

# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding the Importance of Lactational Amenorrhoea among Primigravidae Mother in Selected Community, Bangalore

Sadaf Anjum Makundar\* and Laishram Dabashini Devi

Department of Nursing Sciences, Dayananda Sagar University, Karnataka, India

## Abstract

The lactational amenorrhea method is a new introductory family planning method that simultaneously promotes child spacing and breastfeeding, with its optimal nutrition and disease preventive benefits for the infant. LAM, as it is called, is based on the utilization of lactational infertility for protection from pregnancy and indicates the time for the introduction of a complementary family planning method. LAM is recommended for up to six months postpartum for women who are fully or nearly fully breastfeeding and amenorrheic, and relies on the maintenance of appropriate breastfeeding practices to prolong lactational infertility, with the concomitant delay in menses return. The aim of the study was to determine the effectiveness of structured teaching programme on knowledge regarding importance of lactational amenorrhoea. An evaluative approach was adopted and a pre experimental design was used for the study. Primigravidae mother from konankunte community, Bangalore were the samples and the sample size was 50. The primigravidae mother were selected by purposive sampling technique. Findings of the study revealed that the overall post test mean score was 30.52 (87.20%) with standard deviation 10.33 and the respondents knowledge were significantly higher than, the overall mean pre-test knowledge scores 3.80 (10.85%) with standard deviation 10.46 and computed paired 't' value 28.52 is higher than table value 3.312 at  $P < 0.001$  level. Hence the structured teaching programme on importance of lactational amenorrhoea was effective and statistically significant. The study reveals that there is no significant association between selected demographic variables like age, education, religion, duration of married life, type family, occupation, monthly income, previous knowledge and source of knowledge in relation with pre-test knowledge scores of primigravidae mother at  $P > 0.05$ . Data was analysed using descriptive and inferential statistics.

**Keywords:** Lactational amenorrhea • Primigravidae • Neonatal unit • Family

## Introduction

Breastfeeding is a natural resource that can make a major contribution to health and family planning goals. Today, there is renewed interest in breastfeeding and promotion efforts have resulted in the inclusion of breastfeeding content into the training curriculum and clinical experiences of health professionals. Research into the multiplicity of benefits of breastfeeding has also resulted in confirming the contraceptive effect of certain patterns of breastfeeding. The Lactational Amenorrhea Method (LAM) covered later in this module is an effective family planning method that relies on breastfeeding. The lactation amenorrhea method has been shown to be 98% effective in typical use. This is as effective as oral contraceptives and more effective than condoms. Women should keep in mind, however,

that the first postpartum ovulation can occur at any time and may not be preceded by a "warning" period. Tears are made by the lacrimal gland which is a tubular organ that protects and lubricates the ocular surface. It is situated in the upper lateral region of each orbit. The tear drainage system begins at the puncta in the medial aspect of the upper and lower eyelids. The puncta should be open and in firm apposition to the globe. The tears drain into the puncta from the tear meniscii along the lid margins by capillary action and also due to the negative pressure created by the sac along each canaliculus. These canaliculi pass approximately 2 mm vertically, then turn 90° and run 8 mm-10 mm medially to join the lacrimal sac. As the sac is surrounded by the orbicularis muscle, normal blinking movements result in negative pressure in the sac when the lids

\*Address for Correspondence: Makundar SA, Department of Nursing Sciences, Dayananda Sagar University, Karnataka, India; E-mail: dabashinidevi-nsg@dsu.edu.in

Copyright: © 2023 Makundar SA, et al. This is an open-access article distributed under the terms of the creative commons attribution license which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received: 09 September, 2019, Manuscript No. APN-23-1055; Editor assigned: 12 September, 2019, Pre QC No. P-1055; Reviewed: 26 September, 2019, QC No. Q-1055; Revised: 08 September, 2023, Manuscript No. R-1055; Published: 06 October, 2023, DOI: 10.37421/2573-0347.2023.8.337

are open and positive pressure when, the lids are closed. The lacrimal sac lies in a bony fossa in the anterior medial orbit and extends inferiorly to form the nasolacrimal duct. This duct measures 12 in length mm and has a distal valve, the valve of Hasner, before it opens into the nose through an ostium at the inferior meatus [1,2].

## Objectives of the study

- To assess the knowledge scores of primigravidae mother regarding importance of lactational amenorrhoea.
- To determine the effectiveness of structured teaching programme on importance of lactational amenorrhea.
- To determine the association between pretest knowledge scores of primigravidae mother with selected demographic variables.

## Materials and Methods

Providing interprofessional education and training opportunities allows healthcare professionals to develop a better understanding of each other's roles and responsibilities. Implementing effective communication strategies, such as regular team meetings and the use of electronic health records, enhances interprofessional communication. Encouraging shared decision making empowers patients to actively participate in their care and collaborate with the healthcare team. Continuous quality improvement efforts can identify areas for improvement in collaborative care processes and enhance overall patient care. Collaborative care models are vital in modern healthcare to provide comprehensive, patient-centered, and efficient care. Advanced practice nurses play a central role in these models, leveraging their expertise to coordinate care, advocate for patients and facilitate effective interprofessional teamwork [3]. By implementing collaborative care models, healthcare organizations can improve patient outcomes, enhance patient safety, and optimize resource utilization. Moreover, fostering a culture of collaboration and teamwork leads to increased job satisfaction among healthcare providers, contributing to a more sustainable and rewarding healthcare workforce. As healthcare continues to evolve, the integration of collaborative care models becomes increasingly essential in promoting better patient care and advancing the healthcare system as a whole. By embracing interprofessional teamwork and recognizing the

pivotal role of advanced practice nurses, healthcare organizations can pave the way for a more efficient, patient-centered, and effective healthcare environment. While collaborative care models offer significant benefits, their successful implementation July encounter challenges. Some of the common barriers to adopting collaborative care include.

## Research hypotheses

**H1:** There is a significant difference between pretest and posttest knowledge scores of primigravidae mother regarding importance of lactational amenorrhoea.

**H2:** There is a significant association between pretest knowledge scores of primigravidae mother with selected demographic variables [4].

An evaluative approach was adopted and a pre experimental design was used for the study. Primigravidae mother from konankunte community, Bangalore were the samples and the sample size was 50. The primigravidae mothers were selected by purposive sampling technique [5].

## Results

Finding of demographic variables among primigravidae mother. As the first point of contact for many patients, primary care settings offer an opportune platform to identify and address mental health concerns early on. Advanced practice nurses in primary care can integrate mental health screening tools into routine health assessments to identify patients at risk of mental health disorders. Early detection allows for timely interventions and referrals to specialized mental health services when necessary. Collaborative care models involve a multidisciplinary team approach to managing mental health conditions. APNs can work alongside psychiatrists, psychologists, social workers, and other healthcare professionals to provide comprehensive mental health care. This approach facilitates coordinated and patient-centered care, resulting in improved mental health outcomes. One of the primary roles of APNs is to educate patients, families, and communities about mental health and well-being. By raising awareness about common mental health issues, reducing stigma, and providing resources for self-help and support, APNs can empower individuals to take an active role in managing their mental health (Table 1).

| Age                              | Frequency | Percentage (%) |
|----------------------------------|-----------|----------------|
| 18-22                            | 22        | 44             |
| 23-26                            | 21        | 42             |
| 27-30                            | 7         | 14             |
| <b>Educational qualification</b> |           |                |
| No formal education              | 0         | 0              |
| Primary                          | 10        | 20             |
| Middle school                    | 13        | 26             |

|                              |    |      |
|------------------------------|----|------|
| High school                  | 21 | 42   |
| Graduate and above           | 6  | 12   |
| <b>Religion</b>              |    |      |
| Hindu                        | 17 | 34   |
| Muslim                       | 20 | 40   |
| Christian                    | 4  | 8    |
| others                       | 9  | 18   |
| <b>Duration of marriage</b>  |    |      |
| 2 years                      | 20 | 40   |
| 3 years                      | 17 | 34   |
| 4years and above             | 13 | 26   |
| <b>Type of family</b>        |    |      |
| Nuclear family               | 26 | 52   |
| Joint family                 | 20 | 40   |
| Extended family              | 4  | 8    |
| <b>Occupation</b>            |    |      |
| Housewife                    | 30 | 60   |
| Government employee          | 3  | 6    |
| Private employee             | 17 | 34   |
| <b>Family monthly income</b> |    |      |
| <5000                        | 21 | 42   |
| 5000-12000                   | 18 | 36   |
| 12001-20000                  | 11 | 22   |
| >20000                       | 0  | 0    |
| <b>Previous knowledge</b>    |    |      |
| Yes                          | 15 | 30   |
| No                           | 35 | 70   |
| <b>Source</b>                |    |      |
| Print media                  | 3  | 21.4 |
| Mass media                   | 2  | 14.3 |
| Health personnel             | 2  | 14.3 |
| Family member                | 0  | 0    |
| Friends                      | 7  | 50   |

**Table 1.** Frequency and percentage distribution of respondents n=50.

Table 1 indicates the distribution of respondents by age where, majority of the primigravidae mother 22 (44%) belongs to the age group of 18-22 years, 21 (42%) belongs to the age group of 23-26 years and 7 (14%) belongs to the age group of 27-30 years. majority of the post natal mothers 21 (42%) were completed high school education, 13 (26%) were completed middle school education, 6 (12%) were graduates, 10 (20%) were primary educated and no formal educated mothers has been found during the study [6].

Majority are 20 (40%) of respondents had 2 years of marriage duration, 17 (34%) of respondents had 3 years of marriage duration and 13 (26%) of respondents had 4 and above marriage duration. majority 26 (52%) were from nuclear family, 20 (40%) were from joint family and 4 (8%) were from extended family. Majority 30 (60%) are housewives, 3 (6%) work as government employee and 17 (34%) work as private employee. 18 (36%) family

monthly income is 5000-12000, 21 (42%) have <5000, 11 (22%) have 12001-20000 and no mother's family income is >20000, 15 (30%) had previous knowledge and 35 (70%) on importance of lactational amenorrhoea (Table 2) [7].

| Knowledge   | No. of questions | Min-max score | Knowledge score |       |          |
|---|------------------|---------------|-----------------|-------|----------|
|   |                  |               | Mean            | SD    | Mean (%) |
| Anatomy and physiology of breast                  | 6                | 0-6           | 0.68            | 1.91  | 11.33    |
| General information about lactation               | 7                | 0-7           | 0.72            | 2.12  | 10       |
| General information about breast feeding          | 7                | 0-7           | 0.88            | 2.25  | 12.57    |
| General information about lactational amenorrhoea | 15               | 0-15          | 1.52            | 4.18  | 10.13    |
| Total   | 35               | 0-35          | 3.8             | 10.46 | 10.85    |

**Table 2.** Area wise pretest mean knowledge percentage regarding structured teaching.

Table shows the pretest knowledge score of the respondents in each category of the research topic. It indicates that the total mean was 3.80 and total Standard Deviation (SD) was 10.46. On the other hand total mean % was 10.85% (Table 3) [8].

| Level of knowledge   | No. of women | Percentage (%) |
|----------------------|--------------|----------------|
| Inadequate knowledge | 48           | 96             |
| Moderately knowledge | 2            | 4              |
| Adequate knowledge   | 0            | 0              |
| Total                | 50           | 100            |

**Table 3.** Distribution of respondents by level of knowledge in pretest.

Table shows 48 (96%) of respondents had inadequate knowledge and 2 (4%) had moderate knowledge regarding the topic. None had adequate knowledge (Table 4) [9].

| Knowledge   | No. of questions | Min-max score | Knowledge score |       |          |
|---|------------------|---------------|-----------------|-------|----------|
|   |                  |               | Mean            | SD    | Mean (%) |
| Anatomy and physiology of breast                  | 6                | 0-6           | 5.06            | 1.91  | 84.33    |
| General information about lactation               | 7                | 0-7           | 5.16            | 3.08  | 73.71    |
| General information about breast feeding          | 7                | 0-7           | 5.9             | 2.47  | 84.28    |
| General information about lactational amenorrhoea | 15               | 0-15          | 14.4            | 2.87  | 96       |
| Total   | 35               | 0-35          | 30.52           | 10.33 | 87.2     |

**Table 4.** Area wise posttest means knowledge percentage regarding structured teaching programme.

Table shows the posttest knowledge score of the respondents in each category of the research topic. It indicates that the total mean was 30.52 and total Standard Deviation (SD) was 10.33. On the other hand total mean % was 87.20%(Table 5) [10].

| Level of knowledge   | No. of women | Percentage (%) |
|----------------------|--------------|----------------|
| Inadequate knowledge | 0            | 0              |
| Moderately knowledge | 4            | 8              |

|                    |    |     |
|--------------------|----|-----|
| Adequate knowledge | 46 | 92  |
| Total              | 50 | 100 |

**Table 5.** Distribution of respondents by level of knowledge in post test.

Table shows 46 (92%) of respondents had adequate knowledge and 4 (8%) had moderate knowledge regarding the topic. None had inadequate knowledge (Table 6).

| Knowledge assessment                              | % of Pre-test knowledge | % of Post-test knowledge | % of Knowledge gain |
|---|-------------------------|--------------------------|---------------------|
| Anatomy and physiology of breast                  | 11.33                   | 84.33                    | 73                  |
| General information about lactation               | 10                      | 73.71                    | 63.71               |
| General information about breast feeding          | 12.57                   | 84.28                    | 71.71               |
| General information about lactational amenorrhoea | 10.13                   | 96                       | 85.87               |
| Over all  | 10.85                   | 87.2                     | 76.35               |

**Table 6.** Knowledge gain after structured teaching programme.

Table represents the percentage of pretest knowledge and percentage of posttest knowledge in each area after structured teaching programme [11]. In area 1, the % of pretest knowledge was 11.33% and after the structured teaching programme it was 84.33%. So the % of enhancement in area 1 is 73%. In area 2, % of pretest knowledge was 10% and % of post test knowledge was 73.71%, percentage of enhancement in knowledge in area 2 is 63.71%.

Percentage of Pretest knowledge in area 3 was 12.57% and % of posttest knowledge was 84.28%, so the percentage of enhancement in area 3 is 71.71% and in area 4, the % of pretest knowledge was 10.13% and % of post knowledge was 96%, so the % of enhancement of knowledge is 85.87%. Overall percentage of enhancement after structured teaching programme is 76.35% (Table 7) [12].

| Knowledge   | Pre-test |       | Post-test |       | Paired t-test |
|---|----------|-------|-----------|-------|---------------|
|   | Mean     | SD    | Mean      | SD    |               |
| Anatomy and physiology of breast                  | 0.68     | 1.91  | 5.06      | 1.91  | 19.01         |
| General information about lactation               | 0.72     | 2.12  | 5.16      | 3.08  | 20.44         |
| General information about breast feeding          | 0.88     | 2.25  | 5.9       | 2.47  | 18.48         |
| General information about lactational amenorrhoea | 1.52     | 4.18  | 14.4      | 2.87  | 16.23         |
| Overall aspect                                    | 3.8      | 10.46 | 30.52     | 10.33 | 28.52         |

**Table 7.** Comparison of pretest and post test knowledge score with paired t-test scores.

Table represents the comparison between the pretest and post test knowledge scores on importance of lactational amenorrhoea [13]. The t-value at 0.001 level of significance for the first area is 19.01, t- value for the second area is 20.44, t- value for the third area is 18.48, and t-value for fourth area is 16.23. The

overall t-value is 28.52 at 0.001 level of significance, which is greater than the table value of 3.312 which indicates the effectiveness of structured teaching programme on knowledge regarding importance of lactational amenorrhoea (Table 8) [14].

| Demographic |           | Knowledge score |      |          |     |          |   | N  | Pearson chi-square test NS          |
|-------------|-----------|-----------------|------|----------|-----|----------|---|----|-------------------------------------|
|             |           | Inadequate      |      | Moderate |     | Adequate |   |    |                                     |
|             |           | f               | %    | f        | %   | f        | % |    |                                     |
| Age         | 18-22 Yrs | 22              | 45.8 | 0        | 0   | 0        | 0 | 22 | $\chi^2=2.877$ ,<br>P=0.237<br>2 df |
|             | 23-26 Yrs | 19              | 39.6 | 2        | 100 | 0        | 0 | 21 |                                     |

|                                       |                      |    |      |   |     |   |   |    |  |
|---------------------------------------|----------------------|----|------|---|-----|---|---|----|--|
|                                       | 27-30 Yrs            | 7  | 14.6 | 0 | 0   | 0 | 0 | 7  | NS   |
| Education                             | Primary              | 10 | 20.8 | 0 | 0   | 0 | 0 | 10 | $\chi^2=1.160$ ,<br>P=0.763<br>3 df,<br>NS |
|                                       | Middle school        | 12 | 25   | 1 | 50  | 0 | 0 | 13 |  |
|                                       | High school          | 20 | 41.7 | 1 | 50  | 0 | 0 | 21 |  |
|                                       | Graduate and above   | 6  | 12.5 | 0 | 0   | 0 | 0 | 6  |  |
| Religion                              | Hindu                | 16 | 33.3 | 1 | 50  | 0 | 0 | 17 | $\chi^2=0.751$<br>P=0.861<br>3 df,<br>NS   |
|                                       | Muslim               | 19 | 39.6 | 1 | 50  | 0 | 0 | 20 |  |
|                                       | Christian            | 4  | 8.3  | 0 | 0   | 0 | 0 | 4  |  |
|                                       | Other                | 9  | 18.8 | 0 | 0   | 0 | 0 | 9  |  |
| Duration of married life              | 2 Years              | 19 | 39.6 | 1 | 50  | 0 | 0 | 20 | $\chi^2=0.751$<br>P=0.687, 2 df,<br>NS     |
|                                       | 3 Years              | 16 | 33.3 | 1 | 50  | 0 | 0 | 17 |  |
|                                       | 4 and above yrs      | 13 | 27.1 | 0 | 0   | 0 | 0 | 13 |  |
| Type of family                        | Nuclear              | 25 | 52.1 | 1 | 50  | 0 | 0 | 26 | $\chi^2=0.220$<br>P=0.896, 2 df,<br>NS     |
|                                       | Joint                | 19 | 39.6 | 1 | 50  | 0 | 0 | 20 |  |
|                                       | Extended family      | 4  | 8.3  | 0 | 0   | 0 | 0 | 4  |  |
| Type occupation                       | House wife           | 29 | 60.4 | 1 | 50  | 0 | 0 | 30 | $\chi^2=0.317$<br>P=0.854, 2 df,<br>NS     |
|                                       | Government employee  | 3  | 6.2  | 0 | 0   | 0 | 0 | 3  |  |
|                                       | Private employee     | 16 | 33.3 | 1 | 50  | 0 | 0 | 17 |  |
| Monthly income                        | Rs. <5,000           | 20 | 41.7 | 1 | 50  | 0 | 0 | 21 | $\chi^2=0.604$<br>P=0.740, 2 df,<br>NS     |
|                                       | Rs. 5,001 to 12,000  | 17 | 35.4 | 1 | 50  | 0 | 0 | 18 |  |
|                                       | Rs. 12,001 to 20,000 | 11 | 22.9 | 0 | 0   | 0 | 0 | 11 |  |
| Previous knowledge                    | Yes                  | 15 | 31.2 | 0 | 0   | 0 | 0 | 15 | $\chi^2=0.893$<br>P=0.345, 1 df,<br>NS     |
|                                       | No                   | 33 | 68.8 | 2 | 100 | 0 | 0 | 35 |  |
| Source of knowledge (Yes categories ) | Print media          | 3  | 21.4 | 0 | 0   | 0 | 0 | 3  | $\chi^2=2.077$<br>P=0.747, 3 df,<br>NS     |
|                                       | Mass media           | 2  | 14.3 | 0 | 0   | 0 | 0 | 2  |  |
|                                       | Health personnel     | 2  | 14.3 | 0 | 0   | 0 | 0 | 2  |  |
|                                       | Friends              | 7  | 50   | 0 | 0   | 0 | 0 | 7  |  |

**Table 8.** Association between pretest level of knowledge and their selected demographic.

Table shows the association of level of pre-test knowledge with selected demographic variables. It is evident from the above table that there is no significant association with the variable like age, gender, religious status, type of family, fathers occupation, mothers occupation, family income and there is significant association with the residence status [15].

## Conclusion

An adequate inter-birth interval is of great importance because it enables a mother to recover her physical and emotional strength between pregnancies and confers upon the child advantages of better health and development. Breast feeding is the naturally evolved method of ensuring an adequate inter-birth interval. Breast feeding is the most widely used method of birth spacing and assumes major demographic importance. It is important, therefore, that the factors controlling lactational infertility should be understood.

## References

1. Fraser, Diane M, and Margaret A Cooper. *Myles Text book for Midwives*, 15<sup>th</sup> edition, Churchill Livingstone, London (2003): 513-514.
2. WHO. "The World Health Organization multinational study of breast-feeding and lactational amenorrhea. III. Pregnancy during breast-feeding. World Health Organization Task Force on Methods for the Natural Regulation of Fertility." *Fertil Steril* 72 (1999): 461-471.
3. Peterson, A E, R Perez-Escamilla, M H Labboka and V Hight, et al. "Multicenter study of the Lactational Amenorrhea Method (LAM) III: Effectiveness, duration, and satisfaction with reduced client-provider contact." *Contraception* 62 (2000): 221-230.
4. Subhani, Aqeel, Gultasib Khan Gill, Ansa Islam and Malik Maryam et al. "Duration of Lactational Amenorrhoea: A Hospital Based Survey in District Abbottabad." *J Ayub Med Coll Abbottabad* 20 (2008): 122-124.
5. Bamufleh, Rana Ahmed, Ahlam Eidah Al-Zahrani, and Shadia Abdullah Yousuf. "Effectiveness of Contraceptive Counseling on Women Knowledge and Practice in Saudi Arabia." *Int J Nurs Didactics* 7 (2017): 30-36.
6. Elliott, Catherine L, Janet E Brennand, and Andrew A Calder. "The Effects of Mifepristone on Cervical Ripening and Labor Induction in Primigravidae." *Obstet Gynecol* 92 (1998): 804-809.
7. Mohan, Chinchu. "Assessment of knowledge regarding exclusive breastfeeding among primigravida and primipara mothers." *Int J Adv Res Dev* 3 (2018): 1-128.
8. Aserlind, Alexandra B, and Cathy A Burnweit. "Spontaneous Sternal Fracture during Labor in a Healthy Primigravida with Female Athlete Triad: A Case Report." *Case Rep Women's Health* 27 (2020): e00213.
9. Mohamadirizi, Soheila, Masoumeh Kordi, Mohamad Taghi Shakeri, and Morteza Modares-Gharavi. "The Relationship between Eating Disorder Symptoms and Obsessive Compulsive Disorder in Primigravida Women." *Iranian J Nurs Midwifery Res* 20 (2015): 642.
10. Ugboaja, Joseph O, Nwosu O Berthrand, Anthony O Igwegbe, and Amaka L OBI-Nwosu. "Barriers to Postnatal care and Exclusive Breastfeeding among Urbanwomen in Southeastern Nigeria." *Nigerian Med J* 54 (2013): 45.
11. Fillmore, C J, and K W Taylor. "Infant Care Concerns of Primigravida Mothers and Nursing Practice: Two Models." *Canadian J Nurs Res Arch* (1976): 15-25.
12. Adams, Martha. "Early Concerns of Primigravida Mothers Regarding Infant Care Activities." *Nurs Res* 12 (1963): 72-77.
13. Hamdiah, Hamdiah, Ari Suwondo, Triana Sri Hardjanti, and Ariawan Soejoenoes, et al. "Effect of Prenatal Yoga on Anxiety, Blood Pressure, and Fetal Heart Rate in Primigravida Mothers." *Belitung Nurs J* 3 (2017): 246-254.
14. Lawn, Joy E, Kate K, Christabel EL and Simon C. "3.6 Million Neonatal Deaths-What is Progressing and What Is Not?" *Semi Perinatol* 34 (2010): 371-386.
15. Liu, Lan, Liu LM, Liu YH and Li ZW, et al. "Prevalence of Preterm Birth among Singletons in 10 Counties (Cities) of China, 1993-2005." *Zhonghua Liu Xing Bing Xue Za Zhi* 28 (2007): 1051-1054.

**How to cite this article:** Makundar, Sadaf Anjum and Laishram Dabashini Devi. "A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding the Importance of Lactational Amenorrhoea among Primigravidae Mother in Selected Community, Bangalore." *Adv Practice Nurs* 8 (2023): 337.