

Reported Weaning Practices And Child Growth Among The Mothers And Their Children Attending Immunization Clinic

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Abstract: *The recent concepts of infant and young child feeding practices advocate that breast feeding should be started immediately after birth and continued till six months to two years or beyond with appropriate weaning and adequate weaning diet after six months. The weaning should be timely and adequate. Lack of basic knowledge regarding nutritional needs of infants and child rearing is a universal problem in India and there is much evidence today to suggest that infant mortality rate can be brought down by making all mothers aware of the nutritional needs of infants and child rearing. Poor infant feeding practices directly or indirectly contribute to under nutrition, morbidity and mortality in infants. When potential problems are identified early, health professionals and parents can work together to initiate action before the child's nutritional status or health are seriously compromised. Hence the investigator had taken up "A study to assess the reported weaning practices and child growth among the mothers and their children attending immunization clinic in selected PHC, Bangalore with a view to develop an information booklet". The research design adopted for this study is a descriptive design. By using purposive sampling method, 109 children and their mothers were selected for the study from Dommasandra PHC, immunization clinic. Check list was used to assess the reported weaning practices and anthropometric measurements of the children were taken by using salter's spring balance and inch tape. The collected data were analysed using descriptive and inferential statistics. The study revealed that only 10(9.2%) mothers had very good weaning practices and 32(29.4%) had poor weaning practices. Under the growth assessment of the children according to weight 23(21.1%) were normal, 16 (14.7%) were 1st degree malnutrition, 22(20.2%) were 2nd degree malnutrition, 30(27.5%) were 3rd degree malnutrition and 18(16.5%) were 4th degree malnutrition. Under the growth assessment according to height 14(12.8%) were 1st degree malnutrition, 16(14.7%) were 2nd degree malnutrition, 27(24.8%) were 3rd degree malnutrition and 10 (9.2%) were 4th degree malnutrition. There was no significant association found between selected variables like age, education, income, occupation, no: of children, religion, type of family, source of information except Weight of the children and weaning practice and height and weight of the children. In conclusion only 9.2% of mothers of children had very good weaning practices and there was an association between type of food and degree of malnutrition based on weight ($\chi^2=10.8, p=.004, p<0.05$). The present study concluded that lack of food is not the sole cause of malnutrition. Lack of awareness and knowledge about feeding, amount, frequency, type of food etc. contributes significantly to poor nutritional status among children.*

Keywords: *weaning practices, infant feeding, Nutritional status of children, Anthropometry assessment, malnutrition, Growth of the children, complementary feeding*

I. INTRODUCTION

Starting years of child lives are the formative years. Child needs special attention of mother, father and others who are entrusted with their care. The first three years of life are of

prime importance from the development point of view, so care during this stage has crucial influence on Childs growth and development. Active promotion of breast feeding for first six months of age helps in improving health and development of young children. In many countries, feeding of these children

does not receive adequate emphasis in child health programs. As a result, malnutrition in young children is very common.

UNICEF has coined the term malnutrition a “silent emergency” that endangers women, children, society and the future of mankind. There is a growing realization that good and adequate nutrition is a necessary step in improving the quality of life. The effective measures for the prevention of malnutrition and protection against infection in infancy is breast feeding and introduction of supplementary foods at proper age. Infant feeding and weaning practices have cultural, social and economic roots make malnutrition more than a medical problem. Optimal infant and child feeding practices rank among the most effective interventions to improve the child health. Over 6 million deaths (55% of the 12 million children under 5 years of age) each year in developing countries from infectious diseases can be attributed to malnutrition. In the developing world one out of every 5 persons is chronically undernourished and about 2000 million children under five years of age suffer from malnutrition⁴. WHO and UNICEF global recommendations for optimal infant feeding as set out in the Global strategy are exclusive breast feeding for first six months (180 days), nutritionally adequate and safe complementary feeding starting from the age of six months with continued breast feeding up to two years of age or beyond. The WORLD HEALTH ORGANIZATION has given definition of weaning as “Weaning is the process by which an infant gradually becomes accustomed to an adult diet [WHO (2003)].” The concise Oxford dictionary to wean mean is to teach the sucking child to feed otherwise than from the breast.

Weaning is practiced from the ancient period. According to Indian tradition the ceremony of “ANNAPRASANAM” (feeding baby at first time) is performed at time of giving first food to the baby. Generally, the first is cooked food. This can be prepared from wheat, rice, maize or raggi flour. Weaning has crucial role in child development. From the age of six months, an infant need for energy and nutrients starts to exceed what is provided by breast milk and complementary feeding becomes necessary to fill the energy and nutrient gap. If complementary foods are not introduced at this age or if they are given inappropriately, an infant’s growth may falter. In many countries the period of complementary feeding from 6-23 months is the time of peak incidence of growth faltering, micronutrient deficiencies and infectious illnesses. Complementary foods need to be nutritionally adequate, safe and appropriately fed in order to meet the young Childs energy and nutrient needs. Poor infant feeding practices are to a great extent a man-made problem, which directly or indirectly contribute to infectious illnesses, malnutrition and mortality in infants. Knowledge of attitudes and practices associated with infant feeding forms an essential first step for any ‘need felt’ intervention program designed to bring about positive behavioural change in infant health.

The first 2 years of life provide a critical window of opportunity for ensuring children’s appropriate growth and development through optimal feeding. Poor breast feeding and weaning practices are wide spread. Worldwide, it is estimated that only 34.8% of infants are exclusively breast fed for the first six months of life, the majority receiving some other food or fluid in the early months. Complementary foods are often

introduced too early or too late and are often nutritionally inadequate and safe. Especially rural mothers are ignorant about essentials of child care in terms of nutritional requirement, health care, feeding and weaning practices etc. Most of the mothers in rural areas of Bangalore have a lower socioeconomic background & they have only limited access to get adequate information regarding proper weaning Practices. Therefore, the researcher felt that it would be helpful to assess the weaning practices and child growth to prepare an information booklet based on the findings. It enhances the awareness related to good weaning practice and motivate them to prevent the consequences followed by improper weaning practice such as malnutrition, nutritional deficiencies, diarrheal, respiratory tract infections etc.

STATEMENT OF THE PROBLEM

A study to assess the weaning practices and child growth among the mothers and their children attending immunization clinic in selected PHC, Bangalore with a view to develop an information booklet

OBJECTIVES OF THE STUDY

- ✓ To assess the reported weaning practices among mothers of children attending immunization clinic.
- ✓ To assess the growth of children attending immunization clinic.
- ✓ To determine the association between weaning practices and child growth among the mothers and their children attending immunization clinic .

ASSUMPTIONS

- ✓ The mothers use some weaning practices.
- ✓ There will be a relationship between weaning practices and child growth

II. METHODOLOGY

RESEARCH APPROACH: The research approach adopted for this study was descriptive approach

RESEARCH DESIGN: The research design selected for this study was descriptive survey research design.

SETTING FOR THE STUDY: Study conducted in Dommasandra PHC Immunization clinic, Bangalore.

POPULATION: The population of the present study comprises children between the age group of 8 to 18 months and their mothers who are attending the immunization clinic.

SAMPLE: In this study the sample consists of 109 children and their mothers who are attending immunization clinic, Dommasandra PHC, Bangalore.

SAMPLE SIZE: Sample size for study comprised 109 children and their mothers who are attending immunization clinic at Dommasandra PHC.

SAMPLING TECHNIQUE: By using purposive sampling method, 109 children and their mothers were selected for the study.

SAMPLING CRITERIA

INCLUSION CRITERIA

- ✓ The children attending immunization clinic between the age group of 8-18 months and their mothers
- ✓ Mothers are able to follow instructions in Kannada and Hindi

EXCLUSION CRITERIA

- ✓ Children with chronic illness.
- ✓ Children with congenital illness

DATA COLLECTION INSTRUMENT

On the basis of the objectives and the conceptual frame work of the study, the following instruments were developed to collect data

- ✓ Section A: Structured interview schedule to obtain Demographic variables to find out baseline data.
- ✓ Section B: Check list to assess the reported weaning practices followed by the mothers.
- ✓ Section C: Growth chart for boys and girls (IAP)
- ✓ Section D: Salter’s spring balance and inch tape

VALIDITY AND RELIABILITY

The content validity of the tool was established by 15 experts. The tool was modified as per suggestions of the experts before pilot study. Language experts translated the tool to Kannada and back to English. The reliability of the tool was established by inter-rater technique. The tool was administered to 11 samples in same setting r was estimated by using Carlpearsons product moment formula $r=0.9$ and the tool was found to be reliable.

DATA COLLECTION PROCEDURE

Based on the permission obtained from the District Health Officer and medical officer of Dommasandra PHC, Mothers of children fulfilling inclusion criteria were selected by purposive sampling. Written informed consent was taken from the identified women after explaining the purpose of the study. Structured interview was conducted to elicit the demographic variables. Then weaning practices were assessed by using the check list. Growth of the children were assessed by taking anthropometric measurements (height, weight and head circumference) using inch tape and Salter’s spring balance were plotted in the IAP growth chart separate for girls and boys.

III. FINDINGS

DISTRIBUTION OF SAMPLES BASED ON SOCIO DEMOGRAPHIC VARIABLES

92(84.4%) mothers between the age group of 18-25 yrs, 71(65.1%) mothers were studied 6th-10th standard, 103(94.5%) were not working, 64(58.7%) mothers had only one child, 92(84.4%) were Hindus, 65(59.6%) were belonged to

nuclear family, 69(63.3%) mothers belonged to income group Rs. \leq 5000, 93(85.3%) were non-vegetarians, 93(85.3%) were non-vegetarian and 52(47.7%) had prior information about weaning from health care personnel. 26(23.9%) mothers who breast fed exclusively for six months, 109(100%) mothers who breast fed colostrum and 43 (39.4%) mothers started weaning before 5 months. 50(45.9%) were under the age group of 8-11 months, 44(40.4%) were males, 65(59.6%) were females and 70(64.2%) belonged to 1st birth order.

DESCRIPTION OF REPORTED WEANING PRACTICES

10(9.2%) had very good weaning practices, 67(61.5%) had good practices and 32(29.4%) had poor practices.

DESCRIPTION OF GROWTH OF THE CHILDREN ACCORDING TO WEIGHT

23(21.1%) children were normal, 16(14.7%) were under 1st degree malnutrition, 22(20.2%) were under 2nd degree malnutrition, 30(27.5%) were under 3rd degree malnutrition and 18(16.5%) were under 4th degree malnutrition.

DESCRIPTION OF GROWTH OF THE CHILDREN ACCORDING TO HEIGHT

42(38.5%) were normal, 14(12.8%) was under 1st degree malnutrition, 16(14.7%) were under 2nd degree malnutrition, 27(24.8%) were under 3rd degree malnutrition and 10(9.2%) were 4th degree malnutrition

	Normal (97 th percentile)		1 st /2 nd degree (75 th &50 th percentile)		3 rd /4 th degree (25 th percentile & 3 rd percentile)		Test of significance
	No	%	No	%	No	%	
Degree of malnutrition based on weight	23	21.1	38	34.8	48	44.1	Df=4 $\chi^2=24.75$ p=.00 p<0.05
Degree of malnutrition based on height	42	38.6	30	27.5	37	33.9	

Table 1: Chi square value showing association between degree of malnutrition based on height and weight of the children

The table 1 depict that there is an association between degree of malnutrition based on height and weight of the children. It is statistically significant ($\chi^2=24.75$, p=.00, p<0.05)

Weaning practice		Good no	%	Poor no	%	Test of significance
Weight of the children	Normal (97 th percentile)	22	8.6	1	3.1	
	1 st /2 nd degree (75 th &50 th percentile)	31	40.3	7	21.9	
	3 rd /4 th degree (25 th percentile & 3 rd percentile)	24	31.2	24	75	

Table 2: Chi square value showing association between degree of malnutrition based on height and weight of the children

Table 2 reveals that there is an association between weaning practice and degree of malnutrition based on weight

of the children. It is statistically significant. ($\chi^2=18.9$ $p=0.00$, $p<0.05$)

Type of food	Degree of malnutrition based on weight of the children						Test of significance
	Normal (97 th percentile)		1 st /2 nd degree (75 th &50 th percentile)		3 rd /4 th degree (25 th percentile &3 rd percentile)		
	No	%	No	%	No	%	
Veg	0	0	11	28.9	5	10.4	Df=2 $\chi^2=10.83$ $p=0.004$, $p<0.05$
Non veg	23	100	27	71.1	43	89.6	

Table 3: Association between degree of malnutrition based on weight of the children and type of food

Table 3 shows that there is an association between degree of malnutrition based on weight of the children and type of food. It is statistically significant ($\chi^2=10.8$, $p=0.004$, $p<0.05$)

IV. DISCUSSION

In this study, out of 109 samples, showed that 43(39.4%) started weaning before 5 months,22(20.2%) started weaning at five months,26(23.9%) started at six months,7(6.4%) started at seven months,2(1.8%) started at eight month and 9(8.3%) started after eight months. This result shows that only 7(6.4 %) mothers only stated weaning at correct age of the child (after 180 days). These findings of present study were comparable to the studies which proved that too long or delay in introducing appropriate complementary foods may, however, lead to nutritional deficiencies. Complementary feeding is also influenced by cultural practices, beliefs and knowledge of parents regarding appropriate practices. The present study revealed that mothers 10(9.2%) had very good weaning practices and 32(29.4%) had poor weaning practices.56(51.4%) mothers were used commercial food items like Cerelac, nestle and baby vita at the time of weaning. Only 53(48.6%) mothers started weaning with cereals such as raggi, rice and wheatporridge.56(51.4%) mothers started weaning with commercial food items.38(34.9%) weaning foods were prepared along with adult food and 71(65.1%) prepared separately. 61(56%)mothers had given food for their children before breast fed.46(42.2%) mothers started to give family diet before one year of age.22(20.2%) mothers had given drinks like tea and coffee for their children before the age of one year.73(67%) mothers was used feeding bottles to feed the infant.105(96.3%) mothers did not check the weight and growth monitoring even once a month of their children.81(74.3%) mothers mothers was not used separate container to feed the child.52(47.7%) mothers was not given breast feeding on demand after weaning started. 85(78%) mothers were prepared fresh meal every time to feed the infant. Present study shows a variety of social and cultural reasons such as superstition, lack of awareness and information regarding child care practices, early marriage and repeated pregnancies are causing malnutrition among children. In this study also revealed that association between weaning practices and degree of malnutrition based on weight of the children ($\chi^2=18.9$ $p=0.00$, $p<0.05$), type of food and degree of malnutrition based on weight of the children ($\chi^2=10.8$, $p=0.004$, $p<0.0$ and degree of malnutrition based on height and weight of the children ($\chi^2=24.75$, $p=0.00$, $p<0.05$). Present study results

and latest survey report and other study results shows mother educational level also determines child nutritional status. So, the health professionals should take initiation for promoting proper feeding and weaning practices through health education to mothers. It is essential for improving nutritional status of infants in developing countries as India.

V. CONCLUSION

The development potential of the society depends upon the level of physical and mental state of its children, for which early childhood lays the foundation. “The children of today are the future of tomorrow”; this powerful statement assumes special significance in our context as children comprise one third of the total population in the country. Children constitute not only a large group, but also a vulnerable or special risk group, because of their growth, development and survival. Childhood is also a vital period because that determines the overall development of an individual. The child has only one chance to develop normally and naturally and should not be suppressed by other priorities. A child’s right to develop normally should be the first and foremost priority.

Better infant feeding practices can make an important contribution to the reduction of mortality rates and in protection against the infantile malnutrition during the formative years of human life. Therefore, the present study aimed to assess the weaning practices and child growth and to prepare an information booklet based on the findings of the study. The findings of the study revealed that women had poor weaning practices as well as good weaning practices and inadequate knowledge about how it affects children health as a silent attacker.

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