

# A Quasi Experimental Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Weaning among Mothers of Children between 4-12 Months of Age at Selected Communities of Kanpur UP

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**Abstract:** *Background:* Weaning is the single greatest cause of preventable death globally. Poor knowledge leads to malnutrition, stunted growth, mental retardation and poor development affecting the health, with poor knowledge being a major factor for growth and development. The current study aimed to assess the level of knowledge regarding weaning among mother among mothers of children between 4 - 12 months of age. The objective of the study was to assess the level of knowledge regarding through plan teaching programme among mothers of children between level of knowledge regarding weaning among mother of children between 4 - 12 months of age with selected demographic variables.

**Keywords:** Weaning, Knowledge, experimental study, Effectiveness

## 1. Introduction

In India the health of the most children is not so good because of some factors which may lead nutritional deficiencies and poor growth and development such as kwashiorkor, marasmus, delayed teeth eruption, delay in motor activity, stunted growth poor development, physical and mental retardation, lack of immune power. The factors which cause all that condition are due to improper weaning practices and knowledge. Weaning is a very confusing time for mothers. There is a lot of contradictory information out there and not all of it necessarily correct. Mothers found half of confused by the advices and guidelines on when to start weaning; it also found that babies are all weaned at different ages when mothers decide to wean the baby. Without the knowledge of proper weaning practices as well as a perception of child's hunger need, malnutrition and illness may ensue. The child's weaning period is therefore vulnerable time when the child should be attentively cared for and observed so as to maintain health. Breast milk is ideally suited for the physiological nutritional and psychological need of the infants. It usually nutritional need of the young infant up to the age of 4 - 6 and infant grows rapidly in the first year of life, hence his energy requirement is very high so to fulfill this requirement of the infant by adding supplemental foods to infant diet called weaning. The weaning process begins for the first time when baby take food from a source other then breast weather its formula milk from a bottle or mashed banana from a spoon. According to WHO, The term "weaning" has been traditionally described as withdrawal from breast feeding, i. e. when breast feeding is gradually replaced by fresh or modified animal milk, or by semisolid foods. It is

transitional to change from liquid to solid diet, the feeding behavioral changes from sucking to chewing and biting and the obligatory introduction with the mother or other caretaker. Weaning is a gradual withdrawal of the child from the breast. Weaning is to motivate the child to accept normal feed in place of breast milk. Breast feeding should not be discontinued all of sudden. This process can be started 3 - 4 months of age and completed gradually by 11 - 12 months of age. Weaning has crucial role in the child development.) after 6 months of age breast milk alone is not enough to make an infant grow well. Complimentary feeding refers to food which compliment breast milk and ensure that the child continue to have enough energy. Complimentary feeding is started at the 6 month of age, while continuing breast feeding and breast feed encourages up to 2 years of age in addition to normal food even a 9 month infant need small portion of mix of food groups to be included in their diet to ensure intake of all macronutrients and micronutrients.

## 2. Methodology

A quasi experimental study conducted in the population of present study comprises of effectiveness of plan teaching programme regarding weaning among mother of children between 4 - 12 months of age at selected community of GSVM. Medical college Campus Kanpur U. P. In this study sample size 60 mothers of children between 4 to 12 month of age. The sample in present study is collected by convenient sampling method. This Consist of self structured questionnaire schedule to assess the level of knowledge regarding weaning with 40 statement among mother of children between 4 - 12 months of age in selected

communities of GSVM Medical college campus Kanpur U. P.

### 3. Method

The objective of study is to assess the knowledge regarding weaning among the mothers of children between 4 - 12 months of age at the selected communities of Kanpur. To assess the effectiveness of planned teaching programmed regarding weaning among the mothers of children between 4 - 12 months of age at the selected communities of Kanpur. To find out the association between post test knowledge regarding weaning with the selected demographic variables among the mother of children between 4 - 12 months of age at the selected communities of Kanpur. Participants were selected by purposive sampling method. Participants were selected by purposive sampling method. Inclusion criteria were: mothers who were having infants 4 - 12 month of age, post - natal mothers who can read/understand the Hindi /English language, are willing to participate, who are living in GSVM Medical college. Mothers of children more than of 12 months of age, Who are not willing to participant, Who are not mentally healthy were excluded. Mothers fulfilling the inclusion criteria were informed regarding the purpose of the study and their consent was obtained for data collection. Each selected respondent has explained the purpose and possible benefits of the study and assurance of confidentiality. Written informed consent was obtained from each subject after an oral explanation of the study. The study was carried out in the month of January 2019. Structured questionnaires were the literature and consultation with various experts. Pretesting was done to collect actual data. It consisted of two parts, viz. Part - I that helped to collect the sociodemographic variables of participants like age, residence, occupation, parity etc. and Part - II that was aimed at assessing the post - natal mother's knowledge regarding weaning. Knowledge scores were categorized as follows:

Scores 0 - 10 poor knowledge; 10 - 20 average knowledge; 20 - 30 called good knowledge; 30 - 40 called excellent knowledge.

Knowledge score ranges from 0 - 35. Each respondent was given to answer the questionnaire which was noted by the investigators. It took approximately 15 - 20 minutes to complete the questionnaires. For each correct response, 1 point was and for each incorrect response, 0 points were allotted. Finally, the total score of the mother regarding her knowledge was computed and recorded. The content validity of the tool was established by taking expert opinions. The reliability coefficient for the tool was 0.81.

### 4. Sample Size

According to burns and groves, the sample size is the number of subjects, events, behaviour or situation that are examined in a study. The selected sample size for this study was sixty mothers of age in between 4 - 12 months of age at the selected communities of Kanpur

### 5. Statistical Analysis

The data was collected and coded in master datasheets. Statistical analysis was done using SPSS version 20 software. Both inferential and descriptive statistics were used for the analysis. As a descriptive statistic, mean, standard deviation, frequency, and percentage were used. The Chi - square (Fisher's Exact Test) was used to determine the relationship between selected sociodemographic variables and scores of weaning mothers.

### 6. Results

A total of 60 post - natal mothers participated in the study. The mean age of the participants was 25.7+8.38 years.

**Table 1:** Frequency (N) and percentage (%) distribution of socio - demographic data (n=60).

S. No	Demographic Variables	Frequency	Percentage
1	<b>Age in years</b>		
	a) 18 - 22 years	35	58.30%
	b) 23 - 27 years	15	25%
	c) 28 - 32 years	10	16.70%
	d) 33 - 37 years	0	0%
2	<b>Duration of marriage</b>		
	a) Up to one year	12	20%
	b) Two to three years	35	58%
	c) Three to four years	5	9%
	d) More than five years	8	13%
3	<b>Parity of mother</b>		
	a) Primi para	15	25%
	b) Second para	17	28%
	c) Third para	23	38%
	d) Multi para	5	9%
4	<b>No of male child in the family</b>		
	a) Zero	15	25%
	b) One	17	28.60%
	c) Two	16	28%
	d) More than two	12	18.40%
5	<b>No of female child in the family</b>		
	a) Zero	6	10%
	b) One	32	53.30%
	c) Two	14	23.30%
	d) More than two	8	13.40%
6	<b>Educational status of the mother</b>		
	a) Illiterate	10	17%
	b) High school	45	75%
	c) Intermediate	5	8%
	d) Graduation	0	0%
7	<b>Religion</b>		
	a) Hindu	41	68.30%
	b) Muslim	19	31.60%
	c) Sikh	0	0
	d) Christian	0	0
8	<b>Family pattern</b>		
	a) Nuclear family	13	22%
	b) Joint family	47	78%
	c) Extended family	0	0
	d) Single parent family	0	0
9	<b>Food habits</b>		
	a) Vegetarian	9	15%

	b) Non - vegetarian	51	85%
10	<b>Monthly income</b>		
	a) Less than 5000 Rs/	10	17%
	b) 5000 - 10, 000 Rs/	14	24%
	c) 10, 000 - 15, 000 Rs/	26	42%
	d) More than 15, 000 Rs/	10	17%

The study revealed that majority of 50 (83.33%) mothers had excellent knowledge, 8 (13.33%) mothers had good knowledge and rest 2 (3.33%) mothers had average knowledge regarding weaning. Statistical analysis shows the main score obtain by mother was 33 which indicate that most of the mother had excellent knowledge regarding weaning. Median score obtain by mother was 34 which indicate that most of the mothers had excellent knowledge regarding weaning and standard deviation among mother was 4.76 which indicate that few mothers had average knowledge. Association of level of knowledge regarding weaning among mother of children between 4 - 12 months of age had no association with selected demographic variables except no of female child. The majority 58.33% were in the age group of 18 - 22 years. The majority of weaning mothers belonged to urban areas (51.67) from the Hindu religion (68.3%). The majority were primiparous (58.33%) women and belonged to a joint family (78%). Only 75% of women had secondary education, only 8% of weaning mothers were having education up to higher secondary. The sociodemographic characteristics of the participants are presented in (Table 1). The responses of the participants are depicted in (Table 2)

**Table 2:** Frequency (N) distribution of knowledge scores with mean and SD.

Level of knowledge	N (%)	Mean	SD
Excellent	36 (60)	33	4.7
Good	17 (28.33)		
Average	7 (11.67)		

The knowledge scores were categorized as average, good and excellent and can be noticed that 60 % of participants having excellent knowledge, 28.33% were having good knowledge and 11.67% had average knowledge regarding Weaning. It was found that none of the participants were having poor knowledge which is a score of less than 15 (Table 2). The Mean and Standard Deviation of the Knowledge Scores were computed and given in (Table 2). A significant association were found between sociodemographic variables, residence, literacy status, occupation and level of knowledge (Table 3). It was reported that knowledge regarding weaning was dependent on the residence, literacy status, occupation and independent of age, religion, parity, monthly family income and type of family.

## 7. Discussion

With better knowledge, a mother can formulate a more effective strategy to safeguard the health of her child. For reducing neonatal morbidity and mortality, mothers need to be informed about essential newborn care. Although the study result showed that 60% of participants had excellent knowledge scores and were dependent on sociodemographic variables like residence, occupation and literacy rate. A study done by Ghosh et al.<sup>11</sup> reported that 91.5% had

satisfactory knowledge about newborn care and higher education level was found to be associated with more adequate knowledge ( $p=0.046$ ) similar result was also found in the present study in which higher education was significantly associated with knowledge score. A study done by Jiji et al has also reported a significant association between knowledge and education similar to the present study.<sup>12</sup> The present study also found that community factors like place of residence were significantly associated with knowledge score and postnatal mothers who were residing in urban areas were having high knowledge as compared to rural population mothers, sima similar result was also reported by Mehta et al found that the place of residence was associated with knowledge regarding newborns.<sup>1</sup>

## 8. Conclusion

The main purpose of this study was to assess the knowledge regarding weaning practices by mother of children between 4 - 12 months of age in the selected group of population. Based on the findings of the study, the following conclusions were made. majority (83.33%) had excellent level of knowledge regarding weaning. Educating mothers and providing them correct information can help them to know about weaning practices.

There was also improvement in feeding practices in this study, nutritional education of mothers only had positive impact on their level of knowledge and practices on infant and young children feeding.

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