"A Study to Assess the Effectiveness of Structured Intervention Programme on Knowledge Regarding Premenstrual Symptoms Management among Adolescent Girls in a Selected Girls High School."

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I. Introduction

"Your life style – how you live, eat, and think – determines your health"

The period of adolescence is considered as crucial and significant period of an individual's life. Adolescence is a transitional stage which begins with puberty and ends with the general cessation of the physical growth. Adolescence is usually accompanied by an increased independence allowed by the parents or legal guardians, including less supervision as compared to preadolescence.¹

WHO has defined adolescence as the period between 10-19 years of life. Adolescent girls constitute about 1/5th of total female population in the world.² During adolescence, individual develop their adult identity, move toward physical, biological and psychological maturity. The major landmark of maturity for females is menarche, the onset of menstruation occurs between ages 12 to 14 years. The start of menstruation is usually a mixture of excitement and anxiety & others symptoms occurs at premenstrual phase. An estimated 3 of every 4 menstruating girls experience pre-menstrual symptoms.³

Premenstrual symptoms refer to physical and/or emotional symptoms that typically occur about 6 to 11 days before a girl starts her monthly menstrual cycle. The symptoms usually stops when menstruation begins or shortly thereafter. The common emotional symptoms include, anxiety, restlessness etc. The common physical symptoms include, breast tenderness, back pain, abdominal cramps, headache, etc.³

The various measures have been used to relieve premenstrual symptoms, beginning with lifestyle modifications and progressing to nutritional supplementation, & exercises. Some dietary modifications like avoiding salt before the menstrual period and reduce caffeine intake may relieve the symptoms. Hence to spread the awareness on premenstrual symptoms management the researcher is interested to provide information through structured intervention program. It will enhance the knowledge of adolescent girls, to manage the premenstrual symptoms.

Adolescents are large and growing segment of the world's population. Globally there were 1.2 billion adolescent girls in the year 2009, which forms 18 % of the world's population. Adolescent girls in India constitute almost 47 % of the population. ¹⁰

According to the Nutrition Foundation of India, the average age of menarche is 13 years, and 50% of girls aged 12-15 years do not know even about menstruation. Premenstrual symptoms occurs prior to the onset of menstruation that affects the daily activities and routines of adolescent school girls to a varying degree, particularly school absenteeism, lack of attention and concentration in curricular activities. Before bringing any changes in menstrual practices girls should be educated about the facts of menstruation and its physiological implications.

Many problems in adolescents arise due to the modern lifestyle and risk taking behavior that is typical of this age. Interventions like lifestyle modifications include simple home remedies, changes in food & diet and some exercises can help to prevent & reduce most of premenstrual problems and promote healthy behavior. Encouraging a healthy lifestyle by providing education regarding premenstrual symptoms management are needed for the girls, which helps to relieve symptoms.

There is a need of adequate information for adolescent girls about premenstrual symptoms management to enhance their self-esteem and to increase their academic performance. Hence researcher wants to improve the knowledge of adolescent girls regarding premenstrual symptoms management through structured intervention program.

II. Objectives Of The Study:

- 1) To assess the existing knowledge of adolescent girls regarding premenstrual symptoms management through structured knowledge questionnaire.
- 2) To evaluate the effectiveness of structured intervention program regarding management of premenstrual symptoms through post test knowledge score.
- 3) To find out the significant association between the pre-test level of knowledge and selected demographic variables.

III. Methodology

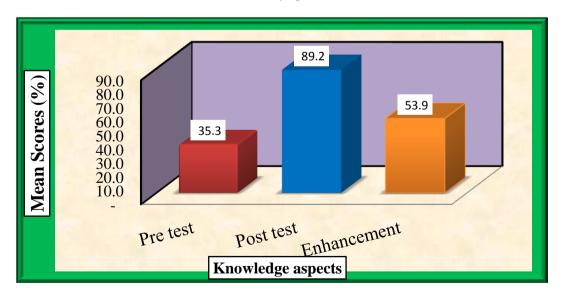
An evaluative research method has been selected by using one group pre-test, post-test design, where same group is observed before and after exposure of independent variable to increase the knowledge of adolescent girls on premenstrual symptoms management.

A researcher's overall plan for obtaining answers to the research questions on testing the research hypothesis is referred to as the research design⁴⁹. The research design adopted for this study is pre-experimental design. On the basis of pre-experimental design, one group pre-test and post-test design was selected to evaluate the effectiveness of structured intervention program on knowledge of premenstrual symptoms management among adolescent girls.

An evaluator approach with pre-experimental design, one group pre-test and post-test design was used for this study. The study was carried out in a selected girl's high school in Shimoga. The sample comprised of 60 adolescent girls who were chosen by purposive sampling technique. Structured knowledge questionnaire was used to collect data. The data was analyzed using descriptive and inferential statistics.

IV. Results

The present study was conducted to evaluate the knowledge of adolescent girls on management of premenstrual symptoms and found that 45 (75%) of respondents had inadequate knowledge, 15 (25%) had moderate knowledge and none of the respondents had adequate knowledge in the pre test. The knowledge of the respondents significantly improved after the Structured Intervention Programme. (calculated 't' value of pretest and post test knowledge scores 28.60 p < 0.05). There was a significant association between pre-test knowledge score and demographic variables like studying class, age of attainment of menarche, method used for blood flow, school absenteeism and measures used to relieve symptoms.



The mean pre-test knowledge score was 11.28. The mean post- test knowledge score was 28.53. The mean percentage of pre-test knowledge score was 35.3% where as the mean percentage of post-test knowledge score was 89.2%. This indicates that structured intervention programme on premenstrual symptoms management was effective in increasing the knowledge score of subjects by mean 17.25 and mean percentage score 53.9 among adolescent girls.

V. Discussion

The findings of this reveals that in pre-test , 75% of the sample obtained scores ranging between 1 and 16 and 25% scored 17 and 24 against the maximum scores of 32. Assessment of the level of knowledge of the adolescent girls after the administration of Structured Intervention Programme shows that majority of the respondents (78.3%) had adequate knowledge score, and 21.7% had moderate knowledge score on premenstrual symptoms management. It shows that Structured Intervention Programme on premenstrual symptoms management was very effective in improving the knowledge level of the respondents.

The Knowledge scores of adolescent girls on premenstrual symptoms management reveals that, post-test mean knowledge score was higher 28.53 (89.2 %) with SD of 3.0 when compared with pre-test mean knowledge which was 11.28 (35.3%) with SD of 3.9. The mean effectiveness score was 17.25 (53.9%) with SD of 4.7. Area wise comparison of effectiveness of SIP also shows significant difference between pre-test and post-test. Maximum effectiveness (19.96%) was observed in Home remedies. Calculated't' value is 28.60 is greater than table value 1.96 at 0.05 level of significance. All these findings indicate that there is significant gain in knowledge on premenstrual symptoms management among adolescent girls after implementation of Structured Intervention Programme.

Chi-square test was done to analyze the association between the pre-test knowledge scores and the selected demographic variables. The study findings show that the chi square values of demographic variables studying class, age of attainment of menarche, method used for blood flow, school absenteeism and measures used to relieve symptoms were significant at 0.05 level of significance. On the contrary the chi square values of age, religion, menstrual cycle, duration of blood flow, amount of blood flow, symptoms experienced and history of PMS in family were not significant at 0.05 level of significance.

VI. Conclusion

The main aim of the study was to assess the knowledge of adolescent girls regarding premenstrual symptoms management and its interventions. Intervention was given through a SIP which helped the adolescent girls to gain knowledge in life style modifications to manage premenstrual symptoms In the pre-test, the distribution of adolescent girls according to their level of knowledge showed that majority of respondents, 75 % had inadequate knowledge scores and 25% had moderate knowledge scores and none of had adequate knowledge regarding premenstrual symptoms management.

This shows that Structured Intervention Programme is an effective method of health education for providing necessary information. Association of demographic variables with pre test scores was computed using chi-square test. Analysis showed that, there is significant association of selected demographic variables with pre test knowledge scores.

VII. Suggestions

The following suggestions are made on the basis of present study to improve the knowledge of adolescent girls regarding premenstrual symptoms.

- Nursing personnel should conduct periodic education programs on health promotional activities.
- Different teaching strategies should be adapted to imparting knowledge and skill to the adolescent girls on premenstrual symptoms.
- Awareness programme on life style modifications to manage PMS should be conducted out for the adolescent girls.

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