



“A Descriptive Study to Assess the Stress Level Related to Premenstrual Syndrome among Female Students in Selected College at Chennai”

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KEYWORDS

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ABSTRACT:

Introduction: Premenstrual Syndrome (PMS) refers to a constellation of physical, emotional, and behavioural symptoms that occur in the luteal phase of the menstrual cycle—typically 1 to 2 weeks before the onset of menstruation—and resolve shortly after menstruation begins. Common symptoms include irritability, mood swings, fatigue, breast tenderness, bloating, and headaches. Although most individuals of reproductive age experience mild premenstrual symptoms, PMS is diagnosed when symptoms are severe enough to interfere with daily activities and quality of life (Lowdermilk, Perry, Cashion, & Alden, 2016).

Aim: To assess the level of stress among female college students experiencing premenstrual syndrome

Methodology: The Study was conducted through quantitative research approach. The design of the study used in the research was non-experimental descriptive research design. This study was conducted at Sree Balaji College of Nursing, Chennai and 60 students were selected as samples through convenience sampling method. The tools used for the study consist of two sections. Section A is Demographic variables. Section B is Perceived Stress Scale (PSS-10),

Result: The study revealed that 5(8%) has low stress level, 51(85%) has moderate stress level and 4(7%) has high perceived stress level in premenstrual syndrome with the average mean of 19.05 and standard deviation of 5.40.

Conclusion: The findings of the study indicate that a significant majority of female college students experiencing premenstrual syndrome exhibit moderate levels of perceived stress. With 85% of participants falling into the moderate stress category and only a small percentage experiencing either low or high stress levels, it highlights the considerable impact PMS can have on psychological well-being. These results emphasize the need for increased awareness, stress management strategies, and supportive interventions tailored for young women during the premenstrual phase to improve their quality of life and academic performance. Findings of the study indicate that a significant majority of female college students experiencing premenstrual syndrome exhibit moderate levels of perceived stress. With 85% of participants falling into the moderate stress category and only a small percentage experiencing either low or high stress levels, it highlights the considerable impact PMS can have on psychological well-being. These results emphasize the need for increased awareness, stress management strategies, and supportive interventions tailored for young women during the premenstrual phase to improve their quality of life and academic performance.

INTRODUCTION:

Menstruation is the periodic shedding of the uterine lining (endometrium) that occurs in response to

hormonal fluctuations during the menstrual cycle. A change in mood, behaviour, appearance of some abnormal vague symptoms is often noticed in the second half of the cycle. However, if the symptoms are severe



enough to disturb lifecycle of women or require medical help, called premenstrual syndrome (PMS)

Premenstrual Syndrome (PMS) refers to a constellation of physical, emotional, and behavioural symptoms that occur in the luteal phase of the menstrual cycle—typically 1 to 2 weeks before the onset of menstruation—and resolve shortly after menstruation begins. Common symptoms include irritability, mood swings, fatigue, breast tenderness, bloating, and headaches. Although most individuals of reproductive age experience mild premenstrual symptoms, PMS is diagnosed when symptoms are severe enough to interfere with daily activities and quality of life (Lowdermilk, Perry, Cashion, & Alden, 2016).

The exact cause of PMS is not fully understood, but it is believed to involve hormonal fluctuations, neurotransmitter sensitivity (particularly serotonin), and genetic and environmental factors. Management strategies include lifestyle modifications, stress reduction, pharmacologic treatments, and nutritional interventions.

Ashraf Direkvand-Moghadam, et al conducted a study on “Epidemiology of Premenstrual Syndrome (PMS)-A Systematic Review and Meta-Analysis Study” The prevalence of PMS is presented in 17 articles. The pooled prevalence of PMS was 47.8% (95% CI: 32.6-62.9). The lowest and highest prevalence were reported in France 12% (95% CI: 11-13) and Iran 98% (95% CI: 97-100)

Elizebeth rani, Bhuvanewari conducted a study on “Assess the Premenstrual Symptoms and Coping Strategies Among Adolescent Girls” showed that, majority (86.7%) of the samples had breast tenderness/swelling, 80% had abdominal bloating, 96.7% had weight gaining, 66.7% had headache, 70% had dizziness/fainting, 76.7% had fatigue, 70% had palpitation, 50% had pelvic discomfort and pain, 50% had abdominal cramp, 80% had changes in bowel habits, 76.7% had increased appetite, 66.7% had generalized acne and pain, 80% had food craving (sugar and salt), 66.7% had skin changes, 76.7% had nausea and vomiting, 50% had muscle and joint pain .

REVIEW OF LITERATURE

Diya Trivedi et.al (2024) conducted a study on Impact of Stress on Premenstrual Syndrome Among Young Women: A Cross-Sectional Study .The study was

conducted among 473 young women aged 18-21 years in Ahmedabad, Gujarat, using a stratified random sampling technique. Data were collected using a validated questionnaire that assessed PMS symptoms and perceived stress levels. The most commonly reported symptoms included irritability, fatigue, and breast tenderness. A majority (84.4%) of the participants were having moderate stress. The study concluded that the significant impact of stress on the severity of PMS among young women in Ahmedabad, Gujarat. Considering higher percentages of stress levels among participants.

METHODOLOGY:

Research design adopted for the study was non experimental descriptive research design. Main objective of this study was to assess the level of stress among female college students experiencing premenstrual syndrome and to determine the association between stress level and selected demographic variables. According to these aims, the following null hypotheses were developed. NH1: There is no significant relationship between premenstrual syndrome and stress among female college students. NH2: There is no significant association between stress levels due to premenstrual syndrome and the selected demographic variable among female college students. This study was conducted at Sree Balaji College of Nursing, Chennai and 60 students were selected as samples through convenience sampling technique.

The criteria for inclusion in the study were female students between 18-25 years, who had regular menstrual cycles. The students with a history of chronic health issues, psychiatric disorders, or diagnosed pelvic inflammatory diseases were excluded from the study.

Ethical approval was obtained from the college's institutional ethics committee, warding off potential issues. Students were fully informed and explained the procedures during the entire process which ensured their peace of mind knowing data was securely kept confidential.

To gather the required data, we administered a structured questionnaire containing two parts. In the first section, we looked into the respondent's age, religion, area of residence, family structure, and if a family history of



PMS existed. The later section of the questionnaire comprised the Perceived Stress Scale (PSS-10)

The interpretation of the PSS-10 results was based on the following criteria: "Low stress" score was 0 - 13. "Moderate stress" score was 14 - 26. "High stress" score was 27 -40. The data was analyzed using SPSS version
DATA ANALYSIS

20.0. Demographics, PMS symptoms and stress levels were summarized using descriptive statistics (frequency, percentage, mean and standard deviation). Chi-square test was performed to determine the association between PMS and stress. Statistically significant value was taken as $p < 0.05$.

Description of demographic variables of college students

Table: 4.1 Frequency and percentage distribution of demographic variables: N=60

S.NO	DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE
1	Age	11	18%
	17-18 years		
	19-20 years	9	15%
	Above 21 years	40	67%
2	Religion	39	65%
	Hindu		
	Muslim	3	5%
	Christian	18	30%
	Others	-	-
3	Education	11	18%
	BSC NURSING I YEAR		
	BSC NURSING II YEAR	8	13%
	BSC NURSING III YEAR	22	37%
	BSC NURSING IV YEAR	19	32%
4	Type of family	50	83%
	Nuclear family		
	Joint family	10	17%
	Extended family	-	-
5	Place of Residence	9	15%
	Rural		
	Urban	51	85%
6	Family History of Premenstrual Syndrome	19	32%
	Present		
	Absent	41	68%

SECTION B

Level of Stress in Premenstrual Syndrome among college students

Table: 4.2 Frequency and percentage distribution of Level of Stress in Premenstrual Syndrome: N=60

S.NO	LEVEL OF STRESS IN PREMENSTRUAL SYNDROME	FREQUENCY	PERCENTAGE	MEAN	SD
1	Low Stress(0-13)	5	8%	19.05	5.40
2	Moderate Stress(14-20)	51	85%		
3	High Perceived Stress(27-40)	4	7%		



Table: 4.2 shows that 5(8%) has low stress level, 51(85%) has moderate stress level and 4(7%) has high

perceived stress level in premenstrual syndrome with the average mean of 19.05 and standard deviation of 5.40.

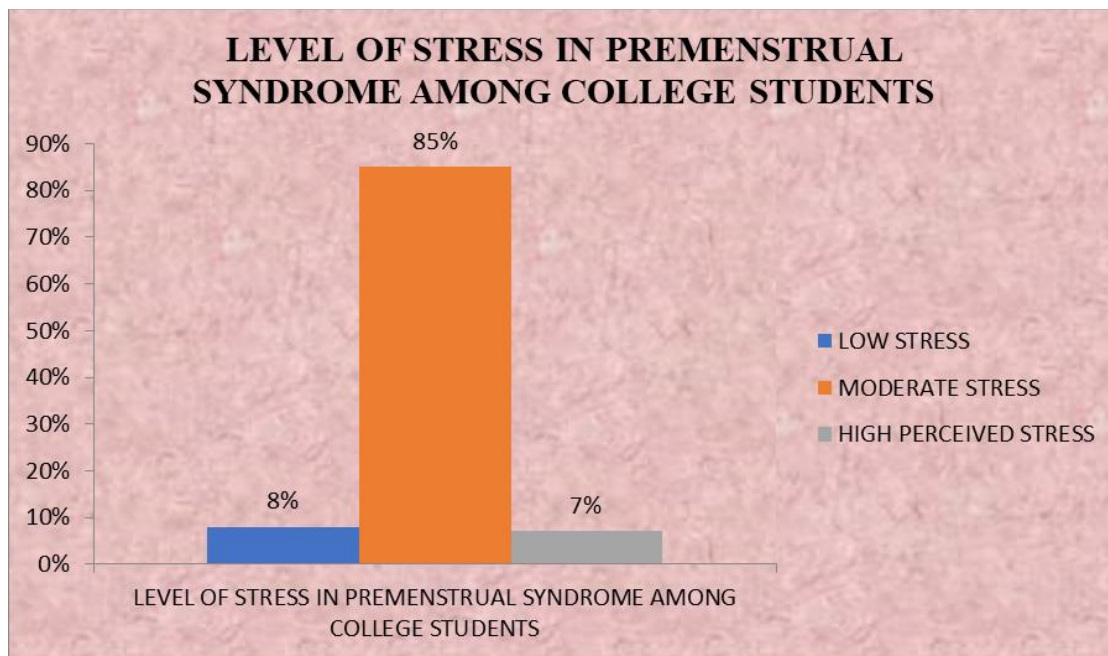


Figure: 4.1(a) Frequency and percentage distribution of Level of Stress in Premenstrual Syndrome

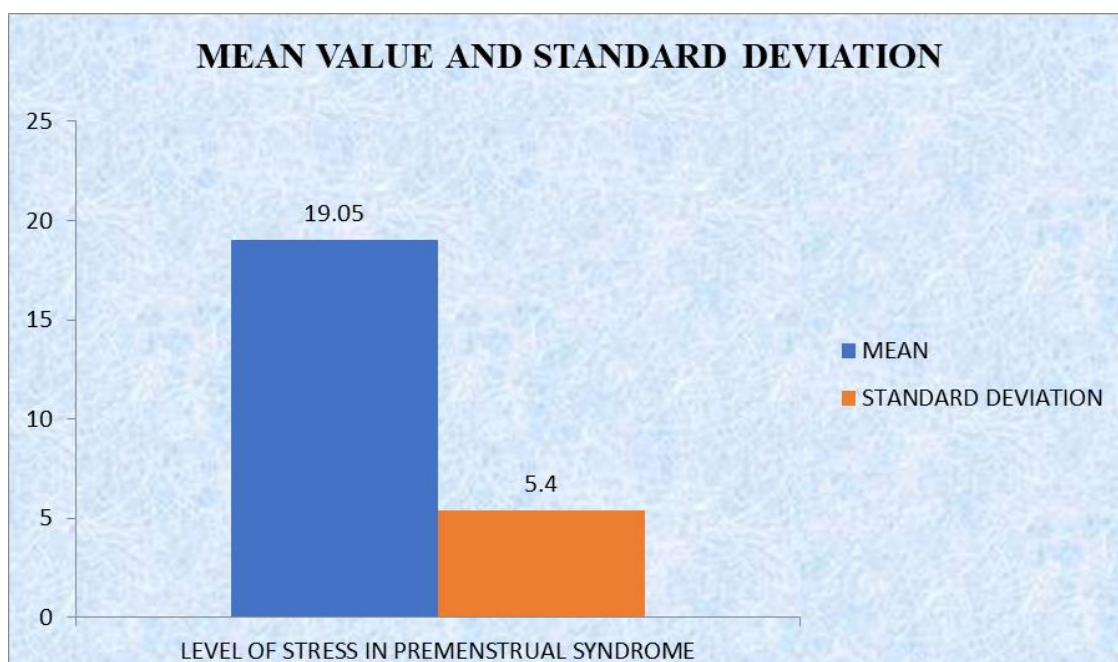


Figure: 4.1(b) Mean value and Standard Deviation of Level of Stress in Premenstrual Syndrome



SECTION C

**Table: 4.3 Association between Level of Stress in Premenstrual Syndrome with selected demographic variables
N=60**

S.N O	DEMOGRAPHIC VARIABLE	LEVEL OF SELF ESTEEM			TOTAL	CHI SQUARE	Df	P Value	Significance (p<0.05)
		LOW STRESS (5)	MODERATE STRESS (51)	HIGH PERCEIVED STRESS(4)					
1	Age 17-18 years	1	8	2	11	6.94	4	0.139	Not Significant
	19-20 years	2	6	1	9				
	Above 21 years	2	37	1	40				
2	Religion Hindu	2	36	1	39	7.49	4	0.112	Not Significant
	Muslim	1	2	0	3				
	Christian	2	13	3	18				
	Others	-	-	-	-				
3	Education BSC NURSING I YEAR	1	7	3	11	11.54	6	0.73	Not Significant
	BSC NURSING II YEAR	1	6	1	8				
	BSC NURSING III YEAR	2	20	0	22				
	BSC NURSING IV YEAR	1	18	0	19				
4	Type of family Nuclear family	2	46	2	50	11.69	4	0.003	Significant
	Joint family	3	5	2	10				
	Extended family	-	-	-	-				
5	Place of Residence Rural	3	5	1	9	9.33	2	0.009	Significant
	Urban	2	46	3	51				
6	Family History of Premenstrual Syndrome Present	1	15	3	19	3.91	2	0.142	Not Significant
	Absent	4	36	1	41				

Table: 4.3 reveal that there is a significant association between Level of Stress in Premenstrual Syndrome with

demographic variables such as Type of family and place of residence and there is no significant association



between Level of Stress in Premenstrual Syndrome with demographic variables such as age, religion, education and family history of premenstrual syndrome

RESULT AND DISCUSSION:

The research problem selected for the study was “A DESCRIPTIVE STUDY TO ASSESS THE STRESS LEVEL RELATED TO PREMENSTRUAL SYNDROME AMONG FEMALE COLLEGE STUDENTS IN SELECETED COLLEGE AT CHENNAI” The sample size was 60 and tool was administered to student in order to assess the level of stress in Premenstrual Syndrome.

OBJECTIVES:

- To assess the level of stress among female college students experiencing premenstrual syndrome
- To determine the association between stress level and selected demographic variables.

DESCRIPTION OF DEMOGRAPHIC VARIABLES:

Among 60 samples, Table 4.1 reveals that 11 (18%) were aged 17–18 years, 9 (15%) were 19–20 years, 40 (67%) and were above 21 years. Based on their religion 39 (65%) were Hindu, 3(5%) were Muslim, 18(30%) and were Christian. Based on their education level, 9 (30%) were in B.Sc. Nursing I year, 11 (18%) in II year, 8 (13%) in III year, and 22 (37%) in IV year. Regarding family type, 50 (83%) belonged to nuclear families, and 10 (17%) to a joint family. Place of residence revealed 9 (15%) from rural areas and 51(85%) from urban, 3 (10%).Family History of premenstrual syndrome revealed 19(32%) were present and 41(68%) were absent.

The first objective of the study is to assess the level of stress among female college students experiencing premenstrual syndrome

Table: 4.2 shows that 5(8%) has low stress level, 51(85%) has moderate stress level and 4(7%) has high perceived stress level in premenstrual syndrome with the average mean of 19.05 and standard deviation of 5.40. NH1 There is no significant relationship between premenstrual syndrome and stress among female college students. Hence the null hypothesis 1 is rejected.

The second objective of the study is to determine the association between stress level and selected demographic variables among female college students

Table: 4.3 reveals that chi square of age is 6.94, religion is 7.14, education is 11.54, and type of family is 11.69, place of residence is 9.335and family history of premenstrual syndrome is 3.91. Here types of family and place of residence shows significance. NH2 There is no significant association between stress level due to premenstrual syndrome and the selected demographic variables among female college students. Hence the null hypothesis 2 is rejected.

SUMMARY, CONCLUSION AND RECOMMENDATION:

The research problem selected for the study was “A DESCRIPTIVE STUDY TO ASSESS THE STRESS LEVEL RELATED TO PREMENSTRUAL SYNDROME AMONG FEMALE COLLEGE STUDENTS IN SELECETED COLLEGE AT CHENNAI” This study was conducted at Sree Balaji College of Nursing, Chennai and out of 60 students that were available at the time, all of them participated. The students were willing participate, which made the convenience sampling method ideal for this study.

Questionnaire was prepared and administered a structured questionnaire containing two parts. In the first section, we looked into the respondent’s age, religion, education, type of family, place of residence and if a family history of PMS existed. The later section of the questionnaire comprised the Perceived Stress Scale (PSS-10).Established good rapport with the people, the investigator statistical method successfully. The data collected was analyzed and finding were interpreted.

CONCLUSION:

The study findings revealed that the majority (67%) of the participants were above 21 years of age, 37% were in their third year of study, 65% were Hindu, 50% belonged to nuclear families, and 51% resided in urban areas. Additionally, 68% had no family history of premenstrual syndrome, and 85% experienced a moderate level of stress during the premenstrual period.



RECOMMENDATION:

- ❖ Similar study can be done for large number of samples.
- ❖ Similar study conducted in rural community.
- ❖ A comparative study between the rural and urban community can able to conduct

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