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A study assess the Prevalence and impact of premenstrual syndrome among selected college students at Salem

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ABSTRACT

Background:

Premenstrual syndrome (PMS) refers to a set of distressing symptoms experienced around the time of menstrual flow. Hormonal changes may underlie these symptoms which can lead to difficulties in day-to-day functioning and poor quality of life. Headaches, bloating, cramps, and mood swings are among the most common PMS symptoms. For some, these symptoms are a minor inconvenience. For others, the symptoms can be so severe that they miss work or school.PMS symptoms range from mild to severe. Some people get their periods without experiencing any PMS symptoms at all. For other people, however, PMS symptoms can significantly affect their ability to perform regular activities and may even reduce their quality of life.

Methods:

The aim is to assess the prevalence and impact of premenstrual syndrome among adolescent students. In this cross-sectional study, 460 students attending the professional college of Salem were administered self-reported questionnaires to obtain socio- demographic, menstrual history. The Premenstrual Assessment Form was used to assess PMS symptoms and impact of life.

Results.

We studied the prevalence and impact of pre menstrual syndrome among 460 college students. The present study shows that the prevalence of PMS was 32% among college students. The mean (SD) score of physical

functioning among participants without PMS was 51.32 (13.10) and that of participants with PMS was 86.0 (10.29), Behavioral functioning among participants without PMS was 42.08 (26.44) and that of participants with PMS was 51.33 (30.41) .The Premenstrual syndrome was significantly associated with physical functioning of the college students.

Conclusion:

The present study concluded that the prevalence of PMS was 32% among college-going girls in the study participants. The most common symptoms of PMS were breast tenderness, swelling, , fatigue, irritability, poor concentration, loss of interest, mood swings. Presence of PMS has impact on Physical, psychological and behavioral functions among college students .

Key words: premenstrual syndrome, impact of life, college students.

INTRODUCTION

Premenstrual syndrome (PMS) refers to the physical and psychological symptoms that a person may experience before their menstrual period. These can include bloating, headaches, mood changes, and more.Pre-menstrual syndrome (PMS) is a very common concern. Nearly 48 percent of women who are of reproductive age experience PMS, and for about 20 percent of them, symptoms are severe enough to affect their regular routine. Symptoms of PMS often involves mild or moderate symptoms that don’t majorly affect daily life, symptoms can be severe enough to impact everyday activities and overall well-being.

Premenstrual syndrome (PMS) has a wide variety of signs and symptoms, including mood swings, tender breasts, food cravings, fatigue, irritability and depression. It's estimated that as many as 3 of every 4 menstruating women have experienced some form of premenstrual syndrome. Symptoms tend to recur in a predictable pattern. But the physical and emotional changes you experience with premenstrual syndrome may vary from just slightly noticeable all the way to intense.

METHODS

A study assesses the Prevalence and impact of premenstrual syndrome among selected college students at Salem. The aim is to assess the prevalence and impact of premenstrual syndrome among adolescent students .This cross sectional study was initiated after obtaining permission from The head of the institution.

Selection of study participants

Undergraduate professional students between the age group of 17–22 years 460 students were selected as participants by convenient sampling .Students with the history of Dysmenorrhea, irregular periods, pelvic inflammatory disease, thyroid disorders, and under any medical treatment were excluded. Participation was purely voluntary and that participants possessed the right to refuse participation, to withdraw from the study. An informed consent was obtained from all participants after providing explanation about the purpose of the study. Confidentiality and privacy were ensured regarding the collected data.

Data collection tools

The data collection tool used in this study was a self-administered PMS questionnaire .The PMS data collection form had two sections. Section A was based on the demographic information of the participant and menstrual history. Section B encompassed questions regarding the various somatic psychological, physiological, and behavioral symptoms that the college students experienced few days prior to menstruation.

Data collection procedures

After obtaining the permission from concerned authority, the participants were explained about the study in brief and informed consent was obtained from them. Data was collected by using Self-administered questionnaire. Superior care was taken to maintain the privacy and confidentiality of the study participants.

Data analysis

The data collected was entered into M.S. Excel and checked for its completeness, then coded and entered into the SPSS software 20.0 version for analysis. The data analyzed was expressed into percentage and mean.

Table (1): Distribution of the college students according to their socio-demographic characteristics (N= 460)

S.NO	Characteristics	With PMS (n=146)		Without PMS(314)	
		Frequency N	Percentage %	Frequency N	Percentage %
1	Age In Years				
	A. 17-18 yrs	63	43%	122	39%
	B. 19-20 yrs	57	39%	83	26%
	C. 21 -22 yrs	26	18%	109	35%
2	Year of study				
	A. 1 St Year	72	49%	79	25%
	B. 2nd Year	46	32%	103	33%
	C. 3rd Year	28	19%	132	42%
3	Mothers Education				
	A. Uneducated	24	16%	57	18%
	B. Primary	53	36%	108	34%
	C. Secondary	32	22%	66	21%
	D. UG	22	16%	56	18%
	E. PG	15	10%	27	9%
4	Type of family				
	A. Nuclear family	49	34%	117	37%
	B. Joint family	97	66%	197	63%
5	Religion				
	A. Hindu	104	71%	214	68%
	B. Muslim	10	7%	13	4%
	C. Christian	32	22%	87	28%
	D. Others	0	0	0	0
6	Menstrual Cycle				
	A. 25-28Days	36	24%	63	20%
	B. 29-32 Days	87	60%	189	60%
	C. 32 Days & Above	23	16%	62	20%
7	Menstrual flow				
	A. Below 3 Days	9	6%	145	46%
	B. 3-5 Days	32	22%	53	17%

	C. 6-8 Days	45	31%	50	16%
	D. 8 Days &Above	60	41%	66	21%
8	Family history of PMS				
	A. Yes	41	28%	67	21%
	B. No	105	72%	247	79%
9	Home Remedies				
	A. Yes	113	77%	44	14%
	B. No	33	23%	270	86%

Table 1. A total of 460 participants participated in the study. Most of the participants, 63 (43%), were 19–20 years. 214(68%) of participants were from Hindus 104 (71%). The educational status of their mother 108 (34%) had primary education and 66(21%) at the secondary level, with most of them belonging to, joint families 197(63%) and they were 189(60%) students had 29-32days menstrual cycle; the majority of 191(61%) students attend menarche at the age of below 13-16 years. It was also noted that the majority of the students had a family history of PMS 247 (86%).

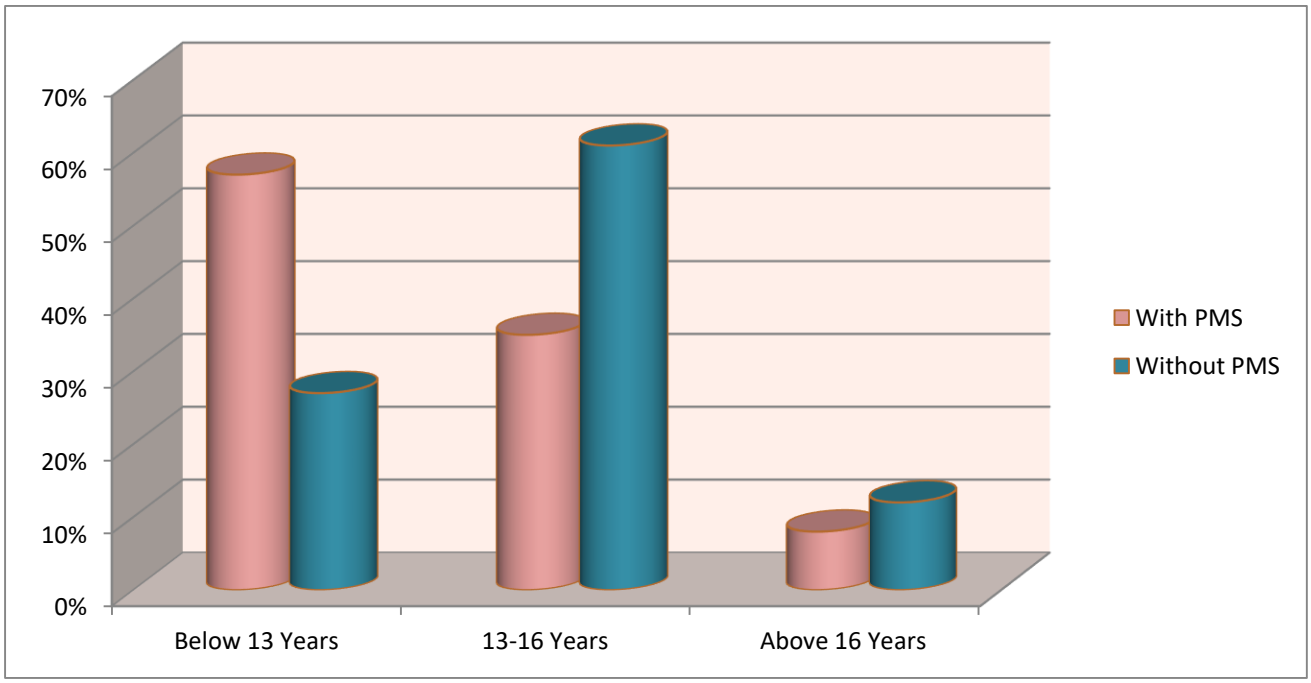

Figure :1 Distrbution of college students according to the Age at menarche.

It can be inferred from the data presented in Fig.1, that majority of the students attained menarche at the age of 13 -15 years191 (61%).

Table: 2 Prevalence of the Physical symptoms of premenstrual syndrome among college students. (N=146)

S.NO	Characteristics	MILD		MODERATE		SEVERE	
		f	%	f	%	f	%
Physical symptoms	Breast tenderness &swelling	19	13%	98	67%	29	20%
	Abdominal bloating	28	19%	84	58%	34	23%
	Weight gain	41	28%	79	54%	26	18%
	Headache	20	14%	88	60%	38	26%
	Dizziness/fainting.	11	8%	66	45%	40	27%
	Fatigue	24	17%	98	67%	56	38%
	Palpitations	19	13%	95	65%	29	20%
	Pelvic discomfort and pain	26	18%	97	66%	23	16%
	Abdominal cramps	23	16%	86	59%	37	25%
	Change in bowel habits	28	19%	75	52%	43	29%
	Increased appetite	29	20%	82	56%	35	24%
	Generalized aches and pains	35	24%	69	47%	42	29%
	Food cravings(Sugar/Salt)	22	15%	77	53%	47	32%
	Skin changes, rashes, pimples	19	13%	89	61%	38	26%
	Nausea/vomiting	23	16%	94	64%	29	20%
	Muscle and Joint pain	21	14%	99	68%	26	18%

Table: 2 It can be inferred from the data presented in the study most of them 41 (28%) had mild weight gain, the majority of subjects 98 (67%) had moderate breast tenderness &swelling. Palpitations were common among 98 percent of them, while 97 percent (66%) experienced pelvic discomfort and pain. Most of them 99 (68%) had moderate muscle, joint pain and the majority of them had severe fatigue 98 (67%) respectively.

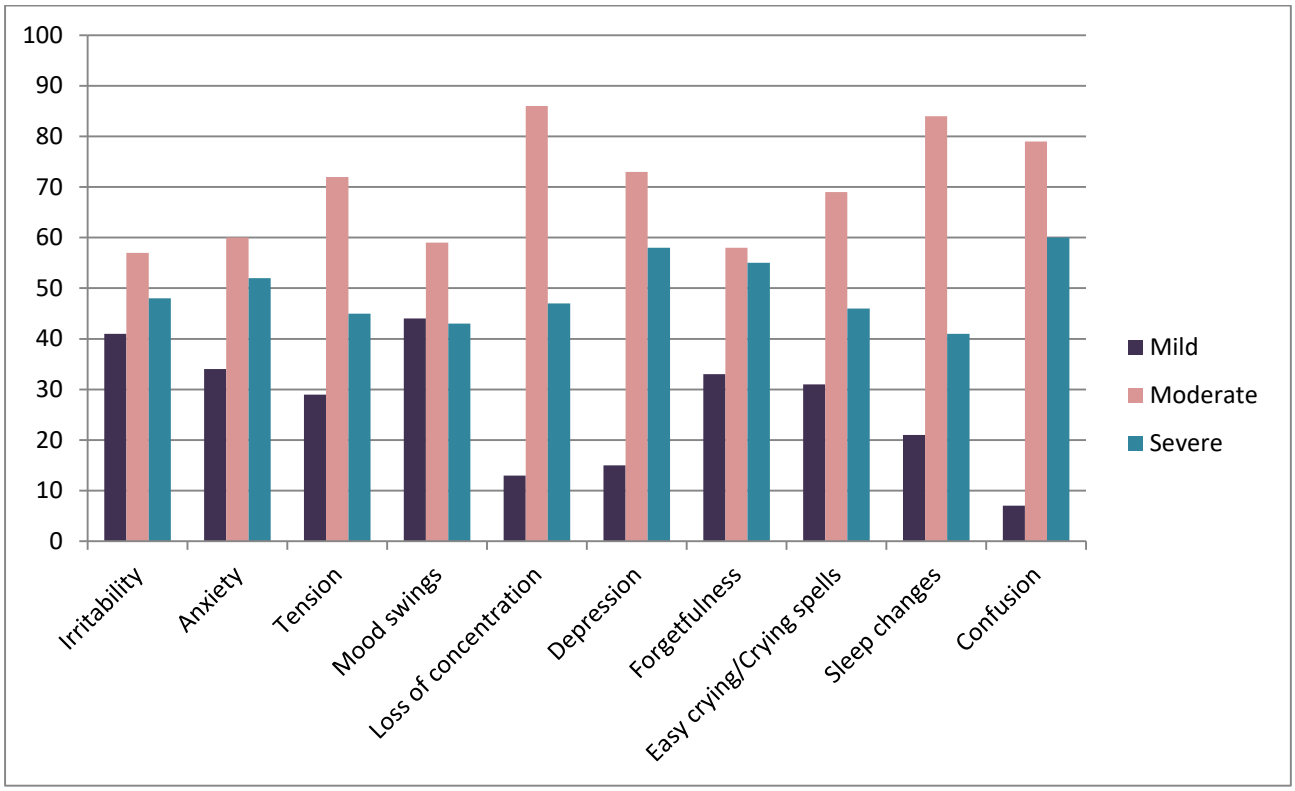

Figure: 2 Prevalence of the Psychological symptoms of premenstrual syndrome among college students.

Figure: 2 It can be inferred from the data presented in the study that majority of subjects (44) (31%) experienced mood swings. Most of them 86 (59%) had moderate loss of concentration, Most of them had moderate sleep changes 84 (58%) respectively. The majority of them had severe confusion during PMS.

Table: 3 Prevalence of the Behavioral symptoms of premenstrual syndrome among college students. (N=146)

S.NO	Characteristics	MILD		MODERATE		SEVERE	
		f	%	f	%	f	%
Behavioral symptoms	Social withdrawal	103	71%	25	18%	18	12%
	Restlessness	28	19%	96	66%	22	15%
	Lack of self control	35	23%	75	52%	36	25%
	Feeling guilty	93	64%	38	26%	15	10%
	Clumsiness	42	29%	66	45%	38	26%
	Lack of interest in usual activities	36	25%	66	45%	44	30%
	Poor judgment	18	12%	82	56%	36	25%
	Impaired work performance	41	28%	82	56%	44	30%
	Obsessional thoughts	28	19%	80	55%	48	33%
	Compulsive behavior	20	14%	80	55%	25	17%
	Irrational thoughts	19	13%	79	54%	25	17%
	Being over sensitive	42	29%	29	20%	98	67%

Table: 3 It can be inferred from the data presented in the study majority of subjects 103 (71%) had mild social withdrawal. Most of them had 82 (56%) poor judgment & impaired work performance. Most of them 96 (66%) had moderate restlessness, the majority of them experienced oversensitivity during PMS, with 98 (67%) being oversensitive.

Table: 4 Impact of premenstrual symptoms among the participants with PMS and without PMS (N=460)

S.NO	Characteristics	With PMS (n=146)						Without PMS(319)		P Value
		MILD		MODERATE		SEVERE				
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	
1	Physical functioning	24.25	6.82	86.00	10.29	35.78	69.79	51.32	13.10	0.106
2	Psychological functioning	26.91	10.78	69.83	9.69	49.25	5.62	51.34	73.91	<0.001
3	Social functioning	42.08	26.44	66.5	22.14	37.41	21.1	51.33	30.41	<0.001

Table: 4 we studied the impact of PMS scores of participants with and without PMS among 460 college students .The mean (SD) score of physical functioning among participants without PMS was 51.32 (13.10) and that of participants with PMS was 86.0 (10.29), Behavioral functioning among participants without PMS was 42.08 (26.44) and that of participants with PMS was 51.33 (30.41) .The Premenstrual syndrome was significantly associated with physical functioning of the college students.

CONCLUSION

The present study concluded that the prevalence of PMS was 32% among college-going girls in the study participants. The most common physical symptoms of PMS were breast tenderness, swelling, (67%) fatigue (67%) Muscle and Joint pain, Psychological symptoms like (31%) experienced mood swings (68%), (59%) had loss of concentration, sleep changes 84 (58%) respectively. The common behavioral symptoms were (71%) social withdrawal, (56%) poor judgment and (67%) being oversensitive during PMS. The Premenstrual syndrome was significantly associated with physical functioning of the college students.

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