

TO FIND OUT THE PREVALENCE OF PREMENSTRUAL SYNDROME AND IT EFFECTS ON WORK PERFORMANCE AMONG THE YOUNG FEMALES OF PARUL UNIVERSITY: A CROSS SECTIONAL STUDY.'

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ABSTRACT

Introduction: Women health disorders are very commonly seen in an individual. Premenstrual pain is also one of the health problems that is widely seen every year. This study is done to find out the prevalence of premenstrual syndrome and its effects on work performance among the young females of Parul University.

Aims: To determine the prevalence of work related premenstrual pain associated work factor and impact of work related menstrual pain among young females of Parul University-Vadodara city.

Materials & methods: Total number of young females of Parul University were analysed and questionnaire will be used to collect information about premenstrual pain in young females of Parul university of Vadodara city.

Results: Total 189 participants were included in the study. The results suggested 15% of the population always having muscles and joint pain and 21.4% of the population always having generalised body pain during PMS phase. While 16.8% of population had suffered from impaired work performance during PMS phase. This study also suggested that 40.7% of the population were going through abdominal cramps in PMS phase.

Conclusion: From the outcome of this study it was concluded that there is high prevalence of premenstrual pain among young females of Parul University. This study represents high chances of work related premenstrual pain.

Keywords: Premenstrual syndrome, Work productivity, Young female.

INTRODUCTION

PMS is defined by international statistical classification of diseases and related health problem 10th revision (ICD-10) as occurrence of one premenstrual symptom in a list of symptoms which include mild psychological discomfort, feelings of bloating and weight gain, breast tenderness, swelling of hands and feet, various aches and pains, poor concentration, sleep disturbances and changes in appetite, restricted to the luteal phase of menstrual cycle and cease with commencement of menstrual flow¹.

Premenstrual syndrome (PMS) is characterized by physical and mental symptoms during the luteal phase of the menstrual cycle; however, symptoms improve rapidly with the onset of menstruation. PMS is commonly seen in women of reproductive age and can be accompanied by emotional and physical symptoms².

The symptoms of which fall into three domains: emotional, physical and behavioural. These symptoms may be of such severity that they can disrupt interpersonal relations, social activities, work performance or quality of life. Women are affected irrespective of socioeconomic status, race or cultural background³.

Epidemiologically, PMS occurs in 20–32% of premenopausal women; the more severe symptoms of PMDD affect about 3–8% of premenopausal women⁴.

The symptoms present a cyclic and recurrent character, which are variable in quality and intensity. A severe form of PMS is classified as premenstrual dysphoric disorder (PMDD), according to the Diagnostic and Statistical Manual of Mental Disorders, fourth edition. The diagnosis of PMDD requires the prospective assessment of at least two consecutive menstrual periods. According to the International Statistical Classification of Diseases and Related Health Problems, 10th revision (ICD-10), the diagnosis of PMS requires the presence of one premenstrual symptom from a list of symptoms. These include mild psychological discomfort, feelings of bloating and weight gain, breast tenderness, swelling of the hands and feet, various aches and pains, poor concentration, sleep disturbances, and changes in appetite. These are restricted to the luteal phase of the menstrual cycle and relieved with the start of menstrual flow. Although there is a consensus that PMS encompasses various premenstrual symptoms, it is still unclear whether an essential number of symptoms for diagnosis exist and whether some symptoms are more important than others⁴.

The evolution of diagnostic criteria for PMS has a confusing and controversial history that has led to frustration among scholars and caregivers who are unclear of what symptoms constitute either disorder. The Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV TR) classified PMS as a mental disorder and termed it the premenstrual dysphoric disorder. Today, the tenth revision of the International Classification of Diseases (ICD-10) places PMS under “Diseases of the genitourinary system: Pain and other conditions associated with female genital organs and menstrual cycle” and labels it as Premenstrual Tension Syndrome⁵.

Treatment options of PMS include the use of psychotropic agents, Gonadotropin-releasing hormone agonists, and oral contraceptives. However, some agents showed addictive symptoms and significant adverse effects such as dizziness, drowsiness, and insomnia. Several studies reported that aerobic exercise improved physical and psychological symptoms in non-athlete girls with PMS. The effects of the resistive exercise on muscle performance, anxiety, and depression among both healthy and patients are well-established. Also, whole body vibration (WBV) showed improvements in depression in adolescent patients and mood state in swimmers. However, their effects on PMS are still unknown⁶.

This article is to find out the prevalence of premenstrual syndrome and its effect among the young females of parul university. Where a cross sectional study was performed among the young females to find out the sign and symptom which was experienced by individual's. Where premenstrual symptom which include mild psychological discomfort, feelings of bloating and weight gain, breast tenderness, swelling of hands and feet, various aches and pains, poor concentration, sleep disturbances and changes in appetite.

METHODOLOGY

This was a cross-sectional study in which the retrospective data of 187 patients diagnosed with premenstrual syndrome in young females between the age group of 15-30 years of parul hospital, faculty of Physiotherapy, parul university, Vadodara from June 2020 to June 2021 were studied. The data was compiled and analysed in December-may 2021. The written and informed consent were taken from all patient participating in this study.

- Study Design: - Survey Study
- Study Population: - Young females of Parul University
- Study Duration: - 6 months

- Sampling Method: - Convenient Sampling
- Selection Criteria: - Females of age between 15 years to 30 years

Inclusion Criteria:-

- The age group of study population was from 15 years to 30 years
- young adults- 15 – 30 years of age
- young females only at Parul University
- Having some schooling and agreeing to participate in the survey by signing a letter of consent

Exclusion Criteria:-

- Females above the age of 30 years.
- Females outside from Parul University were excluded.

Materials required: - Laptop, Google form

Procedure:-

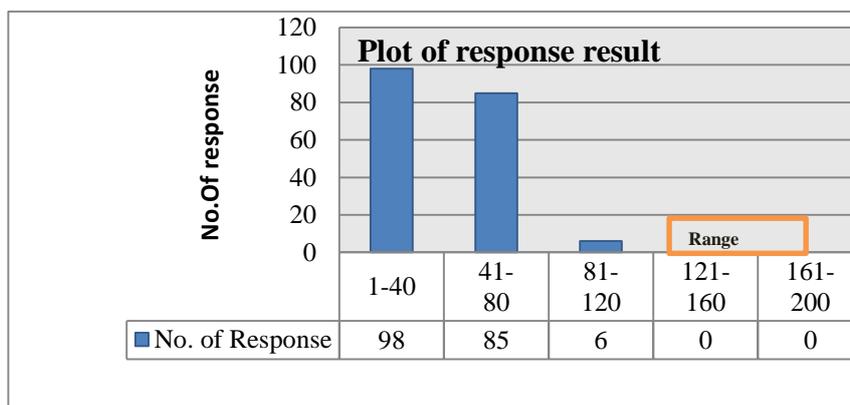
The study was conducted among young females of Parul University. The females were interviewed with the help of Google form which consisted a structured open ended questionnaire about Premenstrual Syndrome.

Each questionnaire consist a standardized, structured, one to one interview, according to a questionnaire designed to guide interview, avoiding any bias. Every female was firstly elucidated about the aim of our study and prevalence of pre-menstrual syndrome. Females were requested to answer the questionnaire according to the symptoms they observe during launched before and after the study. The survey was conducted only after taking a written consent from all the subjects

Outcome Measure: - Premenstrual Syndrome Scale (PMSS) ¹²

RESULTS

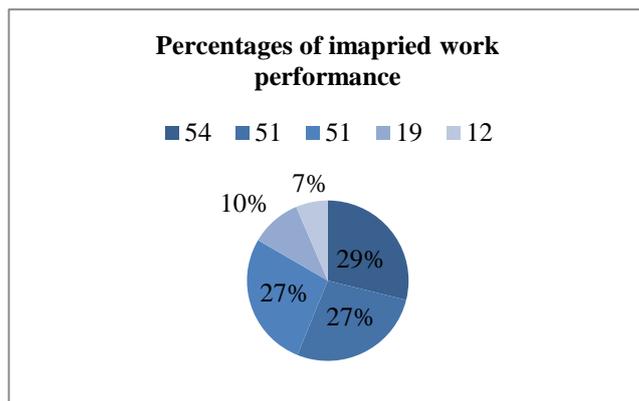
Total 189 participants were included in the study. The results suggested 15% of the population always having muscles and joint pain and 21.4% of the population always having generalised body pain during PMS phase. While 16.8% of population had suffered from impaired work performance during PMS phase. This study also suggested that 40.7% of the population were going through abdominal cramps in PMS phase.



Levels of symptom	Actual score	Percentage of score
No symptom	1-40	<20
Mild symptom	41-80	21-40
Moderate symptom	81-120	41-60
Severe	121-160	61-80
Very severe	161-200	>80

Total 189 participants were included where the result suggested that 98 participants out of total 189 participants scored less than 20% ranging between the actual score (1-40). While 85 participants out of total 189 scored 21%-40% ranging between the actual score(41-80). Where 6 participants out of total 189 participants scored 81%-120% ranging between the actual score (81-120).

Impaired work performance



Sr. No	Grades	Total no. of subjects	Percentages
1.	Never	54	28.9%
2.	Rarely	51	27.3%
3.	Sometimes	51	27.3%
4.	Very often	19	10.2%
5.	Always	12	6.4%

When the females were asked regarding the presence of impaired work performance in their premenstrual phase, 28.9 % (54) of the population never experienced these symptoms while 27.33% (51) rarely had this in their premenstrual phase. It was sometimes felt by 27.3 % (51) prior to their menstruation, while 10.2 % (19) experienced it very often and 6.4% (12) always had these symptoms in their premenstrual symptoms.

DISCUSSION

The aim of the study was to find out the prevalence of premenstrual syndrome and its effects on work performance among the young females of Parul University.

Total 187 participants were included in the study. The results suggested 15% of the population always having muscles and joint pain and 21.4% of the population always having generalised body pain during PMS phase. While 16.8% of population had suffered from impaired work performance during PMS phase. This study also suggested that 40.7% of the population were going through abdominal cramps in PMS phase.

Deepika B. et al, (2016) concluded in their study that frequency of PMS is relatively common in younger girls (18-25 years) and moderate form of PMS is most frequent which adversely affects the educational, social and emotional well-being of the young adolescent girls, so means should be adopted to reduce the prevalence of this disorder and mitigate the severity of symptoms⁷.

Breaux C. et al, (2000) concluded in their study that the group of women who suffer from both major depression and PMS, treatment might be particularly important and needed given that they have been found to be more impaired than women with one condition only. The risk for low self-rated health was highest in women with both conditions, which indicates that they are not only impaired on a psychological level but also feel physically unwell⁸.

Apeksha VT. et al, (2020) concluded in their study that as premenstrual Syndrome is becoming a common day to day problem in young girls hampering their life involving physical and psychic symptoms. Maximum participants do not seek medical advice and take self-treatment⁹.

Fikru WT. et al, (2014) concluded in their study that the prevalence of PMS in general is high among health sciences students of Mekelle University with prevalence of 37.0%. Severe symptoms have negative impact on academic and social performances of the students¹⁰.

Celene MLS. et al, (2006) concluded in their study that the use of psychiatric drugs (anxiolytics and anti-depressives) was associated with greater prevalence of PMS, which may signify that the women who used more medications were those who made more reports of symptoms during medical consultations. Thus, it is not thought to PMS are that the medications cause the symptoms, but that their use is a consequence of PMS. Good results in relation being obtained today through treatment using anti-depressives and, during some symptomatic periods, anxiolytics, since the symptoms of PMS have the same nature as those of depression and anxiety. The fact that only 20% of the women with PMS as defined in the present study were utilizing some form of treatment can be highlighted. It might be envisaged that the other women either did not have access to healthcare services or, when they went there, they did not received the due attention¹¹.

LIMITATION(s)

Limitation of our study is that it is confined to only young females of Parul University. Furthermore, age group was circumscribed from 15-30years (young females) also, the sample size was small.

CONCLUSION

The prevalence of PMS and its effect of impaired work performance in general are high among young females of Parul University with prevalence of 43.9%. The most common physical PMS symptom is muscle and joint pain and the commonest symptom is abdominal cramps due to which there is loss of interest in performing daily activities. Severe symptoms have negative impact on quality of life and impaired work performance, social performances of the young females by causing academic performance as well as job performance, which affect the life of the subjects.

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