IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

A Descriptive Study On The Prevalence Of Premenstrual Syndrome And Its Coping Strategies Adopted By Female Students Studying At Selected College Of Agartala, Tripura, With A View To Develop An Information Booklet Related To Premenstrual Syndrome And Its Management

Mrs. Rupa Ghosh, Associate Professor, Dept. of Obstetrics and Gynecological Nursing, TIPS

Priya Nandi, Dept. of Obstetrics and Gynecological Nursing.

ABSTRACT

Background: Menstruation refers to the monthly discharge through the vagina of blood and other substances from the uterus in non pregnant adult females. Premenstrual syndrome (PMS), occurs 7–14 days before the onset of menstruation and subsides with the commencement of menstrual flow, affects women during their reproductive age, and is associated with physical, psychological and behavioral changes. Premenstrual syndrome is characterized by a complex set of symptoms which include physical, psychological and behavioral changes of varying severity.

Aim: To assess the prevalence of premenstrual syndrome and its coping strategies among female students of selected college Agartala, Tripura.

Method and Material: A quantitative research approach and non-experimental descriptive research design was adopted to collect the data from 150 female students studying at Ramthakur College, Agartala, Tripura by using systematic random sampling technique. Checklists were used to assess the prevalence of premenstrual syndrome and its coping strategies. Chi square test was used to find out association between prevalence of premenstrual syndrome and its coping strategies among female students with their selected demographical variables. After the data collection researcher distributed an information booklet related to premenstrual syndrome and its management to the respondents.

Result: Out of 150 respondents majority of the respondent i.e.79.33% had prevalence of acne and 77.33% had mood swings. A maximum of 66% of respondents had five and more physiological symptoms and 34.7% respondents had two psychological symptoms. Majority of respondents i.e. 84.7% were adopted rest and 82% preferred meditation to cope against physiological symptoms and psychological symptoms. Most of the respondents i.e. 57.33% were adopted five or more coping strategies to cope against physiological and psychological symptoms. Association were found between physiological symptoms with the demographic variables: family history of premenstrual abnormality and psychological symptoms with the demographic variables: age, place of residence, age of 1st menstruation, duration of menstruation and

frequency of menstrual cycle of last 3 cycle, receiving any information about premenstrual syndrome and also coping strategies adopted for physiological symptoms of premenstrual syndrome was significantly associated any other diagnosed gynecological disorder.

Conclusion: In this study premenstrual syndrome was found to be a problem of most of the students and the study findings support the need to have an educational intervention for female students in order to improve their knowledge with regard to premenstrual syndrome and its management.

Key words- Premenstrual syndrome (PMS), Coping strategies, Female students, Information booklet.

INTRODUCTION:

The reproductive period of a woman begins at menarche and ends in menopause. It usually extends from 13 to 45 years. Biological variations may occur in different geographical areas and pregnancy is rare below 12 years and beyond 50 years. Menstruation refers to the monthly discharge through the vagina of blood and other substances from the uterus in non pregnant adult females. Although every woman has an individual cycle of menstruation, which varies in length, the average cycle is taken to be 28 days long and recurs from puberty to menopause except when pregnancy intervenes. PMS is a set of physical and psychological symptoms that arises about a week to ten days before menstruation. Premenstrual symptoms usually relieve or ease once menstruation starts. But they might continue for the first few days of the period. If the problem really is premenstrual syndrome, though, it will go away and then it will come back with the next cycle. Common physiological symptoms are Acne (Pimples), backache, headache, allergy, abdominal cramp, abdominal bloating, breast tenderness, constipation, diarrhea etc and emotional and behavioral symptoms includes tension or anxiety, depressed mood, crying spells, mood swings and irritability or anger, appetite changes and food cravings, trouble falling asleep (asleep), social withdrawal, poor concentration, change in libido and physical symptoms are includes joint and muscle pain, headache, fatigue, weight gain related to fluid retention, abdominal bloating or cramping, breast tenderness, acne flare- ups, constipation or diarrhea, alcohol intolerance, excessive hunger. Symptoms of premenstrual syndrome are generally neglected by students. Quality of life can be affected more than estimated. Considering the reluctance to disclose menstrual disorders, health care providers should be aware of them and ask women about their symptoms during routine visits.

Today, research on women's health has greatly improved and the premenstrual syndrome is a common health problem in women in reproductive age. The prevalence of premenstrual syndrome has been reported in 20 to 32 % of premenopausal and 30-40% of the reproductive female population. Due to side effects of PMS, the present study aimed to investigate the prevalence of premenstrual syndrome and its coping strategies adopted by female students.

METHODOLOGY:

A non experimental, descriptive research study was conducted at Ramthakur College, Badarghat, Agartala, Tripura. To identify the prevalence of premenstrual syndrome and its coping strategies adopted by female students, with a view to develop an information booklet and its management. The systematic random sampling technique was used and 150 samples were selected as per inclusion criteria. The conceptual framework selected for the present study was based on modified Transactional Model of stress and coping (Lazarus and Folkman, 1984). It is a framework for evaluating the processes of coping with stressful events. The tool was developed into five sections, **Section A-** Survey Questionnaire to rule out the presence of premenstrual syndrome among female students, **Section B-** Proforma to collect socio demographic variables**, Section C-** Standardized B.M.I measurement tool, **Section D-** Check list to assess the prevalence of premenstrual syndrome and **Section E-** Checklist to assess the various coping strategies adopted during

Premenstrual Syndrome. Total twelve demographical variables were used in the study and those were, age in years, place of residence, religion, age of 1st menstruation, menstrual cycle, duration of menstruation last 3 cycle, frequency of menstrual cycle last 3 cycle, family history of premenstrual abnormality, diagnosed with any other gynecological disorder, diagnosed with any other medical disorder, pattern of diet, received any prior information about premenstrual syndrome. Informed consent was obtained from them after explaining the purpose and objectives of the study. The data was compiled and analyzed using Microsoft office Excel work Sheet 2007 and SPSS 20 version. Descriptive statistics was used by frequencies with percentage of categorical variables, premenstrual syndrome and coping strategies. Chi square test was used to find out an association between prevalence of premenstrual syndrome with the selected demographic variables of the female students.

RESULTS:

Majority of the respondents i.e. 127 (84.7%) were in the age group of 18-22 years, 76 (50.7%) were resided in urban area, 140 (93.3%) were Hinduism. Most of the respondents had 1st menstruation i.e. 89 (59.3%) were in the age group of 13-16 years out of 150 respondents. As per their menstrual cycle it was shows that majority of respondents i.e. 122 (81.3%) have regular menstrual cycle, 100 (66.7%) had 4-5 days duration of menstruation last 3 cycle; majority of respondents i.e. 123 (82%) had 20-35 days of menstrual cycle last 3 cycle. With regards to their family history of premenstrual abnormality majority of 128 (85.4%) respondents have no family history of premenstrual abnormality, 130 (87%) were not diagnosed with any other gynecological disorder, majority of female students i.e. 148 (98.7%) were not diagnosed with other medical disorder, 146 (97.3%) were non- vegetarian. As per the source of information it was shows that majority of female students i.e. 86 (57.4%) did not receive any information about premenstrual syndrome.

Table-1.1 Frequency and percentage distribution of prevalence of physiological symptoms.

n= 150

Sl. no	Categories		Prevalence	
			Frequency (f)	Percentage (%)
1.	Physiological Symptoms			
	a. Acne (Pimples)		119	79.33
	b. Backache		50	33.33
	c. Headache		104	69.33
	d. Allergies (Itching, rashes, etc.)		20	13.33
	e. Abdominal cramps		85	56.67
	f. Abdominal bloating		86	57.33
	g. Swelling of extremities		41	27.33
	h. Breast tenderness		90	60
	i. Weight gain	i.1 Overweight	90	60
		i.2. Obesity	6	4
	j. Joint pain and muscle cramp		89	59.33
	k. Tired and lethargic		35	23.33
	l. Constipation		21	14
	m. Diarrhoea		71	47.33
	n. Increase appetite		05	3.33
	o. Cold sores (swollen gums, swollen salivary gland, bleeding from gums)		05	3.33
	p. Fainting		03	2
	q. Vomiting		81	54

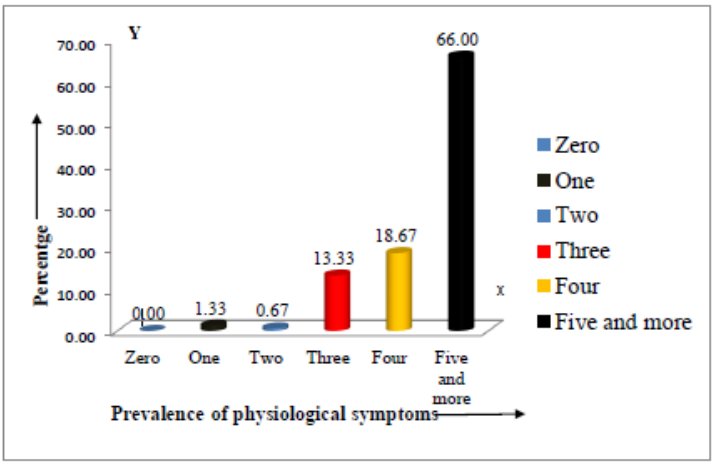

Figure 1.2: Stacked cylinder showing percentage of prevalence of premenstrual syndrome (Physiological symptoms) perceived by individual respondent.

It was seen that majority of the respondents i.e. 119 (79.33%) had prevalence of acne and a maximum of 66% of respondents had five and more physiological symptoms.

TABLE – 2.1 Frequency and percentage distribution of prevalence of psychological symptoms. **n= 150**

Sl. no	Categories		Prevalence	
			Frequency (f)	Percentage (%)
2.	Psychological Symptoms			
	a. Sleep disturbance	a.1. Increase sleep	35	23.33
		a.2. Decrease sleep	20	13.33
	b. Tension		34	22.67
	c. Irritability		59	39.33
	d. Sadness		26	17.33
	e. Mood swings		116	77.33
	f. Confusion		18	12
	g. Feeling anger or felt hostile		27	18
	h. Crying spells		15	10
	i. Forgetfulness		14	9.33
	j. Decreased alertness		29	19.33
	k. Difficulty in concentration		19	12.67
	l. Decrease self-respect		6	4
	m. Sudden attack of anxiety		10	6.67
	n. Lack of interest in social activities		34	22.67
	o. Lack of interest in day to day activities		83	55.33

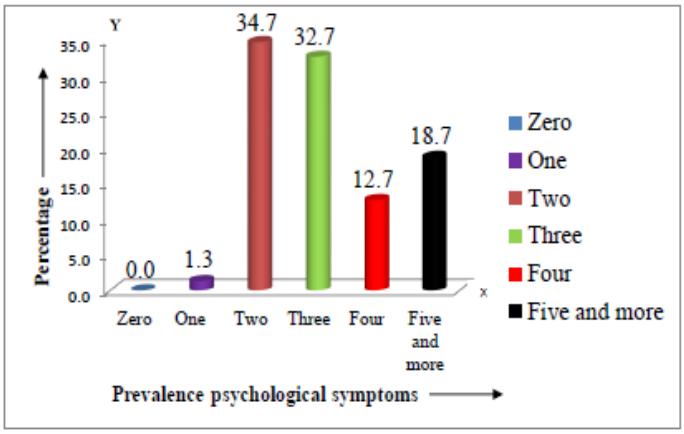

Figure 2.2: Stacked cylinder showing percentage of prevalence of premenstrual syndrome (Psychological symptoms) perceived by individual respondent.

In order of psychological symptoms, majority i.e. 116 (77.33%) had mood swings and a maximum of 34.7% respondents had two psychological symptoms

Table-3.1 Different coping strategies adopted against physiological symptoms **n=150**

Sl. No	Categories	Coping Strategies adopted	
1.	Physiological symptoms	Frequency (f)	Percentage (%)
a.	Rest	127	84.7
b.	Sleeping	118	78.7
c.	Application of hot packs or hot shower	105	70
d.	Herbal Supplements	95	63.3
e.	Taking over the counter medicine	104	69.3
f.	Massage	52	34.67
g.	Yoga	12	08
h.	Watching favourite movie	11	7.33
i.	Listening music	38	25.33
j.	Eating favourite food	12	08
k.	Staying alone	02	1.33
l.	Spending time with family and friends	10	6.67
m.	Reading newspapers/ Books	10	6.67
n.	Mediation	13	8.67
o.	Exercise	05	3.33
p.	Drinking water	08	5.33

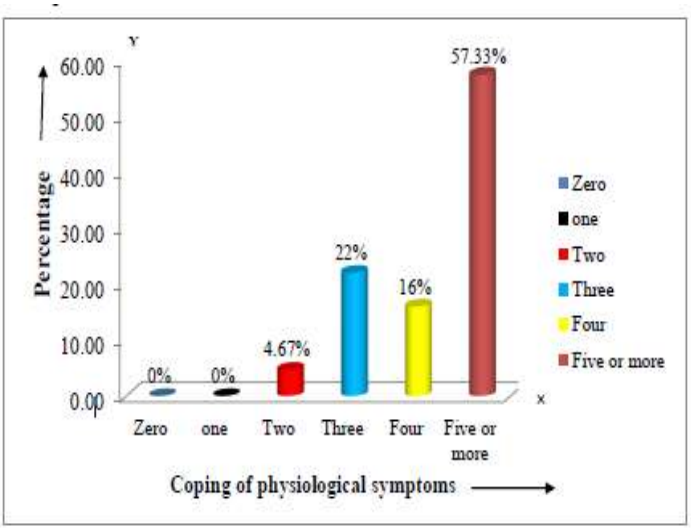

Figure3.2: Stacked cylinder showing highest percentage of coping strategies adopted for physiological symptoms of premenstrual syndrome perceived by individual respondent.

It was seen that majority 127 (84.7%) adopted rest during their premenstrual period to cope against physiological symptoms and from all the respondents, most of them i.e. 57.33% adopted five or more coping strategies.

Table –4.1 Different coping strategies against psychological symptoms **n=150**

Sl. No	Categories	Coping Strategies adopted	
2.	Psychological Symptoms	Frequency (f)	Percentage (%)
a.	Meditation	123	82
b.	Yoga	115	76.7
c.	Spending time with friends and families	102	68
d.	Reading books and newspaper	97	64.7
e.	Accept premenstrual syndrome as natural process	98	65.3
f.	Biting nails	23	15.33
g.	Staying alone	10	6.67
h.	Taking selfie	13	8.67
i.	Breaking mobile	08	5.33
j.	Crying	03	02
k.	Eating favourite food	09	06
l.	Exercise	01	0.67
m.	Listening music	11	7.33
n.	Rest	24	16
o.	Sleeping	11	7.33
p.	Talking over phone	12	08
q.	Watching favourite movie	09	06
r.	Tea and coffee intake	12	08

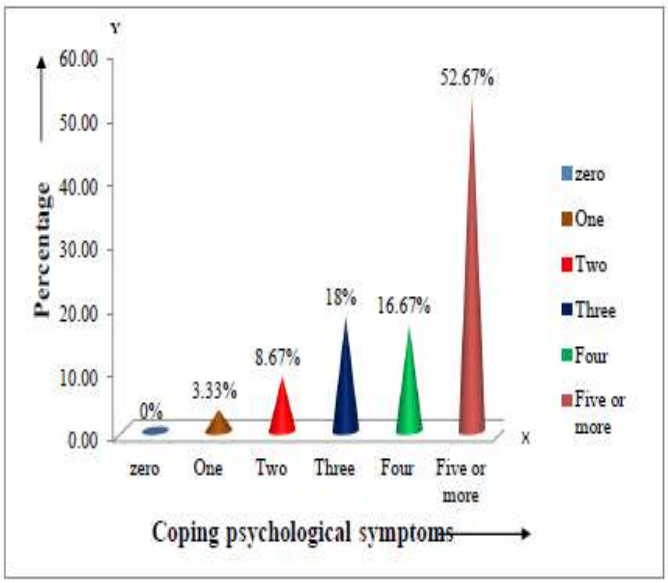

Figure 4.2: Stacked cone showing highest percentage of coping strategies adopted for psychological symptoms of premenstrual syndrome perceived by individual respondent.

Majority of respondents i.e. 123 (82%), preferred meditation to cope against psychological symptoms and from all the respondents, 57.33% adopted five or more coping strategies.

Significant association was found between physiological symptoms with the demographic variables: family history of premenstrual abnormality and psychological symptoms with the demographic variables: age, place of residence, age of 1st menstruation, duration of menstruation and frequency of menstrual cycle of last 3 cycle, receiving any information about premenstrual syndrome.

Significant association was found between coping strategies adopted for physiological symptoms of premenstrual syndrome was significantly associated with diagnosed other gynecological disorder and for physiological symptoms of premenstrual syndrome was not associated with any demographical variables.

DISCUSSION:

In this study premenstrual syndrome was found to be a problem of most of the students and all of them had one or more symptoms of premenstrual syndrome. Acne, headache, breast tenderness, mood swings, lack of interest in day to day activities, irritability were the predominant premenstrual symptoms experienced by students. They adopted different coping mechanisms to get relief from the symptoms but rest, sleeping, meditation, yoga were mostly applied by students as a coping strategies. The family history of premenstrual abnormality, age, place of residence, age of 1st menstruation, duration of menstruation last 3 cycle, frequency of menstrual cycle last 3 cycle, received prior information about premenstrual syndrome were found to be predictors' of premenstrual syndrome whereas, diagnosed with any other gynecological disorder was found to be predictors' of coping strategies. The study findings support the need to have an educational intervention for female students in order to improve their knowledge with regard to premenstrual syndrome and its management. Thus, development of an information booklet for these female students will help them to improve their self-care activities while preventing further complications.

REFERENCE:

1. D. C. Dutta. Textbook of Obstetrics. 7th ed. Delhi, India: New Central Book Agency (P) Ltd: Neuroendocrinology in relation to reproduction, Dysmenorrhea and other disorders of menstrual cycles. Pp. 73, 182,

2. J. Annamma. A Comprehensive Textbook of Midwifery and Gynecological Nursing. 4th ed. Delhi, India: The Health Sciences Publisher; 2015. Hormonal Cycles. Pp.63.

3. Mayo Clinic. Premenstrual Syndrome. Mayo Foundation for Medical Education and Research (MFMER) Available from: https://www.mayoclinic.org/diseases-conditions/premenstrual-syndrome/symptoms-causes/syc-20376780 7

4. Yash Joshi, Pravina Mahadalkar, Rincy Raju, Renji R Karnavar, Shweta Shetty, Starly Jacob et al. A study to assess the premenstrual symptoms experienced by college going students in selected areas of Pune. IJNH .2018 june; (2): 413-419.
Available from: file:///C:/Users/hp/Downloads/Premenstrualsyndrome%20(1).pdf

5. Esra B, Sule Y, Kayhan Y , Baris A. The impact of dysmenorrhea and premenstrual syndrome on academic performance of college students, and their willingness to seek help. National Library of Medicine . 2020 Oct 2; 17(3):196-201. PMID: 33072424

6. Buddhabunyakan N, Kaewrudee S, Chongsomchai C, Soontrapa S, Somboonporn W, Sothornwit J. Premenstrual syndrome (PMS) among high school students. Int J Womens Health. 2017;9:501-505. PMID: 28860863

7. OA Esimai and GO Omoniyi Esan. Awareness of Menstrual Abnormality Amongst College Students in Urban Area of Ile-Ife, Osun State, Nigeria. Indian Journal of Community Medicine. 2010 January; 35(1): 63–66; 35. (1): 63-66. PMID: 20606922

8. Nazeema Beevi P., Manju L., Anil Bindhu S, Jeesha C. Haran, Regi Jose. Menstrual problems among adolescent girls in Thiruvananthapuram district. IJCMPH. 2017; 4 (8).
Available from: https://www.ijcmph.com/index.php/ijcmph/article/view/1556

9. Kimberly Ann Yonkers, MD, Prof. P M Shaughn O'Brien MD, and Prof. Elias Eriksson, MD. Premenstrual syndrome. National Library of Medicine. 2011; 371 (9619): 1200-10. PMID: 18395582

10. Chintan Madhusudan Raval, Bharat Navinchandra Pancha, Deepak Sachidanand Tiwari, Ashok Ukabhai Vala, and Renish Bhupendrabhai Bhatt. Prevalence of premenstrual syndrome and premenstrual dysphoric disorder among college students of Bhavnagar, Gujarat. Indian Journal of Psychiatry. 2016 Jun;58(2):164–170. PMID: 27385849.