

Impact Premenstrual Syndrome on Psychological and Somatic Problem among Students Nursing College in Babylon City

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Abstract: Back ground: The study aims to explore the impact of premenstrual syndrome on psychological and physical problem among students nursing college at Babylon city. The association between premenstrual syndrome and some of reproductive 'characteristics. Methodology: A descriptive analytic design was used on purposive (non probability) sample of 76 students the period between March – November, 2013. were enrolled in this study from Self administrative questionnaire was used by the investigators for the present study. The validity and reliability of the instrument was determined by using through the panel of experts, and internal consistency through the computation of Alpha Correlation Coefficient. The data have been collected through the utilization of the self-administrated questionnaire as a mean of data collection. Data analysis was employed by applying the Statistical Package for Social Science version 21.0 (SPSS). Results: The finding of the study showed that the current age of female ranged between (21-23) years and represented 53,9%, the age of female menarche ranged between (11-13) years recorded high percentage at 57,9% duration of menstrual cycle represented 51.3% ranged between 3-5 days ,amount of cycle 71% was normal ,frequency of menstrual cycle 94,7 were 10 days , regularity of cycle represented 72.4% were regular.the students experience a moderate level of premenstrual syndrome . The correlation analysis indicated that there is significant association between amount of cycle and psychological and physical problems but there is no association with remaining variables. Conclusion: The study concluded that there is significant association between the amount of menstrual cycle and psychological, physical problem at p-value 0.01. Recommendations: Future studies may be required to assess the whole premenstrual physical and emotional changes as well as the relationship between premenstrual syndromes and depression through pregnancy and the postpartum phase.

Keywords: premenstrual, psychological, somatic

1. Introduction

Premenstrual syndrome (PMS) is a multifaceted physical and emotional symptoms that happens repeatedly in a cyclic style previous menstruation (7–14 days before the start of menstruation) and then vanish after the menstrual period. Premenstrual syndrome, or PMS, is a collection of symptoms that start one to two weeks before your period(1).

Premenstrual emotional symptoms are conceptualized in feminist research as intra psychic phenomena because variations in emotions are due to the combination of environmental and psychological factors. PMS is not always cautious as pathological unless the women start suffering from feelings of a way of regulator in their behaviors, which may affect their relationships, with others, especially with the close husband(2). Most women have at least certain symptoms of PMS, and the symptoms go away after their days start. For some women, the symptoms are severe enough to confine with their lives. Any woman who has a period can get PMS, but the following patterns based on age and the social order have been observed PMS is more likely in the late 20s to mid 40s(3). Common PMS symptoms include breast swelling and tenderness Acne Bloating and weight gain, Pain - headache or joint pain Food desires Irritability, mood swings, crying spells, depression no one knows what causes PMS, but hormonal changes activate the symptoms. for many women ,the most disturbing feature of PMS is its variable impact on mood ,irritability ,anger expression of grief spells ,depression ,and anxiety may come and go in the days leading up to your period .some women even have grief with memory and thought during this time sleep complications(4).

No single PMS treatment mechanism for everyone. Over-the-counter pain relievers such as ibuprofen, aspirin or naproxen may help ease cramps, headaches, backaches and breast tenderness. Exercise, receiving enough sleep, and avoiding salt, caffeine, and alcohol can also help. In addition, named premenstrual tension (PMT) is a gathering of emotional symptoms, with or without physical symptoms, related to a woman's menstrual cycle(5).

While most women of child-bearing age (up to 85%) report having experienced physical symptoms related to normal ovulatory function, such as bloating or breast tenderness, medical definitions of PMS are limited to a consistent pattern of emotional and physical symptoms happening only during the luteal phase of the menstrual cycle that are of "sufficient severity to interfere with some aspects of life".(6)

In particular, emotional symptoms must be present every time to diagnose PMS. The specific emotional and physical symptoms attributable to PMS be different from woman to woman, but each individual woman's case of symptoms is predictable, occurs consistently during the ten days prior to the start of the menstrual period, and vanishes either in a moment before or shortly after the start of menstrual flow(7).

More than 200 different symptoms have been associated with PMS, but the three most prominent symptoms are: irritability, tension, and dysphoria (unhappiness). Common emotional and non-specific symptoms include stress, anxiety, difficulty in falling asleep (insomnia), headache, low energy, mood swings, greater than before touching sensitivity, and changes in libido Physical symptoms related

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with the menstrual cycle include bloating, abdominal cramps, constipation, swelling or tenderness in the breasts, cyclic acne, and joint or muscle pain.(8).

In addition, the symptoms of PMS vary among women and no two women are similar in this aspect. Cultural history, psychological and biological make up differences may be responsible for these varied manifestations of this state. The symptoms usually begin during the second half of the menstrual cycle - that is 14 days after the first day of the last menstrual period. The symptoms are reassured by themselves at the beginning of the after that period or 4 - 7 days after a menstrual period ends which falls in the first half of the menstrual cycle. The symptoms are physical, behavioral, or emotional.(9) According to the diagnostic criteria of the American Psychiatric Association (APA),premenstrual syndrome is recognized by observance a menstrual diary. Recording a minimum of 5 symptoms which continue during the last week of luteal phase until the first 4 time of the next cycle for at least 2 successive cycles and that interfere with job or daily activities and communication but are not by reason of mind disorders would suggest premenstrual syndrome.(9) Premenstrual is a psycho-neuro-endocrinal disorder of unknown etiology, often noticed just prior to menstruation. Various studies have shown appearance of important behavioral symptoms - depression, aggression, agitated depression and other symptoms like irritability etc. during PMS. throughout most of history, there has been a certain quantity of taboo involved in the discussion of the female menstrual cycle, there is certainly something uncomfortable about the idea that, every month, women lose about 70-80ml of blood(10). A woman experiences menstruation for about 5 days every month. The uterus develops a inside layer in preparation for pregnancy, and if the woman does not become pregnant, the uterus sheds its inside layer (exiting the body through the vagina) to develop a new lining for the following 2 month. The menstrual cycle begins anywhere around age 12, and continues until about age 50 when menopause begins .While some authorities consider changes in brain hormones to be responsible others believe certain foods may trigger PMS.(11)

2. Methodology

A descriptive analytic design was used on purposive (non probability) sample of 76 students in nursing college in order to attain the objectives of the present study all through the time between March –November, 2013. A study was conducted in 76 of the female distress

Behavioral symptoms that come into sight during PMS has been noticed. It has been found that there is a significant correlation between PMS and behavior modifications. Been common depression, violence tetchiness and so ordinary symptoms of this extremely Self-administrative questionnaire was used by the investigators for the present study which includes of three parts: the first includes the covering letter and characteristics of the female menstrual ; the second includes the psychological questioner which consists of 14 items measured by four Likert Scale. These items were rated to 4 level of Likert Scale and scored as follow: without symptoms = 0, mild = 1, moderate=2, sever = 3 disagreement. The result of premenstrual was calculated consistent with the cut off point for means of scores as following: - 0.25–0.81= mild; 0.82-1.37 = moderate; and 1.38 –1.93 5= sever; the level of premenstrual syndrome was calculated according to the total score as following: = mild; = moderate; and = sever. The validity and Reliability of the device was determined by using of face validity through the panel of experts, and internal consistency through the calculation of Alpha for present study

Through the consumption of the self-administrated questionnaire. Data analysis was employed by applying the Statistical Package for Social Science version 21.0 (SPSS).

3. Result

Table 1: Sample Rreproductive characteristics

Current age			Age at menarche		
	F	%		F	%
18-20	34	44.7	11-13	44	57.9
21-23	41	53.9	13-15	32	42.1
24-26	1	1.3			
total	76	100	total	76	100
Intensity of the menstrual cycle			Duration of menstrual cycle		
	F	%		F	%
Light	2	2.6	3-5days	39	51.3
Medium	54	71.1	5-7days	35	46.1
Heavy	19	25.0	7-10days	2	2.6
others	1	1.3	Total	76	100
Total	76	100			
Regularity of menstrual cycle			Frequency of menstrual cycle		
	F	%		F	%
regular	55	72.4	5 days	2	2.6
irregular	21	27.6	7 days	2	2.6
			10days	72	94.7
Total	76	100.0	Total	76	100

Table 2: Somatic Symptoms Outcome of female who have Premenstrual syndrome

No	Somatic Symptoms	Without symptoms		Mild		Moderate		Sever		M	SD	sig
		F	%	F	%	F	%	F	%			
1	Abdominal bloating	20	26.3	45	59.2	10	13.2	1	1.3	.89	.665	Mild
2	impaired concentration	23	30.3	32	42.1	18	23.7	3	3.9	1.01	.841	Mild
3	Back pain, muscle pain, joint pain	8	10.5	29	38.2	36	47.4	3	3.9	.93	.838	Moderate
4	Loss appetite	26	34.2	32	42.1	15	19.7	3	3.9	1.93	.737	Mild
5	breast tenderness, bloating	33	43.4	39	51.3	4	5.3	0	0	1.45	.588	mild
6	Constipation	54	71.1	18	23.7	4	5.3	0	0	.62	.579	without
7	Limb edema	59	77.6	12	15.8	5	6.6	0	0	.39	.585	Without
8	Drowsiness and dizziness	28	36.8	31	40.8	15	19.2	2	2.6	.29	.816	Mild
9	Fatigue and energy loss	12	15.8	35	46.1	26	34.2	3	3.9	.88	.772	Mild

10	General body discomfort	17	22.4	30	39.5	26	34.2	3	3.9	1.26	.833	Mild
11	Headache	33	43.4	25	32.9	16	21.1	2	2.6	.83	.855	without
12	Sleeping or insomnia	27	35.5	24	31.6	23	30.3	2	2.6	1.00	.879	Without
13	Nausea and vomiting	51	67.1	19	25	4	5.3	2	2.6	.43	.718	without
14	Weight gain	62	81.6	10	13.2	3	3.9	1	1.3	.25	.592	without
										11.39	5.893	

F=frequency ,MS= mean of score ,SD=stander deviation

Table 2 shows the mean of score(MS)of the sample in the area of somatic symptoms they ranged without symptoms somatic problem including 6 items No(6,7,11,12,13,14) range from 879-579%,mild level of somatic symptoms

include 7 items of 1,2,4,5,8,9,10, range from (841- 833)% to moderate level of somatic symptoms include item 3(Back pain, muscle pain, joint pain).

Table 3: Sample psychological symptoms of female who have premenstrual syndrome

No	Psychological Symptoms	Without symptoms		Mild		Moderate		Sever		M	SD	sig
		F	%	F	%	F	%	F	%			
1	(Depressed mood) A state or sudden sadness &angry	23	30.3	30	39.5	19	25	4	5.4	1.05	0.878	Mild
2	Anxiety or tension	20	26.3	32	42.1	21	27.6	3	3.9	1.09	0.836	Mild
3	Decreased interest in usual activities	18	23.7	32	42.1	22	28.9	4	5.3	1.16	0.849	Mild
4	Concentration difficulties Low self-confidence	36	47.4	24	31.6	14	18.4	2	2.6	0.76	0.846	Symptoms Without
5	The mood of severe depression	26	34.2	29	31.6	18	23.7	3	3.9	0.97	0.864	Mild
6	Sense of unusual physical disorders	39	51.3	26	38.2	11	14.5	0	0	0.63	0.727	Symptoms Without
7	Feeling guilty	56	73.7	13	34.2	7	9.2	0	0	0.36	0.647	Without
8	Feeling disappointed accompanied by sever crying	49	64.1	17	22.4	8	10.5	2	2.6	0.51	0.792	Without
9	Hypersensitivity and severity of agitation	35	46.1	22	28.9	18	23.7	1	1.3	0.8	0.849	Without
10	Tendency to isolation and loneliness	35	46.1	26	34.2	14	18.4	1	1.3	0.75	0.802	Without
11	The lessening of self-worth and self-contempt	57	75	9	11.8	8	10.5	2	2.6	0.41	0.786	Without
12	Mood swings and irritability	23	30.3	33	43.4	17	22.4	3	3.9	1	0.833	Mild
13	A sense of personal changes	44	57.9	21	27.6	10	13.2	1	1.3	0.58	0.771	Without
14	A agitation	52	68.4	10	13.2	11	14.5	3	3.9	0.54	0.886	Without
15	Severe a tension	39	51.3	27	35.5	9	11.8	1	1.3	0.63	0.746	Without
16	Sense of extreme pressure out the home	42	55.3	19	25	14	18.4	1	1.3	0.66	0.825	Without
17	Hopelessness and helplessness	35	42.1	27	35.5	11	14.5	3	3.9	0.76	0.846	Without
										12.36	8.863	

M.S: Mean of score, S.D: Standard Deviation, M: mild , Mo: Moderate, High

Table 3 shows the mean of score(MS)of the sample in the area of emotional symptoms they ranged from without symptoms emotional problem including 12 items No(4,6,7,8,9,10,11,13,14,15,16,17) range from 886-647%,mild level of emotional symptoms include 5 items of 1,2,4,5,12, range from (878- 833)%

Table 4: Correlation Between somatic problem and female' reproductive characteristic of cycle

Correlation	Current age	Age of female menarche	Duration of menstrual cycle	Amount of menstrual cycle	Frequency of menstrual cycle	Somatic problem
Current age	1					
Age of female menarche	0.012	1				
Duration of menstrual cycle	-0.155	0.012	1			
Amount of menstrual cycle	0.429	-0.155	.194**	1		
Frequency of menstrual	-0.203	-0.203	-0.186	-0.156	1	
Somatic problem	0.194	-0.017	-0.300**	-0.186	195	1

** Correlation is significant at the 0.01 level (2-tailed).

The findings indicate that there is no significant association between somatic problem and characteristic cycle except amount of cycle and somatic which was correlated significantly at p-value 0.01 respectively

Table 5: Correlation Between emotional problem and female' characteristic of cycle

Correlation	Current age	Age of menarche	Duration of menstrual cycle	Regularity cycle of	Amount of menstrual cycle	Frequency of menstrual cycle	Emotional problem
current age	1.000						
Age of female menarche	-.005	1.000					
Duration of menstrual cycle	.141	-.166	1.000				
Amount of menstrual cycle	.012	-.155	.429**	1.000			
Frequency of menstrual cycle	.077	.126	-.186	-.203	1.000		
Regularity	.0219	.129	.012	-.014	.012	1.000	
Emotional problem	.038	.041	.040	-.530	-.134	.259	1.000

Correlation is significant at the 0.01 level (2-tailed)**

*. Correlation is significant at the 0.05 level (2-tailed).

This table shows that there is significant association between the amount of menstrual cycle and emotional problem at p-value 0.01

4. Discussion

The statistics of table (1) indicates that 76 of the sample was single; and current age of female were ranged between 21-23 years old represented 53.9, the age at menarche 11-13 recorded high percentage at 57.9%, duration of menstrual cycle represented 51.3% ranged between 3-5 days, amount of cycle 71% was normal, frequency of menstrual cycle 94,7% were 10 days, 72,4 % were normal cycle. The findings in the current study regarding to reproductive characteristic is matching with a study In the United States, the average age for a girl to get her first period is 12(11). This does not stand for that all girls start at the identical age. A girl can start her period anytime between the ages of 8 and 15. Most of the occasion, the first period starts about 2 years after breasts first start to develop. If a girl has not had her first time by age 15, or if it has been more than 2 to 3 years because breast growth in progress, she should see a doctor(12). This result is not in agreement with the study of American college it's found that Ninety-six, self-referred females having PMS in the age group of 18-45 years, having regular normal menstrual cycle ranging 21-35 days(13),

For the duration of your period, you shed the thickened uterine inside layer and further blood through the vagina. Your period may not be the same every month. It may also be diverse than other women's periods. Periods can be light, moderate, or heavy in conditions of how much blood comes out of the vagina this is called menstrual flow(14). The length of the period also varies. Most periods last from 3 to 5 days. But, anywhere from 2 to 7 days is normal. For the first few years after menstruation begins, longer cycles are common. A woman's cycle tends to shorten and become more regular with age. Most of the time, periods will be in the range of 21 to 35 days separately. when your menstrual cycles come on a regular basis this means that important parts of your body are working normally. In some cases, not having menstrual periods can mean that your ovaries have congested producing normal amounts of estrogen. absent these hormones can have important effects on your in general health.

Table 2 shows the mean of score (MS=11.39) in the part of somatic symptoms outcomes. They ranged lacking symptoms somatic trouble. Such as, Constipation, extremity edema, Headache, Sleeping or insomnia, Nausea and vomiting, Weight gain. This result is not in agreement with the study of Tabassum who found that 20 to 90% of women have a common sense of symptoms, While be extra severe with 5 to 10% of them 3 to 10% of females in the age of fertilization do not have at all-Symptoms(15).

Table 3 shows the mean of score (MS=11.39) of the sample in the area of emotional symptoms they ranged from (without symptoms) emotional problem as well as attention difficulties Low self-confidence, Sense of curious physical disorders, mood guilty, A agitation, bent to separation and

loneliness, A sense of personal changes, A agitation, Severe a strain sense of extreme pressure out the home, Hopelessness and helplessness. This is congruent with study conducted by Women believe that the personal relationship suffer the most as a result of the emotional changes of PMS. The study shows that 72% of women feel that PMS depressingly affects their association with their husbands/significant others and 62% of them feel it negatively affects their rapport with their children(16). Dalton who reported that 46% of all admissions in psychiatry area and 53% of attempted suicides were during menstruation or pre-menstruation (17).

The result in table 4 indicate that there is no significant association between somatic problem and characteristic menstrual cycle except amount of cycle and somatic which was correlated significantly at p-value 0.01 respectively. Table 5 shows that there is significant association between the amount of menstrual cycle and emotional problem at p-value 0.01. This finding was have the same opinion with Nader(18), who said No relationship between the premenstrual syndrome and the variables associated with menstrual cycle demographic or alive conditions or muscular effort and occupational psychological condition the level of social tension and features of the menstrual cycle or emotional problem, (19) they said that the cause for the appearance of the symptoms of mood swings as a result of ovarian hormones when women who have too much sensitivity or not prepared mood additive. The cultured women reported least about psychological symptoms as they are alert about these symptoms and its relative to premenstrual period; however, most of them reported only the physical symptoms(20). In addition, severe symptoms were found to be higher between participants who has longer duration of menstrual cycles and who are older.

5. Conclusion

The women's experienced moderate level of premenstrual symptoms related to their psychological and somatic problems.

References

- [1] D. K. Menstruation and acute psychiatric illness. *British Medical Journal* (2007); 148-149.
- [2] D K. The premenstrual syndrome Spring field, III. Charles C. Thomas, (2006).
- [3] H. U. The diagnosis of premenstrual syndromes and premenstrual dysphoric disorder--clinical procedures and research perspectives". *Gynecol. Endocrinol.* (2004). 19 (6): 320-34.
- [4] Ch. JC. P "The strange case of Dr. Jekyll and Ms. Hyde: how PMS became a cultural phenomenon and a psychiatric disorder". *Annu Rev Sex Res* (2002). 13: 274-306. PMID

- [5] L. LM.; Kaptein, AA.; Helmerhorst, FM. "Oral contraceptives containing drospirenone for premenstrual syndrome." *Cochrane Database Syst Rev* 2(2012).
- [6] K.DR, Gyulai L, Freeman EW, Morrison MF, Baldassano C, Dubé B ("Premenstrual dysphoric disorder and psychiatric co-morbidity". *Arch Women's Mental Health* 7 (1) February(2004).: 37–47.
- [7] W. H. *Women's health: Readings on social, economic, and political issues*. Sage Publications. (2004).
- [8] A. L "Criminal Law: Premenstrual Syndrome in the Courts?". Retrieved(2010)
- [9] L. J. *Gender and the Social Construction of Illness*. 2nd ed. Walnut Creek, CA: Altamira Press, (2002).
- [10] Gh. P, Sadatian SA. *Cardinal Manifestations & Management of Diseases(CMMD)*. 2nd ed. Tehran: Noure Danesh Publication; (2005). 125-45 p.
- [11] D. L. Mazyck P. & Hunter M. Premenstrual syndrome. *American Family Physician* (2003)67, 345–349
- [12] American College of Obstetrics and Gynecology (ACOG) Practice Bulletin: Premenstrual Syndrome. American College of Obstetrics and Gynecology, Washington, DC. (2005)
- [13] M. J.& Ussher J. A complex negotiation: women's experiences of naming and not naming premenstrual distress in couple relationships. *Women and Health* (2008)
- [14] Tabassum S., Afridi B., Aman Z., et al .Premenstrual syndrome: frequency and severity in young college girls. *Journal of Pakistan Medical Association* . (2005) 55, 546–549.) 47, 57–77
- [15] M. M. W., *The Psychology of Women: Sixth Edition* 2008
- [16] Canning, S; W. Mitch; Orsi, A. Julie; Simpson, Nigel; Dye, Louise. "The Efficacy of Hypericum perforatum (St John's Wort) for the Treatment of Premenstrual Syndrome"(2010). *CNS Drugs* 24 (3): 207–25.
- [17] L. LM.; Kaptein, AA.; Helmerhorst, FM. (2012). "Oral contraceptives containing drospirenone for premenstrual syndrome." *Cochrane Database SystRev* 2
- [18] R. AJ. Lewis, EI (November 2013). "Treatment of premenstrual dysphoric disorder". *Womens Health (Lond Engl)* 9 (6): 537–56. doi:10.2217/whe.13.62.PMID 24161307
- [19] Freeman EW, H. SM, Rickels K, Legler JM, Lin H, Sammel MD: Core symptoms that discriminate premenstrual syndrome. *J Womens Health* 2011, 20:29-35. Publisher Full Text
- [20] Biggs WS, Demuth RH: Premenstrual syndrome and premenstrual dysphoric disorder. *Am Fam Physician* 2011, 84:918-924. PubMed Abstract | Publisher Full Text
- [21] Ch, Gunawardena NS: Premenstrual syndrome: the experience from a sample of Sri Lankan adolescents. *J Pediatr Adolesc Gynecol* 2011, 24:304-310. PubMed Abstract | Publisher Full Text