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Original Research Article

Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Lamaze Technique among 4th Year B.Sc. Nursing Student of Smt. Nagarathnamma College of Nursing

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Abstract: Through labour is a normal physiological process, it is associated with some amount of pain. It depends on many factors like the person's physical build, her emotional status, her mental outlook, associated and coincidental problems etc. Since there so many factors influences pain perception, pain relief can be achieved by changing some or all these factors. The goal of Lamaze Technique is to increase a mother's confidence in her ability to give birth; Lamaze classes help them to understood hoe to cape with the pain in ways that both facilitate labour and promote comfort, including focused breathing, movement, punishing, imaginary and visualization and massage. The Lamaze method id completely natural and doesn't require the use of medical supervision or drugs, making it a popular option among many women. The popularity of the method is largely due to the emphasis on individual personality and the interaction of the body, mind and environment.it teaches women to avoid fears and doubts about delivery and instead respond to the contractions as stimuli and not pain. ***Result:*** There was significant improvement in the knowledge of students following the administration of structured teaching program on Lamaze Technique. ***Conclusion:*** The present study was attempted to assess knowledge regarding Lamaze Technique. The study finding showed that the post test score was higher than pre-test score and was concluded that structured teaching program on Lamaze Technique was effective.

Keywords: Assess, Effectiveness, Knowledge, Structured teaching program.

1. INTRODUCTION

"A study to assess the effectiveness of structured teaching programme on knowledge regarding Lamaze Technique among 4th year B.Sc. nursing student of Smt. Nagarathnamma college of nursing, Bengaluru."

Birthing is an experimental journey. Each birth is like a rebirth for the mother. Natural childbirth is a sublime experience, with a many safe options and benefits woman dream of a perfect birth. The physiological transition from pregnancy to motherhood heralds an enormous change in each woman physically and physiologically. Labour is one of the major events in women's life. It is accomplished by Pain. Labour pain is nature's own way of alerting the pregnant women about impending childbirth. Pregnant woman commonly worries about the pain, they will experience during labour and childbirth and how they will react and deal with that pain [1-4].

A good childbirth experience make woman to have adequate information prior to the labour to ensure compression of the changes the labour will bring to have some control over the birth of her baby. Woman in labour should be encouraged to trust her own instincts, listen to her own body, verbalize feelings in order to get the help and support they need. Increase in confidence as associated with lower level of pain experience during labour. Improved knowledge about how they can cope and work during labour will help the women to have a positive childbirth experience [5].

Analgesics may be given during labour as needed, but as little as possible should be given because they cross the placenta and may depress the neonates

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breathing, neonatal toxicity can occur because after the umbilical cord is cut, the neonate, whose metabolic and excretory process are immature, clears the transferred drug much more slowly, by liver metabolism or by urinary excretion. Preparation and education about childbirth lessen anxiety pain perception, and thus Markley decreased the need for analgesics [6].

REVIEW OF LITERATURE

A survey was conducted to determine the multiparous pregnant women's expectations of their nurse's role during labour and delivery. 57 completed surveys were collected. The women listed a total of 174 items. 29% of the nursing tasks listed by the women were related to providing them with physical and emotional comfort measures such as Lamaze therapy and 24% were related to providing informational support. The survey support emphasizes the importance of physical comfort measures especially Lamaze therapy in women's satisfaction during labour [7].

A prospective study was conducted in England among 700 women regarding the drug use and Lamaze therapy during labour. Most women preferred to keep drug use to a minimum and practiced Lamaze therapy, even though they expected labour to be "quite" or "very" painful. Women who preferred to avoid drugs and practiced Lamaze therapy were more likely to do so, and were more satisfied with the birthing process overall than women who used drugs. In general, women tended to get what they expected. Breathing and relaxation exercises were widely used, and were most successful for those who had expected them to be so [8].

A study was conducted in Delhi to evaluate the effectiveness of breathing exercises on pain relief among 52 primi gravida mothers during first stage of labour selected by purposive sampling. A numerical pain intensity scale was used to collect the data. Data were analysed using descriptive and inferential statistics. The study concluded that breathing exercises were found to be an effective measure for significantly reducing the intensity of labour pain among primi mothers [9].

A study was conducted in West Bengal to evaluate the effect of the breathing technique on maternal outcome among 67 primi gravida mothers by simple random sampling. Experimental group mothers were taught the Lamaze method of breathing exercises.

Data was collected by interview schedule and observation checklist and analysed using descriptive and inferential statistics. Mean behavior score of mothers from experimental group was higher (t=11.5 p<0.05) and duration of labour was higher in control group (t=4.46 p<0.05), frequency of normal vaginal delivery was significantly higher (χ^2=5.511, p<0.05) in experimental group and frequency of occurrence of maternal complications was significantly lower in experimental group than that of control group. Frequency of use of pain-relieving drugs was found to be significantly higher in control group as compared to experimental group (χ^2=4.214 p<0.05). The results illustrate the progress of vaginal delivery by Lamaze breathing [10].

MATERIALS AND METHOD

Evaluative approach is adopted to study as its aim is to test hypothesis that establishes relationship between polycystic ovarian syndrome (PCOS) and reduction in conditions. Pilot study was conducted with six samples in selected college to refine methodology and to find feasibility of study. The setting of study is selected nursing colleges, Bangalore. Main study samples were about 60 in number. Non probability convenient sampling technique was used to select samples. Research design adopted for study was pre-experimental, one group pre-test post-test design. **Polycystic ovarian syndrome (PCOS)** which includes definition, causes, risk factors, signs and symptoms, diagnostic evaluation, preventive measures, and management.

RESEARCH APPROACH

According to nature of problems selected for study, an evaluative research approach was appropriate. Evaluatory approach was used in study, it aimed to assess knowledge regarding polycystic ovarian syndrome [11].

RESEARCH DESIGN

It is defined as "A research overall for obtaining answer to research questions or testing hypothesis"

The research design is plan, structure and strategy of investigations of answering research questions in overall plan or blueprint of researchers select to carry out their study [12].

Pre experimental one group pre-test and post-test design was adapted for study.

Subjects	Pre-test Day 1	Treatment Day 1	Post-Test Day 7
Students studying in 1st year B.Sc. Nursing. Smt. Nagarathnamma college Nursing, Bengaluru.	Assessment of knowledge regarding Polycystic Ovarian Syndrome (PCOS) among 1st year B.Sc. Nursing students by structured knowledge Questionnaire.	Administration of structured teaching programme on Polycystic ovarian syndrome (PCOS)	Assessment of knowledge regarding Polycystic ovarian syndrome (PCOS) among 1st year B.Sc. Nursing students by using structured knowledge questionnaire.

Variables under study: In study key variables are knowledge of students regarding polycystic ovarian syndrome.

Attributed variables: Demographic characteristics such as age, religion, family monthly economic status, residential area, Nationality, previous knowledge and source of previous knowledge.

Independent variables: Structured teaching program, student psychology.

Dependent variables: Student's knowledge

Setting of the study: Setting is physical location and condition in which data collection take place in study. Study was conducted in SMT. NAGARATHNAMMA College of nursing, Bengaluru.

Study population: Population is total number of people who meet criteria that researcher has established for study from whom subjects will be selected and to whom findings will be generalized. Target population- students Accessible population- 1st year B.sc nursing students.

Sampling and sampling techniques:
Sample size: The sample is small portion of population for observation and analysis. In present study, sample size consists of around 40 students of 1st year B.Sc. nursing in Smt. Nagarathnamma College of nursing, Bengaluru.

Sampling techniques: Non probability purposive sampling technique was used for study.

1.1 Tables
A. overall and aspect wise pre & post knowledge score of subject on Lamaze Technique.

Table 1: Overall pretest score on knowledge of subject on Lamaze technique.

Group	Mean	Mean %	Standard deviation
Overall pre – test score	2.63	8.77%	2.48

The above table shows the mean, mean percentage and standard deviation for pretest knowledge of the subject on Lamaze Technique.

Table 2: Distribution of subjects by level of knowledge on Lamaze Technique (pre-test)

Level of knowledge	Category	Number of respondents	Percentage (%)
Inadequate	< 50% score	28	93.33%
Moderate	51-75% score	2	6.67%
Adequate	> 75% score	0	0
Total		30	100%

The above table shows the pretest level of subjects is adequate in all respondents. The above table shows that inadequate is of 93.33% and moderate is of 6.67%.

Table 3: Mean, mean percentage and standard deviation for posttest knowledge on Lamaze Technique

Group	Mean	Mean %	Standard deviation
Overall post test score	27.86	93.86%	3.78

The above table shows that the mean of the overall posttest is 23, mean percentage is 77% and the standard deviation is 8.979.

Table 4: Distribution of the subject by the level of knowledge on Lamaze Technique (post-test)

Knowledge level	Category	Number of Respondents	Percentage
Inadequate	< 50% score	0	0
Moderate	51 – 75% score	3	10%
Adequate	> 75% score	27	90%
Total		30	100%

The above table shows reveal the majority of the subject of 27 (90%) gained adequate knowledge, 03 (10%) gained moderate knowledge on Lamaze Technique.

1.2 Figures and Graphics:
Fig 1 Below graph shows the total mean percentage of the pre-test and post-test and the level of knowledge enhancement.
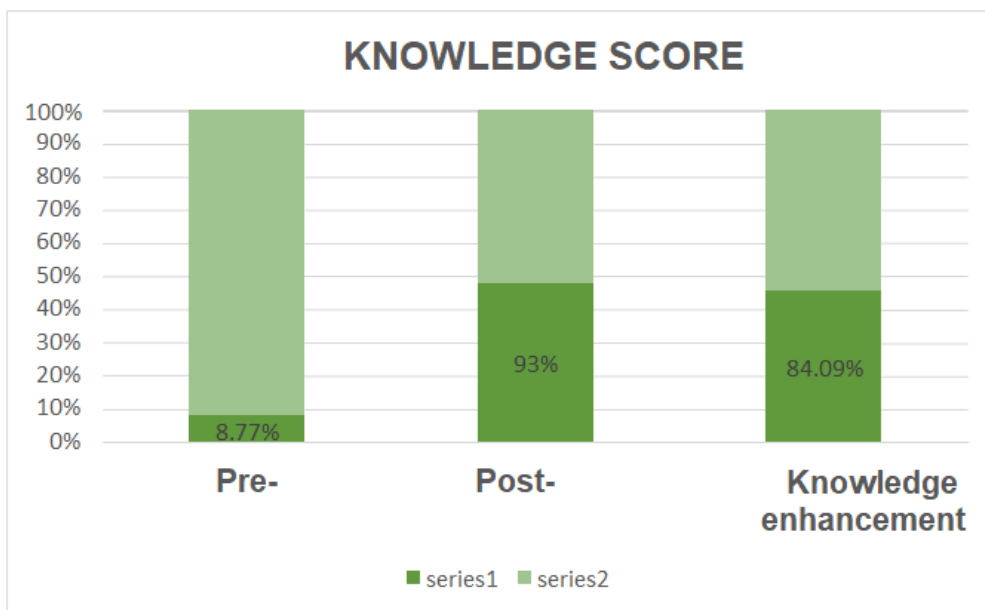
Figure 1

RESULT AND DISCUSSION

There was significant improvement in the knowledge of students following the administration of structured teaching program on Lamaze Technique. The study was attempted to examine the following hypothesis:

1. There is a significant difference between Pre and post-test knowledge score on knowledge regarding Lamaze Technique among 4th year B.Sc. nursing students of Smt. Nagarathnamma College of nursing, Bengaluru.
2. There is a significant association between post-test level of knowledge on Lamaze Technique and selected demographic variables of 4th year B.Sc. nursing students of Smt. Nagarathnamma College of nursing, Bengaluru.

Pre-test knowledge of Lamaze Technique among 4th year B.Sc. nursing students of Smt. Nagarathnamma College of nursing, Bengaluru

The level of knowledge was seen into 3 categories, inadequate, moderate and adequate. All of the subject had inadequate knowledge of Lamaze Technique.

Post-test knowledge of Lamaze Technique among 4th year B.Sc. nursing students of Smt. Nagarathnamma College of nursing, Bengaluru

In the post-test only 10% obtained moderate knowledge and 90% obtained adequate knowledge.

Effectiveness of structured teaching programmed on knowledge regarding Lamaze Technique among 4th year B.Sc. nursing students of Smt. Nagarathnamma College of nursing, Bengaluru.

The Table 1 shows that there is a significant improvement in the knowledge of 4th year B.Sc. nursing students after the administration of computer assisted teaching module.

Association of knowledge regarding Lamaze Technique and selected demographic variables

The Table 1-4 describes the association between knowledge and selected demographic variables of the students such as previous knowledge of Lamaze Technique.

CONCLUSION

The present study was attempted to assess knowledge regarding Lamaze Technique. The study finding showed that the post test score was higher than pre-test score and was concluded that structured teaching program on Lamaze Technique was effective.

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Author Contributions
1. **First Author:** Problem statement formation, objectives, Research methodology, Questionnaire, STP Administration, Etc.,
2. **Second Author**: Contributed to Collect Review of literature, Research design, etc.

Competing Interest

A declaration of interests of all author received before an article reviewed and accepted for publication.

Ethical Clearance: We received ethical clearance from institution.

REFERENCES
1. Pain Relief in Labour [online].2008 June 15 [cited 2012 Jan 10]; Available from: URL: http://www.lanababy.com/pain%20relief.htm.
2. Lamaze technique [online].2009 July 25 [cited 2012 Jan 15]; Available from: URL: http://en.wikipedia.org/wiki/Lamaze technique.
3. Lamaze method [online].2009 April 20 [cited 2012 Jan 28]; Available from: URL: http://www.babypartner.com/guides/prenatal-care/prenatal-classes/lamaze method.php.
4. Wikipedia, the free encyclopedia. Childbirth. Available from; http://en.wikipedia.org/wiki/Childbirth.
5. Introduction (online) available from: http: // WWW.Slideshare. Net/ mobile/ Nelma Joseph / psycho prophylactic –methods-in-labour.
6. Introduction (online) available from: http://WWW.kariclub.co.nz/pregnancy/labourand-birth/article/the-stages-of labour.
7. Dickson, S. K. (1998.). Maternal-infant nursing care. 3rd ed, Mosby publications Missouri, 261-273.
8. Analgesics (online) available from: http:WWW.merckmanuals.com /professional /print/ gynecology-and-obstetrics/normal-labour-and delivery/management-of normallabor.html.
9. Lamaze technique (online) available from: https://en.m.wikipedia.org/wiki/Lamazetechnique.
10. Labour and birth. Pregnancy-info. Net. 2009. Available from:http://WWW.pregnancyinfo.net/topic-pregnancy-related-q.html.
11. Serdar, H. U., & Larissa, H. (1995). Dealing with pain during childbirth [Internet]. 1995. Available from: http://kidshealth.org/parent/pregnancy/centre/child birth/childbirth pain.html.
12. Donna, L., & Wong Shannon, E. (1998). Perry maternal child nursing care .United States of America; 1998. Chapter 14, Management of discomfort; p. 352.
13. WHO. (2012). World health day. Safe mother hood division of reproductive health. WHO Geneva.