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PREVALENCE, SOCIODEMGRAPHIC AND MENSTRUAL CHARACTERISTICS OF PREMENSTRUAL SYNDROME AND PREMENSTRUAL DYSPHORIC DISORDER AMONG UNIVERSITY STUDENTS

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Abstract: The study was conducted to investigate the prevalence, attitude, menstrual characteristic and practice of premenstrual syndrome and premenstrual dysphoric disorder among Govt. Collage University Faisalabad (GCUF) students. The cross sectional study was conducted in different departments of Govt. Collage University Faisalabad, Pakistan a total 600 participants participated in study of premenstrual syndrome. The clinical criteria of American College of Obstetricians and Gynecologist for PMS was used to determine the prevalence and menstrual characteristics of premenstrual syndrome in the student of Govt. Collage University Faisalabad. The questionnaire Performa was set in seven sections to observe the attitude of female student toward premenstrual syndrome and effect on normal life regarding to PMS. For reliving symptoms of PMS different herbal management strategies were describe in the study. The present results of research showed that PMS is common among females and disturb the quality of life. There is little awareness and because of considerable knowledge deficiency, many females do not consult the doctors for treatment.

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INTRODUCTION

Menstruation is a cyclical phenomenon in females. Many female experience premenstrual symptoms before menstruation or during menstruation. The common symptoms are tenderness in breast, nausea, vomiting, headache, abdominal bloating and irritability. The symptoms are mild and do not required treatment in some cases; however, it is seen that these symptoms are severe in 20% to 40% of patient and required special treatment (1). The severity of symptoms is known as premenstrual syndrome. Premenstrual syndrome includes variety of physical and emotional symptoms such as anxiety, depression, mood disorder, irritability and poor concentration. The psychological symptoms of PMS, which seriously affect the daily routine activity in 4-14% of women, are categorized as premenstrual dysphoric disorder (PMDD) (2).

According to study carried by Pal et all. in Pakistani females narrates that the most prominent physical symptoms like agitation, mood swings, cramps and abdominal bloating had been experienced by the women which commonly associated with premenstrual syndrome (3).

Some other symptoms like joint and muscle pain, breast tenderness and back pain were considered as most prevalent symptoms (4). Most frequently reported symptoms by the authors included anxiety, depression, anger and fatigue (5). Some skin disorders, gastrointestinal symptoms such as decrease appetite, headache and swelling of arms, legs (extremities) also experienced by women in premenstrual syndrome (6-7).

The pathophysiology of menstrual related disorder, especially premenstrual syndrome, include multifaceted

connections between procedures of the nervous system, reproductive hormones, and other modulators. These connections incorporate gonadal hormones, their metabolites, and a few neurotransmitter and neuro hormonal system, including serotonin, γ-aminobutyric acid, and rennin-angiotensin-aldosterone system. In weak women, reaction of these system to ordinary changes of gonadal hormones may add to articulations of manifestations. Disturbed homeostasis and hindered adjustment might be a significant hidden mechanism (8). Singular variety in stress responsiveness might be engaged with pathophysiology of premenstrual symptoms (9). The main objective of this study is to find out the overall perception of females towards PMS and premenstrual dysphoric syndrome. To check out the significant impact of PMS premenstrual dysphoric syndrome on the lives of female students going to the universities. To determine how many women goings to different institutes have the knowledge about treatment and risk factors related to PMS and premenstrual dysphoric syndrome.

METHODOLOGY

This cross-sectional study was be conducted on female participants of Government College University Faisalabad from February 23, 2018 to April 15, 2018. Different age group students were selected from different departments (Department of Eastern Medicine, Department of Physical Therapy, Department of Allied Health Sciences, Department of Zoology, Botany, Urdu and English) including both medical and non-medical. The sample size was 600 participants. All psychological and medical disorder students (known cases) as well as married women and students with menstrual irregularities were excluded. All unmarried female students with regular menstrual cycle for at least 3 months included both medical and non-medical living in rural and urban areas from age limit 18 to 23 years. A structure questionnaire was arranged according to demand and proper questions were added through literature searchers and modified by from already published studies. Before conducted to study the questionnaire was properly evaluated by two skilled and a competent professor. For significance, logical and transparency, 17 students were tested. The questionnaire consists of seven portions, the first portion consist of personal question for example age, department and socioeconomic status. In the second portion inquiring students for premenstrual symptoms like irritability, breast tenderness and abdominal bloating. The third part consists of questions related to the menstrual characteristics like cyclic regularity, length and duration of flow. In the fourth portion students were asked how premenstrual syndrome affects normal life like disturbance in normal routine, social events and university routine and also about aggravating factors like stress. The fifth portion related to the student's attitude towards PMS and discussed about vacation may be a choice during menstrual period. The sixth and seven portion consist of both general (pain killer, vitamin supplement, exercise and anti-depressant) and herbal management (tea, fennel, cardamom, ginger). It was necessary that patient must be present with social withdrawal and decrease in academic and work performance for at least two consecutive cycle. Data were analyzed by using (SPSS) version 18.0. Results were presented as frequencies and percentages.

RESULTS

Results were presented as frequencies and percentages (Table 1-2).

DISCUSSION

Premenstrual syndrome prevalence in Government Collage University Faisalabad is 52%. The incidence of PMS is very high in women who suffered a lot in stress condition, and belongs to urban area.

When the suffered in stress for a prolonged period of time, this may cause malfunctioning of neuroendocrine system and lead to PMS. In Adolescents, continuous physical and psychological changes occurs during the way to adulthood. Moreover, they take stress of their studies and reproductive health. The common symptoms were tenderness in breast (38%). The other frequent symptoms included angry outbursts (57.7%), anxiety (53%), and irritability (65%%), Mood swings (68%), headache (32.5%), Depression (39.8%), Fatigue (72%), Increase sleep (38%), Decrease sleep (32%), Abdominal Bloating (54%), Appetite change (53.5%), Swelling in arms and legs (12%), Acne (32%) which was related to previously reported findings among adolescents (1-2). In our study, one of the PMS symptoms in participants was present in high proportion i.e. (86%). Number of factors involved in PMS, including environmental factors dietary habits, genetic factors, social factors, i.e., ethnicity and culture, cigarette smoking, socioeconomic status,alcohol consumption, exercise and menstrual factors i.e., menarche and pattern of menstruation) (10). Moreover, it is more common in urban area (61.5%) and in Rural area (38.5%). According to this study mostly girls experience irregular menstrual flow (53%) and 24% girls with regular menstrual flow. Menstrual flow in 24% female is <21 days, 53.8% female having menstrual flow of 21-30 days and menstrual flow in 22% female is <35 days.

Duration of menstrual flow in 39.5% female is 1-8 days, 43% having 3-6 days and 17% having menstrual duration of >7 days. 52.5% female experience normal amount of menstrual flow. About, 37.5% experience heavy menstrual flow and 10% experience light menstruation. According to this study premenstrual syndrome effects the normal routine of daily life. 83%female disturb their normal routine due to the effect of premenstrual syndrome. About 61.5% female missed their university or work, 36.5% female missed their social events & 46% having stress exacerbates.

CONCLUSION

The present results of research showed that PMS is common among females and disturb the quality of life. There is little awareness and because of considerable knowledge deficiency, many females do not consult the doctors for treatment. The large number of females said that stress and diet exacerbates their premenstrual syndrome, as stress is a common problem of our society. Research on large scale is required to be conducted females from different socioeconomic background and status to better strategies for management of this disease.

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Table 1: Socio Demographic Characteristics

Variable	Frequency	Percentage
Age		
18-20	400	78%
21-22	400	36%
23-25	400	11%
Residence		
Rural	400	38.5%
Urban	400	61.5%
Educational Level		
Medical	400	66.5%
Non-Medical	400	33.5%

Table 2: Symptoms of PMS

Symptoms	Yes (%)	No (%)
Irritability	65	35
Anxiety	53	47
Mood Swing	68	32
Headache	32.5	67.5
Depression	39.8	60.5
Fatigue	72	28
Increase Sleep	38	62
Decrease Sleep	32	69
Abdominal Bloating	54	54
Appetite Change	53.5	46.5
Swelling in Arms & Legs	12	88
Acne	32	68
Breast Tenderness	38	62