

A Study to Assess the Knowledge Regarding Weaning Among Postnatal Mothers in a Selected Area of Udupi District with a View to Develop an Informational Booklet

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ABSTRACT

Background: Undernutrition contributes to an estimated 2.7 million child deaths annually, accounting for 45% of all child mortality. Ensuring proper infant and young child feeding practices is critical for improving child survival rates and supporting healthy growth and development. The first two years of life are especially crucial, as adequate nutrition during this period significantly reduces illness and death, lowers the likelihood of chronic diseases, and promotes overall developmental progress.

Objectives: This study aim to assess the knowledge regarding weaning among postnatal mothers in a selected area of Udupi district with a view to develop an informational booklet.

Materials and Methods: The descriptive survey design among 100 postnatal mothers was used to assess the knowledge regarding weaning in selected areas of Udupi district, with a view to develop informational booklet. A structured knowledge questionnaire was prepared to assess the knowledge of postnatal mother regarding weaning and later the IB was given. Reliability of the tool was tested and validity was ensured in consultation with guides and experts in field of Nursing and Medicine

Results: Overall knowledge scores of postnatal mothers were found that majority 88% postnatal mothers had poor knowledge level and 12% had moderate knowledge on weaning. Area- wise analysis of pretest knowledge of postnatal mothers regarding weaning, it shows that overall knowledge mean was 11.1 with mean percentage of 34%.

Conclusion: This study concludes that the knowledge scores of postnatal mothers on weaning was low. The demographic variables of postnatal mothers are not significantly associated with the knowledge scores.

Keywords: Knowledge, Weaning, Postnatal Mothers, Informational Booklet

INTRODUCTION

Children forms 38% to 40% of our general population. In the first year of life, infants undergo periods of rapid growth when good nutrition is crucial.^[1] As the baby grows, their nutritional needs the food that we give them will help them grow and develop. According to WHO and UNICEF, poor infant feeding practice and their consequences are one of the world major problem and serious obstacle to social and economic development.^[2]

Undernutrition contributes to an estimated 2.7 million child deaths annually, accounting

for 45% of all child mortality. Ensuring proper infant and young child feeding practices is critical for improving child survival rates and supporting healthy growth and development. The first two years of life are especially crucial, as adequate nutrition during this period significantly reduces illness and death, lowers the likelihood of chronic diseases, and promotes overall developmental progress.^[3,4] Complementary feeding as described by WHO refers to the addition of energy and non-energy containing fluids, non-human milk, and semi-solids or solids to children's diet.^[5]

The term "weaning" has been traditionally described as withdrawal from breast feeding that is when breast feeding is gradually replaced by fresh or modified animal milk, or by semisolid food.^[6] It is transitional to change from liquid to solid diet, the feeding behaviour changes from sucking to chewing and biting and the obligatory introduction with the mother or other caretaker changes to independent feeding.^[7]

Fulfilling the nutritional requirement helps to achieve the basic goal of satisfactory growth and prevention of acute and chronic illness.^[8]

The average milk output of a mother is regarding 600ml, which could offer only barely over four hundred calories. this can support the organic process demands of the child up to four months mature only, and thus on the way facet this age the child desires more food things.^[9]

Proper breast feeding and complementary feeding practices can prevent under five mortalities by 19%.^[3] Appropriate complementary feeding depends on accurate information and skilled support from the family, community and healthcare system. Inadequate knowledge about appropriate food and feeding practices is often a greater determinant of malnutrition than the lack of food. Knowledge of mothers about these factors will help in planning interventions to improve feeding practices. It has been shown in many studies that mothers in India are unable to start complementary feeding at the right time.^[10,11]

Knowledge on appropriate weaning practice is therefore important for the child health. Weaning is often advantageous in reducing early infant mortality death. Although timing of weaning varies across societies but is always determined by mother's characteristics, choices, knowledge and perception about culture beliefs related to feeding. Mothers hold the overall responsibilities for the child's health and mother's knowledge can be barrier for weaning practice. India is a country which consists of many villages and about 70% of people live in villages.^[12]

According to the WHO and UNICEF, poor infant feeding practices and their consequences are one of the world's major problems and a serious obstacle to social and economic development. Being, to a great extent, a manmade problem, it must be considered as a reproach to our science and technology and a blot on our so-called development achievements. It is not only a problem of developing world; it occurs in many parts of the developed world as well. Inappropriate feeding practices result in feeding difficulties and malnutrition ultimately leading to increased mortality and morbidity in children. More than 2.4 million deaths occur in India each year and 2/3 of these deaths is related to inappropriate feeding practices.^[13]

Hence there is need to assess the knowledge of postnatal mother regarding weaning, and also to apprise how far these were beneficial to children. No systematic study was done on this topic and in the selected villages. Thus, it was expected that a study would help to impart knowledge regarding weaning to be adopted to prevent complications. It needs no reiteration that the problem of malnutrition can be solved to a large extent by educating people especially the communities to effectively utilize inexpensive locally available food which they can afford.

MATERIALS & METHODS

The descriptive survey design among 100 postnatal mothers was used to assess the knowledge regarding weaning in selected

areas of Udupi district, with a view to develop informational booklet. The selection of area was done based on geographical proximity, feasibility of conducting a study and availability of sample. Purposive sampling technique was used to collect the data. Sample size was calculated by using below formula.

$$n = \frac{Z^2 1 - \alpha/2 [P(1 - P)]}{d^2}$$

Inclusion criteria for the study 1) postnatal mother who are willing to participate 2) participants who are residence of Udupi district 3) mothers who can communicate in English or Kannada. Participants were excluded if 1) mothers who are health professionals 2) mothers who are diagnosed with mental illness.

The tool for data is a self-administered questionnaire which consists of two parts. Part – A: consists of selected socio demographic variables such as age, education, occupation, family income, number of children, type of diet and source of information. This section consists of 7 items. Part – B: consists of structured knowledge questionnaire to assess the knowledge regarding weaning. This section consists of 30 items. Total maximum score will be 30.

Informational booklet is developed keeping in mind the objectives, related reviews, and expert’s opinion and suggestions. The informational booklet contains information regarding definition, importance, timing, continuation, principles, guidelines and responsibilities. Informational booklet was

prepared in English and later translated in Kannada. The prepared tool along with objectives, blue print and criteria checklist was submitted to 8 experts comprised of 6 nurse educators in child health nursing, 1 pediatrician and 1 statistician for establishing the content validity. The experts were requested to judge the items for relevance, clarity, appropriateness of the content area. The modifications were done in the tool based on expert’s suggestions and in consultation with the guide. The first draft of the tool consisted of 30 items and then based on expert’s suggestions and opinion item no. 15 and 20 were modified. The final draft was reframed with 30 items.

The final tool is tested for reliability. The structured knowledge questionnaire was administered to 10 postnatal mothers at Alevor, Udupi. The reliability of the tool was found out by testing the stability by using test-retest method and internal consistency assessed by using split half technique. The internal consistency of the tool is assessed by split half method and is found to be 0.82. It indicates that the tool is reliable.

STATISTICAL ANALYSIS

Descriptive statistics mean, mode, median standard deviation, frequency percentage will be used to describe the data. and chi-square was used to find out association between knowledge with the demographic variables.

RESULT

A total of 100 participants included in the study.

Table 1: Demographic characteristics of the participants

Sl. No	DEMOGRAPHIC VARIABLES	OPTIONS	FREQUENCY (f)	PERCENTAGE (%)
1.	Age in years	<25 years	44	44%
		26-30 years	24	24%
		31-35 years	18	18%
		36-40 years	10	10%
		Above 40 years	4	4%
2.	Education	Illiterate	6	6%
		Primary school	16	16%
		High school	28	28%
		Higher secondary	22	22%

		school		
		Graduate & above	28	28%
3.	Occupation	Housewife	44	44%
		Coolie worker	14	14%
		Private employee	12	12%
		Self-employee	10	10%
		Government employee	20	20%
4.	Family income	Below Rs 10000/-	44	44%
		Rs 10001-50000/-	42	42%
		Rs 50001- 100000/-	8	8%
		Above Rs 100001/-	6	6%
5.	Number of children in the family	One	22	22%
		Two	36	36%
		Three	22	22%
		Above three	20	20%

In relation to age, majority of the subject 44 (44%) were of age below 25 years, followed by 24 (24%) were of age 26-30 years, 18 (18%) were age 31-35 years, 10 (10%) were 36-40 year and 4 (4%) were above 40 years. In regarding with education, majority 28 (28%) of the subjects were educated until high school, and graduate, 22 (22%) were higher secondary, 16 (16%) were primary and 6 (6%) were illiterate.

In regarding with occupation, majority 44 (44%) of the samples were housewife, 20 (20%) were government employee, 14 (14

%) were coolie worker, 12 (12%) were private employee and remaining 10 (10%) were self-employed. In relation to monthly income, majority 44 (44%) of the subjects were having income below Rs, 10,000/-, 42 (42%) were having Rs. 10,001- 50,000/-, 8 (8%) were having Rs. 50,001- 1,00,000/- and 6 (6%) were having above Rs. 1,00,001/. In relation to number of children, majority 36 (36%) had two children, 22 (22%) had one and three children, 20 (20%) had above three children.

Table 2: Distribution of the knowledge score

Overall knowledge of mothers	Frequency (f)	Percentage (%)
Poor	88	88 %
Moderate	12	12 %
Good	0	0%
Excellent	0	0%
Total	100	100%

Table 2, majority 88 (88%) postnatal mothers had poor knowledge level and 12 (12%) had moderate knowledge on weaning.

Table 3: Area-wise of knowledge scores regarding weaning

Sl. No	Area	Max. score	Mean	Mean percentage
1	Definition	02	0.76	38%
2	Time of weaning & BF	05	2.12	42%
3	Principles	10	3.36	34%
4	Guidelines	11	4.54	41%
5	Complications	02	0.32	16%
Total		30	11.1	34%

The table 3 shows area-wise analysis of knowledge of postnatal mothers regarding weaning. It shows that overall knowledge mean was 11.1 with mean percentage of 34%.

Table 4: Distribution of sample on association between knowledge score and demographic variables

Demographic Variables	Options	f	%	Chi square value	P value	Remarks
Age in years	<25 years	44	44%	4.814	0.306	NS
	26-30 years	24	24%			
	31-35 years	18	18%			
	36-40 years	10	10%			
	Above 40 years	4	4%			
Education	Illiterate	6	6%	1.418	0.84	NS
	Primary school	16	16%			
	High school	28	28%			
	Higher secondary school	22	22%			
	Graduate & above	28	28%			
Occupation	Housewife	44	44%	3.338	0.503	NS
	Coolie worker	14	14%			
	Private employee	12	12%			
	Self-employee	10	10%			
	Government employee	20	20%			
Family income	Below Rs 10000/-	44	44%	2.621	0.269	NS
	Rs 10001-50000/-	42	42%			
	Rs 50001- 100000/-	8	8%			
Number of children in the family	One	22	22%	2.956	0.398	NS
	Two	36	36%			
	Three	22	22%			
	Above three	20	20%			

*S-Significant, *NS- Not significant

To see the association between the knowledge score with selected demographic variables, hypothesis is formulated and tested by using chi-square test. The table 5 showed association of knowledge score with selected demographic variables. The variables like age, education, family income, occupation, and number of children does not show any significant association.

DISCUSSION

This study aims to assess the knowledge regarding weaning among postnatal mothers in a selected area of Udupi district with a view to develop an informational booklet.

Overall knowledge scores of postnatal mothers were found that majority 88 (88%) postnatal mothers had poor knowledge level and 12 (12%) had moderate knowledge on weaning. Area- wise analysis of pretest and posttest knowledge of postnatal mothers regarding weaning. It shows that overall knowledge mean was 11.1 with mean percentage of 34%.

The above findings of the first object were supported by a descriptive study to assess the knowledge regarding weaning among under

five children's mothers at Waghodia, Vadodara, Gujarat with a view to develop health education programme. The findings of the study were pre-test under-five children's mothers were having on average 29.5% knowledge regarding weaning and mean score was 5.9 ± 2.57 . The subjects had a maximum mean of 1.76 with a standard deviation of 1.19 and mean percentage of 8.80% for qualities and principles of weaning. The mean score of 1.06 with standard deviation of 1.14 and mean percentage of 5.30% for introduction and weaning at different age. The mean score of 0.26 with a standard deviation 0.44 and mean percentage of 1.30% for Definition of weaning.^[14]

The chi square value of variable like age, education, family income, occupation, and number of children does not show any significant association.

A descriptive cross-sectional study was conducted to assess the level of awareness, practice, and association between awareness and practice regarding weaning among mothers of under two years of children, Shree Birendra Hospital, Chhauni, Kathmandu.

The total number of samples was 96, and the response rate was 100%. Majority (55.2%) of the respondents were between 26 to 30 years of age, and two third (66.7%) had two children. The majority (65.6%) of the respondents have an average level of awareness regarding weaning. Most (55.2%) of respondents had good practice on weaning. However, there was a no significant association between awareness and practice regarding weaning among mothers under two years of children with selected demographic variables.^[15]

Implication of the study

The study findings will help In service education to nursing personnel helps to improve the knowledge regarding weaning among postnatal mothers, complications and different management approaches. The study findings will help to create awareness and to improve the knowledge regarding weaning among postnatal mothers, regarding benefits of 'administration of informational booklet. The nurse can administer informational booklet for improving the level of the knowledge regarding weaning among postnatal mothers.

Limitations of the study

1. Only knowledge was considered in the present study.
2. The study was conducted in two area, which restricts the generalization.
3. Small sample size constrains its generalizability.
4. The study was confined to postnatal mothers only.

Recommendation for future study

Similar study may be conducted on a larger sample and larger area with exploring other components like attitude and practices regarding weaning.

CONCLUSION

This study concludes that the knowledge scores of postnatal mothers on weaning was low. The demographic variables of postnatal

mothers are not significantly associated with the knowledge scores.

Declaration by Authors

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REFERENCES

1. Dorothy R.M., Barbara A.R. Text Book of Pediatric Nursing. 6th edition. Philadelphia; W.B. Saunders Company; 1998.
2. World health organization. Infant and Young Child Feeding. Fifty-fifth World Health Assembly. WHO News Fact Sheet, 2018.
3. Aggarwal A, Verma S, Faridi MMA, Dayachand. Complementary feeding: reasons inappropriateness in timing, quantity and consistency. Indian J Pediatr. 2008; 75: 49-53.
4. Iqbedioh SO, Oqbani AO. Nutritional quality of fermented foods. J Food Sciences 2004;69(2)SN127-SN133.
5. Sam M, Geetha N. A Textbook of Nutrition for Nurses. 1st ed, New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.; 2004. p. 96-7.
6. Bhutta ZA. Iron and zinc intake from complementary foods. pediatrics 2004; 106: 1295-6.
7. Qureshi SK, Nazli H, Soomro GY. Nutritional status in Pakistan. MMAP technical paper series No. 8:1-8
8. Kumar S. "Hand book of pediatric" 2nd edition, New Delhi: All India publishers and distributors;2000.pp.12-15.
9. Jones G, Stekette RW, Black RE, Bhutta ZA, Morris SS. How many child deaths can we prevent this year? Lancet 2003; 362: 65-71.
10. Sethi V, Kashyap S, Seth V. Effect of nutrition education of mothers on infant feeding practices. Indian J Pediatr. 2003; 70: 463-466.
11. Motee, A., Ramasawmy, D., Pugo-Gunsam, P. & Jeewon, R. An assessment of the breastfeeding practices and infant feeding pattern among mothers in Mauritius. J. Nutrit. Metab. 2013, 1. <https://doi.org/10.1155/2013/243852> (2013).
12. Annamreddi Leelavathi Journal of Perinatal, Pediatric and Neonatal Nursing 1 (2.2019)

13. Semukasa E, Kearney J. Health and food safety concerns of early dietary introduction of unmodified cow milk to infants in developing countries. *African Journal of Food, Agriculture, Nutrition and Development*;14(1):8504- 17. Jinnah Hospital Lahore. *wjpmr*, 2019,5(3), 176-180.
14. Al Harthi, H., Al Jufaili, F., Al Ubaidani, S. A., & Al Awaidy, S. T. (2022). Weaning Practices Impact Factors and Outcomes: Cross-Sectional Study. *International Journal of Innovative Research in Medical Science*, 7(02), 66–72. **How to cite this article: Sushma, T. Jeya Rani. a study to assess the knowledge regarding weaning among postnatal mothers in a selected area of Udupi district with a view to develop an informational booklet. *International Journal of Science & Healthcare Research*. 2025; 10(1): 112-118. DOI: [10.52403/ijshr.20250115](https://doi.org/10.52403/ijshr.20250115)**
15. Dr. Muhammad Atif, KAP Study Regarding Weaning In Mothers At A Tertiary Care Unit:
