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### RESEARCH ARTICLE

## A QUASI EXPERIMENTAL STUDY TO ASSESS THE KNOWLEDGE REGARDING PRE-MENSTRUAL SYNDROME AND ITS MANAGEMENT AMONG EARLY ADOLESCENT GIRLS IN SELECTED GOVT. SCHOOL IN JALANDHAR, PUNJAB, INDIA

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### Abstract

A quasi-experimental Study was undertaken to assess the Knowledge regarding Pre-menstrual Syndrome and its management among early adolescent in selected govt. school in Jalandhar, Punjab, India.

**Objectives:** To assess the level of knowledge regarding Pre-menstrual Syndrome and its management among early adolescent girls.

To provide knowledge regarding Pre-menstrual Syndrome with the help of Power point presentation and provide pamphlets regarding its management.

To determine the association between the level of knowledge with selected demographic variables and self structured tools.

**Methodology:** A quantitative research approach with quasi-experimental research design was used in the study. Research setting was government middle school Jalandhar Punjab India. Total 60 samples were selected with non-Probability purposive sampling technique. Verbal consent were taken from the students. Self-structured tool was used to assess the knowledge regarding premenstrual syndrome among early adolescent girls.

**Result and conclusion:** The Present study was done on 60 early adolescent girls to assess the Knowledge regarding Pre menstrual syndrome in selected government school, Jalandhar, Punjab India. The study comparison was done based on pre test and posttest level of Knowledge Pre test 7.53 + 2.581. Post test 19.63+ 1.84. Hence, the finding revealed the significant improvement in the knowledge.

**Recommendation:** Similar studies can be replicated with large samples with generalization. A study can be conducted to evaluate the knowledge and the attitude of adolescent girls regarding PMS.

An exploratory study can be done at various settings to identify factors influencing PMS.

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## Introduction:-

PMS can significantly impact a woman's daily life, affecting her relationships, work, and overall well-being. Understanding and managing PMS symptoms can help improve quality of life for those affected<sup>(1)</sup>. Premenstrual syndrome (PMS) is a common condition affecting women of reproductive age. Global Prevalence: Estimates range from 30% to 80% of women experiencing some symptoms of PMS, with 20% to 40% experiencing severe symptoms that impact daily life.<sup>(2)</sup> According to a systematic review and meta-analysis, the pooled prevalence of PMS in India is approximately 43% (95% CI: 0.35-0.50).<sup>(3)</sup> This translates to about 4 out of 10 women experiencing PMS symptoms. Prevalence Rates in Different Age Groups: Adolescents: The prevalence of PMS is higher among adolescents, at around 49.6% (95% CI: 0.40-0.59). Adult Women: The prevalence rates vary across different studies, but overall, it's estimated that around 40-50% of adult women in India experience PMS symptoms. Regional Variations:- Studies have reported varying prevalence rates across different states in India, ranging from 14.3% to 74.4%. Some states with notable prevalence rates include: Tamil Nadu: 74.4% (Kavitha et al., 2015) and 14.3% (Durairaj et al., 2019) Gujarat: 42% (Brahmbhatt et al., 2013) and 18.97% (Kamat et al., 2019) West Bengal: 42.38% (Ray et al., 2010) and 53.96% (Mandal et al., 2015)<sup>(4)</sup>

## Research Problem

A quasi-experimental Study was undertaken to assess the Knowledge regarding Pre-menstrual Syndrome and its management among early adolescent in selected govt. school in Jalandhar, Punjab, India.

## Objectives:-

1. To assess the level of knowledge regarding Pre-menstrual Syndrome and its management among early adolescent girls.
2. To provide knowledge regarding Pre-menstrual Syndrome with the help of Power point presentation and provide pamphlets regarding its management.
3. To determine the association between the level of knowledge with selected demographic variables and self structured tools.

## Research Methodology:-

### Research approach:

Quantitative (experimental research approach)

### Research design:

Quasi-experimental design

### Setting of the study:

Government middle school Punjab India.

### Target Population:

Early adolescent age group 11 to 14 years.

### Sampling sizes:

60 students

### Tool description:

Self-structured tool was formed to assess the knowledge regarding premenstrual syndrome among early adolescent girls.

Tool was developed in the following ways:

**Part –I Socio-demographic variables** This part consists of items for obtaining personal information from the adolescent girls i.e. Age, Type of family, current academic class, sleeping pattern, food habits, play time, socioeconomic status, Type of school, Medication and duration of menstrual cycle.

**Part –II - Self Structured Tool:** The self structured tool was divided into three sections in the form of Likert Scale<sup>(5)</sup>.

**Section I:** Knowledge about PMS (Premenstrual syndrome)

**Section II:** Attitude toward PMS (Premenstrual syndrome)

**Section III:** Experiences with PMS (Premenstrual syndrome)

Each sections contain Five Questions on the basis of Strongly agree, Agree , Neutral, disagree and strongly disagree. The scoring was done based on poor knowledge (15-35), average knowledge (36-50) and adequate knowledge (51-75).

**Reliability of tool:**

Reliability was commuted and calculated by using Karl Pearson's coefficient of Correlation <sup>(6)</sup> and Spearman's Brown Prophecy <sup>(7)</sup> formula the reliability of the tool was 0.77. Hence, the tool was reliable.

**Results:-**

The analysis was done using descriptive and inferential statistic

**Findings related to socio-demographic variables:**

This part consist of items for obtaining personal information from the adolescent girls i.e. Age, Type of family, current academic class , sleeping pattern , food habits, play time, socioeconomic status, Type of school, Medication and duration of menstrual cycle.

**Table I:-** Table I are showing a frequency and % Percentage distribution of socio-demographic variables.

**N= 60**

Sr. no.	Socio demographic variables	Frequency(f)	Percentage (%)
<b>1.</b>	<b>Age ( in years )</b>		
	10-11	01	1.70
	11-12	08	13.30
	12-13	22	36.60
	13-14	<b>29</b>	<b>48.40</b>
<b>2.</b>	<b>Type of family</b>		
	Nuclear Family	<b>30</b>	<b>50</b>
	Joint Family	<b>30</b>	<b>50</b>
<b>3.</b>	<b>Current academic Class</b>		
	5 <sup>th</sup>	<b>40</b>	<b>66.70</b>
	6 <sup>th</sup>	20	33.30
	7 <sup>th</sup>	00	
<b>4.</b>	<b>Sleeping pattern</b>		
	Less than 8 hours	<b>35</b>	<b>58.40</b>
	More than 8 hours	25	41.60
<b>5.</b>	<b>Food Habits</b>		
	Vegetarian	<b>38</b>	<b>63.40</b>
	Non- Vegetarian	20	33.40
	Vegan	00	00
	Eggetarian	02	3.20
<b>6.</b>	<b>Play time</b>		
	Less than 1 hour	05	8.40
	1-3 hours	<b>50</b>	<b>83.40</b>
	More than 3hours	05	8.20
<b>7.</b>	<b>Socio economic status</b>		
	Below poverty line	<b>40</b>	<b>66.70</b>
	Above poverty line	20	33.30
<b>8.</b>	<b>Type of school</b>		
	Private	00	00
	Semi-government	00	00
	Government	<b>60</b>	<b>100</b>
<b>9.</b>	<b>Medication</b>		

	Never used	30	50
	When needed	30	50
	Always	00	00
<b>10</b>	<b>Duration of menstrual cycle</b>		
	Less than 28 days	10	16.66
	28 days to 32 days	40	66.70
	More than 32 days	10	16.66

Results pertaining Knowledge among early adolescent girls on pre menstrual syndrome

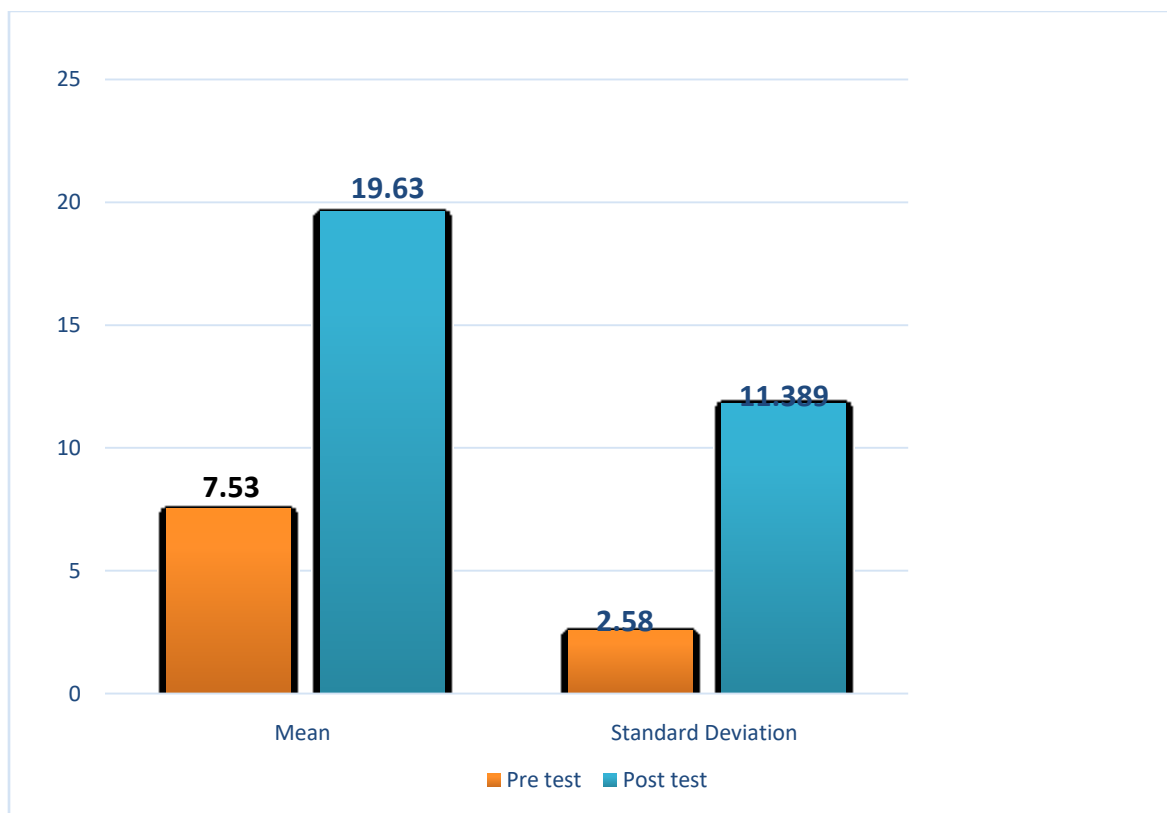
Pre-Test was conducted, than the intervention i.e. structured teaching program and pamphlets were given leading to the posttest

**Table II:-**Mean and Mean percentage and standard deviation of pre testN=60

Early adolescent girls	Mean	Standard Deviation	Mean Percentage
Knowledge on PMS	7.53	2.581	26.90

**Table III:-**Mean and Mean percentage and standard deviation of post test. N=60

Early adolescent girls	Mean	Standard Deviation	Mean Percentage
Knowledge on PMS	19.63	11.389	70.12



**Fig. 1:-** Depicting mean and standard deviation of pre and posttest.

**Conclusion:-**

The Present study was done on 60 early adolescent girls to assess the Knowledge regarding Pre menstrual syndrome in selected government school, Jalandhar, Punjab India. The study comparison was done on the basis of pre test and post test level of Knowledge Pre test- 7.53 + 2.581. Post test 19.63+ 1.84. Hence the finding revealed the significant improvement in the knowledge.

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