



A Study To Evaluate Effectiveness Of Planned Teaching Programme On Knowledge Regarding Pre-Menstrual Syndrome Among Female Students In Selected College At Jaipur.

Pre-experimental Study

Author details

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Abstract

Introduction:

Menstruation is a normal physiological cycle, common to all the female in the reproductive age group. PMS is not real life threatening but it can seriously alter the quality of life of many women and affect their productivity and mental health. The number of women seeking treatment for premenstrual symptoms is on the rise. Approximately 80–90% of women experience some symptoms in the premenstrual period at some point in their reproductive years.

Methods:

The present study is a pre-experimental, one group pre-test post-test design was used for the study. Using the purposive random sampling technique, 100 adolescent girls were selected and the data was collected by administering the Structured Knowledge Questionnaire on premenstrual syndrome during adolescence period. After collecting data, the planned teaching programme (PTP) was administered to the subjects on the same day and on 8th day, a post-test was conducted using the same Structured Knowledge Questionnaire. The collected data was analyzed using the descriptive and inferential statistics.

Results:

Finding shows that pre group of female students 41 (41.0%) had poor knowledge score, 35 (35.0%) had Average knowledge score and 24(24.0%) female students had poor knowledge pre-menstrual syndrome. Additionally, after that the implement of PTP, post group of female students 34 (34.0%) had poor knowledge score, 21 (21.0%) had Average knowledge score and 45(45.0%) female students had post knowledge pre-menstrual syndrome.

Discussion and conclusion:

The findings of the study concluded that the planned teaching programme was effective in improving the knowledge of the adolescent girls regarding life style changes in the prevention of premenstrual syndrome during adolescence period. Educating the adolescent girls, will help them to become more aware about their own health and also helps for early detection and treatment.

Keyword: *Pre-menstrual syndrome, Planned Teaching Program, Female students*

INTRODUCTION

Menstruation is a normal physiological cycle, common to all the female in the reproductive age group. The initiation of the menstruation take place during early adolescence period. PMS is recurrent disorder that occur in the luteal phase of menstrual cycle. It is characterised by intense physical, psychological and behavioural changes that interrupt interpersonal relationship and disrupt the lives of affected women.

Premenstrual syndrome (PMS) occurs 7-14 days before the onset of menstruation and subsides with the commencement of menstrual flow. It is associated with physical, psychological and behavioural changes.¹ PMS can affect menstruating women of any age and the effect is different for each woman. This is a difficult problem in adolescence as the psychological changes that are occurring during this time of a woman's life are often complex and stressful.³ A wide range of symptoms have been described, but it is their timing and severity that are most important. Depression, irritability, anxiety, tension, aggression, inability to cope and feeling out of control are the typical psychological symptoms.

It's important to remember that these changes will happen differently for each teen. Some teens may have these signs of maturity sooner or later than others. And being smaller or bigger than other girls is normal. Each girl goes through puberty at their own pace.

Premenstrual symptoms have been recognized since ancient period. Many women experience a constellation of bothersome and even disabling psychological, somatic and behavioral premenstrual symptoms during a significant portion of their reproductive years. The cardinal symptoms are irritability and abdominal bloating, but mood swings, anger, anxiety/tension, depression or feeling 'blue', loss of control, fatigue, difficult to concentrate, food cravings, weight gain, headache and breast pain are also typically seen.

Some of the extant definitions of PMS include those from University of California, ICD-10 and ACOG. The University of California at San Diego (1992) had developed a definition of PMS based on women's prospective self-reports. This definition requires, the patients to have the cyclic manifestation of at least one of the six affective symptoms and one of the four somatic symptoms during the five days before menses, in each of the three prior menstrual cycles. The listed affective symptoms are depression, angry outbursts, irritability, anxiety, confusion, social withdrawal and the somatic symptoms include breast tenderness, abdominal bloating, headache, swelling of extremities. These symptoms are relieved within four days of the onset of menses, without recurrence until at last cycle day 13.

PMS is not real life threatening but it can seriously alter the quality of life of many women and affect their productivity and mental health. The number of women seeking treatment for premenstrual symptoms is on the rise .

The most widely accepted theories centre on hormonal changes (the rapid fluctuation of levels of estrogen and progesterone in the bloodstream), nutritional deficiencies (particularly in regard to the vitamins—notably B vitamins—that affect nerve transmission in the brain), and stress (which has been shown to be a factor in the severity of symptoms). Many researchers suspect that fluctuations of chemical transmitters in the brain are largely responsible. For purposes of treatment, a chart that records the nature and date of occurrence of a woman's

Approximately 80–90% of women experience some symptoms in the premenstrual period at some point in their reproductive years. Teenagers often present with moderate to severe symptoms, while women in the fourth decade of life appear to have worse symptoms with the severity of the disease worsening with increasing age up until menopause.

METHODS AND METHODOLOGY

Research design and setting

The present study was a pre-experimental one group pre-test post-test research study to assess the effectiveness of planned teaching programme on knowledge regarding pre menstrual syndrome among female students in selected college at Jaipur during the period of month of December 2021.

Sample and technique

A purposive nonprobability sampling technique was used to recruit 100 participants who were eligible according to the inclusion and exclusion criteria under study. Rao soft size calculator was used to estimate the sample size. This calculator allows for a 5% margin error, 95% confidence interval level, and, assumes that per month delivery rate in hospital. The sample size was 50 when the 10% non-response rate was included.

Participants of the study

The students studying for graduation in selected college at Jaipur, students who are willing to participate in the study. Furthermore, were excluded from the study if they had those who are not available at the time of data collection.

Data collection procedure and tool

Before collecting the data prior permission was obtained from the concerned authority of the Rawat P.G girls college, Jaipur. Keeping in mind the ethical aspect of research data collected after obtaining informed consent of the sample the respondents were assured the anonymity and confidentiality of the information provided by them.

Data collection tools are procedure or instrument used by the researcher to observe or measure the key variable in the research problem. The instrument used in the study consisted of two sections- Part I; Demographic variables are the female students. It consists of 6 items including age, weight, religion, type of family, area of residence, previous knowledge regarding PMS, and, Part II; It consist of 27 objective types of multiple choice questions. All questions had only one correct answer. Each correct response was awarded a single score according to the predetermined key and zero score was awarded to wrong responses and omissions. Total possible maximum score for all the items were 27. This tool was used in English language. The score was converted into percentage by using this formula items regarding knowledge on PMS.

Data analysis and statistical plan

The data was analyzed using IBM-SPSS (version-26). The researcher developed a master data sheet to compute the data and used both descriptive and inferential statistics to calculate the results based on the objectives and hypothesis of the study. The demographic profile, which included participants' characteristics, was evaluated with frequency and percentage. The chi-square test with a significance threshold of <0.05 was employed to examine the association for categorical variables.

Ethical consideration

Ethical approval for the study was taken from the Institute Ethics Committee. After being informed about the research, and the confidentiality and anonymity of the information, participants were asked to sign a written consent.

RESULTS

Table:1 Study participants demographic characteristic

Demographic variable	Category		Frequency	Percentage %
Age in year	A	below 17	17	17.0
	B	17-18	24	24.0
	C	19-20	30	30.0
	D	Above 20	29	29.0
Weight in kg	A	Below 45	8	8.0
	B	45-55	45	45.0
	C	55-65	25	25.0
	D	Above 65	22	22.0
Religion	A	Hindu	72	72.0
	B	Muslim	15	15.0
	C	Christian	8	8.0
	D	Other	5	5.0
Types of family	A	Joint family	39	39.0
	B	Nuclear family	61	61.0
Area of residence	A	Rural area	63	63.0
	B	Urban area	37	37.0
have previous knowledge regarding PMS	A	Yes	38	38.0
	B	No	62	62.0

Figure: Distribution of female students according to their level of knowledge regarding pre menstrual syndrome.

(N=100)

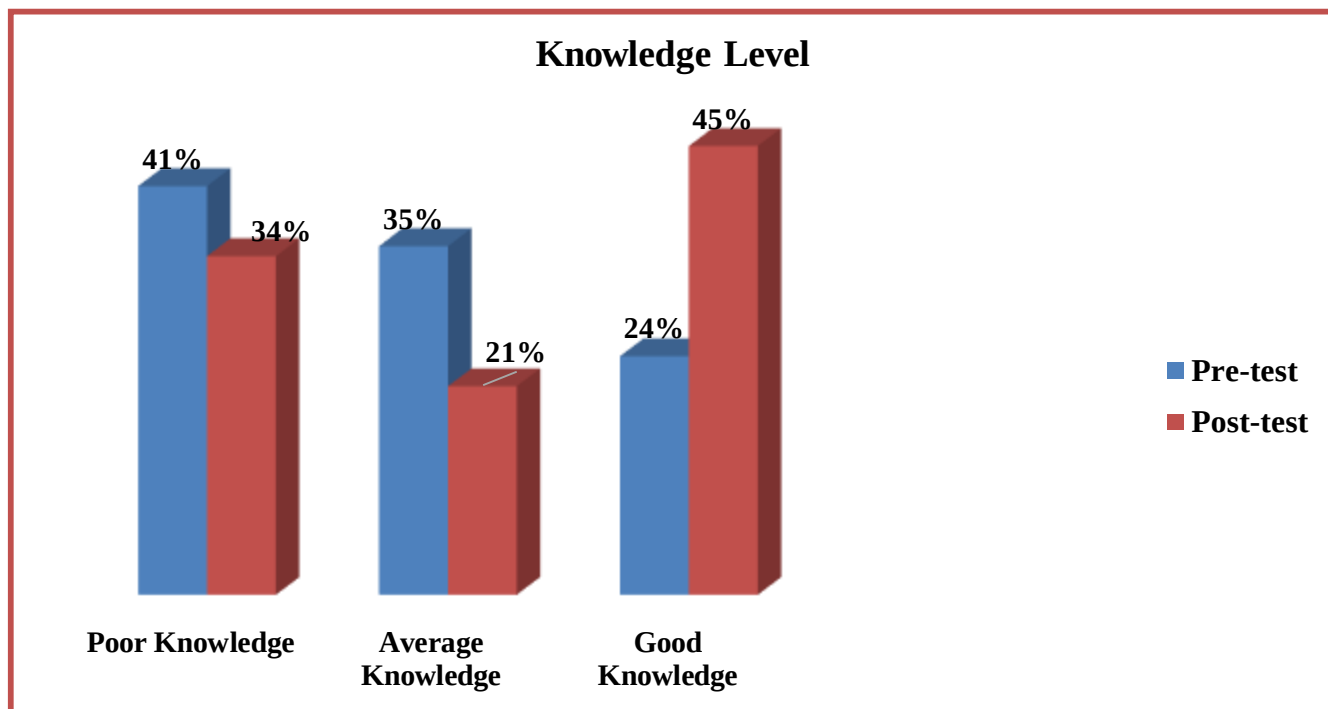


Figure reveals that pre group of female students 41 (41.0%) had poor knowledge score, 35 (35.0%) had Average knowledge score and 24(24.0%) female students had poor knowledge pre-menstrual syndrome. Additionally, after that the implement of PTP, post group of female students 34 (34.0%) had poor knowledge score, 21 (21.0%) had Average knowledge score and 45(45.0%) female students had post knowledge pre-menstrual syndrome.

Table: 2 Association between the pre-test knowledge score and selected demographic variables

(N=100)

Demographic Variables	Pre-test Knowledge score			Chi sq	D.F.	Table Value/Sig
	Poor	Average	Good			
Age (in years)						
Below 17	8	7	2	14.831	6	.022
17-18	11	8	5			
19-20	13	14	3			
Above 20	9	6	14			
Weight in kg-						
Below 45	2	3	3	13.051	6	.042
45-55	21	11	13			
55-65	5	14	6			
Above 65	13	7	2			

Religion						
Hindu	33	27	12	12.779	6	.047
Muslim	3	7	5			
Christian	3	1	4			
Other	2	0	3			
Types of family						
Joint family	13	21	5	10.734	2	.005
Nuclear family	28	14	19			
Area of residence						
Rural area	30	24	9	8.981	2	.011
Urban area	11	11	15			
Have previous knowledge regarding PMS						
Yes	14	16	8	1.364	2	.506
No	27	19	16			

Significant $P < 0.05$ level

Table 2- revealed associations of selected socio demographic variable with knowledge score. There are 6 socio demographic variables which showed there is significant association Age (in years), shows chi square value 14.831 indicating there is significant association, Weight in kg shows chi square value 13.051 indicating there is significant association, Religion shows chi square value 12.779 indicating there is significant association, Types of family shows chi square value 10.734 indicating there is significant association, Area of residence shows chi square value 8.981 indicating there is significant association, and have previous knowledge regarding PMS shows chi square value 1.364 indicating there is no significant association.

DISCUSSION

Mean age at menarche was found to be more in studies in Erode⁶ and Iran.⁷ Menstrual bleeding was reported to be more in the study at Iran.⁷ Prevalence of PMS was much more in Iran study⁷ and Poland⁸ while it was much less in a study in United Arab Emirates.⁹ In Iranian adolescents the most reported physical symptoms were lower abdominal and back pain and lethargy was the major psychological complaint of respondents⁷ whereas in the present study irritability was commonest psychological and abdominal distension was found to be most common among physical symptoms. Almost one-fourth of the girl students had to face social rejection due to PMS. Like the revealed 41 (41.0%) had poor knowledge score, 35 (35.0%) had Average knowledge score and 24 (24.0%) female students had poor knowledge pre-menstrual syndrome. Additionally, after that the implement of PTP, post group of female students 34 (34.0%) had poor knowledge score, 21 (21.0%) had Average knowledge score and 45 (45.0%) female students had post knowledge pre-menstrual syndrome.

It seems that the use of various methods of face-to-face and group health education, as well as counseling, can be very effective in reducing the symptoms of premenstrual syndrome. For example, Taghizadeh *et al.* (2013), had reported that group counseling could reduce the overall severity of PMS, and physical,

psychological, and mood symptoms associated with PMS. A positive effect on depression has been reported following the health education program in the present study, but it was not reported by Tghizadeh *et al.* One of the differences between the two studies was the educator. In the Taghizade study, the intervention was provided by professional health care staff including a nurse or midwife but in the present study, a health educator performed the intervention under the supervision of a psychologist and midwife. Also, the content of the intervention on the subject of depression was not the same in both studies. This point could also lead to different results of two studies on depression. Another explanation for this may be the season in which the measurements and intervention were performed, as the time of measurements and intervention may be different in the two studies. Another study has shown an association between depressive symptoms and seasonal patterns in young people

Conclusion

In general, the findings showed that the proposed educational program could reduce the severity of premenstrual syndrome in high school adolescent girls. Because premenstrual syndrome is a disorder with widespread symptoms, comprehensive interventions should be implemented for its prevention and treatment. It would be valuable to conduct a similar study with a long-term follow-up to assess the long-term effectiveness. Also, similar interventions can be applied to other groups of students with different socio-cultural situations and students with special diseases to increase the reliability of findings to generalize to other situations.

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