



Assess the severity of premenstrual syndrome among students at selected college, Hisar, Haryana

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Abstract

Background: PMS is a combination of emotional, physical, psychological and mood disturbances that occurs after a woman's ovulation and normally ends with the onset of her menstrual flow. Few syndrome can be very intense and disturbs their normal functioning.

Aim: Assess the severity of premenstrual syndrome among students.

Methods: A cross sectional study was conducted to assess the severity of premenstrual syndrome among students. The study was conducted at Savitri Jindal Institute of Nursing, Hisar, Haryana after getting formal approval. The 50 students with premenstrual syndrome were selected by using random sampling technique (lottery method). The data was collected by administering premenstrual syndrome scale tool among the students.

Results: The result have shown that most of students were having moderate symptoms 28(56%), mild symptoms 18(36%), had severe symptoms 04(08%) and no one was having very severe symptoms. There was a significant association between premenstrual syndrome and duration of sleep, age at menarche, Intake of fast food (Per Day) at the significant level 0.05 among students.

Conclusion: The study concluded that most of students were having moderate symptoms and remaining were having mild and severe symptoms.

Keywords: Premenstrual syndrome, assess, severity of symptoms, college, students

Introduction

Premenstrual syndrome (PMS) is a condition of psycho-neuro-endocrine disorder of unknown etiology and premenstrual dysphoric disorder (PMDD) - most severe form of PMS

Before the onset of the menstruation, adolescent girls may have uncomfortable syndrome which last for a short period. Few syndrome can be very intense and disturbs their normal functioning. These syndrome are named as premenstrual syndrome.

Frank initially described premenstrual syndrome in 1931, and he explained that these syndromes are caused by hormonal imbalance in females. The syndrome starts in the luteal phase of the menstrual cycle, reach a peak just before menstruation and reduced during the follicular phase ^[1].

PMS was defined by a National Institute of Mental Health (NIMH) consensus workshop group in 1983 as: "A constellation of mood, behavioral, and /or physiological symptoms that have a regular cyclical relationship to the luteal phase of the menstrual cycle, are present in most if not all cycles, and remit by the end of the menstrual flow with a symptom-free interval of at least one week each cycle (Freeman, 2011) ^[2]

PMS is "The cyclic occurrence of syndrome that are of sufficient severity to interfere with some aspects of life and

which appear with consistent and predictable relationships to menses" as told by Endicott *et al.*, (1981) ^[3].

"PMS is a combination of emotional, physical, psychological and mood disturbances that occurs after a woman's ovulation and normally ends with the onset of her menstrual flow" ^[4].

Symptoms in premenstrual syndrome are physiological, psychological and behavioural symptoms. Physiological symptoms include abdominal Problems (abdominal bloating, abdominal pain or cramps, pelvic heaviness or pressure, abdominal fullness), breast related problems (breast tenderness, breast swelling, breast pain, mastalgia, breast engorgement), edema (variable degrees of edema of extremities, puffiness of face or fingers, bloated body, water or fluid retention, temporary weight gain), aches (headache or migraine, body ache, back ache, muscle or joint pain, muscle or joint stiffness), gastro- intestinal problems (constipation, diarrhea, indigestion, nausea, vomiting, dizziness, feeling gaseous), thirst and appetite changes (total loss of appetite, decrease or increase in appetite, binge eating, over eating, craving for specific food items like chocolates, ice-cream, junk or spicy food), Fatigue, weakness, tiredness or lack of energy and others acne, allergy, soreness and sweating or hot flashes, pins and needle sensation in hands and feet, less tolerance to light

and / or noise, poor impulse control [5, 6]. Psychological syndrome include anxiety and depression related problems, unreasonable tension, tension due to domestic routine, decreased interest in activities, loss of interest in hobbies, feeling sad, hopelessness, worthlessness or self deprecating feelings, anxious, feeling low, uneasiness, nervousness, suicidal tendencies, difficulty concentrating, wish to remain alone, feeling lonely, unreal feeling, violent feeling, panic attacks, restlessness or jitteriness, paranoia and mood disorder (depressed mood, mood swings, irritability or agitation, anger or temper outbursts or aggressive), Sleep disorder (hypersomnia, insomnia, disturbed sleep, bad dreams or nightmares, excessive sleeping) and behavioural symptoms such as tearfulness, increased fear, poor judgment, confusion, social withdrawal, boredom, lethargy, others are emotional hypersensitivity, interpersonal conflicts, altered interest in sex, clumsiness or poor co-ordination, accident prone, decreased efficiency, easy bruising, reduced coping skills [7]. ACOG diagnoses PMS based on the three categories are syndrome must be present five days earlier to the menstruation and continue to minimum three menstrual cycles in a row, syndrome occurred should end within 4days after the periods start and syndrome must affect to some of the regular activities [8]. According to DSM-V diagnosis criteria of PMS (Hofmeister & Bodden, 2016) (American Psychiatric Association, 2013). PMS is diagnosed, founded on patient reporting of at minimum few of the below mentioned somatic syndrome (headache, bloating in abdominal, Joint or muscles pain, weight gain, extremities swelling, tenderness or swelling in breast) and affective syndrome (irritability, angry outburst, depression, anxiety, confusion, social withdrawal) for the period of the five days earlier to periods and in to each of the previous menstrual cycle [8].

Objectives

- To assess the severity of premenstrual syndrome among students.
- To associate the socio-demographical variables with mean score of premenstrual syndrome.

Methods: A descriptive study was conducted to assess the severity of premenstrual syndrome among students. The study was conducted at Savitri Jindal Institute of Nursing, Hisar, Haryana after getting formal approval. By using random sampling technique (lottery method) 50 students with premenstrual syndrome were selected. After providing informed consent, the data was collected by administering premenstrual syndrome scale among the students. Statistical Analysis Statistical analysis was performed using the SPSS software and the MS Excel 2016 package. The data was analyzed in terms of the objectives of the study by using descriptive statistics that was frequency, percentage.

Results

Table No. 1 shows that majority of students with premenstrual syndrome were in the age group of 17-20 years (72%) & 68% students were sleep for 6-10 hours. Most of the students with premenstrual syndrome attained menarche at the age of 13-15 years (74%) and 56 % students were having duration of menstrual cycle for 26-28 days. Majority of students (60%) with premenstrual syndrome taking fast foods frequently. (64%) students were found to be taking fried foods frequently.

Table 1: Socio demographic and menstrual and dietary variables factors of the students with and without premenstrual syndrome.

N=50

Socio demographic and menstrual and dietary variables		F	%
Age	17 -20 years	36	72
	20-23 years	14	28
Duration of sleep (hours)	<6	10	20
	6-10	34	68
	>10	06	12
Age at menarche is	10-12 years	11	22
	13-15 years	37	74
	16-18 years	02	04
Duration of menstrual cycle is	<26 days	08	16
	26-28 days	28	56
	29-31 days	12	24
	>31 days	02	04
Intake of fast food	Daily	06	12
	Frequently	30	60
	Occasionally	14	28
	Not at all	00	00
Intake of fried food	Daily	05	10
	Frequently	32	64
	Occasionally	12	24
	Not at all	01	02

Table 2: Level of severity of premenstrual syndrome among the students with premenstrual syndrome

Level of PMS	F	%
No symptoms (<20%)	00	00
Mild symptoms (21-40%)	18	36
Moderate symptoms (41-60%)	28	56
Severe (61-80%)	04	08
Very severe >81%)	00	00
Total	50	100

Table 2 shows that the level of severity of premenstrual syndrome among students with premenstrual syndrome, most of students were having moderate symptoms 28(56%), mild symptoms 18(36%), had severe symptoms 04(08%) and no one was having very severe symptoms.

Table 3: Association between pre-test level of premenstrual syndrome and the selected demographic variables, obstetric variables & dietary variables.

N=50						
Demographic, Obstetric & Dietary variables	No/ Mild symptoms	%	Moderate/ Severe/ Very severe symptoms	%	Chi Square	
Age	17 -19 years	12	24	24	48	$\chi^2=0.396$ P=0.528 (NS)
	20-22 years	06	12	08	16	
Duration of sleep (hours)	<6	04	08	06	12	$\chi^2=13.031$ P=0.001* (S)
	6-10	08	16	26	52	
	>10	06	12	00	00	
Age at menarche is	10-12 years	06	12	05	10	$\chi^2=6.490$ P=0.038* (S)
	13-15 years	10	20	27	54	
	16-18 years	02	04	00	00	
Duration of menstrual cycle is	<26 days	03	06	05	10	$\chi^2=1.869$ P=0.599 (NS)
	26-28 days	08	16	20	40	
	29-31 days	06	12	06	12	
	>31 days	01	02	01	02	
Intake of fast food	Daily	00	00	06	12	$\chi^2=14.646$ P=0.002* (S)
	Frequently	12	24	18	36	
	Occasionally	06	12	08	16	
	Not at all	00	00	00	00	
Intake of fried food	Daily	00	00	05	10	$\chi^2=4.788$ P=0.187 (NS)
	Frequently	12	24	20	40	
	Occasionally	05	10	07	14	
	Not at all	01	02	00	00	

* The Chi-square statistic is significant at the .05 level

Table 3 shown that there was a significant association between premenstrual syndrome and duration of sleep ($\chi^2=13.031$, p value=0.001), age at menarche ($\chi^2=6.490$, p value=0.038), Intake of fast food (Per Day) ($\chi^2=14.646$, p value=0.002) at the significant level 0.05 among students. There was no association between premenstrual syndrome and other variables such as age, Duration of menstrual cycle and Intake of fried food.

Conclusion

Based on the findings of the study, most of students were having moderate symptoms and remaining were having mild and severe symptoms. As premenstrual syndrome affect the daily activities of students, so there should be arrangement of some health education program to aware the students regarding modification of life style and physical activities to reduce the level of severity of premenstrual syndrome among students.

Limitation of the Study

- The sample size is limited to 50.
- The study limited to GNM students of one institute only.

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Ethical clearance

Ethical clearance was taken from Institutional Ethical Committee, Savitri Jindal Institute of Nursing.

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Conflict of Interest

Not available

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Not available

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