IJBPAS, June, Special Issue, 2023, 12(6): 555-565
ISSN: 2277–4998

International Journal of Biology, Pharmacy and Allied Sciences (IJBPAS)
'A Bridge Between Laboratory and Reader'
www.ijbpas.com

TO ASSESS THE KNOWLEDGE AND PRACTICE REGARDING BREAST-FEEDING TECHNIQUE AMONG PRIMIPARA MOTHERS IN SELECTED HOSPITAL, VADODARA

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Received 25th Jan. 2023; Revised 24th Feb. 2023; Accepted 23rd April 2023; Available online 15th June 2023

https://doi.org/10.31032/IJBPAS/2023/12.6.1078

ABSTRACT

Background of the study: Breast-feeding is an important determinant of health of mothers and their offspring. The WHO have recommended that breast-feeding is strongly exclusive until the age of 6 months. Effective breast feeding depends on correct positioning and attachment which in turn result in increasing the more milk production and release. In other words, Improper positioning of breast-feeding may result in ineffective suckling, lactation failure and breastfeeding problems. Objectives: this research study is to assess pre-test and post-test knowledge and practice of mothers regarding breast-feeding technique among primipara and to assess the effectiveness of plan teaching program and correlation between on knowledge and practice of mothers regarding breast-feeding technique among primipara mothers in selected hospital, Vadodara. **Material and method:** In this research study an evaluative research approach with pre-experimental one group pre-test post-test design with non-probability convenience sampling technique used to collect the 72 samples of primipara mothers and data collection done by administrating the self-structured questionaries. Data was analyzed by using descriptive and interferential statistic such as standard deviation, chi square-test, t-Test and Karl-Pearson correlation test. **Result:** In the post-test 0(00.0%) samples were

having inadequate knowledge, 9(12.5%) samples were having moderate knowledge, 63 (87.5%) samples were having adequate knowledge level and 02(2.78%) samples were having poor practice, 70(97.22%) samples were having good practice level for breast-feeding techniques. Paired-t test was used to identify association between selected Socio-demographic variable and level of knowledge. Result shows that the pre-test and post-test knowledge level mean was 1.6250 and 2.8750, the mean difference was 71, standard deviation of pre-test was 0.56761 and standard deviation of post-test was 0.33304, the obtained 't' value was 16.455, so it was highly significant at 0.05 level. Karl person correlation test was used to identify correlation between knowledge and practice of mother regarding breastfeeding techniques. **Discussion:** According to that correlation between knowledge and practice of mother regarding breastfeeding techniques was strongly positive at 0.05 level of significance.

Keywords: Effectiveness, plan-teaching program, primipara mothers, breast-feeding techniques

INTRODUCTION

Breast-feeding is an important determinant of health of mothers and their offspring. The WHO have recommended that breast-feeding is strongly exclusive until the age of 6 months. If breast-feeding not properly it may cause several problems in children. Children are greatest resource of nation which become productive adult of future. Health of the newborn child directly affected to mother's health during pregnancy. The ideal food for the infant is mother milk, which has the specific characteristics that match the growth of infant's nutritional requirement during first year of life **[1-5]**. Breast-feeding is not just one type of feeding it is a love of mother towards his/her baby. A breast-fed baby enjoys not only feeding but feeling of comfort, warmness and with all his senses he/she drinks in her mother's love **[6-13]**. Effective breast feeding depends on correct positioning and attachment which in turn result in effective suckling via increasing the more milk production. In other words, Improper positioning of mother, incorrect attachment of baby to the breast may result in ineffective suckling and overall responsible for lactation failure and breastfeeding problems. Early postnatal lactation support on correct breastfeeding technique results in effective suckling, longer duration of breastfeeding with reduction of breastfeeding problems **[14-18]**. Breast-feeding should be started within half an hour of birth as soon as possible after normal delivery where as in case of caesarian section delivery, within 4 hours. Rooming in and bedding should be done with mother and baby to prevent separation and promote breast-feeding **[19]**. The

positioning of the baby's body is important for good attachment and successful breast-feeding. Immediately after birth baby is ready to start breast-feeding. Place your baby skin to skin contact immediately after birth and as often as possible during the first day of life, this provides your child comfort and warmness. This also help baby adjust to life outside of your body and to breastfeed better. The first some feedings have a positive and satisfying experience for you and your baby **[20]**. Perfect breast-feeding technique reduces the risk of breast cancer, ovarian cancer, diabetes, hypertension and heart disease. That also promotes post-partum weight loss and emotional health, give emotional support and bonding, prevents post-partum hemorrhage and delays ovulation. That meets the full nutritional requirement of infant, reduces the risk of infectious disease and illness, lower the risk of developing allergic **[21]**. Breastfeeding allows eye-to-eye contact and physical closeness, strengthening the bond between the child and mother. Researcher has attempted to identify the decision-making process and characteristics of women, who breast feed. The variable that may help to improve knowledge and practice of the mother's and these are the important for maternal infant feeding method. The present study aim is to assess the knowledge, attitude and practice of primipara mothers regarding breast-feeding techniques **[22]**.

The main aim of the study is to assess the knowledge and practice regarding breast-feeding technique among primipara mothers who are admitted in postnatal ward.

MATERIAL AND METHOD

Quantitative research approach pre-experimental one group pre-test post-test design was used to conduct the study. The Hospital as a study setting were selected on the basis of availability of number of primipara mothers The sampling techniques used for this study was non-probability convenient sampling technique for 72 primipara mothers. self-structured questions used to assess the knowledge and practice regarding breast-feeding techniques. Ethical approval for conducting the study was taken form Sumandeep Vidyapeeth Institutional ethics committee, Vadodara. Administrative approval and permission were taken from concern authorities of the selected hospital, Vadodara. The consent form was prepared for the study participant regarding their willingness to participate in the research study. The research tool for data collection consists three sections:Section 1: It consists of Socio-demographic variables of the participants such as age, gender, educational status, occupation, income of the family, Type of family, residential place, source of information. Section 2: It includes self-structured questions related to knowledge about breast-feeding techniques. The tool is

total 30 questions that would help to evaluate the knowledge level of primipara mothers regarding breast-feeding techniques. Each question has 1mark. A score is considered as if it is a 0-10 is indicate inadequate knowledge, if it is between 11-20 is indicate moderate knowledge, if it is between 21-30 is indicate adequate knowledge. Section 3: It includes self-structured questions related to practice of breast-feeding techniques. The tool is total 12 questions that would help to evaluate the practice level of primipara mothers regarding breast-feeding techniques. Each question has 1mark. A score is considered as if it is a 0-5 is indicate poor practice, if it is between 6-12 is indicate good practice.

RESULTS

Description of the samples according to their socio Socio-demographic variables

Table 1 Represent the Frequency and percentage distribution of samples, according to their Socio-demographic characteristics. It was observed that among 72 mothers 3(4.2%) belonged to 18 to 21, 62(86.1%) belonged to 21-25 years, 7(9.7%) belonged to 26-29 year and no one belonged to age 30-33 years. 59(81.9%) mothers were Hindu and 13(18.1%) were Muslims and no one belongs to Christian and other religion. 10(13.9%) patients were not having formal education, 53(73.6%) patients had primary education, 9(12.5%) patients had high school education and no one had higher secondary and graduation education. 59(81.9%) were housewife, 3(4.2%) mothers were having private job and 10(13.9%) mothers were having self-employment job. 7(9.7%) mothers having 1000-5000 family-income, 51(70.8%) mothers having 5000-10,000 family-income and 14(19.4%) mothers having 10,000 and above family income. 17(23.6%) mothers had nuclear family, 54(75,0%) mothers had joint family, 1(1.4%) mother had extended family. 24(33.3%) mothers live in Urban area, 47(65.3%) mothers live in Rural area and 1(1.4%) mother live in Tribal area.

Table 4 shows that calculated correlation coefficient (r) value between knowledge and practice is 1. So, there was Strong positive correlation exists between knowledge and practice. Hypothesis H_3 is accepted.

Table 5 shows that, the analysis of association of selected Socio-demographic variables with post-test knowledge level of breast-feeding techniques. Regarding breast-feeding techniques using chi square test revealed that there was significant association relationship between post-test knowledge level of breast-feeding techniques with the variable such as mother education. Because the obtained value was more than the table value at 0.05 level of significance. So, the research hypothesis H_1 was accepted.

Table 6 shows that, the analysis of

association of selected Socio-demographic variables with post-test practice level of breast-feeding techniques. Regarding breast-feeding techniques using chi square test revealed that there was not significant association relationship between post-test pr actice level of breast-feeding techniques with the variables. Because the obtained value was small than the table value at 0.05 level of significance. So, the research hypothesis H_0 was accepted.

Table 7 shows that the pre-test and post-test knowledge level mean was 1.6250 and 2.8750, the mean difference was 71, standard deviation of pre-test was 0.56761 and standard deviation of post-test was 0.33304, the obtained 't' value was 16.455, so it was highly significant at 0.05 level and shows that the plan-teaching program of knowledge was effective. So, the research hypothesis H_2 was accepted.

Table 8 shows that the pre-test and post-test knowledge level mean was 1.2639 and 1.9722, the mean difference was 71, standard deviation of pre-test was 0.44383 and standard deviation of post-test was 0.16549, the obtained 't' value was 13.131, so it was highly significant at 0.05 level and shows that the plan-teaching program of knowledge was effective.

Table 1: Frequency and percentage distribution of samples according to their Socio-demographic variables (Sample size:- 72)

Sr. N0	Socio-demographic data	Categories	Frequency	Percentage
1.	Age	18 to 21	3	4.2
		22 to 25	62	86.1
		26 to 29	7	9.7
		30 to 33	0	0
2.	Religion	Hindu	59	81.9
		Christian	0	0
		Muslim	13	18.1
		Others	0	0
3.	Education	No formal education	10	13.9
		Primary Education	53	73.6
		High school	9	12.5
		Higher secondary	0	0
		Graduate and above	0	0
4.	Occupation	Housewife	59	81.9
		Government	0	0
		Private	3	4.2
		Self-employment	10	13.9
5.	Family Income	1000-5000 Rs/-	7	9.7
		5001-10,000 Rs/-	51	70.8
		10,0001 Rs/-and above	14	19.4
6.	Family type	Nuclear	17	23.6
		Joint	54	75.0
		Extended	1	1.4
7.	Residence	Urban	24	33.3
		Rural	47	65.3
		Tribal	1	1.4

Table 2: Data on level of knowledge regarding breastfeeding techniques (Sample size:- 72)

Sr no	Knowledge level	Pre-test		Post-test	
		F	P	F	P
1	Inadequate	30	41.67%	00	00.0%
2	Moderate	39	54.17%	09	12.5%
3	Adequate	03	04.16%	63	87.5%
Total		72	100%	72	100%

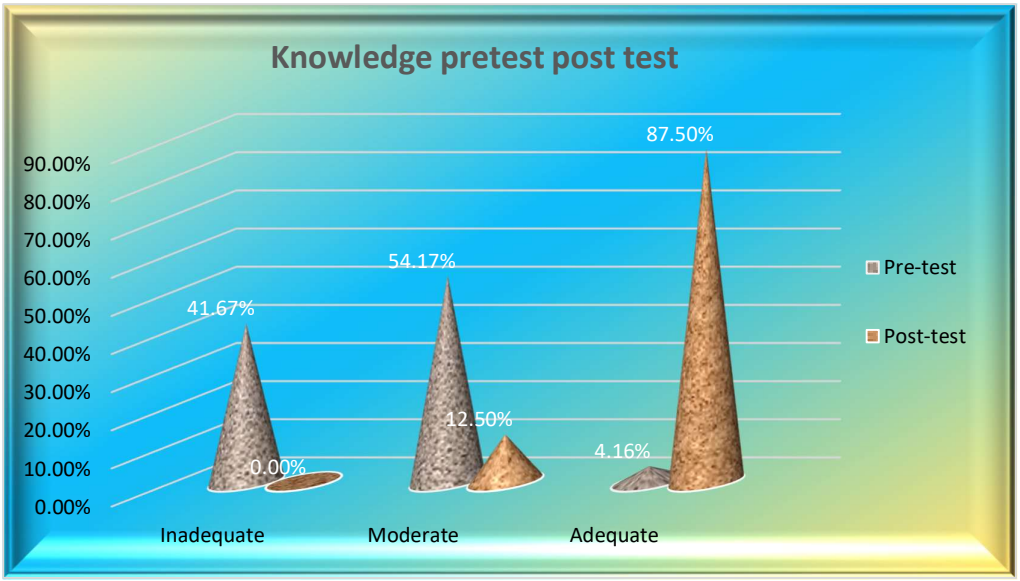

Figure 1: Column chart showing the percentage distribution of the pre-test and post-test knowledge score.

Table 3: Data on level of practice regarding breastfeeding techniques (Sample size:- 72)

Sr no	Practice level	Pre-test		Post-test	
		F	P	F	P
1	Poor	53	73.61%	02	02.78%
2	Good	19	26.39%	70	97.22%
Total		72	100%	72	100%

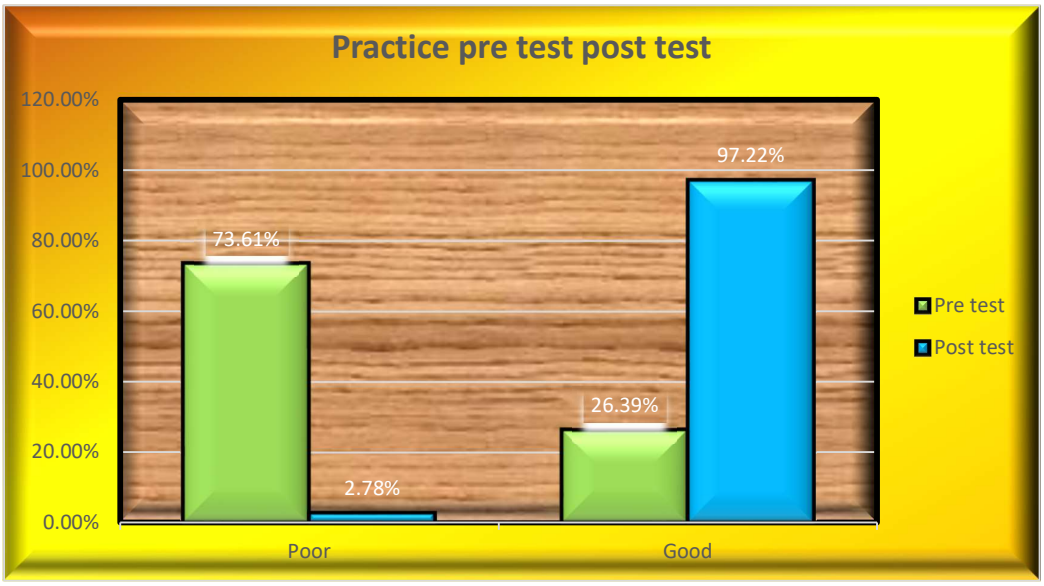

Figure 2: column chart showing the percentage distribution of the pre-test and post-test practice score

Table 4: Correlation between Knowledge and Practice regarding breast-feeding techniques among primipara mothers (Sample size:- 72)

Sr. No.	Variables	Correlation Coefficient(r)
1.	Knowledge	1
2.	Practice	S

Degree of freedom = 71; S= significant P≥0.05 level

Table 5: Data on association between post-test knowledge score with Socio-demographic variables (Sample size:- 72)

Socio-demographic Variable		Inadequate	Moderate	Adequate	Total	Chi-square X^2	Df	Level of significance at 0.05 level
Age	18 to 21	0	1	2	3	1.294	2	NS
	22 to 25	0	7	55	62			
	26 to 29	0	1	6	7			
	30 to 33	0	0	0	0			
Religion	Hindu	0	6	53	59	1.623	1	NS
	Christian	0	0	0	0			
	Muslim	0	3	10	13			
	Others	0	0	0	0			
Education	No formal education	0	2	8	10	6.274	2	S
	Primary Education	0	4	49	53			
	High school	0	3	6	9			
	Higher secondary	0	0	0	0			
	Graduate and above	0	0	0	0			
Occupation	Housewife	0	8	51	59	0.546	2	NS
	Government	0	0	0	0			
	Private	0	0	3	3			
	Self-employment	0	1	9	10			
Family Income	1000-5000 Rs/-	0	0	7	7	2.046	2	NS
	5001-10,000 Rs/-	0	6	45	51			
	10,0001 Rs/-and above	0	3	11	14			
Family Type	Nuclear	0	4	13	17	2.552	2	NS
	Joint	0	5	49	54			
	Extended	0	0	1	1			
Residence	Urban	0	4	20	24	0.673	2	NS
	Rural	0	5	42	47			
	Tribal	0	0	1	1			

Table 6: Data on association between post-test practice score with Socio-demographic variables (Sample size:- 72)

Socio-demographic Variable		Poor	Good	Total	Chi-square X^2	Df	Level of significance at 0.05 level
Age	18 to 21	0	3	3	0.332	2	NS
	22 to 25	2	60	62			
	26 to 29	0	7	7			
	30 to 33	0					
Religion	Hindu	1	58	59	1.419	1	NS
	Christian	0	0	0			
	Muslim	1	12	13			
	Others	0	0	0			
Education	No formal education	0	10	10	0.737	2	NS
	Primary Education	2	51	53			
	High school	0	9	9			
	Higher secondary	0	0	0			
	Graduate and above	0	0	0			
Occupation	Housewife	2	57	59	0.453	2	NS
	Government	0	0	0			
	Private	0	3	3			
	Self-employment	0	10	10			
Family Income	1000-5000 Rs/-	0	7	7	0.847	2	NS
	5001-10,000 Rs/-	2	49	51			
	10,0001 Rs/-and above	0	14	14			

Family Type	Nuclear	0	17	17	0.686	2	NS
	Joint	2	52	54			
	Extended	0	1	1			
Residence	Urban	1	23	24	0.274	2	NS
	Rural	1	46	47			
	Tribal	0	1	1			

Table 7: Data on effectiveness of plan teaching program of knowledge among primipara mothers (Sample size:- 72)

Aspect	Mean	Df	Std. Deviation	"t"-value
Pre-test	1.6250	71	0.56761	16.455
Post-test	2.8750		0.33304	

Significant in 0.05 level

Table 8: Data on effectiveness of plan teaching program of practice among primipara mothers (Sample size:- 72)

Aspect	Mean	Df	Std. Deviation	"t"-value
Pre-test	1.2639	71	0.44383	13.131
Post-test	1.9722		0.16549	

Significant in 0.05 level

DISCUSSION:

According to study 41.67% mothers having inadequate; 54.17% mothers have moderate and 04.16% mothers having adequate knowledge level.73.61% mothers having poor practice and 26.39% mothers having good practice level. Self-Structured questionnaires were used to assess the knowledge and practice of primipara mothers regarding breast-feeding techniques. After the discussion it was found that majority of the primipara mothers having moderate level of knowledge and poor practice regarding breast-feeding techniques. We had given a plan teaching program to the primipara mothers regarding breast-feeding techniques. After the plan teaching program level of knowledge and practice regarding breast-feeding techniques among primipara mothers was improve. Self-Structured questionnaires were used to assess the knowledge and practice of primipara mothers regarding breast-feeding techniques after the plan teaching program. It was found that majority of the primipara mothers having adequate level of knowledge and good practice regarding breast-feeding techniques after the effective plan teaching program.

CONCLUSION

The Present study assessed the knowledge and practice regarding breast-feeding techniques among primipara mothers in Dhiraj General Hospital, Waghodiya, piparia, Vadodara and found that majority of the primipara mothers were having moderate knowledge level and poor practice level.

CONSENT:

As per international standard or university standard, parents written consent had collected and preserved by the author(s)

ETHICAL APPROVAL:

The study was approved from ethical committee of sumandeep vidyapeeth institutional ethical committee and ethical

approval number is sviec/on/nurs/SRP/21040.

REFERENCES:

[1] Williams SR. Nutrition and Diet Therapy. St Louis, Mo: Times Mirror.

[2] Shaikh U, Chantry C. Reflections on the American Academy of Pediatrics' 2005 policy statement on "Breastfeeding and the use of human milk". Journal of human lactation. 2006 Feb;22(1):108-10.

[3] Wetet T. Breast feeding techniques and associated factors among primiparous mothers in south achefer woreda, west gojjam zone, amhara region, ethiopia, 2021 (doctoral dissertation).

[4] Mohapatra SS, Biswal D, Das BK, Pradhan RN. Breast-feeding practices of women in rural Orissa, India. Tropical doctor. 1991 Jan 1;21(1):36-.

[5] Vinther T, Helsing E, World Health Organization. Breastfeeding: How to support success: A practical guide for health workers. Copenhagen: WHO Regional Office for Europe; 1997.

[6] http:/www.slideshare.net/yuyuricci/breastfeeding 78604206?from_m_app=android

[7] Dongre AR, Deshmukh PR, Rawool AP, Garg BS. Where and how breastfeeding promotion initiatives should focus its attention? A study from rural wardha. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2010 Apr;35(2):226.

[8] Million Death Study Collaborators. Causes of neonatal and child mortality in India: a nationally representative mortality survey. The Lancet. 2010 Nov 27;376(9755):1853-60.

[9] Nithiya R. Effectiveness of visual package on breastfeeding technique among antenatal mothers admitted at a selected hospital, Vellore (Doctoral dissertation, Arun College of Nursing, Vellore).

[10] Tiruye G, Mesfin F, Geda B, Shiferaw K. Breastfeeding technique and associated factors among breastfeeding mothers in Harar city, Eastern Ethiopia. International breastfeeding journal. 2018 Dec;13(1):1-9.

[11] Parashar M, Singh S, Kishore J, Patavegar BN. Breastfeeding attachment and positioning technique, practices, and knowledge of related issues among mothers in a resettlement colony of Delhi. ICAN: Infant, Child, &

Adolescent Nutrition. 2015 Dec;7(6):317-22.

[12] Swerts M, Westhof E, Bogaerts A, Lemiengre J. Supporting breast-feeding women from the perspective of the midwife: A systematic review of the literature. Midwifery. 2016 Jun 1;37:32-40.

[13] Joshi H, Magon P, Raina S. Effect of mother–infant pair's latch-on position on child's health: A lesson for nursing care. Journal of family medicine and primary care. 2016 Apr;5(2):309.

[14] Ambike D, Ambike A, Raje S, Chincholikar S. Knowledge, awareness and breast-feeding practices of postnatal mothers in a rural teaching hospital: a cross sectional survey. Int J Reprod Contracept Obstet Gynecol. 2017 Nov;6(12):5429-34.

[15] Rani U, Bhattacharjee T. A study to assess the knowledge and practice regarding techniques of breast feeding among primipara mothers in selected hospital of Delhi with a view to develop self-instructional module.

[16] McQueen K, Taylor C, Murphy-Oikonen J. Systematic review of newborn feeding method and outcomes related to neonatal abstinence syndrome. Journal of Obstetric, Gynecologic & Neonatal Nursing. 2019 Jul 1;48(4):398-407.

[17] Degefa N, Tariku B, Bancha T, Amana G, Hajo A, Kusse Y, Zerihun E, Aschalew Z. Breast feeding practice: positioning and attachment during breast feeding among lactating mothers visiting health facility in Areka Town, Southern Ethiopia. International journal of pediatrics. 2019 Apr 7;2019.

[18] Rinata E, Sari PA. BREASTFEEDING PRACTICES [POSITIONING, ATTACHMENT/LATCH-ON AND EFFECTIVE SUCKLING. SEAJOM: The Southeast Asia Journal of Midwifery. 2017;3(2):1-6.

[19] Yilak G, Gebretsadik W, Tadesse H, Debalkie M, Bante A. Prevalence of ineffective breastfeeding technique and associated factors among lactating mothers attending public health facilities of South Ari district, Southern Ethiopia. Plos one. 2020 Feb 11;15(2):e0228863.

[20] Paul P, Chouhan P. Association between child marriage and utilization of maternal health care services in India: Evidence from a nationally representative cross-

sectional survey. Midwifery. 2019 Aug 1;75:66-71.

[21] Abdellah FG. Levine E. Better Patient Care Through Nursing Research. The Macmillan Publishing Company, New York: 1979.

[22] Treece EW, Treece TT. Elements of Research in Nursing. St. Louis: Mosby, 1986