A study to evaluate the effectiveness of guided imagery technique in alleviating premenstrual syndrome among first year B.Sc. Nursing students at selected nursing colleges in Bangalore

Sapna Patel and Precilla Jebarani

Abstract
This study attempts to evaluate the Effectiveness of Guided Imagery Technique in alleviation of premenstrual syndrome among first year B.Sc nursing students. The research approach adopted for this study quantitative approach. The research design adopted for this study was pre experimental design with one group pre-test and post - test design was applied. The purposive sampling was used to select the sample for the study. The sample consists of the sixty first year nursing students in selected nursing colleges. The Instrument used for the data collection questionnaire on premenstrual assessment scale. In the pre-test level on premenstrual syndrome Mean Score was 95.8, SD 6.79 and Mean percentage 75.6%, post-test Mean is 69, SD 4.12 and Mean percentage 55.2%, the percentage mean effectiveness was 21.4%. The ‘t’ value was 50, shows that there is a reduction of premenstrual symptoms after the guided imagery technique.

Keywords: Knowledge, guided imagery technique, premenstrual syndrome, alleviating, nursing students

1. Introduction
The premenstrual syndrome is a complex combination of psychological symptoms, including irritability, aggression, tension, anxiety, and depression, and somatic changes such as fluid retention, breast tenderness, headache, feeling of bloating, and weight increase. Women are affected irrespective of socioeconomic status, race, or cultural background, and family clusters are well documented. The causes of the premenstrual syndrome have not been clearly elucidated but have been attributed to hormonal change, neurotransmitters, prostaglandins, diet, drugs, and lifestyle, so causal treatment is difficult. The mechanism of action may also be related to modulation of stress induced prolactin secretion via dopamine, without directly affecting luteinising hormone or follicle stimulating hormone. Binding to opioid receptors,β endorphins, and retroactive flavonoids may also have a role. The plant has been used traditionally to relieve the symptoms of the premenstrual syndrome, although systematic evaluation of its efficacy is relatively recent.

The study investigated the effects of a program of relaxation and specific guided imagery on menstrual-cycle length and premenstrual distress. Thirty healthy college women with regular menstrual cycles were studied for 6 months. The subjects completed the Menstrual Distress Questionnaire (MDQ) at the beginning and end of the study and recorded their menstrual cycles for 3 months on an investigator-developed calendar recording sheet. Subjects were then given an audiotape with a progressive muscle relaxation exercise followed by guided imagery with a suggestive message focusing on lengthening the menstrual cycle and delaying the onset of menstrual bleeding. The 15 subjects who completed the entire study had significant increases in cycle lengths during the 3 months of imagery. The total premenstrual distress scores also declined significantly, as did the subscales measuring behavior and negative affect. This study provides preliminary evidence that menstrual-cycle rhythmicity and premenstrual distress are amenable to the mind-body intervention of guided imagery and suggests that further investigation of this phenomena with larger sample size and careful controls for confounding variables be conducted.

Clinically significant premenstrual syndrome occurs in 20% of girls. It is important for a girls to take charge of understanding her premenstrual syndrome patterns and learning about what's happening within her body. Only then can she realistically evaluate their effects on her life and make informed decisions about management. Hence the researcher felt the need to find the prevalence of PMS by guided imagery technique among the adolescence girls.
2. Methodology
The research approach adopted for this study quantitative approach. The research design adopted for this study was preexperimental design with one group pre-test and post-test design was applied. The purposive sampling was used to select the sample for the study. The sample consists of the sixty first year nursing students in selected nursing colleges. The study was conducted in Chinnai College of Nursing, Sri Shanthini College of Nursing and Varalakshmi College of Nursing of Bangalore. The method of data collection adopted for the study was using the structured Questionnaire method. The instrument used for the data collection questionnaire on premenstrual assessment scale.

3. Results
Result shows that in pre-test the total Mean was 95.8, SD 6.79 and Mean percentage 75.6%. In the post test Mean was 69, SD 4.12 and Mean percentage 55.2%. The Pre-test and post-test Mean was compared. The paired’ t’ value obtained was 50. It is clearly states that the guided imagery technique was effective in the alleviation of premenstrual syndrome among the first year B.Sc. nursing students.

4. Discussion
In the Pre-test, Level of physiological symptoms Mean is 55.4, SD 5.83 and Mean percentage 79.14%, Level of emotional symptoms Mean is 19, SD 5.21 and Mean percentage 73.80%, Level of behavioural symptoms Mean is 21.4, SD 4.89 and Mean percentage 69%. Over all pre-test Mean is 95.8, SD 6.79 and Mean percentage 75.6%. In the post-test, Level of physiological symptoms Mean is 39, SD 3.4 and Mean percentage 55.7%, Level of emotional symptoms Mean is 14, SD 3.11 and Mean percentage 56%, Level of behavioural symptoms Mean is 16, SD 2.89 and Mean percentage 53.3%. Over all post-test Mean is 69, SD 4.12 and Mean percentage 55.2%. In the Effectiveness, Level of physiological symptoms Mean is 16.4, SD 3.8 and Mean percentage 23.4%, Level of emotional symptoms Mean is 5, SD 2.85 and Mean percentage 20%, Level of behavioural symptoms Mean is 5.4, SD 2.15 and Mean percentage 18%, Overall Effectiveness on premenstrual syndrome Mean is 26.8, SD 4.15 and Mean percentage 21.4%. The paired’ t’ test analysis of pre-tests and post-tests score of level on premenstrual syndrome. The paired’ t’ test values obtained are 33.4, 23.6, 19.5, and over all paired’ t’ test value is 50. The paired’ t’ value obtained was 50. It is clearly states that the guided imagery technique was effective in the alleviation of premenstrual syndrome among the first year B.Sc nursing students.

The above findings supported by the study report
The study conducted in Tehran to determine the correlation between premenstrual syndrome (PMS) and quality of life (QOL) in adolescent girls. The research is a descriptive-analytic study. The participants were 360 adolescent girls the participants were selected in a multistage randomly-clustered design according to their schools. Respondents completed the demographic questionnaire, premenstrual syndrome symptom daily record scale, and the medical study short form-36 (SF-36). The result finds, Compared with healthy adolescents, those with PMS had a lower score of SF-36 in all the scales (P<0.001). Except for mental health and vitality, no significant difference was observed between other scales of quality of life according to SF-36 in various severities of PMS (P>0.05). A statistically meaningful difference was observed in mental health and vitality of SF-36 in severe form of PMS in compare to mild and moderate PMS (P=0.002). The study concluded that the Premenstrual syndrome is associated with substantial burden on QOL in adolescents. In addition, increasing severity in PMS symptoms results in decreased quality of mental health and vitality.

5. Conclusion
The study concluded that maximum number of students (70%) were from the age group of 18-19 years. The data shows that (58.3%) of students attained menarche at the age of 14-16 years. (55) Of them belonged to the religion of Christian. Majority of them belongs to the non-vegetarian (90%) and (66.6%) of students had a cycling period of 28 days. About (75%) of the students were using the oral analgesic as a remedial measure for premenstrual syndrome. The majority of the students (43.3%) were belongs to the no oriental family history of premenstrual syndrome. The study concluded that 53.3% were had moderate symptoms during pre-test but during post-test 8.3% of the students had moderate symptoms and 20% of students had only mild symptoms of premenstrual syndrome. The Findings of the study recommended the further interventional approaches regarding the premenstrual syndrome. Special health education campaign related to the alleviation of premenstrual syndrome creates awareness, reduces mortality rate. The present study proved that guided imagery technique was effective among the first year nursing students in alleviation of premenstrual syndrome.

6. Recommendations
The study recommends that,
1. The Study can be replicated on large sample and their findings can be generalized to large group
2. A comparative study can be done with guided imagery and alternative therapies.
3. The study can be done in a large setting
4. A longitudinal study to find out the guided imagery for long lasting therapeutic effect on PMS can be taken up
5. A similar study can be done in a true experimental study.

7. References