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Prevalence And Factor analysis of Symptome associated with premenstrual syndrome Among student in Al-Muthanna University.

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Abstract:

Using daily recording of commonly reported symptoms, the current study aimed to determine the prevalence of premenstrual syndrome (PMS), identify PMS variables, examine their interrelation ships, and assess the impact of medicine usage, menarche, then chronological stage. A self-administered structured questionnaire was used to gather data from 125 Al-Muthanna University undergraduate students. A Likert-type gauge, ranging after 1 (no symptoms) to 4 (plain), was used to gauge responses to PMS symptoms. impact of menarcheal age, chronological age, and drug use. While 14.4%, 29.6%, and 15.2% of participants stated mild, reasonable, and plain symptoms, correspondingly, the prevalence of PMS was 58.4%. The results of the MANOVA showed a significant drop in symptom intensity with age (0.069), drug use (0.001), and menarcheal age (0.141) INTRODUCTION

Premenstrual syndrome is a frequent cyclic disorder that affects young and middle-aged women. It is characterized by emotional and physical symptoms that always occur during the luteal phase of the menstrual cycle. Premenstrual dysphoric disorder is the term used to describe women who exhibit more severe mood symptoms. Research indicates that abnormal control of neurohormones and neurotransmitters is involved, even if the exact cause of many illnesses is yet unknown.[1] Females with PMS remain believed to remain more susceptible to normal recurring hormonal changes, and alterations in neurotransmitters such as gamma-aminobutyric acid (GABA), serotonin, and endorphins consume all been linked to these vagaries [2]. There is contradictory data to provision differences (like a drop) in endorphin heights in symptomatic individuals' serum attentions. Women who suffer from PMS may have a different GABA receptor compound response. Numerous investigations take demonstrated that the luteal phase is linked to both a decrease in GABA receptor compassion and a drop in plasma GABA. The most plausible explanation is serotonergic dysregulation accompanied by decreased luteal phase serotonergic activity. There must be additional elements at play because selective serotonin reuptake inhibitors (SSRIs) do not work for all female patients. [3-6]. Although the levels of oestrogen, progesterone, testosterone, and sex steroids are all within normal ranges, women with PMS may be more vulnerable to typical variations. [2] . Premenstrual syndrome symptoms can be minor, moderate, or severe. These symptoms include weeping, mood swings, anxiety, irritability, anger, tiredness, restlessness, headaches, breast tenderness and swelling, back pain, low back pain, nausea, and constipation. [7] Affective symptoms might last anywhere after a few beings to two weeks. Usually, symptoms top two days beforehand to the start of menstruation and are worse a week beforehand.[8] Treatments

for PMS that align with aetiological theories exist. Hormonal therapy is the second option, whereas non-hormonal therapy is the first alternative to increase central seratogenic transmission. Additionally, symptomatic therapy may help reduce some premenstrual symptoms [9]. SSRIs are the most widely used non-hormonal treatment for PMS because they increase serotonin activity in the brain [10-11-12] . In fact, research indicates that SSRIs are superior to a placebo in the treatment of PMS [12,13–15]. However, a number of Numerous adverse effects could result from therapy in this field. Women should therefore be made aware of the possible side effects of SSRIs, including decreased libido, lethargy, drowsiness, nausea, and sleeplessness with long-term use. [10,13]. Furthermore, there is conflicting scientific evidence about a number of vitamin deficiencies that have been proposed but not confirmed, including those connecting zinc, vitamin A, vitaimin E, thiaimine, magnesium, and vitaimin B6. [16]. Hormonal therapy can help physical symptoms by delaying ovulation and reducing hormonal swings, but psychological issues cannot be controlled. Oestrogen, danazol, and GnRH are administered in hormonal therapy [10,17]. Despite a wealth of studies on the causes and treatments of PMS, menstrual women of all ages, races, and geographical locations continue to have monthly negative effects on their quality of life. Compared to younger women, elderly women generally reported fewer severe symptoms. [16,18, 19]. According to earlier research, between 50 and 100 percent of teenagers report having at least one PMS symptom, with 13 to 89 percent of those symptoms falling into the moderate or severe category [20–26]. Despite these findings, premenstrual syndrome has generally gotten minimal attention, especially in developing countries like AL-Muthanna. Given the aforementioned, cyclical hormonal fluctuations may influence cognitive ability during the menstrual cycle in addition to affecting symptom changes. Monarchial age can have a noticeable effect on premeinstrual symptoms since newer women have more plain premenstrual symptoms than big women.

The relationship between fluctuating monthly hormone levels and related symptoms is yet unknown, though.

Methodology study

Female students enrolled in AL-Muthanna University's undergraduate degree program made up the sample. The survey was conducted from November to February. Participation in this study took conducted outside of regular class hours and was entirely voluntary. Every female student contact received a thorough explanation of the study's purpose and scope.

Students from a variety of ethnic origins make up the sample. They appeared to be in good health and were probably very slightly affected by changes in menstrual cycle symptoms. Due to previous research showing a linear relationship between age and PMS, this study included female students aged 18 to 25 and male students aged 8 to 16. Additionally, as with chronological age and menarcheal age, patients were categorized according to whether they were taking medication to alleviate PMS discomfort.

Data collection

The self-administered survey that was utilized to gather data was separated into: 1. Sociodemographic traits (number of children, marital status, menarcheal age, chronological age). 2. Menstrual characteristics (length of menstruation, number of days of bleeding, use of

oral contraceptives, medication use, pain management technique, and PMS symptoms and intensity). On a scale of 1 to 4, where 1 denoted "not present" and 4 denoted "severe," participants scored their experiences during a single premenstrual cycle. If at least one of the physical and cognitive symptoms occurred 13 days before and 4 days after menstruation, the participant was considered to have premenstrual syndrome. [5].

Results

125 We enrolled patients in our study. The table illustrates their age groups.

Age groups	Frequency	Percent
-18 years	8	6.4
19-20 years	32	25.6
21-22 years	38	30.4
23-25 years	47	37.6
Total	125	100.0

The marital status is demonstrated in table 2. Table 2. marital status

Status	Frequency	Percent
Unmarried	103	82.4
married	22	17.6
Total	125	100.0

Number of children is demonstrated in table 3. Table 3. number of children

NO.	Frequency	Percent
1	17	13.6
2	1	.8
3	1	.8
None	106	84.8
Total	125	100.0

The duration of menstruation is demonstrated in table 4.

Table 4. duration of menstruation , in table 4 show duration of menstruation which show most 71 (56.8 %) repoted more than 5 day of bleeding .

Duration	Frequency	Percent
3 days or less	11	8.8
4-5 days	43	34.4
> 5 days	71	56.8
Total	125	100.0

The use of OCP is demonstrated in table 5. Table 5. use of OCP

Usage	Frequency	Percent
NO	119	95.2
Yes	6	4.8
Total	125	100.0

40% of them used medications to relieve pain as demonstrated in table 6.

Table 6. Usage of pain relieve medication , greatest of the participant now this training 75 (60%) stated not by means of medication to relief discomfort of the menstrual , while 50 (40%) reported using different type of drugs ; this show in table 6 .

Usage	Frequency	Percent
NO	75	60.0
yes	50	40.0
Total	125	100.0

The severity of pain is demonstrated in table 7.

Table 7. severity of pain

Severity	Frequency	Percent
Mild	18	14.4
Moderate	37	29.6
Severe	19	15.2
No pain	51	40.8
Total	125	100.0

The symptoms were present in 58.4% as demonstrated in table 8.

Table 8. presence of symptoms of PMS , The total number of members in the education are 125 female learner students and 73 from that (58.4%) positive with PMS and 52 (41.6 %) negative with PMS .

Symptoms	Frequency	Percent
Negative	52	41.6
Positive	73	58.4
Total	125	100.0

The duration of MC is demonstrated in table 9.

Table 9. duration of MC , the effect of drug use : The result also show that 30 (24 .0%) of the members repoted a menstrual series of between 21-27 day , though 59 (47.2%) repoted a menstrual cycle between 28-30 day , and irregual cycle repoted in 36 (28.8 %) ; this show in table 9

Duration	Frequency	Percent
21-27 days	30	24.0
28-30 days	59	47.2
irregular	36	28.8
Total	125	100.0

Table 10. menarcheal age Table 10 show menarcheal age which most reported 61(48.8 %) of the participants menarcheal age between (12-14 yrs) .,

Menarche	Frequency	Percent
8-10 years	4	3.2
11-12 years	44	35.2
12-14 years	61	48.8
14-16 years	16	12.8
Total	125	100.0

Table 11. association between age group and pain severity , The table 11 show association between age and pain severity and ther is no significant between age and pain severity

	Severity				T	S
	m	m	n	s	o	i

		i l d	o d e r a t e	o	e v e r e	t a l	g
A ge gr ou ps	- 18 ye ars	0	1	1	6	8	0 . 0 6 9
	19 - 20 ye ars	3	8	4	1 7	3 2	
	21 - 22 ye ars	3	1 3	5	1 7	3 8	
	23 - 25 ye ars	1 2	1 6	8	1 1	4 7	
Total		1 8	3 8	1 8	5 1	1 2 5	

DISCUSSION

Research from all around the world has shown that PMS affects women of reproductive age frequently and disrupts their social lives on a daily basis. Therefore, it would be beneficial for an effective management to identify the most prevalent symptoms and their covariance. Our sample's PMS prevalence of 58.4% is significantly lower than that of Nigeria, where the prevalence was 59.4% in 2022, lower than previously reported rates in Nigeria [27,28], and 81.3% in Northwest Ethiopia [29]. However, it is higher than the 46.9%, 37.0%, and 39.5% rates previously reported in Midwest Brazil [30], Northern Ethiopia, and [31], and Tiaiwan [32] correspondingly. In our research, we found that there is a significant effect of the Duration of MC, as we found that female students whose period is not regular are the ones who suffer most from premenstrual symptoms, as the samples of female students who irregular their period were 36 female students and 28 from that female students were suffering from symptoms, most of which were moderate intensity, while in previous research and research in Nigeria there was

no effect of the duration of MC .

It is unclear how many participants have ever used clinical services to address their PMS issues, however 50 (40.0%) of them reported utilizing various medications to alleviate their symptoms. For their symptoms, the remaining 75 (60%) did not take any medication. Nonetheless, 58.4% of participants said they had PMS symptoms, which indicates that almost 24% of individuals do not use medicine to treat their symptoms. Most likely not because it doesn't negatively affect their daily lives or academic pursuits, but rather because some women believe PMS cannot be treated, and others have turned to fate as a result. They are therefore reluctant to discuss their suffering with others. Therefore, it is advised that medical professionals educate women by planning outreach initiatives or trainings on PMS. The most common medicine type taken by people with PMS symptoms was painkillers.

Conclusion

Our results showed that, with a prevalence rate of 58.4% and peak symptom severity, PMS is common among college students. Data from daily rating forms for at least two menstrual cycles must be gathered in order to substantiate the study's initial findings about the most often reported PMS-related factor among young AL-Muthanna women.

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