



EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EXPRESSED BREAST MILK AMONG WOMEN WORKING IN SELECTED INDUSTRIES

Dhavamani¹, Saranya L^{2*}, Dr. Padmavathi R³

¹B.sc Nursing student, GRT College of Nursing, GRT Mahalakshmi Nagar, Tirupati Highway, Chennai, Thiruttani, Tamil Nadu, India.

²Assistant Professor, GRT College of Nursing, GRT Mahalakshmi Nagar, Tirupati Highway, Chennai, Thiruttani, Tamil Nadu, India.

³Principal, GRT College of Nursing, GRT Mahalakshmi Nagar, Tirupati Highway, Chennai, Thiruttani, Tamil Nadu, India.

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Corresponding Author

Saranya L

Email: smsaranyamohan7@gmail.com

Abstract

Background: Expressed breast milk plays an essential role in ensuring optimal infant nutrition, especially among working mothers who are separated from their infants during working hours. Adequate knowledge regarding expression, handling, and storage of breast milk is necessary to maintain infant health and promote exclusive breastfeeding practices. **Aim:** To assess the effectiveness of a structured teaching programme on knowledge regarding expressed breast milk among women working in selected industries. **Methods:** A quantitative pre-experimental one-group pretest–post-test research design was adopted for the study. Fifty women working in selected industries were selected using non-probability purposive sampling technique. Data were collected using a structured self-administered questionnaire assessing knowledge regarding expressed breast milk. Following the pretest, a structured teaching programme was administered. Post-test assessment was conducted after one week. Data were analysed using descriptive and inferential statistics. **Results:** In the pretest, 78% of women had inadequate knowledge, 18% had moderately adequate knowledge, and only 4% had adequate knowledge regarding expressed breast milk. After the intervention, 58% had moderately adequate knowledge and 42% had adequate knowledge. The mean pretest knowledge score was 7.98 ± 3.05 , whereas the post-test mean score increased to 15.44 ± 1.57 . The paired t-test value was statistically significant ($t = 13.757$, $p < 0.001$), indicating the effectiveness of the structured teaching programme. Age showed a statistically significant association with post-test knowledge scores ($\chi^2 = 9.234$, $p = 0.026$). **Conclusion:** The structured teaching programme was effective in improving knowledge regarding expressed breast milk among women working in selected industries. Educational interventions can significantly enhance awareness and promote safe breastfeeding practices among working mothers.

Keywords: Expressed breast milk, structured teaching programme, breastfeeding, working women, knowledge, breast milk storage.

INTRODUCTION

Breastfeeding is universally recognized as the optimal method of infant feeding because breast milk provides complete nutrition, immunological protection, and promotes healthy growth and

development. Expressed breast milk is particularly beneficial for working mothers who are unable to directly breastfeed their infants during working hours. The increasing participation of women in the workforce has created challenges in maintaining



exclusive breastfeeding practices. Many mothers discontinue breastfeeding early due to inadequate knowledge regarding expression and storage of breast milk. Proper education regarding breast milk expression and storage can help mothers continue breastfeeding even during periods of separation from their infants.

The World Health Organization recommends exclusive breastfeeding for the first six months of life. However, lack of awareness and inadequate support systems often prevent mothers from following these recommendations. Structured educational interventions can improve mothers' knowledge and confidence regarding breast milk expression and storage practices.

MATERIALS AND METHODS

Research Design

A quantitative pre-experimental one-group pretest–posttest design was used.

Setting

The study was conducted among women working in selected industries in Tiruvallur, Tamil Nadu.

Population and Sample

The target population included working women employed in selected industries. A total of 50 women were selected using non-probability purposive sampling technique.

Inclusion Criteria

- Women willing to participate in the study
- Women available during the data collection period
- Exclusion Criteria
- Women unable to understand Tamil

Data Collection Tool

A structured self-administered questionnaire was used. The tool consisted of:

1. Demographic variables
2. Knowledge questionnaire regarding expressed breast milk

The questionnaire included 20 multiple-choice questions related to:

- Definition and importance of expressed breast milk
- Methods of expression
- Storage techniques
- Handling and safety measures

Intervention

A structured teaching programme regarding expressed breast milk was administered after the pretest.

Data Analysis

Data were analysed using:

- Frequency and percentage distribution
- Mean and standard deviation
- Paired t-test
- Chi-square test

RESULTS

Demographic Characteristics Among the participants:

- 54% were above 30 years of age
- 50% had intermediate or diploma education
- 92% were professionals
- 74% resided in rural areas
- 74% belonged to Hindu religion

Knowledge Scores

Pretest Knowledge

- Inadequate knowledge: 78%
- Moderately adequate knowledge: 18%
- Adequate knowledge: 4%

Post test Knowledge

- Moderately adequate knowledge: 58%
- Adequate knowledge: 42%

Effectiveness of Structured Teaching Programme

Knowledge Score	Mean	SD
Pretest	7.98	3.05
Posttest	15.44	1.57

The paired t-test value was:

* $t = 13.757$

* $p < 0.001$

This indicates that the structured teaching programme was highly effective in improving knowledge regarding expressed breast milk.

Association with Demographic Variables

Age showed a statistically significant association with posttest knowledge scores ($\chi^2 = 9.234$, $p = 0.026$). Other demographic variables showed no significant association.

DISCUSSION

The present study demonstrated that women had inadequate knowledge regarding expressed breast milk before the educational intervention. After the structured teaching programme, knowledge levels improved significantly.

These findings are consistent with studies conducted by:

Ulfat Amin Bhat et al. (2021)

Shruti Kasar et al. (2023)

Kamala K.N. et al. (2019)

All these studies reported significant improvement in knowledge scores following



structured educational interventions regarding breast milk expression and storage. Educational programmes are therefore effective strategies for enhancing breastfeeding awareness among working women.

CONCLUSION

The study concluded that the structured teaching programme significantly improved knowledge regarding expressed breast milk among women working in selected industries. Educational interventions should be incorporated into maternal and child health programmes to promote

breastfeeding practices and improve infant health outcomes.

RECOMMENDATIONS

- Similar studies can be conducted with larger sample sizes.
- Educational interventions may include video-assisted teaching, pamphlets, and demonstrations.
- Awareness programmes should be organized regularly for working mothers.
- Further studies can assess long-term retention of knowledge and actual breastfeeding practices.

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