A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF INCREASING BREAST MILK PRODUCTION AMONG THE LACTATING MOTHERS IN THE SELECTED HOSPITAL AT PUDUCHERRY

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Abstract:

Breastfeeding is natural but first-time mothers don't know the breastfeeding properly. Proper education and encouragement provide knowledge and is helpful for the mother and their child. The objectives of the study were to assess the knowledge and practice of increasing breast milk production, to correlate the level of the knowledge and practice of increasing breast milk production and to associate the level of the knowledge and practice of increasing breast milk production among the lactating mothers. **Methods:** A descriptive research design study was conducted among 100 lactating mothers, at RGGW&CH, Puducherry. Each lactating mother was selected through a purposive sampling method and the level of the knowledge and practice of increasing breast milk production was assessed by using a Structured interview schedule questionnaire. The data were analyzed using both descriptive and inferential statistics. **Results:** Out of 100 lactating mothers interviewed, 80% had moderately an adequate level of knowledge, 13% had an inadequate level of knowledge and 7% had an adequate level of knowledge. Majority of the lactating mothers 62% had an inadequate level of practice and 38% had an adequate level of practice. Correlation between the knowledge and practice of increasing breast milk production indicated the negative correlation with r- value is -0.314, p-value is p=0.001 are highly significant. Age, Educational qualification, Socioeconomic status, Religion, family types, Occupation, Age at marriage, delivery type, Number of children, Age of present child, Weight of the baby at birth had statistically significant association with knowledge and practice level of increasing breast milk production among the lactating mothers at p<0.001 level. **Conclusions:** The study concluded that healthcare providers should provide breastfeeding education to all women during their antenatal follow-up visits, especially women with low educational qualifications and no past breastfeeding experience.

Keywords: Lactating mothers, Knowledge, Practice, breast milk

Introduction

Breastfeeding is the "Gold standard" for infant feeding. It is the best gift that a mother can give to her baby. Exclusive breastfeeding has the potential to reduce the under-5 mortality rate by 13%.^[1] Globally, 60% of infant and young child deaths occur due to inappropriate infant feeding practices.^[2] The first milk in breasts is called colostrum. Breast milk is the best nutrient for the

baby and is important for their growth and development of the brain. It provides all the nutrition given to baby needs during the first six months of life, satisfies their hunger and thirst at the same time.^[3] Exclusive breastfeeding reduces infant deaths caused by common childhood illnesses such as diarrhea and pneumonia, fastens recovery during illness, and helps space births.^[4]

Breastfeeding is natural but first-time mothers don't know to breastfeed properly. Proper education and encouragement provide knowledge and is helpful for the mother and their child.^[5]

Objectives

- ❖ To assess the level of knowledge and practice of increasing breast milk production among the lactating mothers
- ❖ To correlate the level of the knowledge and practice of increasing breast milk production among the lactating mothers.
- ❖ To associate the level of the knowledge and practice with selected demographic variables among the lactating mothers.

Methods

Design: A descriptive research design was adapted for the present study.

Sample: A sample of 100 lactating mothers was selected. The study was conducted in Rajiv Gandhi Government Women and Child Hospital, Puducherry. A purposive sampling technique was used to select the sample. The nature and purpose of the study were explained to lactating mothers and written consent was obtained from the study.

Procedure:

The participants were interviewed with a Structured interview schedule questionnaire of knowledge and practice questionnaire. The questionnaire included socio-demographic details such as Age of the mother, Educational qualification level, Socioeconomic status of the mother, Religion of the mother, Types of family,

Occupation of the mother, Age at marriage, Type of delivery, Number of children, Age of present child, Weight of the baby at birth. The knowledge questionnaire consists of 10 questions and the scoring interpretation are (0-3, inadequate knowledge), (4-6, moderately adequate knowledge) and (7-10, adequate knowledge). The practice questionnaire consists of 10 questions and the scoring interpretation are (1-5, inadequate practice) and (6-10, adequate practice). The contents of the tool were evaluated by experts from the obstetrics and gynecology nursing department and the child health nursing department in various institutions. The suggestions given by the experts were incorporated and the tool was finalized. The knowledge questionnaire reliability is $r = 0.81$ and practice questionnaire reliability is $r = 0.89$. The data were analyzed based on the objectives of the study using Frequency distribution, mean and standard deviation, Pearson correlation test, and Chi-square test.

Results:

Out of the 100 mothers who were interviewed the majority 47% was in the age group 18-22 years, 50% were graduates. 46% were from upper-middle class, 82% were Hindu, 69% were living in a nuclear family, 77% were housewife, 49% married between 20 to 22 years, 60% had normal delivery, 68% had one number of children, 68% had 6 to 8 months in age of the present child and 62% were the weight of the baby at birth is 2.8 kg. (Table1)

Table 1: Frequency and Percentage wise Distribution of demographic and clinical variables among lactating mothers

(N=100)

Sl. No	Demographic Variables	Frequency (N)	Percentage (%)
1	Age of the mother (in years)		
	18-22 years	47	47
	23-27 years	36	36
	28-32 years	12	12
	33-37 years	5	5
2	Educational qualification level		
	Primary	17	17
	Secondary	22	22

	Graduate	50	50
	Post graduate	11	11
3	Socio economic status of the mother		
	Upper class	19	19
	Middle class	24	24
	Upper middle class	46	46
	Lower class	11	11
4	Religion of mother		
	Hindu	82	82
	Christian	11	11
	Muslim	7	7
	Others	0	0
5	Types of family		
	Joint family	31	31
	Nuclear family	69	69
6	Occupation of the mother		
	House wife	77	77
	Government employee	4	4
	Private employee	9	9
	Self- employee	10	10
7	Age at marriage		
	18 to 20 years	17	17
	20 to 22 years	49	49
	22 to 24 years	21	21
	24 to 28 years	13	13
8	Type of delivery		
	Normal delivery	60	60
	LSCS	40	40
9	Number of children		
	2	17	17
	3	15	15
	1	68	68
	4	0	0
10	Age of present child		
	5 months	0	0
	6 to 8 months	68	68
	2 to 4 months	0	0
	9 to 1 year	32	32
11	Weight of the baby at birth		
	2.5 kg	25	25
	3 kg	13	13
	3.5 kg	0	0
	2.8 kg	62	62

The majority 80% had moderately adequate level of knowledge, 13% had an inadequate level of knowledge and less member 7% had an adequate level of knowledge. The mean and standard deviation of the level of the knowledge of increasing breast milk production among lactating mothers is 5.79 ± 1.506 . Majority of the lactating mothers 62% had an inadequate level of practice and 38% had an adequate level of practice. The mean and standard deviation of level of the practice of increasing breast milk production among the lactating mothers are 6.51 ± 2.316 (Table2)

Table 2: Frequency and percentage wise distribution of level of the knowledge and practice of increasing breast milk production among the lactating mothers

(N = 100)

Level of the knowledge of increasing breast milk production among the lactating mothers.	Frequency (N)	Percentage (%)
Inadequate	13	13
Moderately adequate	80	80
Adequate	7	7
Level of the practice of increasing breast milk production among the lactating mothers.	Frequency (N)	Percentage (%)
Inadequate	62	62
Adequate	38	38
Total	100	100

In Correlation between the knowledge and practice of increasing breast milk production indicates the negative correlation and shows the results Pearson correlation r-value is -0.314, the p-value is $p=0.001$ is highly significant (Table3).

Table 3: Correlation between the knowledge and practice of increasing breast milk production among the lactating mothers.

(N = 100)

Correlation	Mean	Standard deviation	r-value	p-value
knowledge	5.79	1.506	-0.314	0.001**
Practice	6.51	2.316		

The demographic variables Age of the mother, Educational qualification level, Socioeconomic status of the mother, Religion of the mother, Types of family, Occupation of the mother, Age at marriage, Type of delivery, Number of children, Age of present child, Weight of the baby at birth had shown statistically significant association with the level of the knowledge and practice of increasing breast milk production among the lactating mothers with chi-square value at $p<0.001$ level (Table 4 and 5).

Table 4: Association between the level of the knowledge of increasing breast milk production among the lactating mothers with their selected demographic and clinical variables.

(N=100)

Sl. No	Demographic & clinical variable	Level of the knowledge						X ²	df	p-value
		Inadequate		Moderate		Adequate				
		N	%	N	%	N	%			
1	Age of the mother							90	6	0.001**
	18-22 years	13	27.7	34	72.3	0	0			
	23-27 years	0	0	36	100	0	0			
	28-32 years	0	0	10	83.3	2	16.7			
	33-37 years	0	0	0	0	5	100			

2	Educational qualification level									
	Primary	13	76.5	4	23.5	0	0	133	6	0.001**
	Secondary	0	0	22	100	0	0			
	Graduate	0	0	50	100	0	0			
	Post graduate	0	0	4	36.4	7	63.6			
3	Socio economic status of the mother									
	Upper class	13	68.4	6	31.6	0	0	123	6	0.001**
	Middle class	0	0	24	100	0	0			
	Upper middle class	0	0	46	100	0	0			
	Lower class	0	0	4	36.4	7	63.6			
4	Religion of mother									
	Hindu	13	15.9	69	84.1	0	0	102	4	0.001**
	Christian	0	0	11	100	0	0			
	Muslim	0	0	0	0	7	100			
	Others	0	0	0	0	0	0			
5	Types of family									
	Joint family	13	41.9	18	58.1	0	0	34.7	2	0.001**
	Nuclear family	0	0	62	89.9	7	10.1			
6	Occupation of the mother									
	House wife	13	16.9	64	83.1	0	0	70.7	6	0.001**
	Government employee	0	0	4	100	0	0			
	Private employee	0	0	9	100	0	0			
	Self- employee	0	0	3	30	7	70			
7	Age at marriage									
	18 to 20 years	13	76.5	4	23.5	0	0	122.4	6	0.001**
	20 to 22 years	0	0	49	100	0	0			
	22 to 24 years	0	0	21	100	0	0			
	24 to 28 years	0	0	6	46.2	7	53.8			
8	Type of delivery									
	Normal delivery	13	21.7	47	78.3	0	0	19.2	2	0.001**
	LSCS	0	0	33	82.5	7	17.5			
9	Number of children									
	2	13	76.5	4	23.5	0	0	75	4	0.001**
	3	0	0	15	100	0	0			
	1	0	0	61	89.7	7	10.3			
	4	0	0	0	0	0	0			
10	Age of present child									
	5 months	0	0	0	0	0	0	33.4	2	0.001**
	6 to 8 months	0	0	61	89.7	7	10.3			
	2 to 4 months	0	0	0	0	0	0			
	9 to 1 year	13	40.6	19	59.4	0	0			
11	Weight of the baby at birth									
	2.5 kg	13	52	12	48	0	0	47.7	4	0.001**
	3 kg	0	0	13	100	0	0			
	3.5 kg	0	0	0	0	0	0			
	2.8 kg	0	0	55	88.7	7	11.3			

**p<0.001 highly significant

Table 5: Association between the level of the practice of increasing breast milk production among the lactating mothers with their selected demographic and clinical variables.

(N=100)

Sl. No	Demographic & clinical variable	Level of the practice				X ²	df	p-value
		Inadequate		Adequate				
		N	%	N	%			
1	Age of the					69.1	3	0.001**
	18-22 years	9	19.1	38	80.9			
	23-27 years	36	100	0	0			
	28-32 years	12	100	0	0			
	33-37 years	5	100	0	0			
2	Educational qualification level					95.9	3	0.001**
	Primary	0	0	17	100			
	Secondary	1	4.5	21	95.5			
	Graduate	50	100	0	0			
	Post graduate	11	100	0	0			
3	Socio economic status of the mother					83.1	3	0.001**
	Upper class	0	0	19	100			
	Middle class	5	20.8	19	79.2			
	Upper middle class	46	100	0	0			
	Lower class	11	100	0	0			
4	Religion of mother					13.4	2	0.001**
	Hindu	44	53.7	38				
	Christian	11	100	0				
	Muslim	7	0	0				
	Others	0	0	0	0			
5	Types of family					73.3	1	0.001**
	Joint family	0	0	31	100			
	Nuclear family	62	89.9	7	10.1			
6	Occupation of the mother					18.3	3	0.001**
	House wife	39	50.6	38	49.4			
	Government employee	4	100	0	0			
	Private employee	9	100	0	0			
	Self- employee	10	100	0	0			
7	Age at marriage					49	3	0.001**
	18 to 20 years	0	0	17	100			
	20 to 22 years	28	57.1	21	42.9			
	22 to 24 years	21	100	0	0			
	24 to 28 years	13	100	0	0			
8	Type of delivery					40.8	1	0.001**
	Normal delivery	22	36.7	38	63.3			
	LSCS	44	100	0	0			
9	Number of children					76.7	2	0.001**
	2	0	0	17	100			
	3	0	0	15	100			
	1	62	91.2	6	8.8			

	4	0	0	0	0			
10	Age of present child							
	5 months	0	0	0	0	76.7	1	0.001**
	6 to 8 months	62	91.2	6	8.8			
	2 to 4 months	0	0	0	0			
	9 to 1 year	0	0	32	100			
11	Weight of the baby at birth							
	2.5 kg	0	0	25	100	56.3	2	0.001**
	3 kg	13	100	0	0			
	3.5 kg	0	0	0	0			
	2.8 kg	49	79	13	21			

****p<0.001 highly significant**

Discussion:

A descriptive research design was used to select the sample; Total of 100 lactating mothers was selected by Purposive sampling technique. 80% had moderately adequate level, 13% had inadequate level and 7% had an adequate level of knowledge. The majority 62% had an inadequate level of practice and 38% had an adequate level of practice. The present study findings were consistent with the study done by Aneesha V B et al (2019) which showed 6.6% had excellent knowledge level, 66.66% had good knowledge level, 23.33% had average knowledge level, 3.33% had poor knowledge level.^[5] Correlation between knowledge and practice of increasing breast milk production indicates the negative correlation with r- value is (-0.314), p-value is (p=0.001) are highly significant. The Association of knowledge and practice of increasing breast milk production among lactating mothers with the demographic variables as Age of the mother, Educational qualification level, Socioeconomic status of the mother, Religion of the mother, Types of family, Occupation of the mother, Age at marriage, Type of delivery, Number of children, Age of present child, Weight of the baby at birth are statistically significant at the level of p<0.001 level. A similar study was conducted by Esha Sharma and Shantha Seelan G (2017) showed that there was a significant association found in the age of mothers, education, occupation, type of family, number of family members and the dietary pattern (p>0.05).^[6]

Conclusions:

The study concluded that the knowledge and practice of increasing breast milk production among the lactating mothers is a moderate level. The healthcare providers should provide breastfeeding education to all women during their antenatal follow-up visits, especially for women with low educational qualifications and no past breastfeeding experience.

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