A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND IN SELECTED COMMUNITY AREAS OF TOHANA IN FATEHABAD

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ABSTRACT

Present study is done on purposively selected mothers of infants in selected community areas of Tohana (Fatehabad)". A structured knowledge questionnaire was prepared to assess the knowledge and practice regarding weaning among the mothers of infants in selected community areas of Tohana (Fatehabad)". Some mothers of infant have little knowledge and practice regarding weaning . While others were not doing weaning practice they were not doing any efforts to preparing weaning food for their infants. Infants were only on breast feeding. Objective of study are to assess the pretest and posttest knowledge regarding weaning among the mothers of infants in selected community areas. To evaluate the effectiveness of structured teaching programme regarding weaning among the mothers of infants among selected community areas. To find out the association between posttest knowledge and selected demographic variables. Observe complication of weaning regarding digestive system among infants.

Key Words:Weaning, Structured ,Association, Demographic variables

Breast feeding provides an unparalleled manner to supply complete and ideal nourishment for the infant in the beginning of life. Although, some studies show that exclusive breast feeding for more than 6 months may also increase malnutrition. At this age breast-milk alone is not enough to meet the needs of infant. Ideally, an infant should be exclusively breast fed for 6 months followed by additional foods being gradually introduced.

In 2002, the 55th World Health Assembly adopted a guideline based on recommendation by World Health Organization and United Nations Children's Fund, that "the infant milk substitute, feeding bottles and infant food amendment Act, 2003".This National guideline formulation came into action from 1st Jan 2004 onwards.

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. Weaning refers to a systematic process of introduction of suitable foods at the age of 3-4 months addition to mother"s milk in order to provide needed nutrients to the infants. Weaning could be a traumatic experience for the infants because they have to give up the oral gratification derived from sucking. Weaning should be started at a suitable time. It's easier to get babies accustomed to new foods earlier than when they grow older. However, weaning should definitely start around 3-4 months.

Government of India adopted a National policy for children, describes the "Right of the Child". The policy declares: "It shall be the policy of the state to provide adequate services to children both before and after birth and through the period of growth, to ensure their full physical, mental and social development. The state shall progressively increase the scope of such services so that, within a reasonable time, all children in the country enjoy optimum conditions for their balanced growth". The policy recognizes children as "the Nations supreme important asset".

United Nations International Children's Emergency Fund (UNICEF) has launched the baby friendly hospital initiative (BFHI) in 1998 to strengthen maternity practices to support breastfeeding. One of the important components of this initiation is to start breast feeding immediately after birth. The frequency, timing, and duration of breastfeeding are also important. Variation in these parameters can have an important impact on child health. Weaning is another very important component of infant feeding. After 6 months, mother's milk alone is not sufficient for the growing child and weaning should be started, timely and in adequate amounts with good quality. Frequency, quality and amount of good feeds given during the weaning period to children are important factors in the malnutrition. Inappropriate feeding practice during this period is found to be the major cause of malnutrition.

MATERIALS AND METHODS

Quantitative research approach with evaluative educative research study was used. Independent variable was structured teaching programme regarding weaning practices. Dependent variables was knowledge and practice regarding weaning. Extreneous variable was age, education, occupation, family income, type of family, types of diet and sources of information. Study was done on the mother of infants in selected community areas of tohana. Probability sampling technique was used for data collection. Structured knowledge questionnaire, expressed check list was used to assess the knowledge of mothers regarding weaning. Hypothesis for study showed that mean posttest knowledge scores of mothers will be higher than the mean pretest knowledge score. There is significant association between the pretest and posttest knowledge with selected demographic variable. Increase knowledge had improved the practice among the mothers of infants. Reliability is degree of consistency or accuracy with which an instrument measures the attribute which is designed to measure. The "r" value calculated using formula Split Half Formula. Thus the tool was considered reliable for the main study. Knowledge questionnaire and expressed checklist were distributed to Mothers of infants . Tool validity was obtained from eleven experts and there suggestions were considered in too; constructions. Data collection took around one hour. The data collected was grouped and analyzed. It gave the evidence that the tool was feasible, reliable and practicable.

METHODS

Tool was prepared under two sections
Section A: This section had information regarding demographic data of mothers of infants such as age, educational status, experience, previous sources of information.

Section B: This section consists of structured knowledge questionnaire on thirty items. Each item had multiple choices in nature with four responses in each question. There was one correct response carrying one mark and the wrong response carried zero mark. The score was 30 for 30.

Section A: Demographic Variables
Instructions to participants
Please read the following statements carefully and tick the best response.
1) Age (in years)
a) Less than 20
b) 21-25
c) 26-30
d) 31-35
e) Above 35

2) Education status
a) Primary
b) Middle
c) Matric
d) Senior secondary
e) Graduate/post graduate

3) Occupation
a) Home maker
b) Laborer
c) Government job
d) Private job
e) self business

4) Family income per month
a) Below Rs 5000
b) 5000-10,000
c) 10,000-15,000
d) 15,000-20,000
e) Above -20,000

5) Type of family
a) Nuclear
b) Joint
c) Extended

6) Residence
a) Rural
b) Urban

7) Type of diet
a) Vegetarian
b) Non-vegetarian

8) Source of health related information
a) TV/ Radio/ Internet
b) Newspaper/ Magazine
c) Family members/ Friends and neighbor's
d) Health personal

Section B: Structured Knowledge Question

Knowledge Questionnaire to assess the level of knowledge regarding weaning among mothers of infants
☐ Tick the correct answer.
☐ Each correct answer carries one mark and incorrect carries zero..

S.N.	CONTANT	YES	NO
1	Do you consider weaning is basic need of infants?		
2	Do you do hand washing before preparing food?		
3	Do you clean the utensils properly before preparing food?		
4	Do you wash vegetables before cooking?		
5	Do you know the quality of initial weaning foods?		
6	Do you avoid taking unnecessary drugs while giving breast feeding to infant?		
7	Do you know about the types of weaning foods?		
8	Do you start weaning after 3 months of infant?		
9	Do you give diet rich in protein, iron, calcium and vitamins during weaning?		
10	Do you add green leafy vegetables in the diet of infant?		
11	Do you preferred homemade foods for infants?		
12	Do you give feed your infant with spoon?		
13	Do you give oily and spicy food to the infant?		
14	Do you make separate food for infant?		
15	Do the infant taking food with interest?		
16	Do you contact with doctor if any allergic sign appears?		
17	Do you give the prescribed medicine at proper time whenever the infant is sick?		
18	Do you wash the hands of infant after short time?		
19	Do you know about the signs to start weaning?		
20	Do you go for health checkup of infant?		

Q 1. What is the meaning of weaning?

a) Introduction of solid food only.
b) Loss of motherhood.
c) Breastfeeding along with semi-solid food.
d) Introduction of solid food forcefully.

Q 2. How long breast milk provides all the nourishment to the infant?
a) 6 months only.
b) 9 months only.
c) 11 months only.
d) 1 year only.

Q 3. When weaning should be started?
a) 4 months.
b) 9 months.
c) 8 months.
d) 10 months.

Q 4. Which food should be given as a first weaning food?

a) Cereal rich in iron.
b) Cereal with low iron content.
c) Food rich in fat.
d) None of above.

Q 5. Why weaning is important for infants?
a) For optimal height.
b) For the development of brain.

c) For the growth of body only.
d) For whole growth and development.

Q 6. Which type of food should be preferred for infants during weaning?
a) Readymade.
b) Homemade.
c) Fried food.
d) Frozen food.

Q 7. When start weaning, how many times a day weaning should be given to infant?
a) Once.
b) Twice.
c) Thrice.
d) Five times

Q 8. What should be done, when the first weaning food is refused by baby?
a) Leave it.
b) Keep trying.
c) Keep introducing another day.
d) Introduced forcefully

Q9. How much quantity of weaning food should be given initially?
a) Couple of teaspoons.
b) Half bowl.
c) One cup.
d) As baby wants.

Q 10. What is the certain time when weaning should not be started?
a) Infant is not demanding.
b) Infant is not feeling well.
c) Changes have occurred at home.
d) All of above.

Q 11. Which food should be given as initial weaning foods?
a) Only liquid.
b) Only solid.
c) Only Mashed.
d) Only milk.

Q 12. What are the essential qualities of weaning food for infants?
a) High in bulk viscosity.
b) Clean, fresh and hygienic.
c) Processed food.
d) Low energy density.

Q 13. How can be aware of food allergies to infants?
a) Family history.
b) Refusing food.
c) Cough.
d) Fever.

Q 14. What should be done when any allergic reaction occur after starting new food?
a) Later concern with doctor.
b) Stop giving particular food.
c) Try again later.
d) None of them.

Q 15. Which types of foods are to be avoided in 3-6 months of age?
a) Nuts and seeds.
b) Fruits.
c) Vegetables.
d) Milk.

Q 16. How should feed the infant initially?
a) Spoon.
b) Hand.
c) Bowl.
d) Glass.

Q 17. When should infants able to enjoy more or less the same food as the rest of the family?
a) After 9 months.
b) After 7 months.
c) After 12 months.
d) After 18 months.

Q 18. When should move from purees to more textured food?
a) 6-7 months.
b) 5-6 months.
c) 8-9 months.
d) 1 year.

Q 19. Which sign indicate that your baby is ready to accept food?
a) Pushing food back.
b) Chewing the fists.
c) Demanding feeds more.
d) All of above.

Q 20. Why it is important to wait until the infants are 3-6 months old?
a) Fully developed digestive system
b) Swallow properly.
c) Can eat own self.
d) To make the interest in food.

Q 21. Which disorder can occur due to early weaning in infants?
a) Kidney disorder.
b) Digestive disorder.
c) Mental disorder.
d) Lungs disorder.

Q 22. What can be happened due to late weaning in infants?
a) Cerebral palsy.
b) Diabetes mellitus.
c) Polio.
d) Growth retardation.

Q 23. Which disorder is prevented by giving adequate amount of iron?
a) Kwashiorkor.
b) Anemia.
c) Diabetes mellitus.
d) Hypertension.

Q 24. What are the factors contributed in delayed weaning?
a) Lack of knowledge among parents
b) Postponed religious ceremony.
c) Busy schedule of both parents.
d) All of above.

Q 25. Which is the crucial period of occurrence of disorders like kwashiorkor and marasmus?
a) Post weaning period.
b) Pregnancy period.
c) Lactation period.

d) Old age period.

Q 26. What is the main problem of infants sometime after weaning?

a) Pain in legs.

b) Pain in abdomen.

c) Pain in mouth.

d) Pain in ear.

Q 27. How can reduce the risk of choking?

a) Give them full fruit.

b) Cut large fruits into slice.

c) Mash all the fruits into bowl.

d) Leave the child alone.

Q 28. What is developed by chewing skills after 6 months?

a) Abdominal muscles.

b) Facial muscles.

c) Leg muscles.

d) Arm muscles.

Q 29. Why is it important to include iron rich foods in a baby's diet from 3 months?

a) Because stored iron is deplete and need to include in diet.

b) Because it taste good.

c) Because they grow up big and fast.

d) None of above.

Table 1: Frequency & percentage distribution

SOCIO PERFORMA		DEMOGRAPHIC	Frequency (%)	Frequency (f)
Age		Less than 20	8	8
		21-25	80	80
		26-30	12	12
Education		Primary	7	7
		Middle	12	12
		Matric	37	37
		Senior Secondary	27	27
		Graduate/Post Graduate	17	17
Occupation		Home Maker	81	81
		Private Job	8	8
		Self-Business	11	11
Family Income		Below Rs 5000	6	6
		5000-10,000	52	52
		10,000-15,000	24	24
		15,000-20,000	18	18
Type of Family		Nuclear	14	14
		Joint	86	86
Residence		Rural	86	86
		Urban	14	14
Type of Diet		Vegetarian	87	87
		Non-Vegetarian	13	13
Source Information	of	TV/ Radio/ Internet	58	58
		Newspaper/ Magazine	14	14
		Family members/Friends and neighbor"s	18	18
		Health Personal	10	10

Q30. What foods should not be given to baby if he/she is under a year?
a) Tea and coffee.
b) Cereals.
c) Fruits.
d) Juice.

Total score=20
Section-A:
Description of Demographic Variables Of Mothers Of Infants

Section-B
Table 2: Knowledge questionnaire to assess the level of knowledge regarding weaning among mothers of infants

Area>	Itemwise Analysis	Pre Correct (f%)	Post Correct (f%)
	Qno.1	29	90
	Qno.2	33	94
	Qno.3	17	59
	Qno.4	19	60
	Qno.5	30	63
	Qno.6	10	45
	Qno.7	22	56
	Qno.8	23	57
	Qno.9	34	69
	Qno.10	21	42
	Qno.11	29	70
	Qno.12	37	81
	Qno.13	33	78
	Qno.14	50	80
KNOWLEDGE SCORE	Qno.15	38	82
	Qno.16	25	54
	Qno.17	29	64
	Qno.18	50	74
	Qno.19	41	59
	Qno.20	28	64
	Qno.21	34	71
	Qno.22	27	44
	Qno.23	30	67
	Qno.24	36	74
	Qno.25	43	70
	Qno.26	41	66
	Qno.27	23	55
	Qno.28	22	71
	Qno.29	26	72
	Qno.30	56	87

SECTION- C
Check list to assess the practice among mothers of infants regarding weaning
General instructions:
☐ **Total score: 20**
☐ **Each correct answer carry 1(one) mark.**

Table 3: Criteria measure of knowledge score

Criteria measurement of knowledge score		
Score Level (N=100)	Pre	Post
High (21-30)	0(0%)	55(55%)
Average(11-20)	26(26%)	45(45%)
Low (0-10)	74(74%)	0(0%)
Maximum=30 Minimum =0		

Table 3 Shows that 0% mothers of infants were have high level of knowledge score, 26% were have average and 74% were have low level of knowledge in pre-test. In post test score, 55% of mothers of infants were having high level of knowledge, 45% were having average and 0% were have low level of knowledge score.

SECTION-C:

Assessment of Pre-Test and Post- Test Practice Regarding Weaning Among Mothers Of Infants

Table 4: Paired" test

PRACTICE			Mean	Paired T	P	Table	
	Mean	S.D.				Value at	Result
Score			Difference	Test	value		
						0.05	
Pre	9.51	1.845	6.260	28.452	0.0000	1.98	Significant
Post	15.77	1.984					

Maximum=20 Minimum=0

Table 4.00 shows that the paired"t" test was worked out to the statistical significant among pre and post score of practice. Invariably in all cases the test is significant at (i.e.p<0.05), research hypothesis is accepted.

Table 5: Percentage of Pre,Post & Difference test

Effectiveness	PRACTICE		
	PRE	Post	Difference
Mean %	47.55	78.85	31.30

Table 5 depicts that 47.55% practice is pre-test, 78.85% were having practice effective after post- test and 31.30

is the difference.

Table: 6: Criteria Measure of Practice Score Test

CRITERIA MEASURE OF PRACTICE SCORE		
Score Level (N=100)	Pre	Post
High (15-20)	2(2%)	74(74%)
Average(8-14)	87(87%)	26(26%)
Low (0-7)	11(11%)	0(0%)
Maximum=20 Minimum =0		

Table 6 shows that in post-test 0% of mothers of infants have low level of practice, 20% have average level of practice score and 74% have high level of practice score. It is the evidence that structured teaching programme is effective.

Table 7: Percentage of Pre & Post Correct in infants

Area>	Questions>>	Pre Correct (f%)	Post Correct (f%)
	Qno.1	8	72
	Qno.2	97	100
	Qno.3	34	36
	Qno.4	42	67
	Qno.5	80	91
	Qno.6	51	72
	Qno.7	31	76
	Qno.8	22	63
	Qno.9	64	100
	Qno.10	100	100
EXPRESSED			
	Qno.11	100	100
PRACTICE			
	Qno.12	27	44
	Qno.13	7	81
	Qno.14	32	79
	Qno.15	52	86
	Qno.16	55	90
	Qno.17	27	89
	Qno.18	25	67
	Qno.19	54	87
	Qno.20	43	77

Table 7 Shows that shows that in post-correct f% have more than pre correct f% in mothers of infants in structured teaching questionnaire.

SECTION-D

Table 8: Associations between Post Test Knowledge and Demographic Variables

Association With Demographic Variables		POST KNOWLEDGE			Chi	P		Table	
Variables	Opts	LOW	Average	High	Test	Value	df	Value	Result
Age	Less than 20		4	4					
	21-25		37	43	0.792	0.673	2	5.991	Not Significant
	26-30		4	8					
Education	Primary		7	0					
	Middle		7	5					
	Maric		12	25	12.048	0.017	4	9.488	Not Significant
	Sr.Secondary		11	16					
	Graduate/P.G		8	9					
Occupation	Home Maker		38	43					
	Private Job		4	4	1.597	0.450	2	5.991	Not Significant
	Self-Business		3	8					
Family Income	Below Rs 5000		2	4					
	5000-10,000		24	28	0.873	0.832	3	7.815	Not Significant
	10,000-15,000		12	12					
	15,000-20,000		7	11					
Type Of Family	Nuclear		8	6	0.970	0.325	1	3.841	Not Significant
	Joint		37	49					
Residence	Rural		37	49	0.970	0.325	1	3.841	Not Significant
	Urban		8	6					
Type of Diet	Vegetarian		40	47	0.258	0.611	1	3.841	Not Significant
	Non-Vegetarian		5	8					
Source Of Information	TV/ Radio/Internet		26	32					
	Newspaper/ Magazine		6	8					

						0.130	0.988	3	7.815	Not Significant
		Family members/								
				8	10					
		Friends	A nd							
		neighbor"s								
		Health Personal		5	5					

ETHICAL CONSIDERATION

Formal permission was obtained from ethical committee through principal ,NIMS college of nursing. Informed written consent was obtained from municipal counselor.☐Informed consent will be obtained from all study subjects. Study subjects will be assured that information collected from them will be kept confidential.

CONCLUSION

The Pilot study was conducted to assess the knowledge and practice regarding weaning among mothers of infants with a view to develop structured teaching programme for mothers of infants. In this pilot study evaluative educative research design was used by taking 10 samples through Probability sampling technique at selected community area, Tohana. The data's were collected by using structured knowledge questionnaire and expressed check list. Data were developed and interpreted by applying respective statistical methods.This chapter deals with the conclusion. The conclusion was drawn on the basis of the findings of the study, were as follows.

- Most of the mothers were 20-25 years of age (80%) and education was matric (37%).

- Overall knowledge of mothers was found 31.20% in pre-test and 67.27% in post-test.

- Overall practice of mothers was found 47.55% in pre-test and 78.85% in post-test. Hence the knowledge score was less than the practice score.

- There was no significant association between knowledge and demographic variables.

- There was no significant association between practice and demographic variables.

- Hence there is a need for formulating education package for mothers of infants regarding
- Weaning.
- There was no any complication found in digestive system of infants regarding weaning food.

Table 8 Shows that result of associations between post test knowledge and

variables is Not Significant

Table 9: Associations Between Post-Test Practice And Demographic Variables

Association with Demographic Variables			POST PRACTICE								
Variable S	Opts		Lo W	Ave Rage		High	Chi Test	P Value	Df	Table Value	Result
Age	Less than 20			4		4					
							2.983	0.225	2	5.991	Not Significant
	21-25			20		60					
	26-30			2		10					
Educatio N	Primary			3		4					
	Middle			4		8					
	Matric			10		27	2.206	0.698	4	9.488	Not Significant
	Sr. Secondary			6		21					
	Graduate/P.G			3		14					
Occupati On	Home Maker			23		58					
	Private Job			2		6	1.878	0.391	2	5.991	Not Significant
	Self-Business			1		10					
Family Income	Below Rs 5000			2		4					
	5000-10,000			15		37	4.970	0.174	3	7.815	Not Significant
	10,000-15,000			8		16					
	15,000-20,000			1		17					
Type Of Family	Nuclear			4		10	0.056	0.813	1	3.841	Not Significant
	Joint			22		64					
Residenc E	Rural			22		64	0.056	0.813	1	3.841	Not Significant
	Urban			4		10					
Type Of Diet	Vegetarian			23		64	0.066	0.797	1	3.841	Not Significant
	Non-Vegetarian			3		10					
Source Of Informati On	TV/Radio/Internet			16		42					
	Newspaper/Magazin E			5		9					
	Family members/ Friends And neighbor"s						2.225	0.527	3	7.815	Not Significant
				4		14					
	Health Personal			1		9					

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