



Exploring The Relationship Between Menstrual Distress Symptoms and their Impact on Overall Wellbeing in Female Young Adults

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ABSTRACT

The study aimed to investigate relationship between menstrual distress symptoms and its effect on the overall well-being of young adult females. Self-reported measures of menstrual distress symptoms and general well-being were collected from a cross section of young female adults. It is found that as menstrual distress increases its impact on general well-being tends to increase as well. The reason behind such findings is because of the discrepancy in the population size of both urban (80) and rural (70) sample. The urban population reported positive well-being and the rural ones reported a negative well-being, therefore, the overall correlation for the population turned out to be positive. Random and purposive sampling was utilized to choose the final group of 150 participants, and the initiative was taken to collect data from the suburban/ rural population as well, as the study contains participants only from one gender. The sample mainly consisted of females in the age group of 18- 35 years who experience menstrual distress symptoms. The data in this study was obtained with the help of the

standardized scales; (The Menstrual Distress Questionnaire (MEDI-Q)) and (The Psychological General Well-Being Scale (PGI GWS)) as well as a demographic information form. The findings suggest that a significant relationship between menstrual distress and the well-being of young adult females between the ages of 18 to 35 years has been found and there is a positive correlation between menstrual distress symptoms and the overall well-being of the participants.

Keywords: *Menstrual Distress Symptoms, General Well-Being, Young Female Adults*

INTRODUCTION

MENSTRUAL DISTRESS

Menstrual distress encompasses a spectrum of physical symptoms that disrupt the lives of individuals during their reproductive years. These symptoms can range from mild discomfort to debilitating pain and may include not only menstrual cramps but also a variety of other physical manifestations. These cramps result from uterine contractions triggered by the release of prostaglandins, which can cause intense pelvic pain radiating to the lower back and thighs. Dysmenorrhea is one of the major problems which is faced by around 70.2% Indian females (Omidvar, 2016). In addition to menstrual cramps, many individuals experience bloating, abdominal distension, and gastrointestinal disturbances such as diarrhea or constipation during their menstrual cycles. Hormonal fluctuations, particularly changes in estrogen and progesterone levels, can contribute to fluid retention and gastrointestinal discomfort, exacerbating these symptoms.

Menstrual challenges may manifest as headaches or migraines, which often coincide with the onset of menstruation or the premenstrual phase. Hormonal fluctuations,

neurotransmitter imbalances, and changes in cerebral blood flow are thought to underlie the increased prevalence of headaches during menstruation, affecting individuals' ability to function and engage in daily activities. Breast tenderness and swelling, known as “mastalgia,” are frequently experienced by menstruating individuals, with hormonal fluctuations during the menstrual cycle being a significant influencing factor (Kataria et al., 2021).

PREVALENCE OF MENSTRUAL DISTRESS

Nausea is a prevalent symptom experienced by many menstruating individuals, particularly during the premenstrual and menstrual phases. Studies have shown that approximately 30% to 40% of women report nausea as a symptom of PMS or menstruation. Hormonal variations, specifically fluctuations in estrogen and progesterone concentrations, are believed to play a role in the onset of nausea during the menstrual cycle. Changes in appetite, including increased cravings and changes in food intake, are common menstrual symptoms experienced by many women. Studies have found that approximately 50% to 60% of women report changes in appetite during the menstrual cycle, with cravings for certain types of food being particularly prevalent.

Acne is a common skin condition that affects a significant proportion of menstruating individuals, particularly during adolescence and adulthood.

Research findings indicate that approximately 40% to 50% of women encounter acne as a result of hormonal changes occurring during the menstrual cycle. Hormonal changes, particularly increases in androgens such as testosterone, contribute to the development of acne lesions, including pimples, blackheads, and cysts. Fluctuations in estrogen and progesterone levels may also influence sebum production and skin inflammation, exacerbating acne symptoms.

WELLBEING

Wellbeing is the holistic state of an individual's health, happiness, and satisfaction with life across various dimensions. Well-being extends further than simply the absence of illness or disease; it encompasses physical, mental, emotional, social, and sometimes spiritual dimensions. Achieving well-being involves attaining a sense of equilibrium, satisfaction, and direction in life. Physical well-being is linked to increased vitality, resilience against illnesses, and improved functional capabilities, enabling individuals to participate in daily activities with greater comfort and pleasure (Step toe & Kivimäki, 2012). Environmental factors such as pollution, noise, and urbanization can have detrimental effects on physical and mental health, underscoring the need for sustainable and healthy living environments. (Helliwell et al., 2012).

Epidemiology found that individuals with higher levels of overall well-being, assessed through measures of life satisfaction, positive emotions, and purpose in life, had a decreased likelihood of developing chronic illnesses like cardiovascular disease and cancer (Boehm et al., 2018). Individuals with higher levels of overall well-being, characterized by frequent experiences of positive emotions and satisfaction with life, exhibited greater resilience to stress and adversity. Overall well-being was associated with adaptive coping strategies, such as cognitive reappraisal and positive reframing, which helped individuals bounce back from negative experiences (Fredrickson et al., 2013).

DISTRESS SYMPTOMS AND THEIR IMPACT ON OVERALL BEING

Psychological distress in menstruating females encompasses a range of emotional and mental experiences that can significantly affect their well-being throughout the menstrual cycle. This distress often arises from a combination of physiological changes, hormonal fluctuations, and psychological factors inherent in the menstrual process. During menstruation,

many females experience mood swings, irritability, anxiety, and even depression. These emotional fluctuations can vary in intensity and duration, impacting daily functioning, interpersonal relationships, and overall quality of life.

Although menstruation is said to be a natural biological occurrence, it can be accompanied by a range of psychological symptoms that have a notable impact on a woman's mental well-being. Hormonal changes, specifically variations in estrogen and progesterone levels, significantly influence mood and emotional states during the menstrual cycle. For example, decreases in estrogen levels during the premenstrual phase have been associated with increased irritability and mood disturbances in some individuals.

Psychological distress tended to peak during the premenstrual phase, highlighting the impact of PMS and PMDD on mental well-being. Women experiencing severe menstrual symptoms were more likely to report higher levels of psychological distress (Banikarim et al., 2020). Significant psychological distress is experienced by women during menstruation, with symptoms such as dysmenorrhea and mood swings negatively affecting daily functioning and well-being. (Jones et al., 2018) Women experiencing severe menstrual symptoms, such as dysmenorrhea and mood disturbances, were more likely to report symptoms of depression, highlighting the significant impact of menstruation on mental health. women with more severe menstrual symptoms were at increased risk of experiencing depressive symptoms, underscoring the link between menstruation and depression. (White et al., 2021).

PREVALENCE OF SEVERE MENSTRUAL SYMPTOMS

The study looks at the frequency of menstruation-related psychological discomfort among public health students in the Kathmandu Valley, as well as the factors that contribute to

it. The study finds that the participants' most frequent symptoms were anxiety, mood fluctuations, and irritation. The results highlighted the critical nature of tackling psychological distress associated with menstruation as a noteworthy public health issue within this demographic. (Chaudhary, 2023). Among Hispanic female adolescents in the United States, dysmenorrhea was found to be prevalent, emphasizing the significance of understanding and addressing menstrual symptoms in diverse cultural contexts (Wang et al., 2016).

The prevalence and determinants of menstruation disorders in both rural and urban populations were examined in this study. 50.64% of the participants reported having dysmenorrhea as their most prevalent issue. Menstrual issues have been found to be significantly predicted by factors such as body mass index (BMI), age of menarche, physical activity, and mental health status in both urban and rural populations. Furthermore, just 3.30 percent of the participants knew what polycystic ovarian syndrome (PCOS) was. The results highlight the need for more education and assistance in managing menstrual health concerns (Sharma et al., 2022).

DISTRESS SYMPTOMS & QUALITY OF LIFE

Menstrual distress and quality of life among Indian female college students. 200 female students' self-report questionnaire responses were utilized in the cross-sectional study design to gather data. Higher levels of menstrual anguish were linked to poorer levels of satisfaction and well-being, according to a negative correlation between menstrual distress and quality of life (Singh et al., 2023) examining the connection between teenage girls in Qazvin, Iran, who led a healthy lifestyle and the severity and discomfort of their period pain. Enhancing self-actualization, stress management, and nutrition may lessen the intensity of menstrual anguish,

while increasing exercise and nutrition may lessen the severity of dysmenorrhea pain (Cholbeigi et al., 2022).

To participate, colleges at King Saud bin Abdulaziz University for Health Sciences (KSAU-HS), in Saudi Arabia, were asked to provide information on their demographics, menstrual patterns, perceived stress, and quality of life using the 20-item Short Form Health Survey (SF-20) and the Perceived Stress Scale (PSS), respectively. Menstrual irregularities may influence women's physical and mental health, social and academic functioning, and overall health. Stress levels were highest among those with eating problems, menorrhagia, and premenstrual symptoms. The study additionally showed a connection between poorer quality of life and premenstrual symptoms, irregular menstruation, and PCOS (Alaskar et al., 2021).

METHODOLOGY

AIM

The study aims to investigate the influence of menstrual distress symptoms on the well-being of young females aged 18 to 35 years.

VARIABLES OF THE STUDY

Independent Variable

Menstrual Distress: This term encompasses a variety of symptoms experienced by individuals before, during, or after their menstrual cycle. These symptoms may include mood fluctuations, fatigue, bloating, headaches, premenstrual syndrome (PMS), irregular periods, and painful menstruation (dysmenorrhea).

Dependent Variable

Overall Wellbeing: This refers to an individual's holistic state of health, incorporating physical, mental, and emotional aspects, along with their satisfaction with life. It encompasses factors such as life contentment, self-esteem, social connections, mental and physical wellness, and the ability to cope with stress.

RESEARCH OBJECTIVES

- To investigate the impact of menstrual distress on the well-being of young females aged 18 to 35 years.
- To study the correlation between menstrual distress and the well-being of young females aged 18 to 35 years.

HYPOTHESIS

- There is no significant impact of menstrual distress on the well-being of young females aged 18 to 35 years.
- There is no significant relationship between menstrual distress and the well-being of young females aged 18 to 35 years.

SAMPLE

In this study, 150 women participated. Random and purposive sampling were the techniques used for the samples. The age range of the participants was 18 to 35.

DATA COLLECTION INSTRUMENTS

The “**Menstrual Distress Questionnaire and PGI General Well-Being Scale**” were the two instruments used to collect the data.

DATA COLLECTION PROCEDURE

For this study, two standardized questionnaires were carefully selected: the "Menstrual Distress Questionnaire" and the "PGI General Well-Being Scale." These instruments were chosen to comprehensively assess various aspects relevant to the study's objectives. Participants were invited to take part and provided with a packet containing these questionnaires, and a detailed explanation of the study's aims was sent to participants. Additionally, the packet included the researcher's contact details, privacy guidelines, and other relevant information. A comprehensive discussion of the questionnaires and study procedures was scheduled to occur over a ten-minute session.

SCORING

- **MENSTRUAL DISTRESS QUESTIONNAIRE (MEDI)**

A 25-item instrument called the Menstrual distress Questionnaire (MEDI-Q) is used to measure the anguish that women feel when they are menstruating. A group of experts in psychiatry and gynecology created the questionnaire. There are several stages to the MEDI-Q grading method that evaluate period discomfort. We look at all 25 of these things separately. At first, the respondent's answer is used to provide a frequency score (A), where 2 indicates "Yes, more than half the time," 1 indicates "Yes, less than half the time," and 0 means "No." In addition, each item's distress score (B, C, or D) is calculated according to the reported

degrees of distress, which can be classified as "Not at all," "A little," "Moderately," or "Very much.

Reliability: The MEDI-Q in English had outstanding psychometric properties, including high test-retest reliability (intraclass correlation coefficient = 0.95) and strong internal consistency (Cronbach's alpha = 0.84).

- **PGI GENERAL WELL-BEING SCALE**

The Psychological General Well-Being Scale (PGI GWS), also referred to as the PGI General Well-Being Scale, is a commonly utilized tool that evaluates a person's general psychological well-being. Each "Yes" response is marked as 1, indicating the presence of the symptom, while each "No" response is marked as 0, indicating its absence.

Reliability: The reliability of the "PGI General Wellbeing test" was assessed using the Test-Retest method, yielding a correlation coefficient of $r = 0.88$.

Validity: The validity of the "PGI General Wellbeing test" was established through the concurrent method, resulting in a correlation coefficient of $r = 0.90$.

STATISTICAL ANALYSIS

The research employed SPSS software for data analysis. Regression and Pearson correlation analysis were utilized for validation, and descriptive statistics tests were employed to explore the hypothesis.

RESULTS AND DISCUSSION

The study aimed to uncover significant insights into the correlation between various indicators of well-being and menstrual distress. These discoveries underscore the importance

of considering menstrual health as an integral aspect of overall wellness among young females. The implications of these findings extend to educators, policymakers, healthcare professionals, and individuals, emphasizing the need for comprehensive approaches to address menstrual health within holistic wellness frameworks.

Table 1

Descriptive statistics of all variables

	Menstrual Distress	General Well Being
Mean	77.2	107.6067
Standard Deviation	35.22488	45.40125
N	150	150

The table shows descriptive statistics based on a sample of 150 people for two variables: general well-being and menstrual distress. With an average Menstrual suffering score of 77.2 and a standard deviation of 35.22, the results show a moderate level of suffering with significant individual variability. On the other hand, compared to Menstrual Distress, the mean score for General Well-Being is higher at 107.61, with a bigger standard deviation of 45.40, indicating a generally favorable degree of well-being but with greater variability. These figures give an overview of the central tendency and distribution of each of these variables within the study population, revealing information about the participants' range and variability in terms of both overall well-being and menstruation discomfort.

Table 2*Regression Statistics*

<i>Regression Statistics</i>	
Multiple R	0.986953
R Square	0.974076
Adjusted R Square	0.973901
Standard Error	7.334676
Observations	150

Table 3*Impact of Menstrual distress symptoms on the well-being of young females aged 18 to 35 years*

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	299167.8	299167.8	5561	0.002
Residual	148	7962.027	53.79748		
Total	149	307129.8			

Null Hypothesis (H_0): There is no significant impact of menstrual distress on the well-being of young females aged 18 to 35 years.

Alternative Hypothesis (H_1): There is a significant impact of menstrual distress on the well-being of young females aged 18 to 35 years.

Since the significance F value is less than the chosen significance level (0.05), we reject the null hypothesis (H_0). This indicates that there is a significant impact of menstrual distress on the well-being of young females aged 18 to 35 years.

Therefore, the alternative hypothesis (H_1) is accepted, implying that there is indeed a significant impact of menstrual distress on the well-being of young females aged 18 to 35 years.

Table 4

Pearson correlation analysis of the relationship between menstrual distress and well-being of young females aged 18 to 35 years

	Menstrual Distress	General Well Being
Menstrual Distress	1	
General Well Being	0.986953	1

Null Hypothesis (H_0): There is no significant relationship between menstrual distress and the well-being of young females aged 18 to 35 years.

Alternative Hypothesis (H_1): There is a significant relationship between menstrual distress and the well-being of young females aged 18 to 35 years.

The correlation coefficient between menstrual distress and general well-being is around 0.987, indicating a very strong positive correlation. This suggests that as menstrual distress increases, its impact on general well-being tends to increase as well. The reason behind such findings is because there is a discrepancy in the population size of both urban(80) and rural (70).The urban population reported positive well-being and the rural ones reported a negative well-being that's

why when results were formulated the overall correlation for the population turned out to be positive.

Therefore, we reject the **Null Hypothesis (H_0)** and accept the **Alternative Hypothesis (H_1)** which states that there is a significant relationship between menstrual distress and the well-being of young females aged 18 to 35 years.

DISCUSSION

Understanding the connection between menstrual distress symptoms and overall well-being is crucial for grasping the holistic health dynamics of female young adults. This study explores how menstrual distress symptoms impact the well-being of women aged 18 to 35 years.

Utilizing The Menstrual Distress Questionnaire (MEDI-Q) and The Psychological General Well-Being Scale (PGI GWS), this research aims to uncover the nuanced interplay between menstrual discomfort and the psychological well-being of young females. Menstrual distress symptoms, encompassing physical, emotional, and psychological manifestations, significantly affect the quality of life of women. Despite being a natural process, menstruation can bring forth distressing symptoms such as pain, mood swings, fatigue, and cognitive disturbances, which may hinder emotional stability, social functioning, and life satisfaction. The presence of menstrual symptoms, ranging from physical discomfort to psychological distress, significantly influences holistic health and life satisfaction, extending into academic or professional performance, social engagement, and personal fulfillment.

The results of the study highlight the crucial relationship between menstruation symptoms and young adult females' general well-being, specifically in the age range of 18 to 35. The research population's overall well-being and menstruation distress levels were revealed

by the descriptive statistics. The prevalence of monthly problems among young women is highlighted by the moderate degree of menstrual discomfort, as shown by an average score of 77.2 along with a standard deviation of 35.22. On the other hand, although there is more variation between people, the higher mean score of 107.61 for overall well-being indicates a generally positive level of well-being.

The influence of menstrual distress symptoms on well-being is further clarified by the regression analysis. The results refute the null hypothesis and demonstrate that menstrual discomfort does have a considerable impact on the well-being of adolescent girls, with a high multiple R-values of 0.987, suggesting a strong positive correlation, and a significant F statistic. This suggests that the group's general well-being increases in proportion to an increase in menstruation distress symptoms. The reason behind such findings is because there is a discrepancy in the population size of both urban (80) and rural (70). The urban population reported positive well-being and the rural ones reported a negative well-being that's why when results were formulated the overall correlation for the population turned out to be positive.

Furthermore, with a correlation value of around 0.987, the Pearson correlation analysis confirms the substantial positive association between menstrual discomfort and overall wellbeing. A significant proportion of adolescent girls from low-income families experienced menstrual distress symptoms, including dysmenorrhea, mood changes, and fatigue. These symptoms were associated with a decreased quality of life, affecting various domains such as physical health, emotional well-being, and social functioning (Almeida PR, 2018).

A considerable proportion of school going adolescent girls in South Delhi experienced menstrual distress symptoms, including dysmenorrhea, mood swings, and abdominal bloating.

These symptoms were closely associated with a lower life quality, particularly in terms of physical health, psychological well-being, and social relationships (Bajpai et al., 2017).

A range of resources and interventions aimed at addressing the multifaceted nature of menstrual distress may include access to healthcare professionals who specialize in women's health, such as gynecologists or psychologists, as well as support groups or online communities where women can share their experiences and seek advice. These findings may be used by educators and legislators to support comprehensive instruction on menstrual health and legislation that give menstrual health priority in educational and medical environments.

By customizing their therapies to target the physical and psychological components of menstruation health, healthcare practitioners may help young adult females achieve holistic wellbeing. Furthermore, empowering people to look for tools and help to properly manage menstruation difficulties might improve their general well-being.

The study's result emphasizes how critical it is for young adult females' overall well-being to identify and treat menstruation difficulties. Additionally, educational programs that provide information about menstrual health and coping strategies can empower women to better manage their symptoms. Through an awareness of the relationship between menstruation discomfort and general well-being, stakeholders may create tailored interventions to meet the psychological and menstrual health requirements of this community, leading to the eventual development of a more empowered and healthy population of young adult females.

CONCLUSION

The complex association between menstrual distress symptoms and general well-being in young female adults is clarified by the study's findings. A comprehensive statistical study has demonstrated that the overall wellness of females between the ages of 18 and 35 is greatly

impacted by menstrual distress. Regression analysis and correlation coefficients both demonstrate how significantly menstruation pain affects general well-being. Although there were significant individual variances, the descriptive statistics revealed modest levels of menstrual distress and generally acceptable levels of well-being, offering a first grasp of the diversity and core patterns within the sample group.

The null hypothesis was rejected, demonstrating a distinct and substantial effect of monthly menstrual discomfort on the well-being of young females. This regression analysis confirmed the significance of addressing menstrual health in the quest for holistic wellness. Moreover, the correlation analysis demonstrated a robust positive association between overall well-being and menstrual distress symptoms, underscoring the interdependence of these two variables.

Looking ahead, efforts to address menstrual distress should involve a variety of resources and support networks, such as access to specialized healthcare professionals in women's health and educational programs focusing on menstrual health and coping strategies. By tailoring treatments to address both the physical and psychological aspects of menstrual health, healthcare providers can assist young adult females in achieving comprehensive well-being.

By increasing awareness of the connection between menstrual discomfort and overall wellbeing, targeted interventions can be developed to address the unique psychological and menstrual health needs of young adult females. This, in turn, can lead to empowerment and improved health outcomes for this demographic.

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