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A Study to Assess the Knowledge and Correlate Feeding Methods Practiced by Mothers and Nutritional Status of their Children in a Selected Private Hospital Bangalore with View to Develop Self-Instructional Module

Padmanjali C B

M.Sc. Nursing, Lecturer, Child Health Nursing Department, Padmashree Institute of Nursing Banglore Karnataka, India
Corresponding Author Email*kiranpadma2013[at]gmail.com*

Abstract: ***Malnutrition is a significant health problem in many countries as well as in India. It is mainly due to fallacious dietary habits which might leads to illness and infection in early childhood period and inadequate food intake will contribute to nutrition deficiencies and underweight in most of the children in India. According to recent studies, over a 3rd of all deaths in youngsters aged 5years or younger is due to under nutrition. Nutrition deficiency greatly interferes India's socio -economic development and chance to scale back economic condition. There is an essential window of chance to stop under nutrition by taking care of the nutrition of young children within the first 2 years of life, women throughout adolescence, and mothers throughout maternity and lactation – once proved nutrition interventions supply kids the simplest likelihood to survive and reach best growth and development.[1] Methodology: A descriptive survey approach was used to correlate feeding methods practiced by mothers and nutritional status of their children in a selected Hospital at Bangalore. Simple random sampling technique was used. Samples consist of 100 mothers of reproductive age group and 100 children the age between 0-5 years of same mothers. Result: Breast feeding aspect highest score was 9 and response on feeding methods practiced by mother mean 6.98, mean percentage 77.56% and SD 0.84. Weaning aspect highest score 10 and response on feeding methods practiced by mother mean 7.11, mean percentage 71.10% and SD 1.08. Family diet highest score 11, mean 5.28, mean percentage 48% and SD 1.96. As per breast feeding methods practiced by mothers, (<50%), 56 percent had moderately satisfactory (51-75%) and 44 percent had satisfactory level (>75%) of breast-feeding practices. As per weaning methods practiced by mother's 38 percent had not satisfactory (<50%) weaning practices, 50 percent had moderately satisfactory (51-75%). weaning practices and 12 percent had satisfactory feeding practices (>75%). As per family diet; 46 percent had not satisfactory feeding practices (<50%), 51 percent had moderately satisfactory (51-75%) and 2 percent had satisfactory feeding practices (>75%). Correlation between scores of feeding methods practiced by mothers and selected nutritional parameters of their children revealed that higher the knowledge level of respondents on feeding practices, better Is the outcome of nutritional parameters. That is, there exist a positive moderate relationship between feeding method practiced by mothers and present weight (r=0.1759), height (r=0.1524) and chest circumference (r=0.1162) of the study group. that there is statistically significant association between feeding methods practiced by mothers and demographic variables of mothers such as Family Income, education and occupation. The remaining variables are found non-significant. No significant association was found between feeding practices and anthropometric variables of children like age, gender, birth order, present weight, height, and chest circumference at p<0.05level. Conclusion: There exist a positive moderate relationship between feeding method practiced by mothers and present weight (r=0.1759), height (r=0.1524) and chest circumference (r=0.1162) of the study group the researcher concluded that there is positive correlation between feeding methods practiced by mothers and nutritional parameters of their children. Hence the score is positive the hypothesis was accepted.***

Keywords: Malnutrition, Nutrition deficiency, descriptive survey approach, feeding methods practiced, Correlation

1. Introduction

World Health Organization (WHO) additionally recommends exclusive breastfeeding for the first six months of a baby's life, followed by extra semi-solid foods to enhance breast milk. Breastfeeding ought to well be continuing up to a minimum of a pair of years of recentt so as to guard the kid from varieties of deficiency disease.[2]

Complementary feeding is introducing a spread of foods bit by bit to a baby, along with the standard milk feeds, till he or she feeds the constant healthy foods. The commutation stage is a chance to intensify ingestion as a well-balanced diet as well as a spread of foods and facilitate folks originated sensible ingestion habits and a healthy diet for a healthy life for his or her youngsters, the alternate part from exclusive breastfeeding to family foods, brought up as complementary feeding, usually covers from 6 months to 18-24 months that may be a vulnerable period of childhood. It's the stage to get deficiency disease in several infants, presenting doubtless to the high prevalence of deficiency disease in youngsters less than 5 years old world-wide. World Health Organization estimates that a pair of out of five are having deficiency.[3]

A comprehensive programme that approaches to rising complementary feeding practices includes timely introduction of age-appropriate and hygienically prepared complementary foods, counsel for caregivers on feeding and care practices and on the best use of domestically on the market foods, rising access to quality foods for poor families through social protection schemes and safety nets, and also the provision of fortified foods and matter supplements once required. Nutriment and mineral deficiencies square measure extremely rife throughout the developing world. Irreversible

harm to their growth, psychological feature development, college performance, and future productivity as adults. United Nations International Children's Emergency Fund supports the govt. in its objectives to scale back and forestall deficiency disease, and to enhance the event of youngsters beneath three-years-old, particularly those in marginalized teams. [4]

A study was conducted on Infant at the Age of 6 Months in relation to Feeding Practices, Iron Status, and Growth in a Peri-Urban Community of South Africa concluded that Prevalence of anemia and stunting for the infants were 36.4% and 28.5%, respectively. Multiple regression analysis showed that birth weight was related to combined psychomotor scores as well as parent rating scores 'Length-for- age z-scores were associated with combined psychomotor scores (β = -1.419 (-2.466, 0.373), p=0.008), as well as parent rating scores (β=-0.747(-1.483, -0.010), p=0.047).[5]

A study was conducted on Mother and child nutrition among the Chakhesang tribe in the state of Nagaland, North-East India and the results showed that the prevalence of underweight, stunting, and wasting among children <5 years of agewas14%, 22%, and 7%, respectively. The prevalence of anemia and vitamin A deficiency was 26% and 33% among children <5 years, whereas it was 33% and 26%, respectively, among mothers. Hypertension was observed in 16% of women, whereas diabetes was seen in 0.8%. Approximately 35% and 24% of HHs suffered mild or moderate food insecurity, respectively, which was associated with literacy of the parents, family income, and family size. Utilization of the rich agro biodiversity and wild foods by the Chakhesangs appears to be a strong reason for their better nutritional and health status as compared to the rest of India.[6]

A study was conducted on nutritional status of infants in relation to their complementary feeding practices. In associate urban slum community of central Karnataka concluded that Prevalence of Exclusive breastfeeding for six months was 68%. Complementary foods were introduced at acceptable age in 55% of infants. 72%of infants were receiving thick (energy dense) complementary foods. 61% were fed adequate quantity of complementary foods. The prevalence of wasting at one year was thirty fourth and aerobatics was thirty second. Higher prevalence of deficiency disease was noticed in infants in whom complementary feeding was started before 6 months.[7]

A study was conducted on nutrition status and feeding practices within the study space concludes that stunting level was 32% whereas wasting was 3% and underweight at 10%. Most of the index children (78%) started breastfeeding within the primary hour of birth. And at regional level, nutrition status and feeding practices with in the study space were poor. The values of these indicators were not significantly changed by allocated intervention status. a lot of effort was required to comprehends distinction in nutrition and feeding practices in selected intervention areas.[8]

A study was conducted on Feeding Practices and Determinants of the nutrition standing of Pupils during a Public grammar school in Aladdin Owerri, African country all over were there have been a lot of females 158(52.7%) than males whereas the mean and median ages were nine.7±0.3and10.6±0.3yearsseverally.200 and sixty 5 (88.3%) of them fed a minimum of thrice daily, 92(30.7%) skipped breakfast frequently, whereas 215(71.7%) had college meals throughout break amount. there have been statistically important associations between Body Mass Index for age (Underweight, traditional and Overweight body fluid Obese) and [sex (p=0.0121); range of siblings (p=0.013), mothers' academic standing (p=0.001) and range of meals per day (p=0.005)] severally. [9]

2. Objectives of the Study

1) To assess the feeding methods practiced by mothers.
2) To assess the nutritional level of children.
3) To find out the correlation between the feeding methods practiced by mothers and the nutritional status of their children.
4) To find out the association between feeding methods practiced by mothers and their children with selected variables.

Hypotheses

H_1: There will be positive correlation between feeding practices of mothers and nutritional status of their children**.**

H2: There will be significant association between feeding methods practiced by mothers and their children with selected variables.

Assumptions of the Study

1) Most of the mothers may not have adequate knowledge about feeding practices
2) Children are prone to develop nutritional disorder due to ineffective feeding practices

3. Conceptual Framework

The Conceptual Framework for the study to correlate feeding methods practiced by mothers and nutritional status of the children is relevance on health belief model. As it is appropriate as abstract framework for this study. Mothers feeding practices relating to nursing, substitution and family diet will be changed by health education and knowledge by health personnel. Mothers will apply this data in taking care of their youngsters.

4. Material and Methods

In this study, a descriptive survey approach was used to correlate feeding methods practiced by mothers and nutritional status of their children in a selected Hospital at Bangalore.

The fact-finding design selected for this study was descriptive correlative design. The aim of a descriptive co-relational design is to explain variables and examine relationships among these variables. Simple random sampling technique was found to be apt for the study. In the present study samples consist of 100 mothers of reproductive age group and 100 children the age between 0-5 years of same mothers.

Inclusion Criteria

1) Mothers of children who were 0 to 5 years old.
2) Both female and male gender children.

Exclusion Criteria

1) Mothers who have disable children both physically and mentally.
2) Mothers who did not have their children along with them during data collection process.

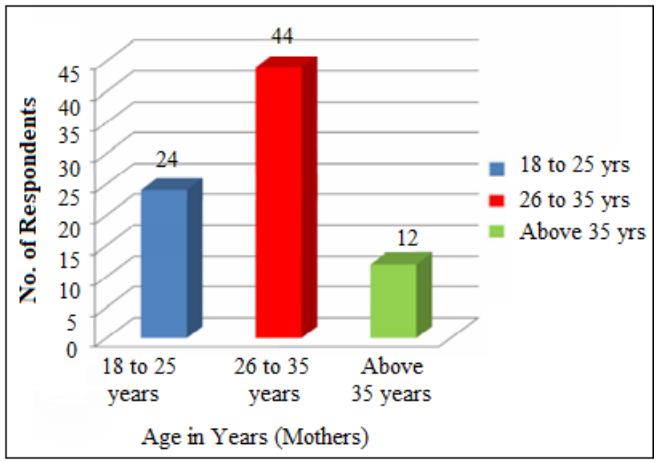
Description of the Tool: Structured interview schedule was comprised of three sections.

Section A: Demographic Variables: The first part of the tool consists of 13 items in that 9 are related to mother's background such as age, number of children, religion, education, occupation, duration of married life, family income, type of family, source of information regarding feeding practices and remaining 4 items are related to child's age, gender, birth order and presence of other problem.

Section B: Check List: It consist of 30 questions to assess the feeding methods which was practiced by mothers such as breast feeding, weaning and family diet and the Total score is 30. The Maximum Score is 30 and the Minimum Score is 0. Each correct answer was given 1 score while the wrong answer was been given 0 score.

Section C: Anthropometry Measurement: height, weight and chest circumference of the child were measured.

Frequency distribution and percentage of demographic variables of mothers and their children

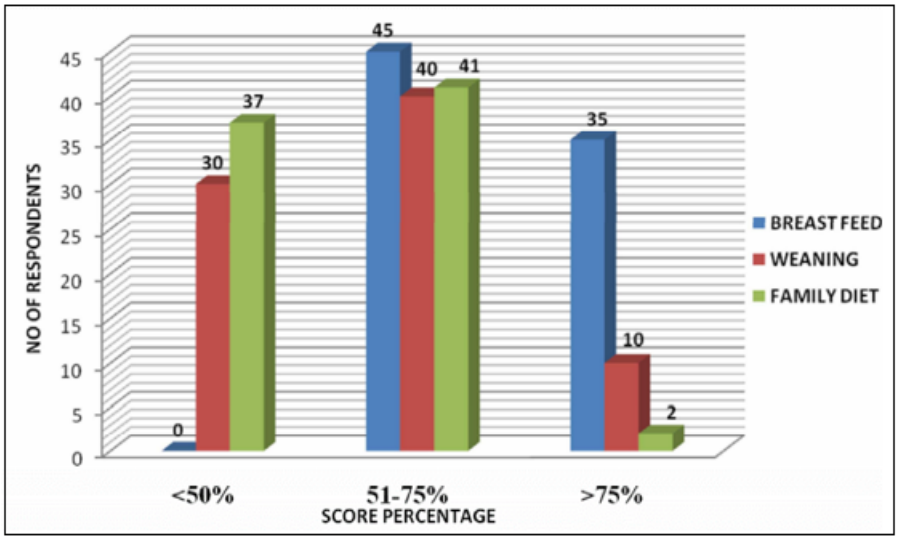


Frequency and percentage distribution of the mothers by age

Area Wise Classification of Respondents on Feeding Methods Practiced by Mothers

Correlation between Feeding Methods Practiced by Mothers and Selected Nutritional

Parameters of their Children



S. No.	Spear man's correlation between the scores of feeding methods practiced by mothers and selected nutritional parameters of children	Spearman's correlation value
1	Present weight (kgs)	0.1759
2	Height	0.1524
3	Chest Circumference	0.1162

Association between Feeding Practices and Selected Variables of Mother

Variable	Category	Feeding practices score		Chi- square	df	Table value
		≤Median	>Median			
Age (yrs.) ▪	18 to 25 yrs.	13	11	2.0394	2	5.99
	26 to 35 yrs.	23	21			
	Above 35 years	9	3			
Religion▪	Muslim	3	1	1.0027	2	5.99
	Hindu	28	25			
	Christian	14	9			

Type of Family▪	Nuclear	13	10	0.0081	2	5.99
	Joint/Extended	17	13			
	Separated	15	12			
Education▪	Illiterate	1	0	**45.157***	4	9.48
	Primary	19	1			
	Secondary	18	4			
	Higher Secondary	5	5			
	Graduate	2	25			
Occupation▪	House wife	36	20	**10.753***	4	9.48
	Government	1	0			
	Private	5	14			
	Business	1	1			
	Agriculture	2	0			
Income▪	Below 5000	29	8	**23.952***	3	7.81
	5000-10000	9	3			
	10001-15000	3	6			
	Above 15000	4	18			
Duration of Married life	Below 2 years	4	7	5.979	3	7.81
	2-5 years	22	14			
	5-8 years	12	13			
	Above 8 years	7	1			
Source of information▪	Family member	25	17	4.051	3	7.81
	Radio/TV/Media	0	2			
	Health personal	20	15			
	Magazine/Newspapers	0	1			

* Significance at p<0.05 level.

Chi-square established at 0.05 level of significance denotes that the association between feeding practices and demographic variables such as education, occupation and income were statistically significant. However, the Chi-square value established at 0.05 level of significance denotes that the association between feeding practices and demographic variables like age, religion, type of family, duration of married life, and source of information were not statistically significant.

Association between Feeding Practices and Selected Variables of Children, n = 100

Variables	Category	Total feeding practices score		Chi- square value	df	Table value
		≤Median	>Median			
Present weight in kg	≤Mean	24	21	0.356	1	3.841
	>Mean	21	14			
Height (cms)	≤Mean	18	17	0.588	1	3.841
	>Mean	27	18			
Chest Circumference (cms)	≤Mean	36	27	0.096	1	3.841
	>Mean	9	8			
Age of Child (months)	0-1 yrs	13	11	0.114	2	5.99
	1- 3 yrs	17	12			
	3-5 yrs	15	12			
Gender	Male	22	11	2.477	1	3.841
	Female	23	24			
Birth order	First	22	26	5.45	2	5.99
	Second	19	8			
	Third	4	1			

No significant association was found between feeding practices score and variables of children like present weight, height, chest circumference, age of the child and gender and birth order of child at P<0.05 level.

5. Major Findings of the Study

1) Findings regarding the Demographic Characteristics of the respondents

Among 100 mothers, 55 % of them were between 26-35 years. Religion wise 66 percent among the total respondents were Hindus. 38 percent of them lived in joint families Education wise 28 percent had secondary school education, Occupation wise, 70 percent of them were housewives. Family income wise, 46 percent of them had an income of below Rs.5000. Among the total mother respondent's 45 percent had duration. And 10 percent had duration of above 8 years of married life.53 percent of the mothers attributed family members / friends as the source of information on feeding practices, Among 100, 3 to 5 years of age. 60 percent were first born, 59 percent of them were females and 41 percent of them were males.

2) Findings pertaining to Area wise Classification of Feeding Methods practiced by Mothers

Breast feeding: 56 percent satisfactory and none of them had not satisfactory feeding practices. **Weaning**: 50 percent satisfactory. **Family diet**: 51.25 percent satisfactory

3) Correlation between Feeding Methods Practiced by Mothers and selected Nutritional Parameters.

Finally, it is found that there is a positive moderate correlation between feeding methods practiced by mothers and nutritional status of their children. Spearman's Rank Correlation value to correlate the feeding methods practiced by mothers and selected nutritional parameters of children is found to be r=0.1759 for the present weight r=0.1524 for height, and r=0.1162 for chest circumference.

4) Association between Demographic Variables and Feeding Methods Practiced by Mothers

There were significant association between demographic variables like education, occupation and family income of mothers and feeding methods practiced by mothers. However, there was no significant association between demographic variables such as age, religion, type of family, income, duration of married life, birth order, age of the child, gender and source of information

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Conflict of Interest

Researcher does not have any Conflict of Interest

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