

Comparative Study to assess the Knowledge of Primiparous and Multifarious Mothers Regarding Weaning Practices in Infants in Selected Rural Areas

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How to cite this article:

Shivateerth Hiremath/Comparative Study to assess the knowledge of Primiparous and Multifarious Mothers regarding weaning practices in infants in selected Rural Areas/J Nurse Midwifery Matern Health. 2022;8(3):89-96.

ABSTRACT

Aim: To assess the knowledge of primiparous and multiparous mothers regarding weaning practices in infants and to improve their knowledge.

Objective: Objectives of the study to assess the knowledge of primiparous and multiparous mother regarding weaning practices in infants and to find out the association between demographic variables with knowledge scores of primiparous and multiparous women regarding weaning practices in infants.

Methods: The research method adopted for this study is quantitative approach. The research design adopted for this study was comparative design. The formal Permission was obtained from the concerned authorities's non probability purposive sampling technique was used to select the sample for the study. The sample consists of the 60 primiparous mother and 60 multiparous mothers, The instrument used for the data collection is self structured knowledge questionnaire. Collected data was analyzed by using descriptive and inferential statistics.

Results: After tabulation and analysis 60 samples were taken from primiparous mothers in that majority of the subjects 41.6% (25) were in the age group of 19-23 years. Majority of the study samples were Hindus 32 (53.3%). Almost 34.4%(20) had education status SSLC to PUC. Most of the mothers 58.4%(35) were got information from family members and friends. Most of mothers 20 (34.4%) are having income of 15001 and above. 60 samples were taken from multiparous mothers in that majority of the subjects 36.6% were in the age group of 29-33 years. Majority of the study samples were Hindus 30 (50%). Almost 34.4%(20) had education status SSLC to PUC. Most of the mothers 40%(24) were got information from family members and friends. Most of mothers 23(38.4%) are having income of 5001-10000. 3(5%) primiparous samples and 17(28.4%) multiparous samples had adequate knowledge regarding weaning practices. 20(33.4%) and 35(58.3%) respectively from primi and multiparous mothers had moderate knowledge and assessed that 37 (61.6%) samples from primiparous mothers and 8(13.3%) samples from multiparous mothers had inadequate knowledge regarding weaning

practices in infants.

Conclusion: The study findings showed that the multiparous mothers are having more knowledge than primiparous mothers regarding weaning practices in infants and there are some demographic variables associated with knowledge regarding weaning practices in infants.

Keywords: Weaning; Primiparous; Multiparous.

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Received on: 01.06.2022

Accepted on: 12.07.2022

INTRODUCTION

Weaning is the gradual replacement of breastfeeding with other foods and ways of nurturing. If done gradually, weaning can be a positive experience for both the mother and the little one. "Weaning is the process of gradually introducing the infant to solid diet and reducing the supply of mother's milk". A fully weaned infant derives all its nutrition from solid foods and is off breast milk completely.¹

Infancy is a period of rapid growth and the weaning in particular requires extra nourishment for new tissue development and growth, as many mothers do not have enough milk to form the sole source of nutrition for the infant. The time of weaning and the type of weaning food are thus crucial in determining the future growth and development of infants in the community. The role of inappropriate weaning practices in causing malnutrition has previously been underscored by various authorities.¹

The WHO 2015 global recommendation is a one size fits all approach to weaning, an approach which may not take sufficient account of the special needs of some infants and fails to allow for the different problems encountered in the industrialized nations compared with economically developing countries. For the healthy normal birth weight full term infant born in an industrialized country, current research supports the benefit of exclusive breast milk feeding until 4–6 months. Evidence of harm through introducing solid food to these infants earlier than this is weak. Infants should be managed individually according to their needs.²

The introduction to solid feeding and the gradual replacement of milk by solid food as the main source of nutrition is the process known as weaning. In its recent publications the WHO uses the term weaning in a more limited sense to indicate complete cessation of breast feeding. Complementary feeding is the provision of any nutrient containing foods or liquids other than breast milk and includes both solid food and infant formula.³

Need for the Study

Weaning or stop breastfeeding and nursing a baby who is one month's or older or the transition from bottle to cup is a hard decision. Breast or bottle feeding is usually the best and sure shot way to soothe or comfort a child and weaning the child from these sources of comfort can distress parents as much as the child. However, even doctors recommend that bottles should be eliminated as

feeding tools by the time babies are one year old to prevent tooth decay and improper alignment of teeth.⁴

For the first twelve months, breast milk provides iron, Vitamin B 12 before it is available through cow's milk. It is recommended that mother breast feed infant till Vitamin B 12 is available through egg yolks or cow's milk. After the infant has reached the first birthday, the infant may be slowly weaned over to whole cow's milk. At the end of 24 months of age, the cow's milk can provide sufficient amounts of essential protein, calcium, magnesium and vitamins B12 and B2.⁵

The non-vegetarian infants can be weaned over to 100% cow's milk by the age of 18 months. The non-vegetarian infants can have plenty of bio-available Iron and Vitamin B12 from meats and egg yolks. The vegetarian infants should be weaned over to 100% cow's milk by their second birthday. The vegetarian infants may be weaned over to Iron fortified formula before weaning over to cow's milk, saving about six months of breast feeding. All infants should be weaned over to taking milk from Sippy cup by the age of 10 months.⁶

Weaning of children is a complex process involving the introduction of non breast milk food and reduction in suckling activity at the proper age (starting at 4 to 6 months). This process is gradual, starts by supplementation of small amount of food to provide the complete nutritional need of the child. Many factors affect the knowledge of practice and the application of proper weaning, for example: mother's age, number of children, family income, and mother's educational level.⁷

The 'germ' of malnutrition 'infects' a fetus in the intra-uterine life due to lack of sufficient antenatal care on part of the mother. The condition deteriorates further when after birth the infant is deprived of exclusive breast feeding or initiation of weaning is delayed. Weaning should be started after the age of 6 months and should contain energy rich semi-solid food. Malnutrition makes a child susceptible to infections and delays recovery, thus increasing mortality and morbidity. Every time an innocent child suffers the curse of malnutrition, the responsibility goes to the mother, the family and to the community due to their faulty or no knowledge regarding the harmful effects of pre lacteal feeding, benefits of exclusive breastfeeding and initiation of proper weaning at the correct time. It is to be realized that a million children die worldwide each year because they are not breast fed. Several millions who survive suffer from acute or chronic illness related to harmful effects of artificial feeding. These

sufferings are unnecessary and are the preventable ones by discouraging bottle ground. A study like this is very much essential to estimate graveness of the situation so that effective and adequate measures can be taken at the individual, family, community and government levels to combat the curse of malnourishment.⁸

OBJECTIVES

Statement of the Problem

“A Comparative study to Assess the knowledge of Primiparous and Multiparous Mother Regarding Weaning Practices in Infants in Selected Rural Areas”.

Objectives of the Study

- To assess the knowledge of primiparous and multiparous mother regarding weaning practices in infants.
- To compare the knowledge of primiparous and multiparous mother regarding weaning practices in infants.
- To find out the association between demographic variables with knowledge scores of primiparous and multiparous women regarding weaning practices in infants.

Operational Definitions

- **Assess:** It refers to the organized systemic process of collecting information regarding weaning practices in infant's primiparous and multiparous mothers in rural areas.
- **Knowledge:** In this study knowledge refers to the correct response given by primiparous and multiparous women to the questionnaire.
- **Primiparous:** It refers to a woman pregnant for the first time.
- **Multiparous:** It refers to a woman who has given birth to two or more babies live or still excluding abortions.
- **Weaning:** It is defined as the process of giving up one method of feeding.

Research Hypothesis

H₁ : There will be significant difference between the knowledge of primiparous and multiparous mother regarding fibroid weaning practices in

infants

H₂ : There will be a significant association between demographic variables with the knowledge of primiparous and multiparous mother regarding weaning practices in infants.

Assumptions

- Multiparous women will have adequate knowledge regarding weaning practices.
- Primiparous women will have inadequate knowledge regarding weaning practices.

Delimitations of the Study

- Mothers of infants of 6months-1year in selected rural area.
- Women, who can read, write or understand either Marathi, Hindi or English.
- Women between the age group of 18 to 35 years.

RESEARCH METHODOLOGY

Research Approach: A quantitative approach will be used in the study and was considered more appropriate as the aim was to assess the knowledge in primiparous and multiparous mothers.

Research Design: Comparative research design is adopted for the present study.

Variables

Demographic Variables: Age, Religion, family income per month, parity, source of information and educational status.

Dependent Variables: Knowledge of primiparous and multiparous women regarding weaning practices in infants.

Setting of the Study: The present study was conducted at selected rural areas of Akulj.

Population: In the present study population includes the mothers in rural areas of Akulj.

Sample: In this study, the sample size consists of 60 primiparous mother and 60 multiparous mothers, who satisfied the inclusion criteria.

Sampling Technique: In the present study non-probability purposive sampling technique was adopted to select the sample.

Sampling Criteria

The following criteria are set to select samples.

Inclusion Criteria

- Have children aged between 6 months to one year old.
- Willing to participate in the study.
- Who can read, write or understand either Marathi or English.

Exclusion Criteria

- Women who are not willing to participate in the study.
- Mothers of children above one year old.
- Mothers who were not available at the time of data collection.

Data Collection Tool

The present study is aimed at assessing the knowledge regarding weaning practices in infants among primiparous and multiparous mothers who are residing at rural areas of Akulj. Thus a structured questionnaire was prepared to assess the knowledge and used for data collection.

Selection and development of the tool

The structured questionnaire was prepared to assess the knowledge among primiparous and multiparous mothers. The questionnaire consists of 38 items. Based on the pre testing, suggestions from experts, modifications and rearrangements of few items were done.

Description of the knowledge questionnaire

This questionnaire is designed for collecting relevant information from primiparous and multiparous regarding weaning practices in infants.

This questionnaire schedule consists of two parts.

Part-I: The questionnaire was used to the samples who met the inclusion criteria to collect data about demographic variables such as Age, Religion, family income per month, parity, source of information, and educational status.

The information obtained will not be scored.

Part II: This part includes 3 sections of questions, section A, section B and section C. "1" score was allocated to each correct answer and "0" score for wrong answers.

Section-A: It consists of 11 multiple choice questions related to knowledge regarding briefings

out regarding breast feeding. "1" score was allocated to each correct answer and "0" score for wrong answers.

Section-B: It consists of 15 multiple choice questions related to weaning practices. "1" score was allocated to each correct answer and "0" score for wrong answers.

Section-C: It consists of 11 multiple choice questions related to advantages and disadvantage and diet planning for weaning, 1 score was allocated to each correct answer and "0" score.

METHODS OF DATA COLLECTION

The data collected period was 6 weeks. The formal Permission was obtained from the concerned authorities. The data was collected from 12th April to 17th Jun 2022. The collection was planned between 1pm to 4pm, with the help of questionnaire. In the beginning a rapport was established with the women and the purpose of the study was explained to them. The investigator reassured the subjects that whatever information they give will be kept confidential and this information used only for the study purpose. The written consent was obtained from the subjects. The totals of 120 subjects (60 primiparous and 60 multiparous) were selected for the study. The data were collected by using questionnaire in Marathi.

Plan for Data Analysis

Descriptive and inferential statistics will be used for analysis of data and the significant findings will be presented in the form of tables, figures and graphs.

RESULTS

Section I: Describes the demographic variables of primiparous and multiparous.

Section II: Assess the knowledge scores among primiparous and multiparous women regarding weaning practices in infants.

Section III: Comparison of knowledge scores among primiparous and multiparous women regarding weaning practices in infants.

Section IV: Association between demographic variables with knowledge scores of primiparous and multiparous women regarding weaning practices in infants.

Section I: Demographic Characteristics of Primiparous and Multiparous Women.

It shows that 41.6% primiparous and 23.4% multiparous were in 19-23 years of age group, 33.4% primiparous and 40% women were in 24-28 years of age group, 25% primiparous and 36.6% multiparous were in 29-33 years of age group. 53.3% of primiparous and 50% of multiparous were Hindus, 33.4% of primiparous and multiparous were Muslims, and 13.3% of primiparous and 16.6% of multiparous were Christians. 8% of primiparous mother and 26.6% of multiparous women are having income of below 50000, 20% of primiparous mother and 38.4% of multiparous women are having income between 5001-10000, 32% of primiparous and 20% of multiparous having income between 10001-150000, 40% of primiparous and 15% of multiparous women having income 150001. 60% of primiparous women and 60% of multiparous

women were found. 15% of primiparous and 21.6% of multiparous got information from health personnel, 58.4% of primiparous and 33.4% of multiparous got information by family members and friends, 6.6% of primiparous and 21.6% of multiparous got information by journals, 20% of primiparous and 23.4% of multiparous got information from mass media. 16.6% of primiparous and 13.3% of multiparous women are having primary education, 33.4% of primiparous and multiparous women are having higher primary education to SSLC education, 33.4% of primiparous and 40% of multiparous women are having SSLC to PUC of education, 16.6% of primiparous and 13.4% of multiparous women are having PUC and above level of education.

Table 1: Shows the overall knowledge scores of the Primiparous and Multiparous women

Knowledge	Inadequate (Less than 50%)		Moderate (51-75%)		Adequate (76-100%)	
	Frequency	%	Frequency	%	Frequency	%
Primiparous women	37	61.6	20	33.4	3	5
Multiparous women	8	13.3	35	58.3	17	28.4

Section II Assessment of Knowledge Level of the Primiparous and Multiparous Mothers Regarding Weaning Practices in Infants.

Area wise analysis of knowledge scores of

primiparous women.

Shows that the overall mean score for primiparous women were 18.3 and with a SD of 1.8. The mean score percentage is 30.5%.

Table 2: Shows the Area wise comparisons of knowledge scores of multiparous and primiparous women

Knowledge aspects	No. of items	Primiparous Women			Multiparous Women			Mean difference
		Mean	SD	Mean %	Mean	SD	Mean %	
Briefing out regarding breast feeding	12	3.55	0.96	39.5	6.95	0.93	76.6	3.4
Weaning practices	15	4.31	1.29	39.1	5.83	0.72	83.2	1.52
Advantages and disadvantages and diet plan for weaning	11	3.41	1.3	39.25	4.15	0.61	83	0.74
Overall	38	18.3	1.8	30.5	28.1	2.7	46.8	9.8

Table 3: Shows the Area-wise comparison of knowledge scores of Primiparous and Multiparous women

Knowledge aspects	No. of items	Rural women		Urban women		Mean difference	t value
		Mean	SD	Mean	SD		
Briefing out regarding breast feeding	12	3.55	0.96	6.95	0.93	76.6	
Weaning practices	15	4.31	1.29	5.83	0.72	83.2	
Advantages and disadvantages and diet plan for weaning	11	3.41	1.3	4.15	0.61	83	
Overall	38	18.3	1.8	28.1	2.7	46.8	24.8

Area wise analysis of knowledge scores of multiparous women.

Shows that the overall mean score for multiparous women were 28.1 and with a SD of 2.7. The mean score percentage is 46.8%.

Section III: Comparison of the Knowledge Level of Multiparous and Primiparous Women.

It depicts a significant difference between the mean and SD scores of primiparous and multiparous women samples. Unpaired 't' test was used to test

Tabel 4: Shows the Association of knowledge scores of multiparous women with the demographic variables.

Variables	<50%	51-75%	76-100%	Chisquare	DF	P-value	Inference
1. Age in years							
a) 19-23 years	4	4	6	2.7	4	9.488	NS
b) 24-28 year	3	9	12				
c) 29-33 years	3	9	10				
2. Religion	10	8	12				
a) Hindu.	8	5	7	2.58	4	9.488	NS
b) Christian	2	2	6				
c) Muslim	10	8	12				
3. Family income per month							
a) Below 5,000	6	2	8	9.944	6	12.592	NS
b) 5000-10,000	2	9	12				
c) 10,000-15,000	2	6	4				
d) Above 15,000	1	3	5				
4. Source of information regarding weaning							
a) Health personnel	3	5	1	15.78	6	12,592	S
b) Family members and friends	12	18	5				
c) Journals	2	1	1				
d) Mass media	4	6	2				
5. Educational status							
a) Primary education	2	4	2	14.05	6	12.592	S
b) Higher primary education to SSLC	4	4	12				
c) SSLC to PUC	8	4	12				
d) PUC and above	2	2	4				

Tabel 5: Shows the Association of knowledge scores of primiparous women with the demographic variables.

Variables	<50%	51-75%	76-100%	Chisquare	DF	P-value	Inference
1. Age in years							
a) 19-23 years	15	8	2	2.32	4	9.488	NS
b) 24-28 year	12	6	2				
c) 29-33 years	8	7	0				
2. Religion	15	11	6				
a) Hindu	8	8	4	2.58	4	9.488	NS
b) Christian	4	2	2				
c) Muslim	15	11	6				
3. Family income per month							
a) Below 5,000	6	2	2	0.852	6	12.592	NS
b) 5000-10,000	8	4	2				
c) 10,000-15,000	9	5	2				
d) Above 15,000	12	6	2				

4. Source of information regarding weaning

a) Health personnel	3	5	1				
b) Family members and friends	12	18	5	15.78	6	12.592	S
c) Journals	2	1	1				
d) Mass media	4	6	2				

5. Educational status

a) Primary education	5	2	3				
b) Higher primary education to SSLC	10	5	5	13.07	6	12.592	S
c) SSLC to PUC	11	2	7				
d) PUC and above	5	2	3				

the research hypothesis, which was H1 there will be significant difference between the knowledge of primiparous and multiparous women regarding weaning practices in infants. After the unpaired' test it was found out that it is invariably significant at $P < 0.05$ level, hence the research hypothesis is accepted. It projects that primiparous women are having less knowledge than multiparous women regarding weaning practices in infants.

Section-IV: Association of Level of Knowledge with Selected Demographical Variables.

Statistical Methods: Descriptive statistical analysis has been carried out in the present study. Results on continuous measurements are presented on Mean $\pm$ SD (Min-Max) and results on categorical measurements are presented in Number (%). Significance is assessed at 5% level of significance. Chi-square and unpaired' test has been used to find the significance of study parameters on categorical scale between two or more groups.

DISCUSSION

The findings of the study have been discussed with reference to the objectives and hypothesis stated in the information and findings of the other studies.

This chapter discusses with the findings of data analyses in accordance with the objectives of the present study. This study was comparative in nature. A total of 120 women were selected by using purposive sampling technique from the selected primiparous and multiparous women. After the selection of sample the structured questionnaire method was used to gather data. The data findings have been organized and discussed. under the following sections:

Summary

This deals with the analysis of findings of data collected from 60 rural and 60 urban women. The

data gathered were summarized in the master sheet and both descriptive and inferential statistics were used for analysis. The discussions were based on the study.

CONCLUSION

The present study reveals that multiparous women are having more knowledge than primiparous women and there is significant association between knowledge scores and demographic variables. Conclusions were derived from findings and are the synthesis of findings. Based on the findings of the study the following conclusions are drawn.

Limitations

- The study is limited to primiparous and mutliparous women in selected rural areas.
- The study is limited to a sample of 60 each from primiparous and mutliparous.
- This study cannot be generalized.

RESULTS

Results shows that 60 samples were taken from primiparous mothers in that majority of the subjects 41.6%(25) were in the age group of 19-23 years. Majority of the study samples were Hindus 32 (53.3%). Almost 34.4%(20) had education status SSLC to PUC. Most of the mothers 58.4%(35) were got information from family members and friends. Most of mothers 20(34.4%) are having income of 15001 and above.60 samples were taken from multiparous mothers in that majority of the subjects 36.6% were in the age group of 29-33 years. Majority of the study samples were Hindus 30 (50%). Almost 34.4%(20) had education status SSLC to PUC. Most of the mothers 40%(24) were got information from family members and friends. Most of mothers

23(348.4%) are having income of 5001-10000.3(5%) primiparous samples and 17(28.4%) multiparous samples had adequate knowledge regarding weaning practices. 20(33.4%) and 35(58.3%) respectively from primi and multiparous mothers had moderate knowledge and assessed that 37 (61.6%) samples from primiparous mothers and 8(13.3%) samples from multiparous mothers had inadequate knowledge regarding weaning practices in infants.. The study showed that there exists more knowledge in urban women than rural women. There exists a 9.8 more score for mutliparous women samples than their counter parts.

In primiparous women source of information and educational qualification have significant association with knowledge regarding weaning practices. Variables such as age, religion, family income per month, have no significant association with knowledge regarding weaning practices in infants.

In multiparous mothers source of information and educational qualification have significant association with knowledge regarding weaning practices in infants. Variables such as age, religion, family income have no significant association with knowledge regarding weaning practices in infants

INTERPRETATION AND CONCLUSION

The study findings showed that the multiparous mothers are having more knowledge than primiparous mothers regarding weaning practices in infants and there are some demographic variables associated with knowledge regarding weaning practices in infants.

ACKNOWLEDGMENT

The authors would like to express their gratitude to the Mothers in rural areas of Akuj for their help in conducting this study.

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