



Premenstrual and Menstrual Symptoms of Adolescent Girls: Review Article

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ABSTRACT

Menstrual issues are the most prevalent of the many issues that teenage girls deal with. Menstrual issues are typically unreported since they are mild. Estimating the prevalence of menstrual issues, specifically dysmenorrhea, menorrhagia, and irregular menstrual cycles, was the aim of this study. Menstrual issues are a significant area of adolescent health, and since they are often unreported, it is essential to provide them the attention and care they need. Older women who ignore their menstrual issues suffer from compromised sexual and reproductive health. Dysmenorrhea and the symptoms of menstruation have a negative impact on women's daily life, with some missing school.

Health information for many Indian girls, the information on menstruation and puberty is deemed insufficient. Cultural factors had a unique effect on the menstruation experiences. There would be need of Research has been done on recently monastic adolescents, where there may be significant differences in their experiences with menstruation symptoms. The menarche age has lowered.

Key word - Premenstrual symptoms, menstrual symptoms, adolescent girls.

INTRODUCTION

In the Indian population, the prevalence and effects of premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) are not well understood. Thus, in order to determine the prevalence of PMS and PMDD among Indian women who are in the reproductive age range, we carried out this systematic review and meta-analysis.

A group of cyclically occurring physical, cognitive, affective, and behavioral symptoms that appear during the luteal phase of the menstrual cycle and go away at or shortly after the commencement of menstrual flow is known as premenstrual syndrome (PMS). The most common symptoms include headache, fatigue, bloating, backache, breast tenderness, food cravings, exhaustion, anxiety, irritability, social disengagement, and depression, while more than 200 symptoms have been documented. For most women, premenstrual syndrome began at the time of menarche.

Some Menstrual symptoms are a broad collection of affective and somatic concerns that occur around the time of menses. Some women have a variety of physical and/or emotional symptoms that may be more difficult during their monthly periods, while other women handle their periods effortlessly and with few or no worries. Premenstrual syndrome (PMS) and dysmenorrhea are two examples of menstruation-related disorders that can be used to categorize menstrual symptoms. Many women may experience menstrual symptoms that do not necessarily fit within the aforementioned diagnoses based on the quality, timing, or interpretation of the symptoms. While PMS is typically more concerned with emotional or psychological issues, dysmenorrhea is more closely linked to the pain sensations that come with menstruation. Nonetheless, the symptoms of these two menstruation-related diseases overlap significantly. While the high prevalence of menstrual symptoms may connote a relatively normative occurrence, the possible effect on other aspects of women's lives may be cause for concern.

Some research has turned its attention to premenstrual syndrome (PMS). The American College of Obstetrics and Gynecology defines PMS as physical and emotional symptoms that begin four days before menstruation and last five days. Affective symptoms include melancholy, impatience, anxiety, depression, and irrational outbursts in addition to physical complaints such as headaches, swelling extremities, breast tenderness, and stomach bloating. The frequency of PMS in teenagers is unknown. An essential determinant of women's reproductive health is the menstrual cycle. But a few years after menarche, the rhythm of menstruation changes and many teenage girls may not be aware of this. The target population's most common menstruation issues include premenstrual symptoms and dysmenorrhea. In India, just 48% of teenage females are aware of menstruation before their first period.

Women frequently suffer from menstruation and its associated symptoms, which can negatively affect their social, mental, and physical health. A meta-analysis revealed that the prevalence of symptoms associated to menstruation was 71.1% for dysmenorrhea and 47.8% for premenstrual syndrome (PMS). In addition to interfering with everyday activities, menstruation-related symptoms have an impact on academic performance and absenteeism in young women.

A general term for the symptoms a woman has just before her menstruation is premenstrual syndrome. It is described as mild psychological and physical symptoms that reoccur frequently throughout the luteal phase of the menstrual cycle and go away with menstruation. During the luteal phase of their menstrual cycle, up to 80% of women report one or more physical, psychological, or behavioral symptoms without experiencing a significant disturbance to their regular functioning.

REVIEW

1. 1. The Menstrual Cycle and Its Underlying Hormones Impact Symptom Expression among Women with Anxiety and PTSD, as Well as Psychological and Biological Processes Relevant to Anxiety and PTSD, were the Subjects of a Study to Evaluate Their Impact on Anxiety and PTSD. The findings on the protective effect of estradiol on recall of extinction learning in healthy women and the retrospective self-report of premenstrual exacerbation of anxiety symptoms are the most consistent.
2. An analysis of the effects of the menstrual cycle on outcomes related to mental health. A variety of health concerns in women have long been linked to the premenstrual phase of the cycle. Nevertheless, a recent quantitative analysis of the relationship between the menstrual cycle and severe mental health consequences has not been conducted.
3. We compare cycle effects to non-suicide mortality by looking at completed suicides, suicide attempts, suicidal thoughts, and psychiatric admissions. A meta-analysis of 32 publications with a total N of 3,791 was carried out. During menstruation, there is a 26% increased risk of suicide fatalities, a 17% increased risk of suicide attempts, and a 20% increased risk of psychiatric admissions. Additionally, we find that there is a 13% increased risk of mental admissions in the premenstrual period. Suicidal ideation was unrelated to the stage of menstrual cycle. Available evidence finds serious and consequential mental health outcomes in the menstrual and premenstrual phases.
4. Research has shown a hitherto overlooked link between polycystic ovary syndrome (PCOS), affective symptoms, neuroactive steroids, and comorbid sadness and anxiety. The majority of research on affective symptoms in PCOS-affected women, however, has been cross-sectional in nature, which has limited our understanding of how symptoms vary during the menstrual cycle and reproductive lifespan of these women, as well as any possible interactions between mood problems and NAS changes.
5. After adjusting for the impact of anxiety sensitivity, a known cause of menstrual misery, the current study examined the incremental validity of felt control over anxiety-related events in predicting the intensity of menstruation symptoms. Women who felt less in control of anxiety-related events were predicted to report more severe menstruation symptoms, especially in the premenstrual period. A group of forty-nine women, ages eighteen to forty-seven, who were in the follicular and premenstrual phases of the Anxiety Control Questionnaire, prospectively monitored their menstrual symptoms for a single cycle.
6. Premenstrual symptoms (PMS): Premenstrual syndrome (PMS) symptoms are reported by some women. Symptoms of this extremely prevalent illness include: Conflicts. Concepts. Stiffness. rapid changes in mood. Fatigue. vertigo. stomach bloating. Social seclusion. inability to concentrate. sensitive breasts. The intensity of these symptoms can vary. Additional symptoms could be headaches, constipation, diarrhea, fluid retention, or soreness in the joints or muscles. Changes in hormone or serotonin levels may be the cause of PMS. Disorder of premenstrual dysphoria: Some women experience a severe form of premenstrual syndrome known as premenstrual dysphoric disorder (PMDD). This can lead to the following symptoms: Depression. Mood swings. Anger. Anxiety. Feeling overwhelmed. Problems with concentration of attention. Irritability. Tension. Women should talk to their doctor for evaluation and treatment if they feel they may be experiencing PMDD. Depression may be the underlying cause.²⁰
7. **Menstrual symptoms** : Different women will have different premenstrual symptoms. Tenderness and edema in the breasts are typical symptoms. Stiffness. Stomach bloating. Outbreaks of acne. Pain in the back, stomach, or legs. Pregnancy-related syndrome. Given their similarities, some people might mistake early pregnancy signs for menstrual symptoms. These include delayed periods, breast tenderness or swelling, nausea, frequent urination, and fatigue.¹⁹ Negative Feelings - Feeling restless. Feeling lonely. The feeling of crying. A feeling of anxiety. Feeling depressed. level
8. Searched from PubMed, Cochrane Library, Scopus and IndMed for studies reporting the prevalence of PMS and/ or PMDD from any part of India, published from 2000 up to Aug 2020. We performed random-effects meta-analyses evaluated using I^2 statistic, subgroup analyses, and sensitivity analyses and assessed study quality. Estimated prevalence along with 95% confidence intervals (CIs) were reported for each outcome of interest. The quality of each study was evaluated using modified Newcastle Ottawa Scale (NOS). This review was conducted following the standard of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Meta-Analysis of Observational Studies in Epidemiology (MOOSE) guidelines. The protocol was registered prospectively in PROSPERO (CRD42020199787). Our search identified 524 citations in total, of which 25 studies (22 reported PMS, and 11 reported PMDD) with 8542 participants were finally included. The pooled prevalence of PMS and PMDD were 43% (95% CI: 0.35-0.50) and 8% (95% CI: 0.60-0.10) respectively. The estimated prevalence of PMS in adolescence was higher and account to be 49.6% (95% CI: 0.40-0.59). The heterogeneity for all the estimates was very high and could be explained through several factors involved within and between studies.

Discussion

Disorders of the menstrual cycle that may require examination. Menstruation that: has not started within 3 years of menarche. did not begin before the age of 14 with signs of hirsutism. did not begin before the age of 14 with a history or examination indicating excessive exercise or eating disorders. do not start at the age of 15. Occur more often than every 21 days or less often than every 45 days. Even within a single cycle, they happen every ninety-day interval.

extends beyond seven days.If the tampon or pad gets wet more than once every one to two hours, it has to be changed frequently.They are severe and linked to a family history of bleeding disorders or a history of excessive bleeding or bruising. It should be helpful to Inform girls and those who look after them (parents or guardians) about the normal cycle length range for subsequent menses as well as what to anticipate from their first menstrual period. When females start menstruation, doctors should inquire about the first day of the girl's most recent menstrual cycle and her menstrual pattern during every comprehensive or preventive care appointment. The early detection of possible health issues for teenage girls may be enhanced by the diagnosis of irregular menstruation cycles in adolescence.

Institutional-based cross sectional study was conducted among Wolkite University regular female students from June 15/10/2021 to 30/10/2021 by using simple random and multistage with systematic random sampling technique to select the study participants (n = 591). Data were collected using a self-administered, pre-tested, semi-structured questionnaire. Premenstrual syndrome scales comprised of 40 questions with three sub-scales were used to determine Premenstrual syndrome. From the total of 631 study subjects, only 591 had completed the questionnaire, giving a response rate of 93.7%. From 591 study participants, 224 (37.9%) [95% CI: (34, 40.9)] of them had premenstrual syndrome. Abdominal cramp (78.8%), depression (73.3%) and fatigue (72.9%) were frequent premenstrual symptoms experienced by students. Having family history of PMS [AOR: 4.05; 95% CI: (2.49, 6.58)], no history of sexual intercourse [AOR: 2; 95% CI: (1.12, 3.47)], severe menstrual pain intensity [AOR: 3.09; 95% CI: (1.58, 6.05)], irregular menstrual cycle [AOR: 2.26; 95% CI: (1.41, 3.62)], early age of menarche (< 13 years) [AOR: 2.64; 95% CI: (1.34, 5.19)], long duration of menses (≥ 7 days) [AOR: 3.56; 95% CI: (1.53, 8.37)] and using many pads (> 8) during menstruation [AOR: 4.44; 95% CI: (2.16, 9.12)] were factors significantly associated with premenstrual syndrome. 93.4% of students apply at least one coping mechanism for premenstrual symptoms, of which; taking rest (67.6%) and sleeping (60.7%) were common strategies.

Conclusion

Whole reproductive cycle which may play an important role in the emergence of premenstrual symptoms. PMS needs great attention as part of the health care service in India. The knowledge, expertise, experience, and capabilities of health education and promotion experts can be used in different environments (including health centers and schools) to achieve this goal.

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