion, culture pattern, mother's education and socio economic status of the family.[3]

A critical period of child growth is in the first 2-3 years of life when growth faltering is common and exclusive breast feeding in the first 6 months and appropriate complementary feeding after 6 months are essential to meet the nutritional needs of the growing child. In addition to lack of access due to limited availability and affordability of a diverse diet, traditional home-prepared complementary foods in many contexts are either too viscous or watered down, monotonous and have low energy and micro nutrient density and poor protein quality.[4]

The level of child under nutrition remains unacceptable throughout the world, with 90% of the developing world's chronically undernourished children living in Asia and Africa.[5]

We are still far from a world without malnutrition. While the 2019 edition of the joint malnutrition estimates shows that stunting prevalence has been declining since the year 2000, nearly one in four – 149 million children under 5 –were stunted in 2018, and over 49 million suffered from wasting. Meanwhile, the number of overweight children worldwide has remained stagnant for more than a decade.

In 2018, three regions had very high rates of Stunting with approximately one third of children affected. On the other hand, four regions had low or very low rates of stunting. However, vast disparities within the low prevalence regions can exist. In Latin America and the Caribbean, for example, despite the low rate overall, some individual countries faced medium, high, and in some cases very high stunting rates. Chronic under nutrition in Latin America and the Caribbean can vary widely between neighbouring countries: In one country less than 1 in 8 are affected, while nearly 1 in 2 of their peers in the country next door are at a disadvantage due to the irreversible physical and cognitive damage that can accompany stunted growth.

In 2018, 21.9 per cent, or just under one in four children under age 5 worldwide had stunted growth. That said, overall trends are positive. Between 2000 and 2018, stunting prevalence globally declined from 32.5 per cent to 21.9 per cent, and the number of children affected fell from 198.2 million to 149.0 million. In 2018, nearly two out of five stunted children lived in South Asia while another two out of five lived in Sub-Saharan Africa.

In 2018 globally, 49 million children under five were wasted of which nearly 17 million were severely wasted. This translates into a prevalence of 7.3 per cent and 2.4 per cent, respectively. In 2018, more than half of all wasted children lived in South Asia and about one quarter in sub-Saharan Africa, with similar proportions for severely wasted children. At 15.2 per cent, South Asia's wasting prevalence represents a situation requiring a serious need for intervention with appropriate treatment programmes. Under-five wasting and severe wasting are highly sensitive to change. Thus, estimates for these indicators are only reported for current levels (2018). The prevalence of wasting in South Asia is very high, at 15.2 per cent.[6]

Need for Study

The incidence of malnutrition rises sharply during the period from 6 to 18 months of age in most countries and the deficits acquired at this age are difficult to compensate for in later childhood. There were 420 children admitted in Nutrition Rehabilitation Centre (NRC) in S.V.R.R.G.G.Hospital, Tirupati, between January 2018 to January 2019 due to Severe Acute Malnutrition (SAM).

Material and Method

The research design selected for the present study was pre-experimental one group pre-test and post-test research design. The study was conducted from 1st march to 31stmarch 2019 at paediatric wards of S.V.R.R.G.G. Hospital, Tirupati, Andhra Pradesh, India. Study population comprised of mothers having children of age group 0-23 months. A total of 50 eligible mothers were approached by non-probability convenient sampling technique. They were informed about the purpose of study and informed consent was obtained from the mothers. The data were collected by interview method using a pretested schedule. The study was carried out by using a structured interview schedule and structured teaching programme on Infant and young child feeding practices.

Results

The study revealed that out of 50 mothers, majority 62.0% (31) were in the Age group of 21-30 years and only 6.0% (3) were at the age group of more than 31 years; With regarding to Religion, majority 78.0% (39) were Hindu and only 2.0% (1) were Christian and others; In relation to Educational qualification, majority 28.0% (14) were having secondary education and only 22.0% (11) were having collegiate education; In relation to Occupation, 60.0% (30) were Home makers; whereas only 6.0% (3) were employee; With regard to Family income per month, majority 46.0% (23) were below Rs.5000 and only 4.0% (2) were Rs.15001 and above income status; Pertaining to Type of family, majority 46.0% (23) were Nuclear family and only 4.0% (2) were from extended family; In relating to place of residence, majority 52.0% (26) were from Semi urban and only 16.0% (8) were from rural; With regarding to Source of water supply, majority 60.0% (30) were using Bore water and only 4.0% (2) were using well water; Related to Mode of defecation, majority were 84.0% (42) were using sanitary latrines/toilets and only 6.0% (3) were using sulab souchalya. With regarding Home Gardening majority 64.0% (32) were not having and only 36.0% (18) were having Home gardening.

Table 1: Percentage distribution of level of knowledge regarding infant and young child practices among mothers of infants and young children

(N= 50)

Variables	Pre Test						Post Test					
	Inadequate		Moderate		Adequate		Inadequate		Moderate		Adequate	
	N	%	N	%	N	%	N	%	N	%	N	%
Knowledge	18	36.0	28	56.0	4	8.0	4	8.0	22	44.0	24	48.0

Table 1 Represents mother's level of knowledge regarding infant and young child feeding practices.

In Pre test - Out of 50 mothers, 18 (36.0%) had Inadequate knowledge, 28 (56.0%) had Moderate knowledge and 4 (8.0%) had Adequate knowledge.

In Post test - Out of 50 mothers, 4 (8.0%) had Inadequate knowledge, 22 (44.0%) had Moderate knowledge and 24 (48.0%) had Adequate knowledge.

Table 2: Percentage distribution of Level of Knowledge on Practices regarding Infant and young child feeding among mothers of infants and young children

(N = 50)

Variables	Pre Test						Post Test					
	Inadequate		Moderate		Adequate		Inadequate		Moderate		Adequate	
	N	%	N	%	N	%	N	%	N	%	N	%
Knowledge on Practice	10	20.0	30	60.0	10	20.0	6	12.0	23	46.0	21	42.0

Table 2 Reveals mothers level of Knowledge on Practices regarding Infant and young child feeding.

In Pre test - 10 (20.0%) had Inadequate knowledge, 30 (60.0%) had Moderate knowledge and 10 (20.0%) had Adequate knowledge.In Post test - 6 (12.0%) had Inadequate knowledge, 23 (46.0%) had Moderate knowledge and 21 (42.0%) had Adequate knowledge.

Table 3: Effectiveness of structured teaching programme on IYCF Practices among mothers of infants and young children.

(N = 50)

Score	Pre-test			Post-test			t-value	P-value	Significance
	Mean	N	SD	Mean	N	SD			
Knowledge	10.64	50	3.225	13.56	50	2.674	5.902	0.00	**
Practice	5.94	50	1.867	7.14	50	1.667	4.529	0.00	**

Significance: ** = Significance at P < 0.01 level, * = Significance at P < 0.05 level

NS = Not significant

Discussion

The discussion of the present study is based on findings obtained from descriptive and inferential statistical analysis of collected data. It is present in view of the objectives of the study.

The First Objective of the study to assess the knowledge and knowledge on practices on Infant and young child feeding among mothers of infants and young children.

In present study, table 1 represents mother's level of knowledge regarding infant and young child feeding practices. In Pre test: Out of 50 mothers, 18 (36.0%) had inadequate knowledge, 28 (56.0%) had moderate knowledge and 4 (8.0%) had adequate knowledge. In Post test: Out of 50 mothers, 4 (8.0%) had inadequate knowledge, 22 (44.0%) had moderate knowledge and 24 (48.0%) had adequate knowledge.

And table 2 reveals mothers level of knowledge on practices regarding infant and young child feeding. In Pre test: 10 (20.0%) had inadequate knowledge, 30 (60.0%) had moderate knowledge and 10 (20.0%) had adequate knowledge. In Post test: 6 (12.0%) had inadequate knowledge, 23 (46.0%) had moderate knowledge and 21 (42.0%) had adequate knowledge.

The results of the present study are supported by **Mency Simon C, Neena M Sebastian** et al., in 2014 on Knowledge Regarding Breast Feeding among Primi Mothers in selected Hospital of Bangalore, Karnataka. The study was carried out with 30 primi mothers. The study results revealed that 77% have inadequate knowledge and only 23% of them have moderately adequate knowledge regarding breastfeeding. The mean knowledge score of the primi mothers was 8.39 with the standard deviation of ±1.55. There was significant association between the knowledge scores of the primi mothers and their education ($P < 0.05$). There was no significant association between the knowledge score and age and type of family ($P > 0.05$). There is inadequate knowledge regarding breastfeeding among primi mothers. Hence there is the immediate need to create awareness regarding breastfeeding to the mothers to improve their breastfeeding practice.[7]

The Second objective of the study to assess the effectiveness of structured teaching programme on IYCF practices among mothers of infants and young children.

In the present study, table 3 indicates that there is a significant improvement in the level of knowledge and knowledge on practices related to infant and young child feeding at $P < 0.01$ level.

The results of the present study are supported by **Miss. More Ujwala Ramchandra1, Dr. Vaishali R Mohite et al.,** in 2017 conducted a study to assess the Effectiveness of Planned Teaching Program on Knowledge Regarding Intervention of Weaning Diet among Mothers of Infant Admitted in Krishna Hospital Karad. An Institution based cross sectional study design was used to assess Knowledge weaning of infants among mothers admitted in Krishna Hospital Karad". From January 9th April to 15th April 2017 sample collection & up to May data analysis done. A total of 50 infant's mothers were taken, interviewed with structured questionnaire. Out of 50 Mothers of infant in pre test 15(30%) having poor knowledge, 35(70%) having average knowledge, 0(0%) having good knowledge. post test shows 0% poor knowledge, 39(78%) having average knowledge, 11(22%) having good knowledge. Where P value is 0.0002 which is <0.5 knowledge and have significantly associated. The outcome of the study is that the increase in the knowledge score of infants mothers after the administration of planned teaching programme.[8]

The Third objective of the study to find out the association between demographic characteristics and the level of knowledge on IYCF practices among mothers of infants and young children.

In Pre test - level of knowledge regarding IYCF in association with demographic characteristics shows age of the mother, education qualification, type of family and source of water supply were significant at $P < 0.05$ level. In Post test - age, religion, educational qualification, occupation of the mother, family income, type of family and home gardening were significant at $P < 0.05$ level.

In Pre test - level of knowledge on practices regarding IYCF in association with demographic characteristics shows age of the mother, educational qualification, occupation, family income and source of water supply were significant at $P < 0.05$ level. In Post test - age, educational qualification, family income, place of residence, source of water supply and mode of defecation, type of family and home gardening were significant at $P < 0.05$ level.

The results of the present study are supported by **S. Kavitha, C. Nadhiya and Dr. Parimalavalli** in 2013 to

assess complementary feeding practices among mothers of infants aged six months to one year. A hospital-based cross sectional study was conducted at one private hospital in Salem, Tamil Nadu. The study was carried out with 50 mothers of infants. The study results revealed that there is a significant association between initiation and type of complementary foods respectively with residence area and maternal education and family income at $P < 0.005$ level.[9]

Conclusion

The data proved that the knowledge of mothers had been markedly increased after structured teaching programme. Irrespective of demographic variables the mothers improved their knowledge after receiving structured teaching programme. Hence direct education could bring about improvement in the knowledge and change in desired behaviour.

Conflict of Interest: None

Funding: Self

Ethical approval: The ethical approval was obtained from ethical committe, college of nursing, svims.

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