A Study to Evaluate Effectiveness of Lifestyle Modification on Physical Premenstrual Syndrome Among Adolescent Girls at Selected Nursing Colleges of Bhilai, Chhattisgarh

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***Abstract*: Premenstrual syndrome is a disorder that mainly affects adolescents' young women's daily life. It usually begins in the late luteal phase and ends in a few days after menstruation. The title of the study is: A study to evaluate effectiveness of lifestyle modification on physical premenstrual syndrome among adolescent girls at selected nursing colleges of Bhilai, Chhattisgarh. The main purpose of the study to find out the effectiveness of the lifestyle modification on premenstrual syndrome. *Methodology:* Experimental research design was used. Total 300 samples from two different nursing colleges were selected and participated in this lifestyle modification programme. The effectiveness of this intervention technique is evaluated by finding of pretest and post test. Descriptive and inferential technique were used for analysis of data. *Result:* The findings reveal that lifestyle modification found effective to reduce the physical symptoms of premenstrual syndrome.**

***Keywords*: Premenstrual syndrome (PMS), Lifestyle modification (LSM), Aerobic exercise, Dietary counseling.**

1. Introduction

Agrawal Anil K and Agrawal Anju (2010) stated in the stage of adolescence somatic, psychological, endocrinal and behavioural growth takes place. These changes occur from childhood to adulthood. The adolescent stage is a preparation for motherliness. The health of the entire population is depending upon the health of the adolescent girls. In India nearly quarter of people consists of youngster girls less than 20 years. A vital transition occurs in the phase of adolescent i.e., onset of menarche. It is related with issues regarding irregularity of menstrual period, heavy flow of menstruation and dysmenorroea.

Problem Statement: An experimental study to evaluate effectiveness of lifestyle modification on physical premenstrual syndrome among adolescent girls at selected nursing colleges of Bhilai, Chhattisgarh.

The objectives of this study were: To assess effectiveness of lifestyle modification programme on physical premenstrual Syndrome and menstrual disorders among adolescents.

Research Approach: Experimental research approach.

Research Design: One group pre-test and post-test research design.

Setting of the Study:

In this present study Shri Shankaracharya College of Nursing, and Swami Swaroopanand College of Nursing, Bhilai, Chhattisgarh are selected for data collection.

Population: In the present study, population includes all B.Sc. nursing 1st to 3rd year students of Shri Shankaracharya College of Nursing, Bhilai and Swami Swaroopanand College of Nursing, Bhilai, Chhattisgarh.

Sampling Plan: Purposive sampling technique is used which is a type of non-probability sampling.

Sample: B.Sc. Nursing Students from 1st to 3rd year

Sample Size: Total 300 samples

Sample Selection Criteria: The study includes the B.Sc. nursing students from 1st to 3rd year who are:

- Girls of 17-21years of age.
- Suffering from Premenstrual syndrome.
- Interested for intervention of the study.
- Willing to do aerobic exercise.
- Not under treatment of any disease.
- Not taking any products to lose and gain weight (as it causes menstrual disorders).

Variables Under Study:
- *Independent Variables:* Life style modification programme i.e., aerobic exercise and dietary counseling.
- *Dependent Variable:* Premenstrual syndrome.
- *Socio-Demographic Data:* Age, Qualification, Family monthly income, Mass media exposure about menstrual disorders & PMS, Source of Mass media exposure, Type of dietary pattern

Selection & Development of Instrument:
- *Socio-Demographic Data:*
  Self-structured questionnaires were prepared for assessing socio demographic variables modified standard tool [Premenstrual Syndrome Scale (PMSS)]

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for assessing Premenstrual syndrome

Reliability: Reliability of modified PMSS tool is 0.84

Content Validity: Content validity of tool was done by expert of field.

Procedure and Time Frame of Data Collection

- In this research study quantitative survey method was used to collect data from 300 B.Sc. Nursing girl students.
- Main study was scheduled from 25th January to 19th March 2020.
- Pretest questionnaire administration & dietary counseling.
- Formal permission for the study was taken from the principals of both nursing Colleges. The girl students of B.Sc. nursing 1st to 3rd year were assembled in the auditorium of the college i.e., B.Sc. nursing 1st year, 2nd year and 3rd year on three different dates and timings.
- Those students who fulfilled the inclusion criteria were selected for the study. Pretest is done for three consecutive days according to Year of B. Sc. Nursing program in Shri Shankaracharya College of Nursing Bhilai, (CG) and same procedure carried out in Swami swaroopanand college of nursing.
- After pretest data collection, the investigator gave instruction to all the participants regarding lifestyle modification program which included dietary counseling and aerobic exercises to be performed for six weeks (5 days a week).

Post Test Questionnaire Administration:

- After completion of interventional program of this present study i.e., aerobic exercise and dietary counseling, post-test data were collected from both selected colleges i.e., in Shri Shankaracharya College of Nursing and Swami Swaroopanand College of Nursing according to the schedule.

2. Result and Discussion

The assessment of physical premenstrual symptoms before and after life style modification (LSM) were identified. The findings revealed that regarding breast tenderness and swelling at Df 2, as chi square value17.38 is greater than critical value 13.82 the difference is found highly significant at p<0.001 level. Regarding abdominalbloating findings were highly significant at p<0.0001 level as at Df 2 chi square value 43.94 is greater than critical value 18.42. Regarding weight gain at Df 2 chi square value7.92 is greater than critical value 7.82 so it is highly significantly at p<o.02. With respect to headache, at Df 2, chi square value is 5.22, critical value 4.61 found not significant at p<0.15 level. Related to dizziness/ fainting at Df 2, chi square value 24.37 is greater than critical value 13.82 at p<0.001 level so this difference is highly significant. For fatigue

at Df 2, chisquare value is 36.42 greater than critical value is 13.82 at p<0.001 level so this difference is highly significant. Regarding palpitation at Df 2, chi square value is 0.73, critical value 1.02 found no significant at p<0.69 level. For pelvic discomfort and pain at Df 2, chi square value is 11.35 greater than critical value is 9.21. So, this difference is highly significant at p<0.003 level. Regarding abdominal cramps at Df 2, chi square value is 6.68 greater than critical value is 5.99. So, this difference is highly significant at <0.03 level. With regard to changes in bowel habits found highly significant at p< 0.0001 level as at Df 2, chisquare value is 25.76 greater than critical value is 18.42. Regarding increased appetite at Df 2 chi square value is 0.76 which is lesser than critical value 1.02 at p< 0.68. The difference is found to be non-significant. Generalized aches and pains found highly significant at p<0.0001 level as at Df 2 chi square value 48.76 is greater than critical value 18.42. With respect to food craving (sugar/ salt) found highly significant at p<0.0001 level as chi square value 48.30 is greater than critical value 18.42. Regarding skin changes, rashes & pimples at Df 2 chi square value is 0.96 and critical value is 1.02. This difference is found non-significant at p< 0.6. With respect to nausea / vomiting at Df 2, chi square value is 7.39 and critical value is 5.99. It is found significant at P<0.024 as chi square value is greater than critical value. With regard to muscles and joint pains found non-significant at 0.87 where chi square value is 0.27 which is lesser than critical value is 0.44. Singh BB et al (2000) supported the findings that 17% of the women indicated physical premenstrual syndrome (PMS) is a condition in which a (e.g., pain, bloating, feeling more emotional, weight gain and food cravings) occurs. Samadi Zeinab et al (2013) had investigated the effects of 8 weeks of regular aerobic exercise on the symptoms of premenstrual syndrome in non-athlete girls. This study's findings supported the present study.

3. Conclusion

Thus, it is concluded that lifestyle modification technique that is dietary counseling along with aerobic exercise is found effective to reduce the physical premenstrual symptoms.

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