



ORIGINAL RESEARCH PAPER

Nursing

A STUDY TO ASSESS THE KNOWLEDGE REGARDING WEANING AMONG MOTHERS OF INFANTS IN PAEDIATRIC OUTPATIENT CLINIC IN A RURAL COMMUNITY BASED HOSPITAL WITH THE VIEW OF INFORMATION BOOKLET.

KEY WORDS: Knowledge, Weaning, Mothers, Infant, SES

Mr Soibam Pahari Singh

M.Sc (N) Department of Pediatric Nursing, Faculty of Nursing, Assam down town University.

Mrs Nirmali Gogoi

Associate Professor, Department of Pediatric Nursing, Faculty of Nursing, Assam down town University. *Corresponding Author

Ms Anamika Bhuyan

Assistant Professor, Department of Community Health Nursing, Assam down town University

ABSTRACT

INTRODUCTION AND OBJECTIVES: Weaning is a process of introducing solid foods into the baby's diet in order to fulfil their growing nutritional needs. It is started at the age of six months of the child; from 4-6 months' baby may not get all the calories, iron & other nutrients from milk. The study was attempt to assess the knowledge regarding weaning among 114 mothers of infants (0-12 months) who attended in paediatric outpatient clinic of Maternity and Child Welfare Hospital, Dhirenpara, Assam.

MATERIAL AND METHODS: Non-experimental descriptive survey research design was adopted for the present study. A convenient sampling technique was used to select 114 mothers of infants (0-12 months) who attended in paediatric outpatient clinic of Maternity and Child Welfare Hospital, Dhirenpara, Assam. Data was collected by structured questionnaire on demographic proforma and weaning of infants.

RESULT AND ANALYSIS: The knowledge level of mother regarding weaning of infants was found that 68% had good knowledge level, 29% had average knowledge level and 3% had poor knowledge level. Majority of the infant were in the age group of 7-12 months and maximum of the mothers were in the age group of 23-27 years. Maximum of the mothers were belongs to Hindu religion and having dietary pattern of non-vegetarian. Maximum of the mother were having 2 children and working as Elementary Occupations, Maximum mothers were belong to middle school certificate and having 6327-18949 income per month. Majority of the mothers were belongs to upper lower socioeconomic status and belongs to joint family.

DISCUSSION AND CONCLUSION: The finding of the study revealed that there is no statistical significant association found between knowledge of mother and other demographic variables such as age of mother, religion, dietary pattern, occupation, family income per month, socio economic status, type of family. It is found that there is significant association between knowledge of mother with age of infants, number of children and education of mother.

INTRODUCTION

Weaning is a process of introducing solid foods into the baby's diet in order to fulfil their growing nutritional needs. It is started at the age of six months of the child, from 4-6 months' baby may not get all the calories, iron & other nutrients from milk. Weaning is a gradual process starting around the age of six months, because mother's milk alone is not sufficient to sustained growth beyond six months. Weaning which is often referred to as "mixed feeding" proceeds in stages from liquids to solids and from one method of feeding to another, weaning is a gradual process, extending from the time when baby is solely breast fed, until he/she is feeding entirely on the adult diet.¹

Nutrition plays a very important role in physical, mental, social development of children and emphasis must be given to provide good nutrition to growing populations especially in formative years of life.²

It is a complex process involving nutritional, immunological, biochemical and psychological adjustments. WHO recommends a gradual weaning period from 6 months to 2 years and allows the child to receive the benefits of breast feeding, while also consuming the benefits of the necessary nutrients from the complementary foods.³

Weaning should be started at a suitable time. Mixed feeding may be introduced early into an infant's diet (say from 2 months after birth) depending on the infant's growth pattern. Also, it's easier to get babies accustomed to new foods earlier than when they grow older. However, weaning should definitely start around 3 months. There is no right age when a baby should be weaned. Weaning too early may cause baby at higher risk of developing digestive disorders and adverse

reactions or allergies to certain foods. On the other hand, weaning too late may deprive adequate nutrition and can result in improper growth and development.⁴ Weaning an infant from breast feeding to complementary food is a common cultural practice which plays vital role in the child's milestone for growth and development. The right practice of weaning is necessary to prevent from various health related complications like allergy, diarrhoea and choking.⁵

The Academy recommends exclusive breastfeeding for 6 months, followed by continued breastfeeding for at least 12 months as complementary foods are introduced. Weaning is the term usually used to describe the process of cessation of breastfeeding after a period of successful breastfeeding. This usually involves addition of food to infant's diet and/or replacement of breast milk in infant's diet with another type of milk (formula or whole milk). Maternal physiology, infant nutritional needs, infant development, especially the development of biting and chewing, and cultural issues all play a role in the timing of weaning.⁶

If the mother is not aware about the nutritional status, nutritional needs of her child according to his requirements the child may leads to nutritional deficiency disorders. Therefore, the mother should know the basic things regarding the nutrition of the child. & to create awareness about the nutrition & its importance to prevent and control the nutritional disorder.⁷

MATERIALS AND METHODS

Non-experimental descriptive survey research design was carried out among mothers of infants (0-12 months) who attended in paediatric outpatient clinic of Maternity and Child Welfare Hospital, Dhirenpara, Assam. A convenient

sampling technique was used to select the sample. The sample size is 114 mothers of infants. Ethical permission was obtained from the concerned authority of Maternity and Child Welfare Hospital, Dhirenpara, Assam and written consent was taken from the mothers selected for the study. Data was collected by using structured questionnaire on demographic proforma and weaning of infants. Mother of infant who are not willing to give consent to carry out the study and infants who are sick during the study were excluded in the study. Data analysis was done by using descriptive and inferential statistics.

RESULTS AND DISCUSSION

Findings of the study show that majority of the infant 68% were in the age group of 7-12 months and maximum of the mothers 47% were in the age group of 23-27 years. Maximum of the mothers 60% were belongs to Hindu religion and 58% were having dietary pattern of non-vegetarian. Maximum of the mother 42% were having 2 children and 39% were working as Elementary Occupations, Maximum mothers 30% were belong to middle school certificate and 56% have 6327-18949 income per month. Majority of the mothers 53% were belongs to upper lower socioeconomic status and 51% belongs to joint family.

Table 1: Distribution of frequency and percentage of demographic variables of mothers of infant.

n=114

Demographic variables	Frequency (f)	Percentage (%)
1. Age of infant (in months)		
• 0-6 months	46	40
• 7-12 months	68	60
2. Age of mother (in years)		
• 18-22 years	37	33
• 23-27 years	54	47
• 28-32 years	16	14
• 32 and above	7	6
3. Religion		
• Hindu	68	60
• Muslim	41	36
• Christian	5	4
• Others	-	-
4. Dietary pattern		
• Vegetarian	48	42
• Non vegetarian	66	58
5. Number of children		
• 1	33	29
• 2	48	42
• 3	21	18
• >3	12	11
6. Occupation		
• Legislators, Senior Officials & Managers	-	-
• Professionals	-	-
• Technicians & Associate Professionals	-	-
• Clerks	-	-
• Skilled workers and Shop & Market Sales workers	6	5
• Skilled Agricultural & Fishery Workers	16	14
• Craft & related Trade Workers	21	18
• Plant & Machine Operators and Assemblers	19	17
• Elementary Occupations	44	39
• Unemployment	8	7
7. Education		
• Profession or honours	-	-
• Graduate	4	3
• Intermediate or diploma	18	16
• High school certificate	33	29
• Middle school certificate	34	30
• Primary school certificate	17	15
• Illiterate	8	7

8. Total monthly income		
• >126,360	-	-
• 63,182-126,356	-	-
• 47,266-63178	-	-
• 31,591-47262	-	-
• 18,953-31589	-	-
• 6327-18949	4	4
• ≤6323	64	56
	46	40
9. Socio economic status		
• Upper	-	-
• Upper middle	-	-
• Lower middle	3	2
• Upper lower	59	53
• Lower	52	45
10. Type of family		
• Nuclear family	56	49
• Joint family	58	51
• Extended family	-	-

As shown in table-1 majority of the infant 68 (60% were in the age group of 7-12 months, maximum of the mothers 54 (47%) were in the age group of 23-27 years. Maximum of the mothers 68 (68%) were belongs to Hindu religion, majority of the mother 66 (58%) were having dietary pattern of non-vegetarian. Maximum of the mother 48 (42%) were having 2 number of children, most of the mother 44 (39%) were working as Elementary Occupations. Maximum mothers 34 (30%) were belong to middle school certificate and 64 (56%) were having 6327-18949 income per month. Majority of the mothers 59 (53%) were belongs to upper lower socioeconomic status and 58 (51%) of mother belongs to joint family.

Table 2: Aspect wise Knowledge score of the mothers of infant regarding weaning

n=114

Sl no	Aspects	Statement	Max. Score	Range Score	Knowledge aspects		
					Mean	Mean (%)	SD (%)
1	Regarding weaning	8	8	3-8	6.49	81.12%	16%
2	Regarding weaning age	7	7	1-7	5.15	73.57%	19.57%
3	Regarding preparation of weaning food	6	6	1-6	4.51	75.16%	22%
4	Regarding storage of weaning food	2	2	0-2	1.57	78.5%	23%
5	Regarding positioning during weaning	2	2	0-2	1.61	80.5%	23%
6	Combined	25	25	9-25	19.33	16.95%	14.64%

Table-2 shows that regarding weaning the knowledge score was 81.12%, in the aspect of regarding weaning age the knowledge score was 73.57%, in regarding preparation of weaning food the knowledge score was 75.16%, in regarding storage of weaning food the knowledge score was 78.5% and in regarding positioning during weaning the knowledge score was 80.5%. The total mean, mean % and SD % of knowledge was 19.33, 16.95, 14.64 respectively.

Assessment of knowledge regarding weaning among mothers of infant.

The data presented in figure 1 shows that majority 68% of the mothers had good knowledge level (18-25), 29% had average

knowledge level (10-17) and 3% had poor knowledge level (0-9) regarding weaning. The knowledge regarding weaning among mothers of infant was assessed by using structured knowledge questionnaire. The present study is supported by the study of Dipty Subba, S. Bhattarai and R. Roy (2014) on knowledge among Mothers Regarding Weaning Practice of Jhangad Community of Jhorahat V.D.C, Nepal. The study was conducted among 50 mothers by using convenient purposive sampling method and self-administered and semi structured questionnaire was used to conduct the study. The study showed that 82% of the mother had adequate knowledge about weaning practice.⁸

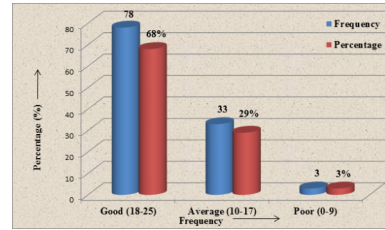


Figure 1: Frequency and percentage distribution of knowledge score of the mothers of infant regarding weaning.

Table 3: Association of knowledge regarding weaning among mothers of infant with selected demographic variables. n=114

Demographic variables	Knowledge score			Chi square (χ ²)	df	p-value	Inference
	Good	Average	Poor				
1. Age of infant (in months)							
• 0-6 months	19	25	2	26.32	2	5.99	S
• 7-12 months	59	8	1				
2. Age of mother (in years)							
• 18-22 years	20	15	2	7.25	6	12.59	NS
• 23-27 years	39	14	1				
• 28-32 years	14	22	-				
• 32 and above	5	2	-				
3. Religion							
• Hindu	46	21	1	1.93	6	12.59	NS
• Muslim	29	10	2				
• Christian	3	-	-				
• Others	-	-	-				
4. Dietary patten							
• Vegetarian	28	18	2	4.07	2	5.99	NS
• Non vegetarian	50	15	1				
5. Number of children							
• 1	16	15	2	17.74	6	12.59	S
• 2	42	5	1				
• 3	12	9	-				
• >3	8	4	-				
6. Occupation							
• Legislators, Senior Officials & Managers	-	-	-	18.31	18	28.87	NS
• Professionals	-	-	-				
• Technicians & Associate Professionals	-	-	-				
• Clerks	4	2	-				
• Skilled workers and Shop & Market Sales workers	10	6	-				
• Skilled Agricultural & Fishery Workers	16	5	-				
• Craft & related Trade Workers	14	5	-				
• Plant & Machine Operators and Assemblers	30	13	1				
• Elementary Occupations	4	2	2				
• Unemployment	-	-	-				
7. Education							
• Profession or honours	-	-	-	25.59	12	21.03	S
• Graduate	4	-	-				
• Intermediate or diploma	16	2	-				
• High school certificate	21	12	-				
• Middle school certificate	24	10	-				
• Primary school certificate	10	6	1				
• Illiterate	3	3	2				
8. Total monthly income							
• >126,360	-	-	-	1.54	12	21.03	NS
• 63,182-126,356	-	-	-				
• 47,266-63178	-	-	-				
• 31,591-47262	-	-	-				
• 18,953-31589	3	1	-				
• 6327-18949	46	17	1				
• ≤6323	29	15	2				
9. Socio economic status							
• Upper	-	-	-	1.52	8	15.51	NS
• Upper middle	-	-	-				
• Lower middle	2	1	-				
• Upper lower	39	18	2				
• Lower	37	14	1				
10. Type of family							
• Nuclear family	37	18	1	0.76	4	9.49	NS
• Joint family	41	15	2				
• Extended family	-	-	-				

NS= not significant, $p < 0.05$

As shown in table-3 the χ^2 value of Age of infant, Number of children, Education of mother was found to be 26.32, 17.74, 25.59 respectively, which was significant association at $p < 0.05$ level of significance. But there is no significant association found between knowledge regarding weaning among mothers of infant and other demographic variables such as age of mother, religion, dietary pattern, occupation, family income per month, socio economic status, type of family. The present study is supported by the study of Gadhavi Rajshri Ambadan and Serene Shekhar on Knowledge of Recommended Weaning Practices Prevalent Among Urban Mothers (2018). Randomly selected 80 respondents with pre-structured interview scheduled was used for the study. The findings revealed that 56.25 per cent of the respondents were having correct weaning knowledge up to medium extend. Weaning knowledge had positive and significant association with age, education income and mass media.⁹

The present study is supported by the study of N. Dhanasekaran on Knowledge on practice of weaning among the mothers with infant below 6 months of age in Salem, Tamil Nadu (2015). A descriptive design with cross sectional survey approach was undertaken to assess 50 mothers by purposive sampling technique and data was collected by using structured interview schedule. The Overall Mean knowledge score was (11.5 ± 3.26) and (50 %) revealing average knowledge. However there was significant association between knowledge score and education & type of family ($P = 0.0151$ & $P = 0.0091$) revealing that maximum demographic variables do not affected the level of knowledge.¹⁰

CONCLUSION

The present study will help the mothers to prevent the malnutrition and nutritional deficiency diseases. So the present study was conducted to assess the level of knowledge among mothers of infants regarding weaning with a view of information booklet. The findings of the study revealed that majority of the mothers (68%) had a good knowledge level regarding weaning of infants. So the researcher concluded that the mothers of infant in the study area had a good knowledge level regarding weaning of infants.

ACKNOWLEDGEMENT

Deeply acknowledge Dy. Superintendent, Maternity and Child Welfare Hospital, Dhirenpara, Guwahati and ethical committee of Assam down town University for giving permission to conduct the research study.

REFERENCES

1. Park K. Text book of preventive & social medicine; 19th ed. Published by M/S Banarasidas Bhanot, Jabalpur. 2007
2. Simon MS, Cleghorn CL. A longitudinal study of breast feeding and weaning practices during the first year of life, 2002
3. World health organization. Exclusive breast feeding, nutrition infant and young child, 2006
4. Stella M. Dietician, Weaning- its importance in child care. 2003:21-25
5. Marianne SJ, Morten S, Molbak K and Aaby P. Reason for Termination of Breastfeeding and the Length of Breastfeeding. International Journal of Epidemiology. 1996; 115-121
6. Simondon and Simondon F. Mothers prolong breastfeeding of undernourished children in rural Senegal, International journal of epidemiology 1998; (27):490-494
7. Wafaie F, Guillermo MH, Nestel P, Alawia El. A longitudinal study of prolonged breastfeeding in relation to child under nutrition, international journal of epidemiology. 1998; (27):255-260
8. Subba D, Bhattarai S, Roy R. A study on knowledge among mothers regarding weaning practice of Jhangad community of jhorahat V.D.C, Nepal. 2014; 12(1):54-59.
9. Ambadan CR, Shekhar S. Knowledge of recommended weaning practices prevalent among urban mothers. Int. J. pure App. Biosci 2018; 6(1):101-109.
10. Dhanasekaran N. Knowledge on practice of weaning among the mothers with infant below 6 months of age in Salem, Tamil Nadu. Journal of College of Medical Sciences Nepal. 2015 Jan-mar, Vol-11, no 1.