



A STUDY TO ASSESS THE KNOWLEDGE REGARDING EXPRESSION AND STORAGE OF BREAST MILK AMONG WORKING LACTATING WOMEN IN POSTNATAL WARD IN RAJIV GANDHI GOVERNMENT WOMENS AND CHILDRENS HOSPITAL PUDUCHERRY.

Gynaecology

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ABSTRACT

Background: Breast feeding is the foundation of lifelong good health for babies and mothers. Nutrition, food security and poverty reduction are fundamental to achieving the United Nation's sustainable development. The objectives of the study was to assess level of knowledge regarding expression and storage of breast milk, to associate the knowledge of working lactating women regarding Expression and storage of breast milk and their demographic variables and to create awareness on expression and storage of breast milk with power point presentation among postnatal mothers..

Methods: By using a descriptive non- experimental research design 100 postnatal lactating mothers was selected at Rajiv Gandhi Government Women and Child Hospital, Puducherry. Convenient sampling technique was used to select the sample. The data were analyzed based on frequency, percentage distribution, and chi square test. Structured teaching module was conducted with Laptop power point presentation and Pamphlet.

Results: Out of 100 postnatal lactating mothers interviewed, 13% of the mothers had inadequate level of knowledge, 47% had moderate level of knowledge and 40% had adequate level of knowledge on Expression and storage of Breast milk. The Association between knowledge among mothers regarding Expression and storage of breast milk with the demographic variables were statistically highly significant at the level of $P < 0.001$. With the Structured teaching module the mother would acquire knowledge on Expression and Storage of breast milk and develop positive attitude and skill in practicing Expression and Storage of breast milk.

Conclusions: The study concluded that all working lactating women should be educated about the Expression and storage of breast milk. The nurse should create an opportunity for the mothers to express their breast milk.

KEYWORDS

Expression and Storage of Breast Milk, Working Lactating Women, Postnatal, Puducherry.

INTRODUCTION

Breast feeding is the foundation of lifelong good health for babies and mothers. The world filled with inequality, crises and poverty. According to Breast feeding week 2018, breast feeding prevents hunger and malnutrition in all its forms and ensures food security for babies, even in times of crises. Breast feeding is a low cost way of feeding babies with no additional burden on household income and contributes to poverty reduction. Nutrition, food security and poverty reduction are fundamental to achieving the United Nation's sustainable development.^[1]

World Health Organization and American Academy of Pediatrics emphasize the value of breast feeding for mothers as well as children. Both recommend exclusive breast feeding for the first six months of life for sick newborn and preterm infants. The AAP recommends that this has to be followed by supplementary breast feeding for at least one year, while WHO recommends that supplemented breast feeding be continued up to 2 years or more.^[2]

A few years ago, formula feeding was encouraged as a replacement for breast feeding. Formula feeding was prescribed by physician as an alternative, only when the mother is medically unfit to breast feed. But people started taking it for granted and used formula feeding but encountered with lots of problem to the infants. Nowadays numbers of mothers are choosing to go to work and also during travelling they are unable to feed their babies.^[3]

To overcome all these problems the mother has to go for an alternative method for breast feeding that is expression and storage of breast milk. Expression of breast milk refers that artificially removing and storing the breast milk. Expression and storage of breast milk refers to the process by which the women expel milk from her breast, then be stored and fed to her baby later. Milk may be expelled manually using the hands or with a pump especially designed for expression and storage of breast milk. After expressing, the breast milk can be safely stored in any clean, capped glass or hard plastic container or in special plastic bag designed for milk collection and storage called as storage bags. Freshly expressed breast milk can be kept at room temperature for up to 4 to 6 hours.^[4]

The Indian Government gives maternity leave for six months in private sector provides, 26 weeks maternity leave to their women employees. The Tamil Nadu Government has announced maternity leave from six

months to nine months.^[5]

After maternity leave, major concern for working mother is breast feeding her baby. She starts thinking that how she can manage the baby when she joins her work. Breast feeding to infant is very essential at least for six months and it becomes more beneficial if mother can feed up to one year. For nonworking women it is possible to feed baby at any time, But for working women it become question of concern to breast feed her baby for a long time. But it is possible that she can feed her baby by giving stored breast milk when she starts her job. She should get strong for doing that because mother is naturally attached more with her baby emotionally and she doesn't want to keep her baby away from her eyes soon after pregnancy period. Women were forced to go to work may be at 3 months to 6 months. At this instant she has to decide whether to continue breast feed or any other alternative is there. This decision depends upon the family support, financial support and knowledge about expression and storage of breast milk. If she has, she would instantly focus on expression and storage of breast milk.^[5]

Maternity leave is available in Rajiv Gandhi Government Women and Child Hospital Puducherry (RGGW&CH) for 6 months after the delivery. The mothers can extend the leave up to 1 month without salary. After 6 months they leave the baby at home and come for work. At home the babies are left with bottle feeding. Many of them are unaware about expression and storage of breast milk. Hence the researcher wanted to identify the level of knowledge and attitude regarding expression and storage of breast milk as initial step to educate lactating mothers on exclusive breast feeding. After assessing the knowledge the researcher will provide power point presentation and pamphlet to the mothers to enable them to be educated regarding expression and storage of breast milk.

OBJECTIVES:

- To assess the level of knowledge regarding expression and storage of breast milk among working lactating mothers.
- To find out association between the knowledge of working lactating women regarding Expression and storage of breast milk and their demographic variables.
- To create awareness on expression and storage of breast milk with power point presentation and pamphlet among postnatal mothers.

METHODS

Design: A descriptive non- experimental research design was adapted

for the present study.

Sample: A sample of 100 postnatal lactating mothers was selected. The study was conducted in Rajiv Gandhi Government Women and Child Hospital, Puducherry. Convenient sampling technique was used to select the sample. Each subject was informed about the purpose of the study and its benefits and then oral and written informed consent was obtained.

Procedure: The participants were interviewed with a structured questionnaire. Questionnaire included socio-demographic details such as age, family, monthly income, type of family, educational status, occupation etc and the awareness of the mothers about Exclusive and Expression of breast milk and the Storage and feeding of the baby with Expressed breast milk. The total knowledge score was 25 and the scored as inadequate (0-8), moderately adequate (9-16) and adequate (17-25). The data were analyzed based on the objectives of the study using frequency, percentage distribution and chi square test. Structured teaching was conducted with Laptop power point presentation and Pamphlet. On completion of this section, the patient will acquire knowledge on Expression and Storage of breast milk and develop positive attitude and skill in practicing Expression and Storage of breast milk.

Results: Out of the 100 mothers who were interviewed, Majority (51%) of study population was in the age group 18-24 years. Most of them (71%) were followed in Hindu religion. Majority of the mothers were completed high school education 50 (50%). Most of the mothers were upper lower level in socio economic status (34%). Majority of the mothers have one children (60%). Most of the mothers were undergone normal vaginal delivery (57%). Majority of the mothers were received source of information through television (48%). (Table 1) Out of 100 postnatal lactating mothers was interviewed, 13% of the mothers had inadequate level of knowledge, 47% had moderate level of knowledge and 40% had adequate level of knowledge on Expression and storage of Breast milk. The mean and standard deviation of knowledge on Expression and storage of Breast milk was (12.44± 4.959) (Table 2 and Figure 1). The Association between knowledge among mothers regarding Expression and storage of breast milk with all the demographic variables were statistically highly significant at the level of $P < 0.001$ (Table 3). The Structured teaching module was conducted with Laptop power point presentation and Pamphlet. On completion of the teaching, the mothers will acquire knowledge on Expression and Storage of breast milk and develop positive attitude and skill in practicing Expression and Storage of breast milk. (Table 4)

DISCUSSION

A descriptive non- experimental research design was used to select the sample, Total 100 postnatal lactating mothers were selected by convenient sampling technique. Out of 100 postnatal lactating mothers 13% had high level, 54% have medium level and 33% had low level of knowledge on Expression and storage of Breast milk. The present study findings was consistent with the study done by Attahiru, et al (2018) which showed 13% people had good knowledge on expressed breast milk feeding^[7]. The Association of knowledge among mothers regarding Expression and storage of breast milk with the demographic variables as religion (0.002), economic status (0.003) and types of delivery (0.001) are statistically significant at the level of $P < 0.005$. A similar study was conducted by Helene M. Johns., et al (2013) showed that there was a significant association found in the religion ($P < 0.05$), economic status ($P < 0.001$) and mode of delivery ($P < 0.001$)^[8].

Recommendations

- A similar study may be replicated on large samples with different demographic variables.

Table-3: Association between knowledge among mothers regarding Expression and storage of breast milk with the selected demographic variables.

SL. NO	DEMOGRAPHIC VARIABLE	LEVEL OF KNOWLEDGE						X ²	df	p-value
		INADEQUATE		MODERATE		ADEQUATE				
		N	%	N	%	N	%			
1.	Age in years							73.64	4	0.001**
	18-24 years	13	25.5	38	74.5	0	0			
	25-29 years	0	0	9	25	27	75			
	30-35 years	0	0	0	0	13	100			

- An intervention study can be done to assess the effectiveness of Education on the Knowledge and Attitude of the Lactating mothers on the expression and storage of Breast Milk.

CONCLUSIONS

The study concluded that all working lactating women should be educated about the Expression and storage of breast milk. The nurse should create an opportunity for the mothers to express their breast milk.

Disclosure

The authors report no conflicts of interest in this work.

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

(N=100)

Sl. No	Demographic Variables	Frequency (N)	Percentage (%)
1.	Age in years		
	18-24 years	51	51
	25-29 years	36	36
	30-35 years	13	13
2.	Religion		
	Hindu	71	71
	Muslim	16	16
	Christian	13	13
3.	Educational status		
	Illiterate	7	7
	High school	50	50
	Higher secondary	16	16
	Graduate	27	27
4	Socio-economic status		
	Upper	4	4
	Upper middle	24	24
	Lower middle	19	19
	Upper lower	34	34
	Lower	19	19
5.	Number of children		
	1 children	60	60
	2 children's	33	33
	More than 2 children's	7	7
6.	Type of delivery		
	Normal vaginal delivery	57	57
	Lower segment caesarean section	37	37
	Instrumental delivery	6	6
7.	Source of information		
	Television	48	48
	Radio	23	23
	Newspaper	4	4
	Friends/relatives	25	25

Table 2: Frequency and percentage wise distribution of level of the knowledge among mothers regarding Expression and storage of breast milk.

(N = 100)

Level of the knowledge among mothers regarding Expression and storage of breast milk.	Frequency (N)	Percentage (%)	Mean and standard deviation
Inadequate	13	13	12.44±4.959
Moderate	47	47	
Adequate	40	40	
Total	100	100	

2. Religion								64.29	4	0.001**
Hindu	5	7	47	66.2	19	26.8				
Muslim	0	0	0	0	16	100				
Christian	8	61.5	0	0	5	38.5				
3. Educational status								95.01	6	0.001**
Illiterate	7	100	0	0	0	0				
High school	5	10	38	76	7	14				
Higher secondary	0	0	0	0	16	100				
Graduate	1	3.7	9	33.3	17	63				
4. Socio-economic status								107.6	8	0.001**
Upper	4	100	0	0	0	0				
Upper middle	9	37.5	15	62.5	0	0				
Lower middle	0	0	19	100	0	0				
Upper lower	0	0	13	38.2	21	61.8				
Lower	0	0	0	0	19	100				
5. Number of children								100	4	0.001**
1 children	13	21.7	47	78.3	0	0				
2 children's	0	0	0	0	33	100				
More than 2 children's	0	0	0	0	7	100				
6. Type of delivery								61.86	4	0.001**
Normal vaginal delivery	13	22.8	40	70.2	4	7				
Lower segment caesarean section	0	0	7	18.9	30	81.1				
Instrumental delivery	0	0	0	0	6	100				
7. Source of information								80.35	6	0.001**
Television	13	27.1	35	72.9	0	0				
Radio	0	0	12	52.2	11	47.8				
Newspaper	0	0	0	0	4	100				
Friends/relatives	0	0	0	0	25	100				

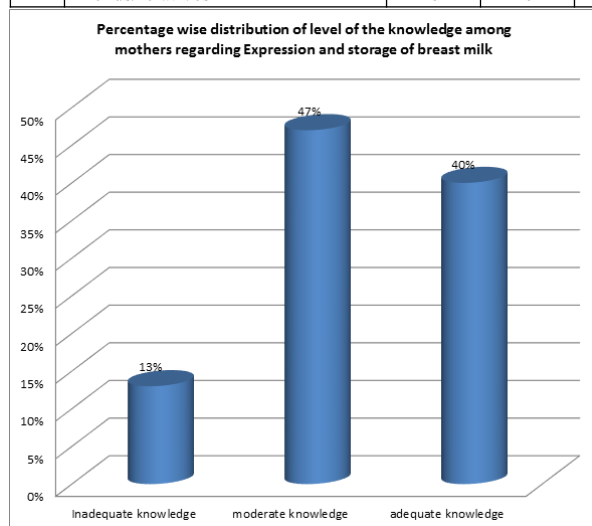


Figure: 1 Percentage wise distribution of level of the knowledge among mothers regarding Expression and storage of breast milk.

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