

Assess the Knowledge Regarding Exclusive Breast-Feeding Practices Among Primi Mothers Admitted in Dr.Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk

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Abstract

Background: Human milk is the preferred form of nutrition for all infants. it is most economical form of feeding. its protection against infection can save time and cost of medical visit. Human milk is species specific, having evolved over time to optimize the growth and development of baby and young child.¹ Breast milk consist of carbohydrate, protein, fat and fatty acids, vitamins, minerals like iron, zinc, calcium, phosphorus, sodium, potassium etc and trace elements. All these constituents in breast milk are well balanced and easily digestible.²

Exclusive breast feeding refers that only breast milk is given to the babies up to six months, not even water is given. The main advantages of exclusive breast feeding include the optimum growth and development of the brain, bone, myelination of nervous system and maturation of intestinal tract of the baby. The World Health Organization (WHO) and the United Nation Children's Fund (UNICEF) recommend initiation of breastfeeding within the first hour after birth; exclusively breastfeed for the first six months of age and continuation of breastfeeding for up to two years of age or beyond in addition to adequate complementary foods

Objectives: 1.To assess the knowledge regarding exclusive breast-feeding practices among primi mothers. 2.To find out the association between knowledge regarding exclusive breast-feeding practices and selected demographic variables

Material and Methods: The research design was non-experimental descriptive study with one group pre-test design. The study was conducted among 100 primi mothers admitted in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk. The participants were selected by using non-probability purposive sampling technique. The Data was collected by interview schedule which included structured knowledge questionnaire. It consists of two sections. Section A with socio-demographic data and Section B with 25 questions with 4 options. The data collected from October 2024 to December 2024. Data gathered were analysed by using descriptive and inferential statistics.

Result: The findings of the study revealed that the 37% participants had good knowledge, 52% participants had average knowledge and 11% participants had poor knowledge regarding exclusive breast feeding practices. The Chi square test showed that there was significant association between knowledge score and selected demographic variables like age and educational qualification.

Conclusion: The findings of this study revealed that majority of the participants had moderate knowledge regarding exclusive breast feeding. It also shows that educational strategies are important to improve and correct primi mothers knowledge. This study identifies the need for the workforce to encourage mothers to attend antenatal and postnatal care to improve EBF practices.

Keywords: Knowledge, Exclusive breastfeeding practice, Primi mothers

I. Introduction

Human milk is the preferred form of nutrition for all infants. it is most economical form of feeding. its protection against infection can save time and cost of medical visit. Human milk is species specific, having evolved over time to optimize the growth and development of baby and young child.¹ Breast milk consist of carbohydrate, protein, fat and fatty acids, vitamins, minerals like iron, zinc, calcium, phosphorus, sodium, potassium etc and trace elements. All these constituents in breast milk are well balanced and easily digestible.²

Exclusive breast feeding refers that only breast milk is given to the babies up to six months, not even water is given. The main advantages of exclusive breast feeding include the optimum growth and development of the brain, bone, myelination of nervous system and maturation of intestinal tract of the baby. it is also preventing various types of maternal diseases like breast cancer, ovarian cancer etc. it provides good immunity power to the child.³ The World Health Organization (WHO) and the United Nation Children's Fund (UNICEF) recommend initiation of breastfeeding within the first hour after birth; exclusively breastfeed for the first six months of age and continuation of breastfeeding for up to two years of age or beyond in addition to adequate complementary foods.⁴

The Baby Friendly Hospital Initiative (BFHI) is a joint effort of World Health Organization (WHO) and United Nation Children's Fund to encourage, promote and support exclusive breast feeding as the model for optimum infant nutrition.⁵ Ten research supported practices were developed by BFHI as a guideline for maternity facilities worldwide to promote breast feeding.⁶

Scientific studies show that the watery human milk in what the human infant needs. the exclusively breast-fed babies who consume enough breast milk to satisfy their energy need will easily meet their fluid requirement even in hot or dry climate.⁷ A healthy mother produces 850ml of breast milk per day up to 3 months. The energy requirement for infants during 0-6months is 140 kcal/kg of the body weight. If mother produces 600 ml milk, the infant gets 420 kcal/day. the nutritive value of breast milk is better than buffalo's or cow's milk or formulated milk.⁸

Breast-fed infants especially beyond 2-3 months of age, tend to grow at a satisfactory but slower rate than bottle fed infants. A research study conducted by Rajiv Gandhi University of Health Sciences (2010), to assess the knowledge, practice and attitude of breast feeding among 50 postnatal mothers in selected community areas showed the result that 72% had inadequate knowledge and practice regarding breast feeding.⁹

Statement of the problem

"A study to assess the knowledge regarding exclusive breast-feeding practices among primi mothers admitted in Dr. Vithalrao Vikhe Patil Pravara Rural Hospital, Loni Bk".

Objectives

- To assess the knowledge regarding exclusive breast-feeding practices among primi mothers

- To find out the association between knowledge regarding exclusive breast-feeding practices and selected demographic variables

II. Methodology

Research design and approach: A research design is a plan of how, when and where data are to be collected and analysed. Here, non-experimental descriptive study with one group pre-test design is adopted for the study, because the aim of this research study was to assess the level of knowledge regarding exclusive breastfeeding in primi mothers.

Setting of the study: Setting is the physical location and condition in which data collection takes place in a study. The setting of the present study was the Intensive Care Units of Dr Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk. Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital is 1275 bedded multi-disciplinary; super specialty medical institute located in Loni Bk, Ahmednagar, Maharashtra, India. The inpatient department of Obstetrics and Gynecology department of the hospital consist of well-equipped labour room, two Antenatal ward and six postnatal ward with average 800-1000 patients per month.

Samples and sampling: Samples of the present study was 100 primi mothers admitted in Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk and those who met the inclusion criteria. The primi mothers were selected by using non-probability purposive sampling technique. The inclusion criteria for the study included the primi mothers who are healthy and able to understand Marathi language.

Tool and technique: The instrument used for this study was a structured knowledge questionnaire, in which an interview schedule was adapted to collect the data. The structured questionnaire included two sections, section A with socio-demographic variables and section B with questionnaire to assess the knowledge regarding exclusive breastfeeding practices among primi mothers which consisted 25 questions with four options. The maximum score was 25 and minimum score was zero. The tool for the study were validated and approved by the renowned experts from medical and nursing profession. The time taken for each participants for the completion of data were 30 minutes each.

Data collection procedure:

Prior to the study, Ethical approval obtained from the Institutional Ethical Committee of Pravara Institute of Medical Sciences (DU). Official written permission taken from the Medical Superintendent, Nursing Superintendent and Head of the department of Obstetrics and Gynecology of Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital. Informed consent taken from the participants before data collection. The data were collected during October 2024 to December 2024.

Statistical Method

The data were analysed by descriptive and inferential statistics and presented in the forms of tables, graphs and figures. The demographic variables were analysed by using descriptive statistics in the frequency and percentage form. The level of knowledge regarding exclusive breastfeeding practices among primi mothers were analysed by using mean and standard deviation and Chi square test was used to find out the association between knowledge regarding exclusive breastfeeding practices and selected socio-demographic variables. ($p < 0.05$)

III. Result

Socio-demographic variables of Primi mothers

Table No.1: Description of participants according to their demographic and clinical characteristics
n= 100

Sr no	Variables	Frequency	Percentage
1.	Age 1 A. 18-25 years B. 26-30 years C. 31-35 years D. 36 years and Above	55 42 03 00	55% 42% 03% 00%
2.	2.Week of gestation A.30-35 weeks B. 36-40 weeks C. 41 weeks and Above	38 60 02	38% 60% 02%
3.	3. Educational Status A. No formal education B. Primary education C. Secondary education D. High School/HSE E. Graduation and above	00 05 16 45 34	00% 05% 16% 45% 34%
4.	4. Marital status A. Married B. Unmarried C. Widow D. Divorced	100 00 00 00	100% 00% 00% 00%
5.	5.Monthly income A. Rs.5000- Rs. 10000 B. Rs.10001-Rs.15000 C. Rs.15001-Rs.20000 D. Rs.20000 and Above	03 27 66 04	03% 27% 66% 04%
6.	Type of family A. Nuclear B. Joint C. Extended	33 62 05	33% 62% 05%
7.	7. Occupation A. Home Maker B. Daily wager D. Private sector E. Government sector	40 16 40 04	40% 16% 40% 04%
8.	8. Religion		

A. Hindu	78	78%
B. Muslim	11	11%
C. Christian	06	06%
D. Other	05	05%

Table No. 1 shows the distribution participants according to their demographic variables. It revealed that majority (55%) of the participants belongs to the age group 18-25 years followed by 42% belongs to the age group 26-30 years. Highest percentage (60 %) of the participants belongs to 36-40 weeks of gestation and 38% were 30-35 weeks of gestation. Educational status shows that 45% participants completed Higher Secondary

Education followed by 34 % were graduation and above. The 100 % of the participants were married. monthly income shows that 66% of the participants belongs to Rs.15001-Rs.20000. The highest percentage of the samples (62%) living in a joint family followed by nuclear family (33%) and equal percentage, that is 40% shows both home maker and working in private sector. Majority of the participants belongs to Hindu religion with 78% followed by Muslim (11%).

**Table No. 2: Assessment of knowledge regarding exclusive breastfeeding practices among primi mothers
n=100**

Sr.no	Aspect	Level of knowledge	Frequency	Percentage	Mean	SD	Mean %
1	Knowledge regarding exclusive breastfeeding practices among primi mothers	Poor	11	11%	14.8	±1.7	59.2%
		Average	52	52%			
		Good	37	37%			

Table No.2 depicts the distribution of mean, SD and mean % of knowledge score of primi mothers regarding exclusive breastfeeding practices.it shows that the knowledge score was 14.8 ± 1.7 , which was the 59.2% of the maximum score. The primi mothers had average knowledge regarding exclusive breastfeeding practices

Table No.3: Association between knowledge regarding exclusive breastfeeding practices among primi mothers and their selected demographic variables.

Sr. no.	Variables	X ² calculated	X ² table	Degree of freedom	Level of significance
1.	Age	0	12.59	6	Non-significant
2.	Weeks of Gestation	3.4	9.48	4	Non-Significant
3.	Education	16.78	15.50	8	Significant
4.	Marital status	3.18	12.59	6	Non-significant
5.	Monthly income	11.2	15.50	8	Non-significant
6.	Type of family	4.22	9.48	4	Non-significant

7.	Occupation	7.43	12.59	6	Non-significant
8.	Religion	5.41	12.59	6	Non-significant

n=100

p<0.05 level of significance

Table No.3 depicts the association between knowledge regarding exclusive breastfeeding practices and the selected demographic variables. The findings revealed that there was significant association between the knowledge level and demographic variable like education and there was no significant association between knowledge level and demographic variables like age, weeks of gestation, marital status, monthly income, type of family, occupation and religion.

IV. Discussion

Exclusive breastfeeding practice is the best and most economical nutrition to the baby. The lack of knowledge can influence proper breast feeding and it is important to assess exclusive breast feeding practices mainly for the primi mothers.¹⁰

The present study was undertaken to assess the knowledge regarding exclusive breast feeding practices among primi mothers admitted in Dr Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk. The study revealed that 55% of the participants belongs to the age group 18-25 years followed by 42% belongs to the age group 26-30 years; 60 % of the participants belongs to 36-40 weeks of gestation and 38% were 30-35 weeks of gestation; educational status shows that 45% participants completed higher secondary education followed by 34 % were graduation and above; 100 % of the participants were married; monthly income shows that 66% of the participants belongs to Rs.15001-Rs.20000; the highest percentage of the samples (62%) living in a joint family followed by nuclear family (33%); equal percentage, that is 40% shows both home maker and working in private sector and majority of the participants belongs to Hindu religion with 78% followed by Muslim (11%).

Findings of the present study was supported by a study conducted by Mulugeta Wassie and Netsanet Bayu on knowledge and attitude of antenatal mothers towards exclusive breast feeding in Ethiopia, which also stated that majority of the participants (66.9%) belongs to the age group 20-30 years, majority (83.9%) were married and 45% participants were home makers.¹¹

Findings related to the knowledge regarding exclusive breast feeding practices among primi mothers

Findings of the present study concluded that majority (52%) of the primi mothers had average knowledge regarding exclusive breastfeeding practices followed by good knowledge (37%) and poor knowledge (11%).

The present study was supported by a study conducted by Alexandria Cardoso and Abel Silva which showed that 60% of the antenatal mothers having average knowledge regarding exclusive breast feeding practices.¹²

Findings related to the knowledge regarding exclusive breastfeeding practices and demographic variables of the primi mothers

Chi square values were calculated to find out the association between knowledge regarding exclusive breastfeeding practices and demographic variables of the primi mothers. The findings revealed that there was significant association between the knowledge level and demographic variable like education and

there was no significant association between knowledge level and demographic variables like age, weeks of gestation, marital status, monthly income, type of family, occupation and religion.

The present study was supported by a study conducted by Alexandria Cardoso and Abel Silva which showed that there is significant association between knowledge level and educational qualification.¹²

Conclusion

Breast milk is a natural food for the baby which acts as the complete source of nutrition for the newborns.¹³ Early initiation of breast feeding along with the exclusive breastfeeding should be followed by the mother's in order to achieve the Millennium Development Goal of reduction of infant mortality.¹⁴ Thus the present study concluded that the primi mothers admitted in Dr Vitthalrao Vikhe Patil Pravara Rural Hospital, Loni Bk had average knowledge regarding exclusive breast feeding practices. It shows that educational strategies are important to improve and correct primi mothers knowledge. This study identifies the need for the workforce to encourage mothers to attend antenatal and postnatal care and counselling to improve EBF practices.

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