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## Original Research Article

# A quasi experimental study to assess the knowledge and attitude regarding premenstrual syndrome among adolescent girls in selected schools at Madurai

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## ABSTRACT

**Background of the Study:** Adolescence is a journey from the world of the child to adult. It is a time of physical and emotional change as the body matures. Adolescence is a critical transitional period that includes the biological changes of puberty and the need to negotiate key developmental task and it requires special attention and protection. Health of today's adolescence is hope for tomorrow's world.

**Aim of the Study:** The aim of the study is to investigate the knowledge and the attitude of adolescent school girls towards premenstrual syndrome.

**Materials and Methods:** A quasi experimental research using one group pre-test post-test design was conducted with simple random sample of 100 adolescent girls, Madurai. A structured knowledge on premenstrual syndrome and likert type attitude scale were developed by the researcher to assess the attitude regarding premenstrual syndrome and used to collect data from the participants. The planned teaching programme covered all aspects in it. The knowledge and attitude of the adolescent girls were assessed immediately before and a week after planned teaching programme was conducted.

**Results:** The majority 75(75%) of the adolescent girls belonged to the age group of 15 to 18 years. Nearly three fourths 90(70%) of the adolescent girls attained menarche in the age group of 11 to 16 years. Majority 95(95%) had inadequate knowledge and 5(5%) had moderate knowledge regarding pre menstrual syndrome in the pre-test and 50(50%) of adolescent girls had adequate knowledge, 38(38%) had moderate knowledge and 12(12%) had inadequate knowledge in the post-test ( $12.4 \pm 4.36$  to  $23.6 \pm 8.25$   $p < 0.05$ ; paired t- test). Majority 56(56%) had neutral attitude, 41(41%) had negative attitude and 3(3%) had positive attitude in the pre test. Majority 48(48%) had positive attitude, 42(42%) had neutral attitude and 10(10%) had negative attitude. The attitude score significantly increased from  $11.0 \pm 2.21$  to  $13.9 \pm 2.61$  ( $p < 0.05$ ; paired t- test). There was significant positive correlation between post test knowledge and attitude scores ( $r = 0.06$ ).

**Conclusion:** The present study concludes that recently pre menstrual syndrome is a common problem all over the world affecting the quality of life of women significantly. Despite the growing awareness, there remains a considerable deficiency of knowledge and attitude about the symptoms, treatment and home remedies of pre menstrual syndrome. The further research is required for a large population including women from various background for the better assessment and strategize to manage this rising problem. Majority of adolescent reports, stress exacerbates their pre menstrual syndrome. It is important that a healthy culture to be promoted among adolescent girls as well as women through health education. Pre menstrual syndrome, programme KAA dolescent girls.

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## 1. Introduction

Now a day the young adolescent faces many problems because of their life style modifications such as eating Junk

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foods, fast foods, snacking, skipping of the meal which is common in urban adolescent girls.<sup>1</sup> Some experiencing more symptoms of pre menstrual syndrome due to lack of knowledge on treatment and home remedies of pre menstrual syndrome. A major problem of an adolescent girl is a pre menstrual syndrome. This study was conducted to promote a knowledge and attitude on pre menstrual syndrome for the adolescent girls.<sup>2,3</sup>

## 2. Background of the Study

Adolescence is a journey from the world of the child to adult. It is a time of physical and emotional change as the body matures. Adolescence is a critical transitional period that includes the biological changes of puberty and the need to negotiate key developmental task and it requires special attention and protection.<sup>4</sup> Health of today's adolescence is hope for tomorrow's world. Some of the major problems faced by adolescent which includes in physical- Anemia, infection, reproductive tract infection, in emotional- lack of freedom, lack of confidence, in education-lack of proper counseling and guidance, lack of peer adjustment, in sexual problem- curiosity about opposite sex and incomplete concept of sex. Adolescent period includes mental, emotional, social and physical maturity.<sup>5,6</sup> The physical influence in the girls during adolescent are significant and the changes occurs in the body, both internally and externally.<sup>7</sup>

Menstruation is a normal physiological process in girls and has monthly uterine bleeding for 3-5 days after every 28 days from puberty to menopause.<sup>8</sup> A change in normal behavior and appearance of abnormal symptoms often noticed in second half of the cycle, but this symptoms are severe enough to disturb life cycle of women and caused premenstrual syndrome.<sup>9,10</sup> Between the age group of 25-35 years up to 85% of menstruating woman reports that they are having one or more premenstrual syndrome. All the women who are all between the age group of 14-30 years were experiencing premenstrual syndrome. A study conducted in New York, reported 10-20% of severe symptoms disrupt their liver and the women who has severe symptoms may be diagnosed with premenstrual dysphonic disorder.<sup>11</sup>

Study conducted in Israel says 90% of girls having the pain during their menstrual period. Abraham, in his study found that 54% of women had experienced menarche complaints of irritability and 40% of women had experienced the abdominal blotting. South Asia complains of premenstrual syndrome in their study conducted among adolescent girls in the college of Belgium city. According to the study maximum girls are suffering from premenstrual syndrome. A cross-sectional survey among adolescent girls reported that 127(81%) women had least one morbid symptoms or condition. 85% women had abdominal pain and 22% women had irritability, tension, confusion.<sup>12</sup>

The researcher participated in the school health programme and during the physical examination she observed that most of the students have the symptoms of pre menstrual syndrome and based on this information the researcher feels that it is important to prevent the pre menstrual syndrome among adolescent girls in the schools. Hence the present study was undertaken with a view to evaluate the effectiveness of structured teaching programme among adolescent girls with pre menstrual syndrome.

## 3. Statement of the Problem

“A quasi experimental study to assess the knowledge and attitude regarding premenstrual syndrome among adolescent girls selected schools at Madurai.”

## 4. Objectives

1. To evaluate the effectiveness of planned teaching program on knowledge and attitude regarding premenstrual syndrome among adolescent girls
2. To find out the correlation between knowledge and attitude regarding premenstrual syndrome among adolescent girls.
3. To find out the association between knowledge and attitude with the demographical variables.

## 5. Conceptual Framework

The Conceptual framework for the present study is “Nola J. Pender promotion Model (2000)”.

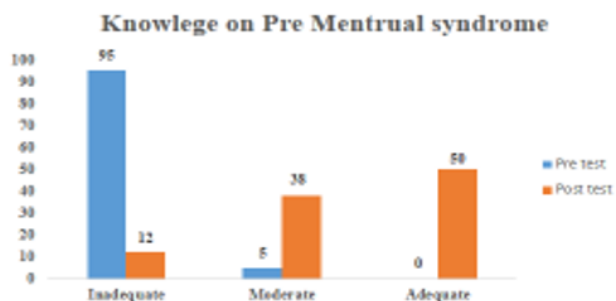
## 6. Methodology

A Quasi experimental design was adopted for this study. Simple random sampling technique without replacement was used to select the samples and the size of the sample was 100. Adolescent girls were selected as a samples for this study. A structured questionnaire was developed and used to assess the knowledge and the attitude among the adolescent girls regarding pre menstrual syndrome. The tool were validated by experts and found to be valid for this study. The reliability was established through the test-pre test method. The Karl Pearson's coefficient of correlation was computed and the reliability was found to be 0.96.

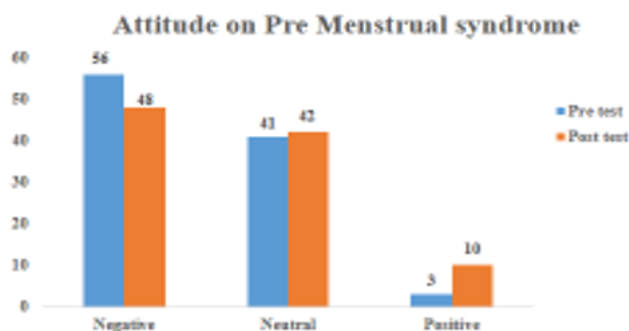
## 7. Results

Regarding existing knowledge and attitude on pre menstrual syndrome among adolescent girls, Majority 95(95%) had inadequate knowledge and 5(5%) had moderate knowledge and 56(56%) had neutral attitude, 41(41%) had negative attitude, 3(3%) had positive attitude regarding pre menstrual syndrome in the pre-test. This may be due to lack of education, unawareness and lack of exposure to health education program regarding pre menstrual syndrome. In post test 50(50%) of adolescent girls had adequate

knowledge, 38(38%) had moderate knowledge and 12(12%) had inadequate knowledge and in the attitude 48(48%) had positive attitude, 42(42%) had neutral attitude and 10(10%) had negative attitude.



**Fig. 1:** Distribution of pre test and post test level of knowledge on pre menstrual syndrome among adolescents



**Fig. 2:** Distribution of pre test and post test level of attitude on pre menstrual syndrome among adolescents

Regarding the effectiveness of the planned teaching program on various aspects of pre menstrual syndrome, the mean score for post test knowledge was higher than pretest knowledge. It was 12.4 in pretest and 23.6 in the post test. The obtained ‘t’ value (11.8) was found to be highly significant at the level of  $p < 0.05$ . The mean score of attitude in post test was 13.9 increased from a pretest mean score of 11.0. The obtained ‘t’ value (7.99) was found to be highly significant at the level of  $p < 0.05$ . This result shows that, there was a significant difference between pretest and post test levels of knowledge and attitude regarding pre menstrual syndrome among adolescent girls. It was observed that the planned teaching program plays a vital role in improving the knowledge and attitude of adolescent girls regarding pre menstrual syndrome.

Regarding the relationship between post test knowledge and attitude, there was a moderate positive correlation ( $r = 0.06$ ) between post test knowledge and attitude on pre menstrual syndrome. The investigator feels that if the

**Table 1:** Relationship between post test level of knowledge and level of attitude on pre menstrual syndrome among adolescent girls. (N=100)

Group	Mean	SD	“r” Value
Knowledge	23.62	8.25	0.06
Attitude	13.93	2.61	

\*\*\*Significant at 0.001 levels

knowledge increased, an attitude will also increase.

Regarding the association between the levels of knowledge and attitude with selected demographic variables, there was a significant association between their knowledge with selected demographic variables like source of information and significant association between their attitude with selected demographic variables like age in years and source of information regarding pre menstrual syndrome.

### 8. Conclusion

The present study concludes that recently pre menstrual syndrome is a common problem all over the world affecting the quality of life of women significantly. Despite the growing awareness, there remains a considerable deficiency of knowledge and attitude about the symptoms, treatment and home remedies of pre menstrual syndrome. The further research is required for a large population including women from various background for the better assessment and strategize to manage this rising problem. Majority of adolescent reports, stress exacerbates their pre menstrual syndrome. It is important that a healthy culture to be promoted among adolescent girls as well as women through health education.

### 9. Implications

1. The present study will encourage the community health nurse to create awareness among the public about PMS by intensifying mass health and individual health. Education with appropriately designed audio visual aids.
2. The present study will help the nursing administrative authority to recognize the need for conducting awareness program on PMS. Both private and government sector should organize the in service education and continuing education program to update knowledge of health personal regarding PMS.
3. The finding of the study help to expand the scientific body of professional knowledge upon which further research can be conducted.

### 10. Recommendations

1. Similar study can be under taken by utilizing other domain like practice.

2. A similar study can be under taken with large number of sample which might lead to generalization.
3. A similar study can be conducted as a comparative study between urban and rural adolescent girls.

## 11. Source of Funding

None.

## 12. Conflict of Interest

The authors declare no conflict of interest.

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