Premenstrual Syndrome among Kirkuk University Students

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Abstract:

Background: Premenstrual syndrome (PMS) is a common menstrual disorder precipitated by stress and tensions either at home or at work and particularly affect women during their reproductive live mostly in their reproductive live mostly in their twenties and thirties.
Objective: To estimate the prevalence of PMS among Kirkuk University Students and its effect on their activities and learning process.
Patients and Methods: This cross-sectional study was conducted during the period 10th/11/2010-10th/3/2011 among 224 Kirkuk University students; by using a special questionnaire form which includes information about: name of the college, age of the student, marital status and physical and psychological symptoms of PMS.
Results: Majority of the students included in the study complained from more than one symptom of PMS; and PMS affect their activities.
Conclusion: PMS symptoms affect the study and training of the students during their academic year.
Recommendation: Advice the girls to take prophylactic drugs and avoid consumption of food and beverage that are high in sugar content or taking sweets which might aggravate menstrual symptoms.
Key wards: Premenstrual Syndrome, Kirkuk, University, Students.

Introduction:

Premenstrual syndrome(PMS) is the recurring of cyclical somatic, psychological and emotional symptoms that happened in the luteal premenstrual phase of menstrual cycle and resolved by time of menstruation ceases and affect women during their reproductive life [1, 2, 3, 4].

More than 200 potential symptoms of PMS identified in different studies and the estimated frequency of PMS in the general population varies from (30-80%) of women of reproductive age [5, 6, 7]. PMS is commonly precipitated by stress tension either at home or works; and women awareness of symptoms related to PMS [8, 9].PMS is most prevalent in women in their 30s and 40s with a great incidence in women with a past history of postpartum depression or other effective disorder [10].

The objectives of this study are to:

1- Find out the prevalence of PMS among Kirkuk University female students.
2- Determine the effects of PMS on the activity and learning processes of the students.

Patients and Methods:

This cross-sectional study was conducted among female Kirkuk university students during the academic year2010-2011. The study sample was composed of (224) students chosen randomly from all colleges of Kirkuk University; except college of agriculture due to its geographical location. A special questionnaire form was designed by the researchers which includes the following information: name of the college, age of the student, marital

status, regularity and characteristic of menstrual cycle, the physical and psychological symptoms from which the student suffer during PMS such as (fatigue, abdominal cramps, headache, poor concentration, depressed mood) and the effect of PMS on their activities such as (difficulty to continue training, visiting friend, taking leave from college). The validity and reliability of questionnaire was secured. Chi-square test was used as a test of significant for the results and P-value less or equal to 0.05 was regard as statistically significant.

Results:

Table 1 shows the percent distribution of the study sample according to the type of college, where about quarter of them were either students of medical or management and economy, or education colleges and the least percentage (8%) belong to engineering college and this is because the number of female students was few.

Table 2shows that (92%) of the study participants were single, (64.3%) of them had regular menstrual cycle, and (75.4%) of them had moderate amount of menstrual flow and (18.8%) with heavy amount.

The type of symptoms associated with PMS among the study sample is shown in table3, where the majority (80.0%) of the study sample were suffering from abdominal cramps; and two-third of them were suffering from fatigue. About (55%; 52%,48.2%) of the sample study were suffering from generalized muscle and joint pain, abdominal bloating or swelling and breast tenderness respectively. Only (10.7%) of the study sample were complained from swelling of extremities.

The psychological symptoms associated with PMS among the study sample were shown in (Table 4); where the depressed mood ranked first (70.1%); followed by (68.3%, 67.4%) of the study sample suffered from irritability and anger and lethargy respectively. Half of study sample complained from poor concentration or confusion or readiness to cry and the least percentage (19.6%) was related to the feeling of hopelessness.

Table 5 shows the effect of PMS on the activities of students; (69.6%) of them complained of difficulty to study, (45.1%) from difficulty to continue training and (28.1%) from visiting their friend, (27.2%) taking leave from their college, and the percentage (19.6%) of them postponed their examination or absent from college.

Table (1): Percent distribution of the study sample according to the type of college.

Type of college	No. of students	%
Medicine	58	25.9
Management and Economy	54	24.1
Education	52	23.1
Science	42	18.8
Engineering	18	8.0
Total	224	100.0

Table (2): Background information about the study sample.

Marital Status	No. of students	%
Single	206	92.0
Married	18	8.0
Regularity of Menstruation		
Regular	144	64.3
Irregular	80	35.7
Characteristic of Menstrual Flow		
Scanty	13	5.8
Moderate	169	75.4
Heavy	42	18.8
Total	224	100.0

Table (3): Percent distribution of the physical premenstrual symptoms among the study sample.

Symptoms	(%)
Abdominal Cramps	80.8
Fatigue	67.0
Generalized muscle and joint pain	55.0
Abdominal bloating or swelling	52.7
Breast tenderness	48.2
Dizziness	36.6
Excessive sleep	34.0
Poor appetite	33.0
Insomnia	30.8
Headache	22.7
Binge eating	21.0
Swelling of extremities	10.7

Table (4): Percent distribution of the sample study by psychological symptoms.

Psychological Symptoms	Current study
Depressed Mood	70.1
Irritability and Anger	68.3
Lethargy	67.4
Poor Concentration	54.4
Confusion	50.5
Readiness to cry	49.1
Social Avoidance	43.3
High Energy	25.4
Forgetfulness	25.0
Feeling of Hopeless	19.6

Table (5): Effects of PMS on the activity of the study sample.

Type of activity	No.	%
Difficult to study	156	69.6
Difficult to continue training	101	45.1
Visit friend	63	28.1
Taking leave from college	61	27.2
Absentees from college	44	19.6
Postponding examination	44	16.9

Discussion:

PMS defined as physical or psychological symptoms that begin in the week prior to menstruation and resolved shortly after its onset [11,12]. The cause of it is uncertain and it results distress for many women preventing them from functioning at full capacity [13,14]. Premenstrual complaints were reported by (20%-90%) of women in their reproductive live and the most prevalent symptoms were depression (56%), irritability (48%), Anxiety (36%), and headache (23%) [6,15].

The prevalence of premenstrual symptoms among the sample study is attributed to the similarity of culture in both communities [16]; while the prevalence is less than that found among adult and this variation may be related to the problem definition or information about symptoms that collected or cultural differences [17]. About two-third and three-quarter of the study sample were with regular cycle and moderate menstrual flow respectively and these results are similar to Erbil study. The majority of the sample were suffering from more than one premenstrual symptoms; a result which is in line with results of other studies [5, 15,16]. About (80.8%) of study sample suffered from abdominal cramp and (67%) from fatigue and these results differ from Erbil and this may be due to information about symptoms collected.

More than two-third of the study sample were complained from depressed mood or irritability and anger or lethargy that was similar to finding reported by Freeman and his colleague [15]. Researches from university of Toronto meta analyzed more than 47 studies; found that just over (15%) of the negative moods can be attributed to premenstrual tension (PMT) [18]. About (69.6%) of the study sample stated that they have difficulty to study during PMS and this may be attributed to uncomfortability of students during their period and this in turn will affect their study and training, a fact that supports the opinion of Symonds E. and his colleague [7]. The prevalence of PMS symptoms in this study is the highest among those with irregular menstruation (90%) a result which is identical with Erbil study (P value =0.005).

Conclusion

High prevalence of female Kirkuk University students suffered from premenstrual syndrome and this have an effect on their study and training processes.

Recommendation:

1- Advice the girls to take prophylactic drugs and avoid consumption of food and beverage that are high in sugar content which may lead to more

severe menstrual symptoms.
2- Prepare suitable educational program to control PMS.
3- There is a need for further researches to identify the exact factors that may play a rule in the severity and prevalence of PMS.

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References:

[1]. Monga A. International student's edition; Gynecology by Ten Teacher 18ed.Holder Arnold, India
[2]. MceevoryM.,Chang J.,Coupeg S. Common menstrual disorder in adolescencence, Nursing International: American J. MCN.2004;29 (1) :41-9
[3]. Dcnster PA.,AderaT.,South-Paul J.Biological,Social and behavioral factors associated with premenstrual syndrome. Archives of Family Medicin.1999; 8(2):122-8
[4]. Greer I., Camern I., Kitchener H.,Prentice A. Mosby's Color Atlas and Text of Obstetric and Gynecology. Mosby, London.2001:34-41.
[5]. Rubinow and Scmiat P.J. Modeles for the development and expression of syndrome in premenstrual syndrome. Psychiatric Clinc of North America.1989; 12:53.
[6]. Gelder M.,MayonR.,Cowen P. Shorter Oxford Textbook of Psychiatry. Oxford University Press. 2001:502
[7]. Halbriech V. The diversity of premenstrual assessment Form, Acta Psychiatr Scand. 1982; 56: 46
[8]. SymndsE.,Symonds I. Essential Obstetric and Gynecology 4thed.,Churchill livingstone London.2004;225-253.
[9]. Singh BB, Berman BM.,Simpson RL.,Annechild A. Incidence of PMS and remedy usage : a national probability study. Altem Ther. Health Med.1988; May (3); 75-9
[10]. Beckmann C.,Ling F.,Bazansky B., BatesG.,Herbert W. Obstetric and gynecology 2nd ed. Williams and Wikins London.1999:279-83.
[11]. Scully J.,Bechtlod J.,DubovskiS.,Neligh G.. Peterson J., Psychiatry2nded. John Wiley and Sons, Newyork.1989:194.
[12]. BkstromT.,Sanders D.,Leask R., Davidson D., Warnerond P. Mood,Sexuality, Hormon and the menstrual cycle. Hrmonal levels and their relationship to menstrual syndrome. Psychosomatic,Medicine.December,1983;45(6):503-7.
[13]. Scott J.,Jenkins R. Psychiatric disorder in Companion to Psychatric studies, JonestoneE..Freeman C.,Zeally A., Churchill Livingstone London. 1998:551-62.
[14]. Emilia O. Premenstrual syndrome and premenstrual dysphoric disorder in Indonesia women. BerkaralLimu Ledoktern.2008; 4(3):148-53.
[15]. Freeman E.,Sondheimc S., Weinbuaumam P. Evaluating premenstrual symptoms in medical practice. Obstetric and Gynecology.1985; 65:500.
[16]. Haji A., Najib B. Premenstrual syndrome among college of nursing students.Zanco J.Med.Sci.2010; 14:170-75.
[17]. Chau J., Change N.,Effect of an education programme on adolescent with PMS. Health education research, 14 (6), 1999:817-30.
[18]. Kathy J., Oct. 18, 2012, Woman Health News; WWW.epidia.net.