IS THERE ANY IMPACT OF EMPLOYMENT STATUS ON PREMENSTRUAL SYMPTOMATOLOGY?

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ABSTRACT

Objective: To find out the difference between various premenstrual symptoms in employed and unemployed women.

Methodology: This was a cross sectional, prospective, comparative study conducted from May 2010 to April 2011, in Emergency and Out Patient sections of Obstetrics and Gynecology department, Lady Reading Hospital, Peshawar. By purposive non-probability sampling technique, 150 subjects were selected among attendants of regular patients, after fulfilling inclusion criterion of employed and unemployed women, in age group of 15-40years. Premenstrual symptoms were recorded as, Quantification of severity of psychological, social and physical symptoms, for two consecutive symptomatic cycles. SPSS 16.0 was used to analyze the data. Chi-Square test was used to compare the premenstrual symptoms between employed and unemployed women. P value ≤ 0.05 was taken as significant between pairs of variables.

Results: A total of 150 female patients recruited in the study. Out of these 50.7% (n=76) were employed and unemployed were 49.3% (n=74). Mean age was 26±6.2 years (15-45). Overall 72% (n=109) of subjects were symptomatic with one or more premenstrual symptoms. Psychological symptoms were found in 68 of 150 women (45%). About 50% of women in the employed group had psychological symptoms as compared to 40% in the un-employed group. Social symptoms were present in 64 of 150 women (42%). About 36 out of 76 employed women (47%) whereas 28 out of 74 un-employed women (37%) reported social symptoms. Physical symptoms were present in 89 of 150 women (59%). These were present in 43 out of 76 employed (56%) and 46 out of 74 un-employed women (62%).

Conclusion: The results suggest that the distribution of premenstrual symptoms does not vary significantly between employed and un-employed women. Although different groups of females may have different manifestations, these are not statistically significant to emphasize the role of environmental factors in its causation.

Key Words: Premenstrual symptoms, Premenstrual syndrome, employed women, unemployed women.

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INTRODUCTION

Premenstrual syndrome (PMS) is a psycho-neuro-endocrine disorder with biologic, psychologic and social parameters. A woman is considered to have PMS if she complains of recurrent psychological or somatic symptoms (or both), occurring specifically during the luteal phase of menstrual cycle and which resolve in follicular phase at least by the end of menstruation[1-3]. The symptoms may include headache, breast tenderness, pelvic pain, premenstrual tension, irritability, dysphoria and mood lability[1,4,5].

PMS is a common cyclic disorder of young and middle aged women. Up to 75% of women experience some recurrent premenstrual symptoms; 20-40% are mentally or physically incapacitated to some degree and 5% experience severe distress[6].

Various treatment options have been proposed including life style changes for mild symptoms and supplementation with medication in case of moderate to severe symptoms[7-9]. This may include from simple dietary supplementation of calcium and evening primrose oil to selective serotonin reuptake inhibitors such as Fluoxetine, which offer most effective symptomatic

relief[10-12]. Hormonal interventions have been shown to be effective. Medical menopause with Gonadotrophin Releasing Hormone agonists is also under investigation[13,14].

Studies have evaluated its association with stress and working lifestyle[7-9]. In our study, we wish to analyze the effect of having an employed status on occurrence of recurrent premenstrual symptoms as this will allow better understanding of the psychological and physical aspect of the disease.

METHODOLOGY

This was a cross sectional, prospective, comparative study conducted from May 2010 to April 2011, in Emergency and Out Patient sections of Obstetrics and Gynecology department of Post Graduate Medical Institute, Lady Reading Hospital, Peshawar. By purposive non-probability sampling technique, 150 sample size was selected among attendants of regular patients, after fulfilling inclusion criterion of employed and unemployed women, in age group of 15-40 years, having regular menstrual cycles, without history of major depression, epilepsy or hypertension or taking medications for these disorders and those taking oral contraceptives, diuretics or corticosteroids. Recurrent premenstrual symptoms were recorded and PMS diagnosed as, Quantification of severity of psychological (e.g; tension, anxiety), social (e.g; lack of energy) and physical (headache, breast tenderness) symptoms, for two consecutive symptomatic cycles. Employment was defined as those women working outside their homes, engaged in paid jobs, and unemployment was defined as women including house wives, not engaged in paid jobs outside their homes. SPSS 16.0 was used to analyze the data. Mean±SD, frequency and percentages were used for numerical and categorical variables, respectively. Chi-Square test was used to compare premenstrual symptoms between employed and unemployed women. P value ≤ 0.05 was taken as significant between pairs of variables.

RESULTS

A total of 150 patients recruited in the study. Out of these 50.7% (n=76) were employed and unemployed were 49.3% (n=74). Mean age was 26±6.2 years (15-45). About 61% (n=91) patients were unmarried, 38% (n=57) were married, and one case each of widow and divorced. Overall 72% (n=109) of subjects were symptomatic with one or more premenstrual symptoms. About 58 out of 76 employed (76%) as against 51 out of 74 unemployed women (68%) complained of one or more premenstrual symptoms (Table No.1). Psychological symptoms were found in 68 of 150 women (45%). About 50% of women in the employed group had psychological symptoms as compared to 40% in the un-employed group. Social

Table 1: Premenstrual symptoms in employed and unemployed women

Employment status	Premenstrual Symptoms		Total
	Positive	Negative	
Employed	58	18	76
Unemployed	51	23	74
Total	109	41	150

P value= 0.309

Table 2: Comparison of symptoms among employed and un-employed women (n = 150)

Symptoms		Employed % (76)	Un-Employed % (74)	Total	P value
Psychological Symptoms	Symptoms present	50 (38)	40 (30)	45 (68)	0.245
	Symptoms absents	50 (38)	60 (44)	55 (82)	
Social Symptoms	Symptoms present	47 (36)	37 (28)	42 (64)	0.238
	Symptoms absents	53 (40)	63 (46)	58 (86)	
Physical Symptoms	Symptoms present	56 (43)	62 (46)	59 (89)	0.594
	Symptoms absents	44 (33)	38 (28)	41 (61)	

Table 3: Diagnosis of PMS in employed and un-employed women

		Employment status		Total
		Employed	Un-employed	
Diagnosis of PMS	Positive	35	30	65
	Negative	41	44	85
Total		76	74	150

P value=0.496

symptoms were present in 64 of 150 women (42%). About 36 out of 76 employed women (47%) whereas 28 out of 74 un-employed women (37%) reported social symptoms. Physical symptoms were present in 89 of 150 women (59%). These were present in 43 out of 76 employed (56%) and 46 out of 74 un-employed women (62%). Comparison of psychological, social and physical symptoms between employed and unemployed women is given in tables 2. About 46% of employed women compared to 40% of unemployed women had symptoms severe enough to be labeled as suffering from premenstrual syndrome (Table 3).

DISCUSSION

Premenstrual syndrome is a constellation of psychological, social and physical symptoms that affects the lives of a large number of women in their reproductive age. Among the finally selected 150 patients, employed and un-employed women were in almost equal percentage.

Up to 80% of menstruating women are estimated to experience premenstrual symptoms and according to the American College of Obstetricians and Gynecologists (ACOG) criteria, the prevalence of PMS is between 20-40%[2]. Moreover, recurrent premenstrual symptoms were noted in 72.7% of the cases while premenstrual syndrome was diagnosed in 43.3% of the cases, regardless of employment status[2].

Among the employed women, about two third were engaged in physically demanding jobs. It was noted that premenstrual syndrome was more common in those working in offices (sedentary, less physically active job). Gannon et al found that women with PMS were less physically active[9]. However, his data refers to exercise as a measure of physical activity. Rasheed et al, however, found out that a larger population of those who were physically active had higher premenstrual symptom scores than those who were sedentary[10].

When compared for premenstrual syndrome, the frequency of premenstrual syndrome was slightly higher in employed women (46%) than un-employed women (40%). However, the difference was not significant when chi-square test was applied. Regarding negative impact on routine functioning, employed women appeared to be affected more than un-employed women in this study.

In a study by Jabeen et al, it was found that employed women suffer from premenstrual syndrome to a greater extent as compared to un-employed women[7]. However, Collins et al demonstrated that employment was not related to premenstrual symptoms, but women in managerial jobs who experienced PMS perceived greater effects on their function than those in service jobs[11]. Yet another study by Deuster et al showed a lower prevalence of premenstrual syndrome in employed as compared to un-employed women[12].

Of the three sets of symptoms, employed women complained more of psychological and social symptoms, while the physical symptoms occurred more frequently in un-employed women. Different studies have quoted different symptoms as being more frequent among the participants[8,13].

CONCLUSION

The distribution of premenstrual symptoms does not vary significantly between employed and un-employed women. This stresses the inherent nature of the syndrome. Although different groups of females may have different manifestations, these are not statistically significant to emphasize the role of environmental factors in its causation.

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CONTRIBUTORS

NH conceived the idea, did data collection and wrote the manuscript. SP helped in data collection & writing up of manuscript. Both authors contributed significantly to the final manuscript.