



A TRUE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PSYCHOSOMATIC RELAXATION PACKAGE ON KNOWLEDGE, SYMPTOMS EXPERIENCE AND LIFE STYLE PRACTICES AMONG ADOLESCENT GIRLS WITH PREMENSTRUAL SYNDROME AT SELECTED COLLEGES, TIRUNELVELI DISTRICT.

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ABSTRACT

Introduction: Premenstrual syndrome (PMS) is a combination of psychological, physical and behavioural symptoms which is seen in the late luteal phase of menstrual cycle in the women at the age of reproductive age and disappears within several days upon the start of the menstruation and repeats in many cycles. Many studies report that the prevalence of PMS is high among adolescent girls. **Objectives:** To assess the effectiveness of psychosomatic relaxation package among adolescent girls with PMS. **Methods:** Quantitative research approach with experimental design was adopted. PMS Screening Tool (modified checklist) was used to select 60 adolescent girls with PMS who fulfilled the inclusion criteria. Random sampling technique was used (30 for each group). A structured knowledge questionnaire, ratingscale and checklist were used to assess knowledge, symptoms experience and life style practices of adolescent girls with PMS respectively. Psychosomatic relaxation package was administered to the experimental group where as Routine care to the control group. Posttest was conducted. **Results:** There was significant increase in the post test level of knowledge ($p=0.001$), reduction of symptoms experience ($p=0.001$) and change in lifestyle practices ($p=0.001$) in the experimental group. There was a correlation between knowledge Vs symptoms experience ($r=0.34$), symptoms experience Vs lifestyle practice ($r=0.38$) and knowledge Vs lifestyle practice (0.37) which were significant at $p=0.01$ level of significance in the experimental group. There is association of age and educational status of adolescent girls with knowledge, association between nature of bleeding and symptoms experience. **Conclusion:** The psychosomatic relaxation package is effective in increasing knowledge, reducing symptoms experience and improving the life style practices of adolescent girls with PMS.

KEYWORDS : Premenstrual syndrome, symptoms experience, lifestyle practice, psycho somatic relaxation package

INTRODUCTION

Pre-Menstrual Syndrome (PMS) is among the most common health problems reported by adolescent girls and women of reproductive age, and up to 40% of menstruating women experience some difficulty with the symptoms.

Back Ground Of The Study:

The prevalence of PMS in Iran is reported about 85.6% and of PMDD it was 36.3%. Similar study conducted in Thailand reported that the prevalence of PMS among adolescent girls of high school was about 29.8%. By late adolescence, 75% of girls experience some problem associated with menstruation.

Significance & Need For The Study:

Many adolescent girls complain of pain, anxiety, depression, fatigue, vomiting during menstrual cycle throughout their reproductive life. PMS may also cause absenteeism, social withdrawal, lack of concentration and poor memory, lack of interest in all activities which may affect the healthy life & wellbeing of the girls. Studies reported that certain life style changes may help to manage PMS if the symptoms are not severe. These include a healthy diet, regular exercise to improve health & fitness, learning techniques to relieve stress & regular sleep. Hence in this background, the present study was conducted at selected colleges, Tirunelveli, India with the aim to study the socio-demographic profile and the effectiveness of **Psycho somatic relaxation package** on knowledge, symptoms experience and lifestyle practices among adolescent girls with pre-menstrual syndrome.

Statement Of The Problem

A true experimental study to assess the effectiveness of psychosomatic relaxation package on knowledge, symptoms experience and lifestyle practices among adolescent girls with pre-menstrual syndrome at selected colleges, Tirunelveli Dt.

OBJECTIVES-

1. To screen the adolescent girls for PMS by using PMSST checklist (modified), both in experimental and control group.
2. To assess and compare the pre and posttest level of knowledge, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental & control group.
3. To assess the effectiveness of psychosomatic relaxation package and routine care on knowledge, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental group & control group respectively.
4. To correlate the posttest level of knowledge score, symptom experiences and lifestyle practices among adolescent girls with PMS in experimental & control group.

5. To associate the selected demographic variables with mean differed knowledge score, symptom experiences and lifestyle practices among adolescent girls with PMS in experimental & control group.

NULL HYPOTHESES

NH₁: There is no significant difference between pre & post-test level of knowledge, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental & control group at $p<0.05$ level.

NH₂: There is no significant correlation between mean knowledge score, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental & control group at $p<0.05$ level.

NH₃: There is no significant association of selected demographic variables with knowledge score, symptom experience and lifestyle practices among adolescent girls with PMS in experimental & control group at $p<0.05$ level.

MATERIALS AND METHOD

The research design used for this study was True Experimental. Independent variable for the study was Psycho somatic relaxation package intervention devised by the investigator and the dependent variable was Knowledge, symptom experiences & lifestyle practices and extraneous variables are age, religion, educational status, marital status, duration of sleep and rest, age at menarche, eating habits, BMI & exercise pattern. The study was conducted at 2 selected colleges in Tirunelveli District. The sample for the study were the adolescent girls with the age of 17-19 yrs with PMS and the sample size was 60 (30 in each group). Simple random sampling technique i.e. Lottery method was used to select the samples.

PHASES OF DATA COLLECTION PROCEDURE

Phase 1: Screening of adolescent girls for PMS by PMSS checklist. Sample selection: 30 students each in experimental and control group by lottery method from the selected colleges

Phase 2: The demographic data was collected and the pretest level of knowledge, symptom experience and life style practice were assessed by structured questionnaire, rating scale and check list respectively in both experimental and control group.

Phase 3: The investigator started psychosomatic relaxation package to experimental group

- **Behaviour change Communication** through lecture with ppt and flash cards on the day 1 for 30 minutes was established and maintained
- **Figure 8 walk** was demonstrated to the group on the same day 30 minutes (10min for 10 students)
- **Rebozo technique** was demonstrated to the samples of experimental group on 2nd day for 15 min (5min for 10 students)

- **Abdominal breathing exercise** was demonstrated to the group on 2nd day for 20min (10 min for 15 students)
- **Diet enhancement plan** based on their BMI was provided through handout

Adolescent girls in the experimental group are instructed to adhere these interventions at least 5 days a week and was assessed by **improvised compliance chart** which was provided by the investigator. **Phase 4: Posttest** knowledge, symptoms experience and lifestyle practice were assessed after intervention by structured questionnaire, rating scale and check list respectively in both experimental and control group at 6th week.

Control Group -

Routine care was followed by the control group. A similar scheme of data collection was implemented for the samples in control group with the exception of interventions by the investigator. After posttest the control group also received the psychosomatic relaxation package.

RESULTS AND DISCUSSION

Table 1: Screen The Adolescent Girls For PMS By Using PMSST (Modified) Both In Experimental And Control Group N=60

Assessment		Group				Chi square test
		Experimental group		Control group		
		N	%	N	%	
Pre-test	Mild	12	40	13	43.33	2=0.18 p=0.91(NS)
	Moderate	15	50	14	46.67	
	Severe	3	10	3	10	

P>0.05 not significant NS=not significant

Table 1 shows that the 40% of adolescent girls had mild PMS, 50% had moderate PMS and 10% had severe PMS in experimental group. In control group 43.3% of adolescent girls had mild PMS, 46.67% had moderate PMS and 10% had severe PMS.

OBJECTIVE -2: To assess and compare the pre and posttest level of knowledge, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental & control group

Table 2.1: Comparison Of Pre And Posttest Knowledge Score

Group	Assessment	Mean score	Std. Deviation	Mean difference	Student's paired t-test
Experimental	Pre test	16.87	1.70	11.53	t=23.06 p=0.001*** DF=29, (S)
	Posttest	28.40	3.74		
Control	Pre test	17.13	1.33	0.53	t=1.42 p=0.16 DF=29, (NS)
	Posttest	17.66	1.77		

Table 2 depicts that the overall pretest mean knowledge score was 16.87 whereas in the post test the overall mean knowledge score was 28.40 with mean difference of 11.53 which showed statistically significant difference in the experimental group at P=0.001 whereas in control group pretest knowledge score was 17.13 and the posttest knowledge score was 17.66 with the mean difference of 0.53 which was not statistically significant.

Comparison Of Pre And Post-test Symptom Experience.

During pretest the overall mean symptom experience score in experimental group was 62.47 whereas in the post test the overall mean symptom reduction score was 49.53 with mean difference of 12.94 which showed statistically significant difference in the experimental group at P=0.001, whereas in the control group the pretest mean symptom experience score was 63.40 and in posttest it was 61.67 and the mean difference of 1.73 which was not statistically significant.

Comparison Of Pre And Post-test Life Style Practice.

In the experimental group the overall pretest mean life style practice score was 24.33 whereas in the post test the overall mean score of life style practice was 36.40 with mean difference of 12.07 which showed statistically significant difference in the experimental group at P=0.001, whereas in the control group pretest mean life style practice score was 24.27, the post test the overall mean score of life style practice was 24.70 with the mean difference score was 0.43 which was not statistically significant

relaxation package and routine care on knowledge, symptoms experience and lifestyle practices among adolescent girls with PMS in experimental group & control group respectively.

During the pre-test there was no statistical difference was observed in knowledge score, symptoms experience score and life style practice score between experimental and control group. However, in the post-test there was a statistically significant difference was observed in knowledge level (P=0.001), symptoms reduction (P=0.001), and practice score (P=0.001), in the experimental group. This showed the psychosomatic relaxation package was effective in reducing the symptoms experience of adolescent girls in the experimental group.

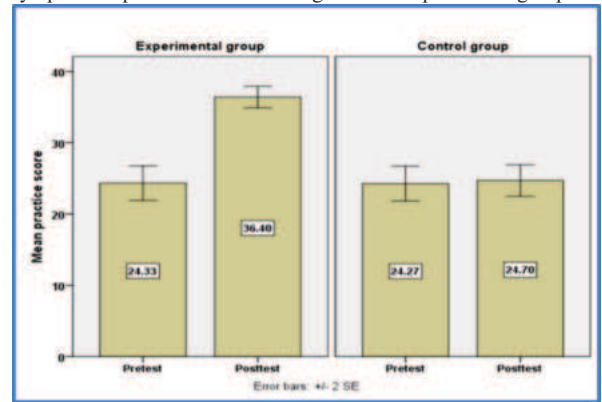


Figure 1: Simple bar diagram with 2 standard error bar diagram compares the pretest and posttest mean practice score among experimental and control group adolescent girls.

OBJECTIVE 4: To correlate the posttest level of knowledge score, symptom experiences and lifestyle practices among adolescent girls with PMS in experimental & control group.

There was a positive fair correlation between knowledge Vs symptom experience (r= 0.34), symptom experience Vs lifestyle practice (r= 0.38), knowledge Vs lifestyle practice (r=0.37) which were significant at P=0.01 level of significance in the experimental group.

OBJECTIVE-5.

There was association between knowledge gain score, symptoms reduction and practice score variables with selected demographic variables. Statistical significance was calculated using one way analysis of variance F-test/ student independent t-test.

CONCLUSION:

The pilot study revealed the tool was reliable and the study is practicable and feasible to carry on with the adolescent girls with PMS. The method of administering the psychosomatic relaxation package, teaching methods selected and the proposed analytical measures were suitable for the study. The study concluded that the psychosomatic relaxation Package devised by the investigator is an effective interventional strategy to increase level of knowledge, reduce the symptom experience and improve the lifestyle practice among adolescent girls with PMS.

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OBJECTIVE-3: To assess the effectiveness of psychosomatic