

## **A STUDY TO ASSESS THE EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON LEVEL OF KNOWLEDGE REGARDING WEANING AMONG PRIMI MOTHERS IN PAEDIATRIC UNITS IN PRIVATE HOSPITALS OF DIFFERENT STATES, INDIA**

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### **ABSTRACT**

Breast milk is the best and safest food for young babies. It is important that babies should be given extra food as well as breast milk at the right age in sufficient amounts to enable them to grow and stay healthy. Weaning is the process in which an infant's diet pattern is gradually changed from liquid food like breast milk to solid foods which are supplementary food to the breast milk. These can be added after six months of infant's life because breast milk alone cannot provide the required amount of nutrients and so cannot sustain the growth of the infant after this age. Hence most important aspect of weaning is the introduction of solid food. At about six months of age, while breast feeding is being continued, addition of other food is essential to prevent growth faltering. Delayed introduction of additional food in an exclusively breast fed infant in malnutrition. Improper introduction of foods is fraught with dangers of diarrhea due to infection from unhygienic preparation. Malnutrition related to inadequate calorie intake due to low frequency of feeding and low calorie density of additional foods. Weaning should provide a pleasant experience, not a conflict for mothers and infants. Praise, loving attention, and cuddling are vital to successful weaning. A study was done to assess the effectiveness of self-instructional module on level of knowledge regarding weaning among primi mothers in Paediatric units in a private hospitals with the objectives to assess the level of knowledge among primi mothers regarding weaning before and after self-instructional module, to determine the effectiveness of SIM on weaning and to find out the association between knowledge score with their selected demographic variables. The nature of study was pre experimental. The study was conducted in pediatric units in Private Hospital, Dehradun. The conceptual framework used for this study is based on health belief model. The research design used for this study was one group pre-test post- test design. Data collected using non- probability sampling. The data was collected to assess the effectiveness of 40 primi mothers regarding weaning by level of knowledge score. Pretest analysis revealed that 67.5% primi mothers had inadequate knowledge, 32.5% primi mothers had moderate knowledge. Post test analysis revealed that 65% had adequate knowledge, 35% primi mothers had moderate knowledge.

Keywords : knowledge, effectiveness, SIM, weaning, primi mothers

### **INTRODUCTION**

In the first year of life, infants undergo periods of rapid growth when good nutrition is crucial. In fact, nutrition in the early years of life is a major determinant of healthy growth and development throughout childhood and of good health in adulthood. Breastfeeding is an excellent way to feed your baby in the early months and breast milk continues to be the best food for baby's first year. It is a complete food for the baby because it contains many immune cells which help the baby fight germs and infections without first falling ill. It also creates a psychological security and bond between the mother and child. Babies on mother milk are less likely to be overweight as adults than the one fed on formula feeds. The incidence of diabetes and intestinal diseases is also much lesser in a breast fed child.

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changed from liquid food like breast milk to solid foods which are supplementary food to the breast milk. These can be added after six months of infant's life because breast milk alone cannot provide the required amount of nutrients and so cannot sustain the growth of the infant after this age. Hence most important aspect of weaning is the introduction of solid food. At about six months of age, while breast feeding is being continued, addition of other food is essential to prevent growth faltering. Delayed introduction of additional food in an exclusively breast fed infant in malnutrition. Improper introduction of foods is fraught with dangers of diarrhoea due to infection from unhygienic preparation Malnutrition related to inadequate calorie intake due to low frequency of feeding and low calorie density of additional foods. Weaning should provide a pleasant experience, not a conflict for mothers and infants. Praise, loving attention, and cuddling are vital to successful weaning.

The study was conducted on Effectiveness of self-instructional module on knowledge of post-operative self-care for mothers undergoing elective caesarean section in selected hospitals, Mangalore. The research design was a one group pre test posttest design which was a pre experimental research design. 40 mothers undergoing elective caesarean section by purposive sampling. The pretest knowledge questionnaire was administered to the mothers two days prior to caesarean section, followed by a self-instructional module on post-operative self-care. Post test was conducted after 5 days using the same tool. The collected data were analyzed using descriptive and inferential statistics. The mean knowledge score was 14.98 whereas maximum possible score was 30. Among the 11 areas, the mean percentage knowledge score in the area of caesarean section and self care was 77.50% bladder and bowel care was 60% breast feeding was 58.40% diet was 52.50% pain management was 47.50% post operative complications and home care was 46% baby care was 44.33% early ambulation and exercise was 44% perineal hygiene was 41% wound care was 40.67% and deep breathing and coughing was 40.67%. The 't' value showed significant in the post test ('t' calculated value of pretest and post test knowledge scores) (Rajan & Nayak, 2014)

In an another study Fifty consecutive mothers of infants above 6 months of age attending in an outpatient service at Dr. D.Y. Patil Hospital and Research Centre, Nerul, Navi Mumbai were interviewed using questionnaire to determine how well they were informed about weaning process. Methodology: A cross sectional survey was conducted using questionnaire method regarding definition, age at which weaning should be initiated, foodstuffs to be included, principles to be followed and myths in context to weaning. Findings: Majority of the mothers are having wrong concept about weaning and are not knowledgeable about current weaning recommendations. The study concluded that Improved health facilities, child and maternal health programmes, easy access to mass media along with the increased rate of literacy in women, it has been seen that many mothers are well aware about weaning process. Though a still few mothers are lacking knowledge.

Ignorance about nutrition is another important issue. Studies in several countries including India have shown that almost half the cases of malnourishment are found where there is no such shortage of food. The reason of this ignorance is that the mother does not realise that her child is not growing and is becoming malnourished and has no clear idea of what food and in what quantity must be given to the child. In many cases it is difficult to feed the child because of depressed appetite due to illness or due to the belief that food must be withheld during illness. Most mothers do not understand the importance of giving the baby soft mashed foods that constitute the household diet. The baby nibbles at it and spit it out (Ghose, 2010)

At the same age of the same weight for all infants very few infants will require solid food. Weaning means starting of semi- solid food to be given in addition to milk. Weaning should be gradual process which extends over a period of weeks or every months. Weaning does not commence foods before the age of three months but the majority should be offered a mixed diet not later than the age of six months (Basvanthappa, 2009). Vitamins and iron fortified dry cereals are often used as a source of calories and micronutrients to supplement the diet of infant whose needs for these nutrients are not met by human milk after about six months of age. Cereals commonly are mixed with breast milk formula or water and later with fruits. New single ingredient foods generally can be offered approximately every week (Robert, 2008).

Families often buys ready to eat like rusks, biscuits and various snacks which are unsuitable for the child, expensive and may result in infection. In the country wide national health survey, 1995-99 and 1992-93 it was found that 33.5% children were being given semisolid at 6-9 months. Ranging from 72.9 in Kerala to only 17.5% in Rajasthan and 17,3% in UP. In all major states except Kerala, Tamil Nadu, Andhra Pradesh, Himachal Pradesh and Assam more than 50% of children of age 6-9 months were not receiving semisolid food in addition to breast milk (Bansal, 2008).

Swati Kambli done a study about Fifty consecutive mothers of infants above 6 months of age attending in an outpatient service at Dr. D.Y. Patil Hospital and Research Centre, Nerul, Navi Mumbai were interviewed using questionnaire to determine how well they were informed about weaning process. Methodology: A cross sectional survey was conducted using questionnaire method regarding definition, age at which weaning should be initiated, foodstuffs to be included, principles to be followed and myths in context to weaning. Findings: Majority of the mothers are having wrong concept about weaning and are not knowledgeable about current weaning recommendations. Conclusion: Improved health facilities, child and maternal health programmes, easy access to mass media along with the increased rate of literacy in women, it has been seen that many mothers are well aware about weaning process. Though a still few mothers are lacking knowledge. A study to assess the effectiveness of self instructional module on level of knowledge regarding weaning among primi mothers in Paediatric units in private hospitals, India. The Purpose of the study is mainly associated with assess the effectiveness of self instructional module on level of knowledge regarding weaning among primi mothers in Paediatric units of different Hospitals, India

## **METHOD**

The nature of study was pre experimental. The study was conducted in paediatric units in Private Hospitals, India. The conceptual framework used for this study is based on health belief model. The research design used for this study was one group pre- test post- test design. Data collected using non- probability convenient sampling. The data was collected to assess the effectiveness of 40 primi mothers regarding weaning by level of knowledge score. The data collected were analyzed and interpreted by using descriptive and inferential statistics.

## **RESULTS**

The result Revealed that Highest percentage of primi mothers (50 %) in the age group of 26 – 30 years. Education of primi mothers reveals that Highest percentage (35%) of mothers were graduate. Highest percentage of primi mothers (45% ) were home maker. Highest percentage of primi mothers (87.5% ) were belongs to middle class. Highest percentage of primi mothers (57.5% ) were living in rural area. Highest percentage of primi mothers (75% ) were belongs

from nuclear family. Highest percentage of primi mothers (55% ) were belongs to Hindu religion. Highest percentage of primi mothers (72.5% )their babies were born in hospitals. Highest percentage of primi mothers (45%) had get information from friends or relatives. Highest percentage (40%)primi mothers had Rs 15001-25000 monthly family income. Pre test analysis revealed that 67.5% primi mothers were having inadequate knowledge, 32.5% primi mothers were having moderate knowledge. Post test analysis revealed that 65% were having adequate knowledge, 35% primi mothers were having moderate knowledge.

**Section A : Effectiveness of Intervention in Terms of Increasing the Knowledge Level**

Table 1.

Frequency and percentage distribution of the pre test and post test score values (n = 40)

Level of Knowledge	Score Range	Pre test		Post test	
		f	%	f	%
Inedquate knowledge	< 50%	27	67.5	0	0
Moderate knowledge	51 – 75%	13	32.5	14	35
Adequate knowledge	76 – 100%	0	0	26	65

Data presented in table 1 shows that 67.5 % sample score ranging <50 % (inadequate knowledge) and 32.5 % had score between 51 – 75 % (Moderate knowledge) which shows majority of sample are having inadequate level of knowledge in pre test, and 65% sample score ranging between 76 %-100 % (Adequate knowledge) and 35 % had score between 51 - 75 % (Moderate knowledge) and 0% of sample score < 50 % (Inadequate knowledge) in post test. It is clearly indicates that there was increase the level of knowledge after intervention.

**Section B : Comparision of Pre Test and Post Test Knowledge Score Hypothesis Testing**

H1: There is a significant difference in the knowledge level of primi mothers regarding weaning before and after self instructional module. (Research hypothesis) to test the above hypothesis we use the “paired - t” test for pre and post observations.

Table 2.

T value between the pre test and post test score value (n=40)

Knowledge Score Value	Mean	SD	df	Calculated ‘t’ Value	T - Value	Levelof Significance
Pre Test	14.58	3.012	39	26.41	2.02	Highly Significant
Post Test	23.48	2.587				

Data shown in table 2 revealed that the mean post test knowledge score value among primi motherswere significantly higher than the mean pre test value. The calculated “t” value (26.41) is more than the table value (2.02) at P< 0.05 level of significance. Therefore it can be said that the self instructional module was effective in increasing knowledge level among primi mothers. There is significant difference between the level of knowledge among primi mothers regarding weaning before and after self instructional module. Hence the hypothesis (H1) is accepted.

**DISCUSSION**

After implementing self instructional module65% were having adequate knowledge, 35% primi mothers were having moderate knowledge.pre test mean score is 14.58 and post test mean score is 23.48. The association between post test with demographic variable was found by chi square test. Knowledge, attitude and practices of weaning were assessed in 500 mothers of children

aged between 6 to 24 months of age. The mean age of knowledge regarding weaning in this study is 7.99 months which is more than the recommended 6 months. Only 34.2 % of mothers had the knowledge that weaning should be started by 6 months, which is less than the study. Hence, the knowledge regarding timely weaning, feeding practices, recommendations and guidelines is lacking and inadequate. Mothers are not aware about the medical problems associated with late weaning.

In the present study, information regarding weaning was received from health personale in only 152 out of 500 mothers, which is very less. Majority of the mothers weaned their child by self or previous experience and others had information from family or friends. Literature and media played a very minimal role in educating mothers regarding proper weaning practices. Comparing with Savage et al study in Glasgow, sources of information influencing weaning were previous experience, books/leaflets, advice from health visitors and family/friends. Mothers who received formal information tend to wean correctly. There are very few Indian studies, about source of information regarding weaning.

In the present study, most of the mothers started weaning as they felt that their milk was not enough or insufficient and increased requirement by the child. There are many other studies, which have obtained similar reasons for weaning. The main reasons for delayed weaning were, not knowing the time when to start weaning, misconceptions, customs and false beliefs prevalent in the community. Knowledge of these factors will help in planning interventions to improve feeding practices. Misconceptions hindering feeding practices can be overcome only by education. Hence correct information should be given to the target population, that is the mothers and care givers of the child about current guidelines of weaning or complementary feeding practices. The most common reason for delayed weaning was child not accepting or vomiting weaning foods.

## **CONCLUSION**

Based on the findings of the study, it can be concluded that pre test knowledge score of primi mothers is less (regarding weaning). After intervention (self instructional module) the post-test knowledge score of primi mothers is increased.

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