

## Effectiveness of video assisted teaching module on knowledge and practice regarding breast massage for breast milk expression and volume among Primiparous mothers

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### Abstract

A Pre-experimental research study was conducted to assess the Effectiveness of Video Assisted Teaching module on Knowledge and practice regarding Breast massage for breast milk expression and volume among 60 Primiparous mothers in a selected Government Hospital, Dehradun, Uttarakhand. A Structured Knowledge Questionnaire and observational checklist was prepared and used to collect the data after testing reliability and validity. Results of the study revealed that in the demographic variables majority 30% percent of Primiparous mothers were in the age between 18-20 years. The pre-test knowledge scores of Primiparous mothers' shown majority i.e., 97 percent had average knowledge, while 3 percent had poor knowledge level and none of them had good knowledge. The knowledge score of Primiparous mothers in post-test showed all mothers acquired good knowledge while, pre-test practice scores showed majority 93 percent falls under poor category and 7 percent falls in average level. In posttest practice mostly 98% mothers acquired good level of practice only 2% mothers had average level of practice. The calculated value of paired t-test for knowledge was 30.327. For practice, it was 56.304. In the demographic variables only educational status had statistically significant association both with the knowledge and practice of Primiparous mothers. On the basis of the present study, the researcher concluded that Primiparous mothers had inadequate knowledge and practice regarding Breast massage. Using VATM on Knowledge and practice of breast massage among Primiparous mothers was effective as their knowledge and practice level improved significantly.

**Keywords:** effectiveness, knowledge, practice, breast milk expression, volume, primiparous mother, video assisted teaching module

### Introduction

Primiparous is a woman who has borne only one child or who is to give birth for the first time. Mother is the one who can immediately understand the needs of an infant by its expressions. She is again the only one who understands the sign language and the little unclear words that the child says when he starts talking. (Hasan Rashel, 2013)<sup>[14]</sup>

Human milk provides the best nutrition for most babies and breastfeeding provides the best nutrition for infants and very young children, according to an updated position paper. The paper also outlines the health risks of not breastfeeding, which include increased rates of infant and maternal morbidity and mortality, increased health care costs and significant economic losses to families and employers. It is the position of the Academy of Nutrition and Dietetics that exclusive breastfeeding provides optimal nutrition and health protection for the first 6 months of life and that breastfeeding with complementary foods from six months until at least 12 months of age is the ideal feeding pattern for infants. (Academy of Nutrition and Dietetics, March 5, 2015)<sup>[19]</sup>.

Breastfeeding offers many benefits to the baby. Breast milk contains the right balance of nutrients to help infant grow into a strong and healthy toddler. Some of the nutrients in breast milk also help protect infant against some common childhood illnesses and infections. Certain types of cancer may occur less often in mothers who have breastfed their babies. Women who don't have health problems should try to give their

babies' breast milk for at least the first six months of life. There are some cases when it's better not to breastfeed. If you have HIV or active tuberculosis, you should not breastfeed because you could give the infection to your baby. Certain medicines, illegal drugs, and alcohol can also pass through the breast milk and cause harm to your baby. (Medline Plus August, 2015). The UK Baby Friendly Initiative Step 4 recommendation is that health care professionals should help mothers initiate breastfeeding soon after the birth' (UNICEF 2006).

Many mothers experience low milk supply after birth of the baby. It can be resolved by some methods or techniques and milk volume can be increased to adequate level. One of the methods is breast massage or massaging milk producing glands with hand expression of milk. Breast Massage, a "handy" multipurpose tool to promote breastfeeding success breast massage is not new. It is a "handy" technique that has been studied for decades and praised for its many uses in establishing and sustaining lactation, overcoming breastfeeding difficulties, and preventing or treating maternal and infant problems. This article reviews some of the studies examining various breast massage and breast-compression techniques, and proposes possible indications for their use. (Clinical Lactation, 2011)<sup>[4]</sup>.

Massaging the breasts will clear the milk ducts and cause the milk to flow more freely, which will help empty the breasts and therefore trigger a higher milk production. Breast massage

is not just for those mothers wanting to increase their milk supply. It is also an important area of breast health that is neglected due to the image that society has created about “touching yourself”. Your breasts do not get exercise or stimulation, and as a result you will have a fluid buildup, which can lead to breast problems. (Tracy Behr, 2015)

**Objectives**

- To assess the pre-test and post-test level of knowledge and practice regarding breast massage among Primiparous mothers.
- To develop and administer Video Assisted Teaching Module on breast massage.
- To evaluate the effectiveness of Video Assisted Teaching Module regarding knowledge and practice of breast massage.
- To find out the association of knowledge and practice of primiparous mothers regarding breast massage with their selected demographic variables.

**Hypothesis**

- **H<sub>1</sub>:** There would be significant difference in the pre-test and post-test level of knowledge among Primiparous mothers who will receive Video Assisted Teaching Module on breast massage for breast milk expression and volume.
- **H<sub>2</sub>:** There would be significant difference in the pre-test and post-test practice among Primiparous mothers who will receive Video Assisted Teaching Module of breast massage for breast milk expression and volume.
- **H<sub>3</sub>:** There would be significant association between the knowledge of breast massage and their selected demographic variables.
- **H<sub>4</sub>:** There would be significant association between the practice of breast massage and their selected demographic variables.

**Methodology**

A pre-experimental study was conducted to assess the

Effectiveness of Video Assisted Teaching module on Knowledge and practice regarding Breast massage for breast milk expression and volume among Primiparous mothers. Quantitative experimental (An Evaluative) approach was considered as an appropriate one for present study. Research design adopted for the study was Pre-Experimental research design (one group pretest-posttest research design). The study setting for data collection was Female Doon Hospital, Dehradun. 60 Primiparous mothers were selected by purposive sampling technique. The research tools used to collect the data consisted of a self structured knowledge questionnaire on breastfeeding and breast massage and a structured observational checklist to assess the practice of breast massage and video assisted teaching module regarding breast massage. Tools were validated and suggested modifications were done. The reliability of tools was found for practice ( $r = 0.93$ ) and for knowledge was (+1) that indicated that tool were highly reliable.

**Data collection procedure**

Data was collected from 11/08/2015 to 25/08/2015 after getting written permission from hospital authority and written informed consent from primiparous mothers. On the first day pretest was done to collect the data and video assisted teaching was given. On the 3<sup>rd</sup> day post test was done by using same tools. Data was analyzed by descriptive and inferential statistics.

**Results**

Major findings of the study revealed that majority 30% percent of Primiparous mothers were in the age between 18-20 years. Majority 41 (68%) mothers belonged to joint family. 36 (60%) Primi mothers were residing in Rural area. 37 (62%) mothers were Vegetarian by dietary habits. Mostly 23 (38%) belonged to intermediate education level and 21 (35%) mothers were in between 15,000-50,000 Rs. Income group. 47 (78%) primiparous mothers did not have any previous exposure to education.

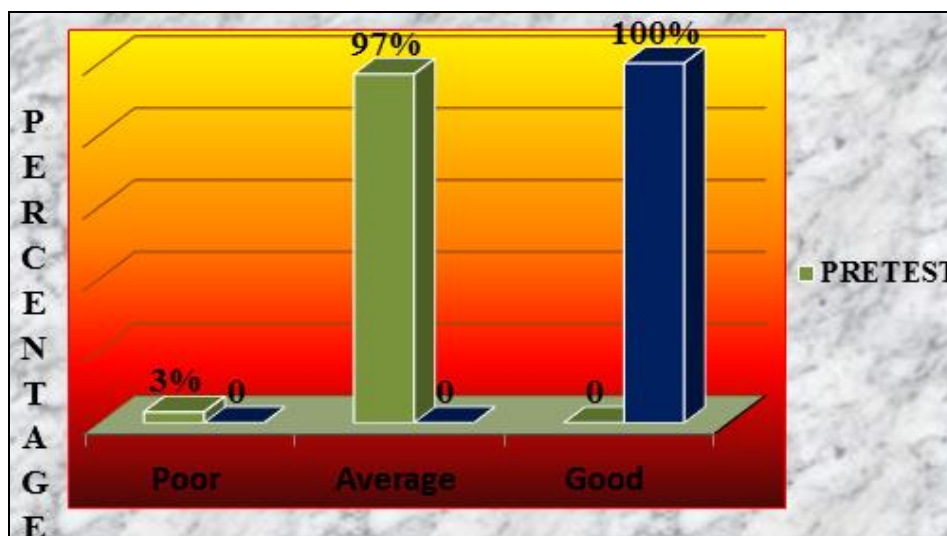


Fig 1: Knowledge Scores

Figure shows frequency and Percentage data distribution of the Knowledge Score of the Primiparous mothers. The data indicates that 3 percent had poor knowledge, while majority i.e. 97 percent had average knowledge and none of them had

good knowledge in pre-test.

The knowledge score of Primiparous mothers in post-test shown all 100 percent acquired good knowledge.

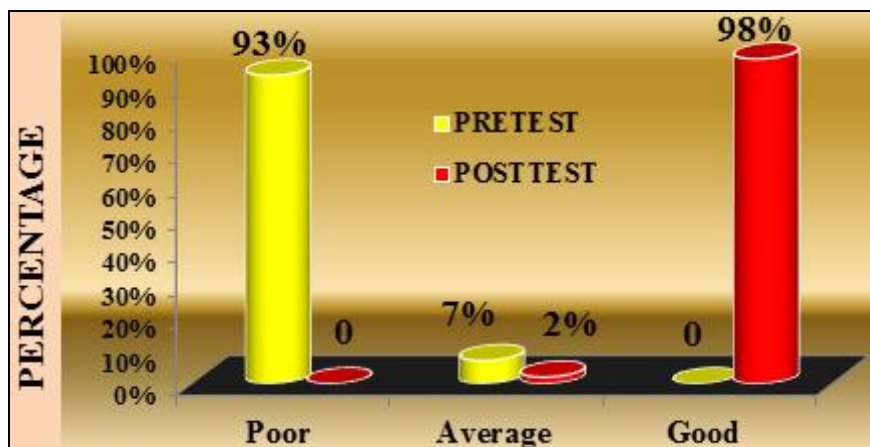


Fig 2: Practice Scores

While, pre-test practice scores showed majority 93 percent falls under poor category and 7 percent falls in average level.

In post test practice majority 98% mothers acquired good practice level while only 2% had average level of practice.

Table 1

Test	Mean	Std. Deviation	Mean Difference	95% Confidence Interval of the Difference		t	P Value Sig. (2-tailed)
				Lower	Upper		
Total Pretest knowledge	16.90	2.821	8.83	8.25	9.416	30.327	0.001
Total Posttest knowledge	25.73	2.674					

This table shows relationship between total pretest and posttest knowledge scores on breast massage for breast milk expression and volume. Pretest mean was 16.90 with SD,

2.821. Posttest mean was 25.73 with SD 2.674. Mean difference of scores was 8.83. 95 % confidence Interval was 8.25 to 9.416. t-value was 30.327 and p value (<0.001).

Table 2

Test	Mean	Std. Deviation	Mean Difference	95% Confidence Interval of the Difference		t value	P Value Sig. (2-tailed)
				Lower	Upper		
Total Pretest practice	4.15	1.351	11.733	11.316	12.15	56.304	0.001
Total Posttest practice	15.88	1.688					

Above table shows relationship between total pretest and posttest practice scores on breast massage for breast milk expression and volume. Pretest mean was 4.15 with SD 1.351 and posttest mean was 15.88 with SD 1.688. Mean difference of scores was 11.733. The difference on 95 % confidence Interval was 11.316 to 12.15. t-value was 56.304.

“chi square test” and “fisher” exact test had been done to find out association between the pre test level of knowledge and practice and their demographic variables in a group. It had been found that there was only one variable (educational status) had significant association with the pre test level of knowledge and practice.

The present study revealed that around 97% primi mothers were in a group had average level of knowledge during pretest and remaining 3% had poor knowledge regarding breast massage. The knowledge score of primi mothers in post test shows none of primi mothers in group had poor and average level of knowledge. All acquired good level of knowledge

regarding breast massage

In practice of breast massage, during pretest majority Primiparous (93%) mothers were in poor category. Only 7% mothers had average level of practice. In post test (98%) had acquired good level of practice and only 2% samples had average practice regarding breast massage.

The post-test mean of Knowledge scores was 25.73 with a Standard deviation of 2.674 significantly higher than the pre-test mean score. The statistical paired t test value for overall Knowledge was found to be 14.457.

The post-test mean of practice scores was 15.88 with a Standard deviation of 1.688 also significantly higher than the pre-test mean score. The statistical paired t test value for overall practice was found to be 56.304.

There was statistically significant association of pre test level of knowledge and practice with educational status. Other demographic variables were not associated with pretest knowledge and practice like Age, type of family, residence,

dietary pattern, annual income, and previous exposure to education.

“Paired t test” shows significant difference between the pretest and post test level of knowledge. Mean difference was 8.833 with CI=8.25-9.416 (t-value=30.327),  $p < 0.05$  and for significant difference between the pretest and post test level of practice, Mean difference was 11.733 with, CI-(11.316-12.15), (t-value=56.304),  $p < 0.05$ . Thus this hypothesis is accepted indicating the effectiveness of video assisted teaching module.

### Nursing Implications

Nursing personnel should be equipped with Knowledge, skill and possess a positive attitude to deal with Primiparous mothers with less milk volume and in imparting the knowledge and practice awareness regarding breast massage among Primiparous mothers. The study finding has certain very important implication for nursing profession i.e. clinical practice, nursing education, nursing administration and nursing research, community health nursing.

### Recommendations

- Quasi Experimental study can be conducted to assess the effectiveness of video assisted teaching module on knowledge and practice of breast massage. This study can be replicated with a large population thereby generalizing the finding for a large population.
- A similar study can be conducted for mothers who delivered by LSCS and whose babies are in NICU.
- A similar study can be done with a control group and using a larger population of community.
- A similar study could be replicated on a sample with same demographic characteristics and with same techniques.
- A survey study could be initiated to check the prevalence and further requirements of the problems.

### Conclusion

On the basis of the present study, the researcher concluded that Video Assisted Teaching Module regarding breast massage for Primiparous mothers was found effective as their knowledge and practice level were improved significantly. Researcher also concluded that breast massage as an entity of concern among Primiparous mothers. It is therefore recommended that measures should be taken to promote awareness of breast massage and develop a healthy culture among Primiparous mothers.

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