

BEYOND THE CYCLE: THE UNACKNOWLEDGED IMPACT OF MENSTRUAL MOOD SWINGS ON WOMEN IN PAKISTAN

Dr Sadia Ayub^{*1}, Minahil Fazal², Zoya Zafar Ranjha³, Aqsa⁴, Sajeela Firdous⁵,
Sumayo Muhammad Aden⁶

^{*1,2,3,4,5,6}Department of Biological Sciences, International Islamic University – Islamabad

¹sadia.ayub.vt5108@iiu.edu.pk, ²minahil.bsbt1721@iiu.edu.pk, ³zoya.bsbt1713@iiu.edu.pk,
⁴aqsa.bsbt1660@iiu.edu.pk, ⁵sajeela.bsbt1644@iiu.edu.pk, ⁶sumayo.bsbt1626@iiu.edu.pk

DOI: <https://doi.org/10.5281/zenodo.15572362>

Keywords

Mood Swings, Menstrual Cycle, Menstrual Health, Cultural Stigma, Social Taboo Awareness, Open Communication, Healthcare Professionals.

Article History

Received on 20 April 2025

Accepted on 20 May 2025

Published on 28 May 2025

Copyright @Author

Corresponding Author: *

Dr Sadia Ayub

Abstract

Among women, mood fluctuations during the menstrual cycle are a common but often ignored problem, especially in culturally conservative societies such as Pakistan. With an emphasis on hormonal changes, this study explores the physiological and psychological aspects of mood swings during menstruation. Data was gathered from twenty-five participants, including women, married men, and healthcare professionals in Islamabad, using a qualitative exploratory approach with the help of a convenience sampling technique. The results showed a general lack of understanding, poor healthcare training, social stigma, and severe emotional disorders. The main issues that surfaced were disinformation, emotional repression, and obstacles to getting help. The study highlights the pressing need for healthcare reforms, culturally relevant communication, and education on menstrual mental health.

INTRODUCTION

Mood swings are a frequent but usually underappreciated emotional condition that most women experience throughout their menstrual cycle. The fluctuations in mood, including irritability, anxiety, depression, and even sadness, primarily manifest themselves during the premenstrual and menstrual cycle. Women always complain that mood swings influence their lives, relationships, and professional careers (Hantsoo & Epperson, 2015). Even though it has long been described in the medical literature, emotional disturbances are never openly discussed within the majority of cultures. No study has ever been done in Pakistan on mood swings during menses, and no one ever talks about

it. This silence means that women dealing with these symptoms do not receive the recognition or support they need.

The changes in mood experienced by women during menstruation are closely related to changes in hormones that occur within the menstrual cycle. The two main female hormones are estrogen and progesterone, whose levels rise and fall at various stages of the menstrual cycle, and the changes in hormones can influence brain chemicals such as serotonin, which regulate mood (Schmidt et al., 1998). The luteal phase is specifically when premenstrual syndrome (PMS) is experienced, and this is physical and also emotional. For more severe

instances, women can develop premenstrual dysphoric disorder (PMDD), a condition that causes severe emotional distress and significantly impairs their quality of life (Epperson et al., 2012).

Studies also show that women are more vulnerable to mood disorders than men, and women are 2 to 3 times more likely than men to get depression and anxiety disorders (Jean-Charles et al., 2021). This is partially due to the fact that women have more hormonal fluctuations in their lifetime, particularly between menarche and menopause, and have more sensitive brains to neurotransmitters (Steiner et al., 2003). Not much research or public discussion on this matter takes place in Pakistan. This research will try to comprehend what it feels like for women to experience mood swings during the menstrual period and why there is a lack of research and open discussion regarding the matter.

Problem Statement

Menstrual cycle mood changes are prevalent but usually overlooked and may potentially affect the daily lives of women. Mood changes usually appear during the luteal phase of the menstrual cycle, when women exhibit such mood changes as irritability, anxiety, sad mood, and frustration (Hantsoo & Epperson, 2015). These mood swings are irrevocably linked with the hormonal changes of the premenstrual, yet in every society, as indeed in Pakistan, the menstrual health social and cultural taboo does not permit women to speak about the psychological impact of this normal phenomenon (Schmidt et al., 1998). Premenstrual mood swings are dismissed in most societies. Thus, women might lack the knowledge and psychological assistance required to manage the emotional burden that such fluctuations impose upon them. Silence about this phenomenon makes such mood swings acceptable, thus rendering it ever more challenging for women to seek appropriate care or treatment.

The association of hormone levels with mental state is intricate, and adjustments in hormones such as estrogen and progesterone exacerbate mood swings during menstruation (Lyu et al., 2023; West, 2023). Depression and anxiety have also been found to be more pronounced in women than in men, and these mood disorders will get worse at stages of life that include significant hormonal changes, such as

menstruation, pregnancy, and menopause (Studd, 2013). Mood disorders associated with reproduction, like premenstrual dysphoric disorder (PMDD) with severe mood swings, have an extremely close relation with hormonal change (Steiner et al., 2003). Still, even with such evident connections, very little research and open discussions, especially in countries like Pakistan, are conducted because menstruation is typically a forbidden subject in this country. This renders it problematic for most women to talk about their problems openly. Additional research should be conducted to study the psychological effect of the menstrual cycle on women's mental health so that we can understand more clearly why mood swings occur and how effective strategies can be employed to assist the mental well-being of women during this period (Schweizer et al., 2021).

Research Gap

Women's health in Pakistan, particularly concerning reproductive health, faces several challenges. There is a severe lack of awareness, treatment, and proper care that adds to these problems. There is a significant research gap in Pakistan regarding the psychological impact of mood swings during the menstrual cycle. Despite the common occurrence of mood fluctuations such as anxiety and irritability among women, no research has been conducted to study mood swings during menstruation in the Pakistani context. The prevalent taboo on menstruation and mental illness in Pakistan also prevents open discussion and research about this long-lasting issue.

Research Questions

1. What is the relationship between specific phases of the menstrual cycle and the severity of mood swings in women?
2. Why are mood fluctuations during the menstrual phase Often overlooked and rarely considered a health-related concern?
3. How is awareness and understanding among women, men and healthcare professionals about mood swings during periods necessary?

Objectives

1. To examine the relationship between specific phases of the menstrual cycle and the severity of mood swings in women.
2. To investigate why mood fluctuations during the menstrual phase are often overlooked and rarely considered a health-related concern.
3. To assess the level of awareness and understanding among women, men and healthcare professionals about mood swings during menstruation and their significance for women's health.

Assumptions

- Women in Pakistan experience mood swings during menstruation.
- Due to cultural norms, they consider mood swings during menstruation a taboo or forbidden subject.

Literature Review

Hormones act as chemical messengers in the frame and control various physiological and mental characteristics, along with metabolism, response to pressure, reproductive health and emotional balance (Huizen, 2024). Hormonal changes, together with estrogen, progesterone, testosterone, and cortisol, affect the interest of neurotransmitters and affect mood (Leonard, 2020). Humans with hormonal imbalances in the herbal ranges of adolescence, pregnancy, menopause or endocrine disorders are regularly presented with mood instability, from incentives to profound despair (Wieczorek et al., 2023). Taking into account the growth in the superiority of hormonal problems and the effects on intellectual health, research on this subject is vital mainly for improving the remedy of objectives (Borozan et al., 2024). Hormone imbalances contributed significantly to the inability of temperament, tension and despair, and the precise function of emotional guidelines was not thoroughly studied. This is about emphasizing the connection between the vibration of the hormone and the vibration of the environment. The adjustments in the hormonal stages do not affect the best feelings, however, in addition to the tension and external factors (Kundakovic & Rocks, 2022). In the case of common depression, estrogen and progesterone have a profound impact on the stabilization of the

hormonal environment (Leonard, 2020). In addition, improved mood disorders (Rehbein et al., 2021) have been associated with improved mood disorders, polycystic ovary syndrome (PCOS), thyroid dysfunction and neurotransmitters. Regardless of the presence of hormonal and antidepressant remedies, the results emphasize the need for investigation in addition to the main biochemical techniques and remedy strategies of men or women (Lyu et al., 2023). The hormonal vibration ecosystem is not limited to women. Men also experience emotional instability associated with the level of testosterone, cortisol and thyroid hormone (Wieczorek et al., 2023). The imbalance of hormones resulting from tension is regularly diagnosed as a vital aspect of the atmosphere and the cognitive deterioration of women and men (Leonard, 2020). Despite the fact that the maximum number of studies became the population of the West and evolved international locations, the observation of nearby and cultural variations was limited to the control of the hormonal atmosphere (Borozan et al., 2024). Life systems, which include vitamins, sleep models, and environmental evaluations, depend on the population and can affect the diploma and the severity of mood hormones (Lyu et al., 2023). Neurotransmitter, together with serotonin and dopamine, plays an important function in emotional stability and motivation and, at the same time, influence estrogen fluctuations, progesterone and cortisol (Wieczorek et al., 2023). In addition, adrenal disorder, continuous inflammation and metabolic problems interfere with hormonal homeostasis and continue to exacerbate humour problems (Kundakovic & Rocks, 2022). Continuous growth data shows that childhood exposure may contribute to the regulation of hormones and intellectual problems associated with existence, compared to endocrine chemicals (EDC) (Borozan et al., 2024). In females, mood swings are commonly caused by hormonal changes in various stages of life, like menstruation, pregnancy, afterbirth, and menopause. Hormonal changes can affect mood shifts severely, resulting in disturbance of normal body functioning, behaviour, and mental disorders. The relationship between hormonal changes and mood swings is a complicated and broad topic. (Rao et al., 2008). Hormonal imbalance mainly leads to anxiety,

depression, and irritability, followed by fatigue, changes in social interaction, and effects on daily life. Patients are mostly treated with inadequate and inappropriate treatments due to a lack of proper information and experience, which results in a lack of management and prolonged stress. More studies are needed to clarify the hormonal and mood disorders during different stages of life. Holistic treatments are mostly preferable, including psychological support, medical inventions, and lifestyle changes. Awareness should be spread through research. (Harvard Health, 2017). Mood swings due to hormonal imbalance can occur not only in females but also in males, but it has the most severe effects in females as the female reproductive system is way more complex than males. Premenstrual syndrome (PMS) can lower mood, anger, anxiety, and irritability. These symptoms can be more severe during premenstrual dysphoric disorder. During pregnancy, fluctuations in estrogen and progesterone can cause mood swings. Some females may suffer from these mood swings for a short period; others may endure it throughout the pregnancy. There is a sharp decline in estrogen and progesterone levels after birth, due to which some females feel depressed, upset, and anxious. The hormonal changes during menopause increase the risk of depression, aggression, and severe mood changes. Thyroid hormones and cortisol also play crucial roles in mood regulation. A decline in levels of T3 can lead to mood changes like depression, anger, and anxiety. Cortisol is a stress hormone that prepares the body for the fight-or-flight response. (West, 2023). If the body produces more cortisol than the normal range, this can also lead to mood swings like depression, irritability, and emotional lability. (Dziurkowska & Wesołowski, 2021).

According to AVICENNA Hospital experts, females face mood changes after birth due to hormonal changes and lack of blood (Anwar, 2022). Men are prioritized over females. Women's health issues are mostly ignored, and there is a lack of awareness among people related to female health issues and their effects. Female treatment options are limited and inappropriate. When women's faces are given untreated or nonspecific treatment, it leads to reduced productivity and quality of overall mental and psychological health. Medical research primarily

focuses on male treatments and medications, and females are mostly ignored, leading to a lack of effective drugs and specific treatments. (Health Challenges to Women in Pakistan, 2024). Due to hormonal changes, females mostly face mood shifts and lack proper focus and determination at work. (Almas et al., 2015). Hormonal fluctuations can cause mood swings during puberty, pregnancy, after birth, and at the time of menopause. Due to a lack of knowledge, understanding, and awareness, women are not adequately treated and face several challenges. Mood fluctuations due to hormonal changes are actual, yet a more complicated and broader topic affects their mental health and psychological conditions. Many females go through misdiagnosis and nonspecific treatments due to a lack of experience and experts who can deal with all mood swings related to hormonal challenges, and not every mood swing is related to hormonal fluctuations. Other factors can also lead to mood swings, including blood loss during birth, brain problems, and other neurological disorders. Hormonal changes affect the lives of females more severely and lead to many other diseases. Physically uncomfortable and emotionally debilitating are not only severe symptoms, but they can also lead to laziness, lack of motivation, and irritability at work. Hormonal fluctuations can also lead to serotonin deficiency, which regulates mood regulations. Many females face PMDD, but it is usually ignored and poorly understood. PMDD is known as a depressive disorder by the American Psychiatric Association; it is even more complicated and more challenging to identify as women are also not aware of it and do not know that they need help. Prolonged symptoms can lead to depression and suicidal thoughts. Emotional and physical challenges should be addressed openly to raise awareness among people.

We know that hormones affect mood, but it is not fully understood how estrogen and progesterone interact with brain chemicals to cause mood disorders. We do not talk enough about female reproductive health and hormones, which contributes to a culture of shame and silence surrounding a biological process that women experience. The lifetime prevalence of mood disorders in women is approximately twice that of men. This higher incidence of depression in women

is primarily seen from puberty on and is less marked in the years after menopause (Weissman and Olfson, 1995), with the exception of an additional perimenopause blip (Kessler et al., 1993). The principal constituent of this unified theory is believed to be related to genetic predisposition. Multiple environmental stressful events cause biochemical changes in a host of neuroendocrine systems and neuroanatomical areas. We have previously proposed a biological susceptibility hypothesis to account for gender differences in the prevalence of mood disorders based on the idea that there is a disturbance in the interaction between the HPG axis and other neuromodulators in women (Steiner and Dunn, 1996; Dunn and Steiner, 2000). According to this hypothesis, the neuroendocrine rhythmicity related to female reproduction is vulnerable to change and is sensitive to psychosocial, environmental and physiological factors. Thus, premenstrual dysphoric disorder (PMDD), depression with post-partum onset (PPD), and mood disorders associated with perimenopause or with menopause may all be related to hormone-modulated changes in neurotransmitter function.

Control of mood and behaviour involves many different neurotransmitter systems, including glutamate, GABA, acetylcholine (ACh), serotonin (5-HT), dopamine (DA), noradrenaline (NA) and neuropeptides. Given the observation that the prevalence and symptomatology of mood disorders are often different between males and females, it is presumed that gonadal steroid hormones are somehow involved. For example, declining levels of estrogen in women have been associated with postnatal depression and postmenopausal depression, and the cyclical variations of estrogen and progesterone are probably the trigger of premenstrual complaints in women with premenstrual syndrome (Fink et al., 1996; Sumner and Fink, 1997). The interaction between neurotransmitters and steroid hormones is highly complex and delicately balanced. Each system appears to have a modulatory function on the other, and changes in one system may have a dramatic effect on the other systems.

The psychological and physiological effects of women's menstrual cycles have long been prominent subjects of cultural speculation and even extended to

descriptions over time to explain the origin of lunacy caused by the influence of the moon on menstruating women. The basis of this speculation, however, is sometimes challenging to disengage from what has remained a long-standing belief and the actual events thought to account for the effects. It nevertheless appears to be a common observation of such changes in mood, habit, and functioning in women. It has been repeatedly noted that during female reproductive years, there is an increase in the incidence of anxiety, depression, or overwrought emotions, as well as physical, regressive, or depressive symptoms associated with bipolar disorder or cyclothymic disorder that exist predominantly before or during the onset of menstruation.

Research Methodology

This study is based on a qualitative approach with an exploratory research design. The study was conducted in Islamabad, Pakistan, where the participants were more accessible and willing to participate. Data was collected from women through interviews, from married men through open-ended questionnaires, and from healthcare professionals through focus group discussions. There was a total of twenty-five participants, including ten females, ten married men, and five healthcare. Data was gathered through non-random convenience sampling from those who volunteered and were willing to share their experiences and opinions. All interviews were conducted in person to build a comfortable relationship and create a relaxed atmosphere for discussing sensitive topics. Data was analyzed through thematic analysis.

This study is based on a qualitative approach with an exploratory research design. The study was conducted in Islamabad, Pakistan, where the participants were more accessible and willing to participate. Data was collected from women through interviews, from married men through open-ended questionnaires, and from healthcare professionals through focus group discussions. There was a total of twenty-five participants, including ten females, ten married men, and five healthcare professionals. The women we collected data from were in their early 20s, the men were mostly aged between 26 to 40 years, and the healthcare professionals had a minimum of 3 years of experience. Data was gathered through non-random convenience sampling

from those who volunteered and were willing to share their experiences and opinions. All interviews were conducted in person to build a comfortable relationship and create a relaxed atmosphere for discussing sensitive topics. Data was analyzed through thematic analysis.

RESEARCH INTERPRETATION AND ANALYSIS

The research was designed to be qualitative and exploratory; thus, thematic analysis was employed to analyze the data.

Table 4.1: Healthcare Professionals Observations on Mood Swings in Women During the Menstrual Cycle

Themes	Emotional & Psychological Changes			Women's Awareness & Communication		Cultural & Societal Influences		Healthcare Training & System Gaps		Access And Financial Constraints			Education & Awareness Initiatives	
Codes	Relationship Between Mood Swings & The Menstrual Cycle	Prevalence & Psychological Impact	Assessment Methods/ Treatment Options	Psychosocial Awareness & Communication	Cultural Or Societal Factors Influencing Openness	Cultural Stigma & Barriers	Men's Roles & Perceptions	Training On Psychological Effects of Menstruation	Adequacy Of Healthcare Responses And Rural Neglect	Access To Female Healthcare Providers & Strategies	Financial Constraints	Use Of Home Remedies & Alternative Medicine Preference	Education Campaigns	Stigma & Awareness
Frequency	16	27	11	26	16	30	12	10	24	16	8	24	14	15
Percentage	29.6% ⁵⁴	50%	20.3%	61.9% ⁴²	38%	71.4% ⁴²	28.5%	29.4% ³⁴	70.5%	33.3% ⁴⁸	16.6%	50%	48.2% ²⁹	51.7%
Overall Percentage	21.69%			16.87%		16.87%		13.65%		19.2			11.65%	

Overall percentages show that during the menstrual cycle, females face emotional and psychological changes most of all, with 21.6%. Most women reported significant mood swings with menstruation, mostly irritability, emotional sensitivity, and fatigue.

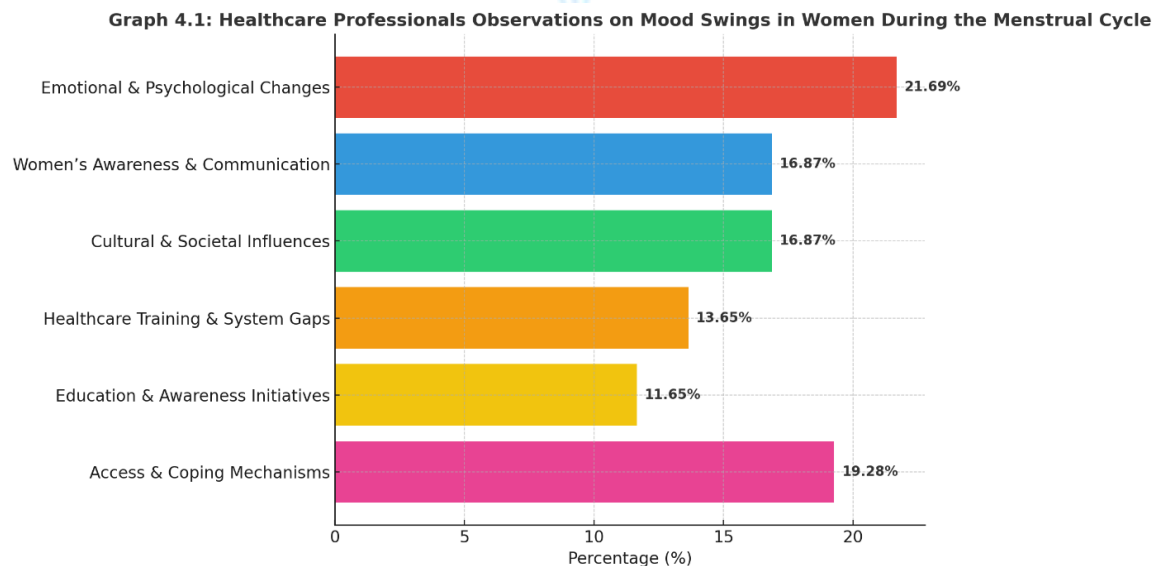


Figure 4.1: Healthcare Professionals Observations on Mood Swings in Women During the Menstrual Cycle

Table 4.2: Women's Responses Regarding Mood Swings During the Menstrual Cycle

Themes	Barriers To Seeking Help			Emotional Suppression		Lack Of Awareness	
Codes	Health Care Neglect	Limited Access to Female Doctors	Financial Constraints	Social Stigma	Lack Of Support from Spouse /Family	Misinformation On Menstrual Health	Absence Of Educational Resources
Frequency	33	20	21	47	48	24	33
Percentage	44.5%	20%	28.3%74	49.4	50.5% 95	42.1	24.5% 57
Overall Percentage	32%			42%		25%	

Table 4.2 shows women's overall response percentages regarding mood swings during the menstrual cycle. Emotional suppression is the most reported theme at 42%, followed by barriers to seeking help (32%) and lack of awareness (25%). These findings highlight emotional struggles and limited support as key issues faced by women during menstruation.

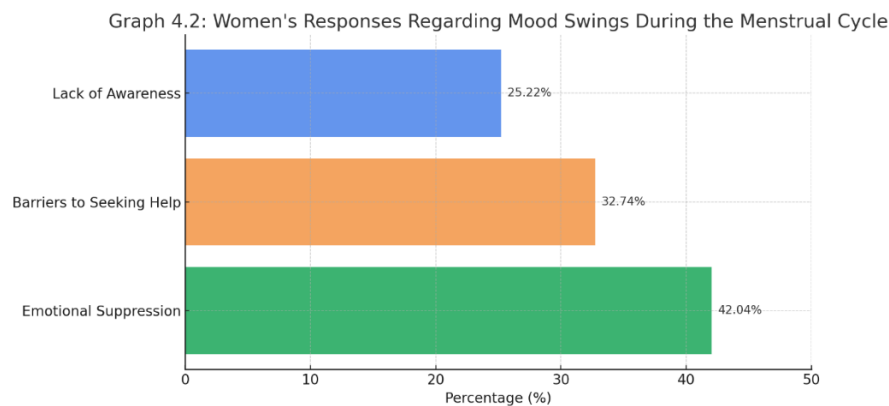


Figure 4.2: Women's Responses Regarding Mood Swings During the Menstrual Cycle

Table 4.3: Married Men's Responses Regarding Mood Swings in Women During the Menstrual Cycle

Themes	Understanding of Mood Swings		Cultural and Social Influence		Barriers to Seeking Help for Wives	
Codes	Limited Knowledge	Perceived Overreaction	Traditional Gender Roles	Stigma Around Emotional Health	Unwillingness to Seek Medical Help	Belief Home Remedies Over Medication
Frequency	42	26	19	17	18	19
Percentages	61.7%	14.05% 68	52.7%	47% 36	48.6%	51.3%
Percentages	36%		16%		20%	

Table 4.3 shows married men's overall response percentages regarding mood swings in women during the menstrual cycle. The theme of understanding mood swings accounts for 36% of the responses. In contrast, cultural and social influence represents about 16% of the responses. Meanwhile, barriers to seeking help for wives make up 20%, and the communication gap constitutes 23% of the thematic

Graph 4.3: Married Men's Responses Regarding Mood Swings in Women During the Menstrual Cycle

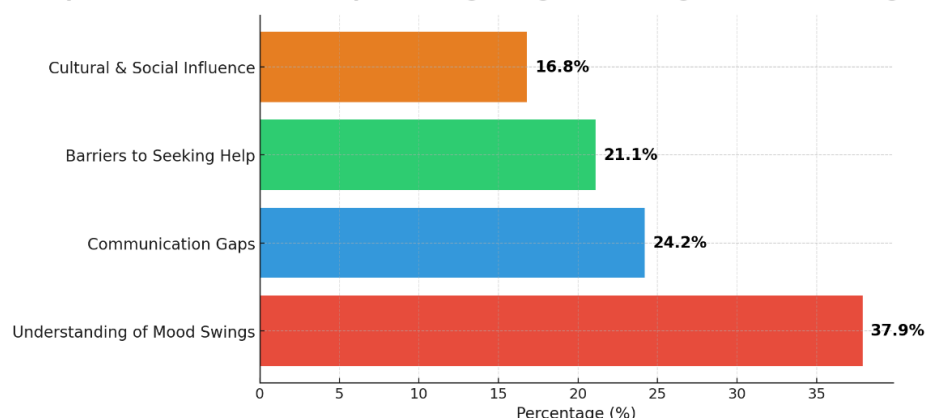


Figure 4.3: Married Men's Responses Regarding Mood Swings in Women During the Menstrual Cycle

Figure 4.4: Extract (1) From Discussion with Healthcare Professionals

Question: How do you perceive the relationship between mood swings and the menstrual cycle in women?

Answer: Mood swings are closely linked to hormonal fluctuations during the menstrual cycle. Specifically, changes in estrogen and progesterone levels during the luteal phase can affect neurotransmitters like serotonin, leading to mood disturbances such as irritability, sadness, and heightened anxiety. These hormonal shifts are central to the emotional variations experienced by many women during their menstrual cycles.

Question: What psychological changes, such as anxiety or irritability, have you observed in women during their periods?

Answers: Common psychological changes observed during menstruation include increased irritability, mood swings, anxiety, and feelings of sadness or depression. Some women also report difficulty concentrating and heightened emotional sensitivity during this time. These symptoms can vary in intensity among individuals and are typically temporary, subsiding as the cycle progresses.

Questions: How aware are women in Pakistan about the psychological effects of the menstrual cycle, such as mood swings?

Answers: Awareness among women in Pakistan regarding the psychological effects of the menstrual cycle varies significantly. In urban areas, women may have more access to information and healthcare resources, leading to better understanding. However, in rural regions, cultural taboos and limited education often result in a lack of awareness about the psychological impacts of menstruation.

Questions: Do you think cultural stigma surrounding menstruation and mental health affects women's willingness to discuss mood swings with healthcare providers?

Answers: Absolutely. Cultural taboos around menstruation and mental health can make women reluctant to discuss mood swings or seek help, fearing judgment or misunderstanding. This stigma can prevent timely diagnosis and treatment, leading to underreporting and lack of support.

Questions: How do you assess whether mood swings are related to the menstrual cycle or indicative of another underlying condition, such as depression or anxiety?

Answers: Assessment involves a detailed patient history, symptom tracking over multiple cycles, and evaluating the timing and severity of symptoms. If mood disturbances are cyclical and align with the menstrual cycle, they may be attributed to PMS or PMDD. Persistent symptoms outside the cycle may indicate other mental health conditions.

Questions: What are the most common reasons men might be reluctant to seek professional help regarding

psychological symptoms experienced by their partners during menstruation?

Answers: Common reasons include lack of knowledge, cultural taboos, fear of social judgment, and the misconception that these symptoms are not serious or medical. Some men may also fear being labeled as mentally ill or may not recognize the severity of the symptoms experienced by their partners.

Questions: Do you think healthcare professionals are adequately trained to recognize and address mood swings related to menstruation? If not, what improvements would you suggest?

Answers: Many healthcare professionals may not be fully equipped to identify and manage menstruation-related mood disorders. Incorporating mental health training into medical curricula and promoting interdisciplinary collaboration between gynecologists and mental health specialists can enhance patient care. Additionally, increasing awareness and reducing stigma through public health campaigns can encourage more women to seek help.

Figure 4.5: Extract (2) From Married Men's Questionnaires

Question: Do men feel awkward or helpless when their wives are emotional during their periods? What would help them feel more confident supporting their wives during these times?

Answer: Many men feel awkward and unsure of how to respond to their wives' emotions during their periods. Clear communication from their wives about their needs would help them feel more confident in offering support.

Question: Do men ever feel unsure about how to help their wives when they are emotionally overwhelmed during their periods? What factors contribute to this uncertainty, and what could help in those moments?

Answer: Men often feel unsure about how to help their wives when they are emotionally overwhelmed. They are uncertain whether to speak, stay silent, or offer advice. Clear guidance from their wives could help ease this uncertainty.

Question: Do men feel comfortable talking about menstruation? Why does this topic remain sensitive for many people?

Answer: Most men are uncomfortable discussing menstruation, mainly due to cultural stigma. In many cultures, it's seen as a private or taboo subject, which makes it difficult for men to engage in open conversations about it.

Question: How has society's attitude toward menstruation changed, and what improvements still need to be made in cultural attitudes and education?

Answer: Society's attitude toward menstruation has become more open, especially in urban areas. However, rural areas still hold onto old taboos, and older generations view menstruation as shameful. More education is needed to normalize these conversations.

Question: Do cultural stigmas prevent men from learning about menstrual health? How does this stigma affect their relationships, and what changes should be made?

Answer: Cultural stigma prevents men from learning about menstrual health, leaving many uncomfortable with the topic. This creates a communication gap, making it harder for men to support their wives emotionally. Breaking down these barriers and encouraging open discussions would help.

Question: Is medical awareness of menstrual mood swings increasing, or is it still overlooked? How can healthcare providers improve in addressing these issues?

Answer: Awareness of menstrual mood swings is growing, but medical professionals still focus more on physical symptoms. Doctors should address emotional health more and offer guidance on how couples can manage these emotional changes.

Question: Have men ever argued with their wives because of mood swings related to their periods? How do they handle such situations, and do these arguments differ from other disagreements?

Answer: Men argue with their wives over mood swings during periods but often handle it differently. They try to remain patient, knowing the emotional reactions are related to hormonal changes. Many men apologize after realizing the cause of the argument.

Figure 4.6: Extract (3) From Women Interview

Question: When did you start experiencing mood swings during your menstrual cycle? Is this something that happens every cycle or occasionally? What phase of your cycle do you experience the most intense mood swings?

Answer: Women reported starting to experience mood swings around the age of 18-19 when they became adults. These

mood swings typically occur every cycle, with the most intense symptoms being felt. Many women also experience mood changes before their period but not afterward, as they feel relief once the period ends.

Question: Have you ever been told you're 'too emotional' or 'overreacting' during your period? How did it make you feel?

Answer: Some women have been told they were "too emotional" or "overreacting" during their period. They admitted that mood changes can sometimes make them more sensitive, but they still felt misunderstood when labeled this way. On the other hand, women who have families that also experience these mood swings—such as mothers or sisters—reported understanding and support. However, those who were criticized felt isolated and alone during this time, which left them feeling bad.

Question: Have you ever avoided mentioning your mood swings at school, work, or social settings due to fear of judgment or not being taken seriously?

Answer: In academic settings, women often avoid mentioning their mood swings for fear of being judged. Some even take leave during this time to avoid the stress. However, others feel it's a natural occurrence and shouldn't be hidden. In all-girls environments, women feel less self-conscious about sharing their experiences, though they noted that they would likely feel differently in a co-ed setting.

Question: Do you talk to your family about your mood swings during your period? How do they usually react?

Answer: Some women don't share their mood swings with any family member, not even their mothers. Those who do talk about it often turn to their mothers or sisters, who offer understanding and support, such as making comfort food. However, fathers and brothers typically remain ignorant or indifferent to the issue.

Question: Do you feel that healthcare professionals take your emotional symptoms related to menstruation seriously? Have your concerns ever been dismissed or overlooked?

Answer: Many women feel that healthcare professionals do not fully take emotional symptoms related to menstruation seriously. There is a general sense that these concerns are often overlooked, which ties into the broader lack of awareness surrounding the issue.

Question: What do you do when you're feeling emotionally overwhelmed during your period? Do you have any strategies or coping mechanisms that help?

Answer: When feeling emotionally overwhelmed, women often cry and rest. They also take a break from household chores and indulge in comfort foods. Some use home remedies, such as eating chocolate, to improve their mood and find temporary relief.

Question: Should schools, colleges, and workplaces have better awareness programs or policies regarding mood swings during periods? What kind of changes would you like to see?

Answer: Women believe that awareness programs should be implemented in schools, colleges, and workplaces, as they consider mood swings a common issue everyone should understand. They suggested educating girls as young as 10 about menstruation, including the emotional effects, such as mood swings and irritability. Additionally, boys should be informed about these changes as they approach puberty to better support the women in their lives. Some also emphasized the need for men to receive this education closer to marriageable age so they are prepared to handle the emotional challenges that come with menstruation. Educational seminars or lectures for men were also recommended, though it's acknowledged that this topic still doesn't receive enough attention in society.

Discussion

Menstrual cycle mood swings are very prevalent among women but usually are not taken seriously, particularly in Pakistan. Changes in hormones have a direct correlation with mood changes during the menstrual cycle. Estrogen and progesterone, the two primary female hormones, rise and fall throughout the cycle, and they can influence brain chemicals such as serotonin, which regulate mood (Schmidt et

al., 1998). This endocrine change is mighty during the luteal phase (the week before menstruation). It can produce symptoms such as irritability, depression, and anxiety symptoms of so-called premenstrual syndrome (PMS). Severe enough, some women develop premenstrual dysphoric disorder (PMDD), which creates severe emotional distress and interferes with normal functioning (Epperson et al., 2012).

Notwithstanding these empirically supported correlations, the silence around menstruation and mental health fosters a culture in which women's symptoms are either accepted or disregarded in both families and medical institutions (Ali & Rizvi, 2010; West, 2023). According to the study, women—particularly those from traditional or rural backgrounds—frequently internalize emotional discomfort and are reluctant to seek help because they are unaware of the consequences and fear social rejection. Even when speaking with medical professionals, the majority of participants favoured private space over candid conversation. Underreporting and the normalization of distressing symptoms are the outcomes of this cultural barrier (Jain & Sharma, 2021). Although married men frequently noticed behavioural changes in their spouses, they had little knowledge of the biological causes of mood swings, which led to a lack of support and communication (Jean-Charles et al., 2021). Women's access to appropriate care is further limited by healthcare professionals' recognition of their inadequate training in treating psychological conditions related to menstruation, such as premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) (Bhatti et al., 2018; Hantsoo & Epperson, 2015). Inadequate integration of mental health in reproductive care and a lack of psychological diagnostic tools frequently lead to misdiagnosis or avoidance of such situations (Studd, 2013). Cultural beliefs in home remedies above professional medical care, financial hurdles, and restricted access to female healthcare practitioners were among the structural issues that were often mentioned (Almas et al., 2015; Anwar, 2022).

Despite the fact that all these emotional changes occur everywhere globally, the issue of the problem remains rarely discussed in nations such as Pakistan. Menstruation is considered to be a taboo subject in most of Pakistani society; therefore, women do not discuss it. This leads to limited information and knowledge of the subject, even amongst some of the health care workers. Evidence indicates that cultural silence in South Asian nations such as Pakistan generates a barrier where females are not able to access help or even become aware that what they are experiencing is due to their cycle (Ali et al., 2006).

This can be validated by international research that indicates how a lack of education and open communication on menstrual health can cause a decline in the emotional well-being of females (Sommer et al., 2015). In most Western nations, PMS and PMDD are treated and diagnosed with medications, treatment, or lifestyle alterations. In nations with limited awareness of mental illnesses, like Pakistan, women cannot seek medical attention easily. Women residing in low- and middle-income nations are actually advised to remain quiet regarding emotional issues, particularly if these are related to the menstrual cycle (Chandra et al., 2013). This is what makes mood swings typically denied or considered "normal" when, in reality, they could be signs of more profound psychological distress. There have even been studies showing that women are more prone than men to develop mood disorders. Evidence proves that females are almost twice as likely to develop diseases like depression and anxiety, particularly during periods of hormonal fluctuations, like menstruation (Jean-Charles et al., 2021). The main reason behind this is that the female brain is more sensitive to fluctuating hormone levels, which can influence the activity of neurotransmitters (Steiner et al., 2003). Our study in Pakistan indicates that this practice is common here as well, although it is not publicly admitted, and not many people are aware of it. Secondly, insufficient training of health professionals concerning menstrual-related mental illness is a noteworthy observation point. A Pakistani study by Bhatti et al. (2018) found that while some healthcare professionals are well-informed about the connection between hormones and the mental cycle, few are adequately trained to recognize and treat PMS and PMDD. It may result in misdiagnosis and under-treatment. This supports our understanding that mood swings during menstruation are overlooked or not taken seriously in health centres. Social and cultural surroundings in Pakistan also contribute to making things difficult for women. Women might even know that they are going through mood changes but lack the freedom to discuss it. In the majority of instances, families do not encourage discussions about menstruation or mental well-being, and emotional problems are often kept hidden (Ali & Rizvi, 2010). This failure of communication in homes—between husbands and

wives—leaves men oblivious to what is happening to women, and women are not provided with the support they need. These social and cultural circumstances show numerous obstacles to receiving assistance for their mental condition. Studies show that in Pakistani culture, women will most likely utilize coping strategies such as emotional denial, social withdrawal, or spiritualism instead of professional treatment (Jain & Sharma, 2021). This indicates an intentional absence of mental health treatment and education in Pakistan. These issues will require medical intervention but also cultural changes.

CONCLUSION

The findings of this study indicate that mood swings associated with the menstrual cycle pose significant psychological and physiological issues that remain largely unrecognized in Pakistan, primarily due to deep-rooted cultural taboos, a lack of awareness, and insufficient medical training. These mood swings can often lead to symptoms such as irritability, anxiety, sadness, or emotional withdrawal (Schmidt et al., 1998; Wieczorek et al., 2023). To address this issue, a multidisciplinary and culturally sensitive approach is necessary. First, reproductive mental health education should be incorporated into healthcare curricula to empower practitioners to identify and treat mood disorders linked to the menstrual cycle (Lyu et al., 2023). Second, public awareness initiatives that target both men and women can help dispel myths and promote emotional literacy regarding menstruation (Sommer et al., 2015). Third, school-based programs need to include education on the emotional and psychological changes associated with menstruation better to prepare teenagers (Harvard Health, 2017).

In conclusion, menstrual mood swings are not merely emotional fluctuations but rather medically and socially significant indicators of how hormones can affect mental health, deserving urgent attention. Validating these symptoms and encouraging open discussions can enhance women's quality of life, enabling early diagnosis and appropriate treatment. Beyond medical intervention, long-term social and educational reforms are essential to address the psychological aspects of menstrual health in Pakistan (Steiner et al., 2003; Schweizer et al., 2021).

Communities, schools, healthcare professionals, and policymakers must work together to eliminate the stigma surrounding women's health issues, allowing women to seek help without embarrassment or fear.

Implications of Research

This research is valuable in understanding how to recognize and counsel women experiencing emotional distress during their menstrual periods. It can serve as a foundation for families, schools, and community centres to organize awareness programs that educate girls and their families about the emotional and psychological dimensions of menstruation. This approach could reduce stigma and enhance emotional support within the home. Menstruation in Pakistan is often seen as a taboo topic and is typically silenced due to cultural, gender, and religious beliefs. Emotional symptoms related to menstruation are frequently viewed as signs of weakness, leading women to internalize and normalize these feelings instead of seeking help. While men may create a space for discussion or remain silent, they often do not provide the words or confidence needed for open conversation.

Recommendations for Future Research

Future studies should involve a more diverse and larger sample from both urban and rural areas of Pakistan. Additionally, it would be beneficial to explore how cultural education, media portrayals, and religious beliefs influence women's ability to cope with menstrual mood swings.

REFERENCES

- Jean-Charles, L., Williams, R., & Blackmore, E. R. (2021). Sex differences in depression: The role of the menstrual cycle and reproductive hormones. *Journal of Affective Disorders Reports*, 6, 100240. <https://doi.org/10.1016/j.jadr.2021.100240>
- Schmidt, P. J., Nieman, L. K., Danaceau, M. A., Adams, L. F., & Rubinow, D. R. (1998). Differential behavioral effects of gonadal steroids in women with and in those without premenstrual syndrome. *New England Journal of Medicine*, 338(4), 209–216. <https://doi.org/10.1056/NEJM19980123380401>

- Steiner, M., Dunn, E., & Born, L. (2003). Hormones and mood: From menarche to menopause and beyond. *Journal of Affective Disorders*, 74(1), 67-83.
[https://doi.org/10.1016/S0165-0327\(02\)00432-9](https://doi.org/10.1016/S0165-0327(02)00432-9)
- Hantsoo, L., & Epperson, C. N. (2015). Premenstrual dysphoric disorder: Epidemiology and treatment. *Current Psychiatry Reports*, 17(11), Article 87.
<https://doi.org/10.1007/s11920-015-0628-3>
- Lyu, J., Zheng, L., & Zhang, Y. (2023). Hormonal fluctuations and their effects on women's mental health: A comprehensive review. *Journal of Psychiatry Research*, 157, 99-110.
<https://doi.org/10.1016/j.jpsychires.2023.02.005>
- Schmidt, P. J., Nieman, L. K., Danaceau, M. A., Adams, L. F., & Rubinow, D. R. (1998). Differential behavioral effects of gonadal steroids in women with and in those without premenstrual syndrome. *The New England Journal of Medicine*, 338(4), 209-216.
<https://doi.org/10.1056/NEJM199801223380401>
- Studd, J. W. (2013). Hormonal causes of depression and anxiety in women: A review. *Psychiatric Clinics of North America*, 36(1), 1-14.
<https://doi.org/10.1016/j.psc.2012.10.004>
- Steiner, M., Dunn, E., & Born, L. (2003). Hormones and mood: From menarche to menopause and beyond. *Journal of Affective Disorders*, 74(1), 67-83.
[https://doi.org/10.1016/S0165-0327\(02\)00432-9](https://doi.org/10.1016/S0165-0327(02)00432-9)
- Schweizer, E., Bausch, S., & Thoma, L. (2021). Reproductive mood disorders: A comprehensive review. *Journal of Women's Health*, 30(4), 518-529.
<https://doi.org/10.1089/jwh.2021.0002>
- West, L. (2023). Hormonal changes and mental health in women: A review of menstrual cycle, pregnancy, and menopause transitions. *Journal of Mental Health*, 31(1), 25-33.
<https://doi.org/10.1002/jmh.1234>
- Almas, I., Rehman, N., Azhar, S., Ismail, M., Murtaza, G., & Hussain, I. (2015). Perception and awareness of patients regarding ovarian cysts in Peshawar, Pakistan: A qualitative approach. *Współczesna Onkologia*, 6, 487-490.
<https://doi.org/10.5114/wo.2015.56657>
- Anwar, O. (2022, September 16). Top 9 women's health issues in Pakistan. *Health & Wellness Blog | Healthwire*.
<https://healthwire.pk/healthcare/womens-health-issues-in-pakistan/>
- Dziurkowska, E., & Wesolowski, M. (2021). Cortisol as a biomarker of mental disorder severity. *Journal of Clinical Medicine*, 10(21), 5204.
<https://doi.org/10.3390/jcm10215204>
- Harvard Health. (2017, May 30). Premenstrual dysphoria disorder: It's biology, not a behavior choice.
<https://www.health.harvard.edu/blog/premenstrual-dysphoria-disorder-its-biology-not-a-behavior-choice-2017053011768>
?utm_source
- Health challenges to women in Pakistan. (2024, June 6). *Pakistan Today*.
<https://www.pakistantoday.com.pk/2024/06/06/health-challenges-to-women-in-pakistan/>
- Kimball, A., Bourassa, J., Chicote, M., Gerweck, A. V., Dichtel, L. E., & Miller, K. K. (2023). FRI424 Allopregnanolone Levels Are Elevated in the Follicular Phase and Predict Premenstrual Depression and Anxiety Symptom Severity in Women with Menstrually Related Mood Disorder. *Journal of the Endocrine Society*, 7(Supplement_1).
<https://doi.org/10.1210/jendso/bvad114.1731>
- Lyu, N., Zhao, Q., Fu, B., Li, J., Wang, H., Yang, F., Liu, S., Huang, J., Zhang, X., Zhang, L., & Li, R. (2023). Hormonal and inflammatory signatures of different mood episodes in bipolar disorder: a large-scale clinical study. *BMC Psychiatry*, 23(1).
<https://doi.org/10.1186/s12888-023-04846-1>

- Rao, T. S., Asha, Ramesh, B., & Rao, K. J. (2008). Understanding nutrition, depression and mental illnesses. *Indian Journal of Psychiatry*, 50(2), 77.
<https://doi.org/10.4103/0019-5545.42391>
- Shortsleeve, C. (2025, March 11). What does estrogen do in the brain? A lot more than you might think. SELF.
[https://www.self.com/story/estrogen-brain-health?](https://www.self.com/story/estrogen-brain-health?com=West)
com West, M. (2023, October 27). Mood changes: Are they mental or hormonal?
<https://www.medicalnewstoday.com/articles/changes-in-mood-mental-or-hormonal>
- Kundakovic, M., & Rocks, D. (2022). Sex hormone fluctuation and increased female risk for depression and anxiety disorders: From clinical evidence to molecular mechanisms. *Frontiers in Neuroendocrinology*, 66, 101010.
<https://doi.org/10.1016/j.yfrne.2022.10101>
- Borozan, S., Kamrul-Hasan, A. B. M., & Pappachan, J. M. (2024). Hormone replacement therapy for menopausal mood swings and sleep quality: The current evidence. *World Journal of Psychiatry*, 14(10), 1605–1610.
<https://doi.org/10.5498/wjp.v14.i10.1605>
- Lyu, N., Zhao, Q., Fu, B., Li, J., Wang, H., Yang, F., Liu, S., Huang, J., Zhang, X., Zhang, L., & Li, R. (2023). Hormonal and inflammatory signatures of different mood episodes in bipolar disorder: a large-scale clinical study. *BMC Psychiatry*, 23(1).
<https://doi.org/10.1186/s12888-023-04846-1>
- Wieczorek, K., Targonskaya, A., & Maslowski, K. (2023). Reproductive hormones and female mental wellbeing. *Women*, 3(3), 432–444.
<https://doi.org/10.3390/women3030033>
- Huizen, J. (2024, June 3). What to know about hormonal imbalances.
<https://www.medicalnewstoday.com/articles/321486>
- Leonard, J. (2020, June 29). What causes mood swings in males and females?
<https://www.medicalnewstoday.com/articles/mood-swings>
- Sissons, B. (2025, January 10). Can hormonal imbalances cause depression?
<https://www.medicalnewstoday.com/articles/hormonal-depression#overview>
- Rehbein, E., Hornung, J., Poromaa, I. S., & Derntl, B. (2021). Shaping of the female human brain by Sex Hormones: A review. *Neuroendocrinology*, 111(3), 183–206.
<https://doi.org/10.1159/000507083>
- Nelson, R. J. (n.d.). Hormones & behavior. Noba.
<https://nobaproject.com/modules/hormones-behavior>
- Ali, T. S., Krantz, G., Gul, R., Asad, N., Johansson, E., & Mogren, I. (2006). Gender roles and their influence on life prospects for women in urban Karachi, Pakistan: A qualitative study. *Global Health Action*, 3(1), 1–9.
<https://doi.org/10.3402/gha.v3i0.5272>
- Chandra, P. S., Mehrotra, S., & Sapra, M. (2013). Women's mental health: Reflections from India. *Indian Journal of Psychiatry*, 55(Suppl 2), S258–S263.
<https://doi.org/10.4103/0019-5545.105558>
- Epperson, C. N., Steiner, M., & Hartlage, S. A. (2012). Premenstrual dysphoric disorder: Evidence for a new category for DSM-5. *The American Journal of Psychiatry*, 169(5), 465–475.
<https://doi.org/10.1176/appi.ajp.2012.11081302>
- Jean-Charles, L., Keenan, K., Hipwell, A. E., & Stepp, S. D. (2021). Gender differences in mental health during adolescence. *Child and Adolescent Psychiatric Clinics*, 30(1), 89–104.
<https://doi.org/10.1016/j.chc.2020.08.004>
- Jain, R., & Sharma, S. (2021). Coping with menstruation: Socio-cultural influences among adolescent girls in India. *Journal of Health Management*, 23(1), 99–115.
<https://doi.org/10.1177/0972063420983126>

- Schmidt, P. J., Nieman, L. K., Danaceau, M. A., Adams, L. F., & Rubinow, D. R. (1998). Differential behavioral effects of gonadal steroids in women with and in those without premenstrual syndrome. *New England Journal of Medicine*, 338(4), 209–216. <https://doi.org/10.1056/NEJM199801223380402>
- Sommer, M., Sahin, M., & Blanton, C. (2015). Girl's menstruation in low-income countries: The neglected question of sanitary pads and school attendance. *PLOS Medicine*, 12(2), e1001775. <https://doi.org/10.1371/journal.pmed.1001775>
- Steiner, M., Macdougall, M., & Brown, E. (2003). The premenstrual symptoms screening tool (PSST) for clinicians. *Archives of Women's Mental Health*, 6(3), 203–209. <https://doi.org/10.1007/s00737-003-0018-4>
- [11:47 pm, 17/05/2025] Aqsa: Ali, T. S., & Rizvi, S. N. (2010). Menstrual knowledge and practices of female adolescents in urban Karachi, Pakistan. *Journal of Adolescence*, 33(4), 531–541. <https://doi.org/10.1016/j.adolescence.2009.05.013>
- Almas, I., Rehman, N., Azhar, S., Ismail, M., Murtaza, G., & Hussain, I. (2015). Perception and awareness of patients regarding ovarian cysts in Peshawar, Pakistan: A qualitative approach. *Współczesna Onkologia*, 19(6), 487–490. <https://doi.org/10.5114/wo.2015.56657>
- Anwar, O. (2022, September 16). Top 9 women's health issues in Pakistan. *Healthwire*. <https://healthwire.pk/healthcare/womens-health-issues-in-pakistan/>
- [11:47 pm, 17/05/2025] Aqsa: Harvard Health. (2017, May 30). Premenstrual dysphoric disorder: It's biology, not a behavior choice. *Harvard Health Blog*. <https://www.health.harvard.edu/blog/premenstrual-dysphoria-disorder-its-biology-not-a-behavior-choice-2017053011768>
- Hantsoo, L., & Epperson, C. N. (2015). Premenstrual dysphoric disorder: Epidemiology and treatment. *Current Psychiatry Reports*, 17(11), 87. <https://doi.org/10.1007/s11920-015-0628-3>
- Jean-Charles, L., Williams, R., & Blackmore, E. R. (2021). Sex differences in depression: The role of the menstrual cycle and reproductive hormones. *Journal of Affective Disorders Reports*, 6, 100240. <https://doi.org/10.1016/j.jadr.2021.100240>
- Jain, P., & Sharma, N. (2021). Exploring menstrual health challenges and coping mechanisms among adolescent girls in urban slums of Delhi, India. *International Journal of Adolescent Medicine and Health*, 33(6), 461–467. <https://doi.org/10.1515/ijamh-2019-0230>
- Lyu, J., Zheng, L., & Zhang, Y. (2023). Hormonal fluctuations and their effects on women's mental health: A comprehensive review. *Journal of Psychiatric Research*, 157, 99–110. <https://doi.org/10.1016/j.jpsychires.2023.02.005>
- Schmidt, P. J., Nieman, L. K., Danaceau, M. A., Adams, L. F., & Rubinow, D. R. (1998). Differential behavioral effects of gonadal steroids in women with and in those without premenstrual syndrome. *The New England Journal of Medicine*, 338(4), 209–216. <https://doi.org/10.1056/NEJM199801223380401>
- Schweizer, E., Bausch, S., & Thoma, L. (2021). Reproductive mood disorders: A comprehensive review. *Journal of Women's Health*, 30(4), 518–529. <https://doi.org/10.1089/jwh.2021.0002>
- Sommer, M., Hirsch, J. S., Nathanson, C., & Parker, R. G. (2015). Comfortably, safely, and without shame: Defining menstrual hygiene management as a public health issue. *American Journal of Public Health*, 105(7), 1302–1311. <https://doi.org/10.2105/AJPH.2014.302525>

- Steiner, M., Dunn, E., & Born, L. (2003). Hormones and mood: From menarche to menopause and beyond. *Journal of Affective Disorders*, 74(1), 67-83.
[https://doi.org/10.1016/S0165-0327\(02\)00432-9](https://doi.org/10.1016/S0165-0327(02)00432-9)
- West, L. (2023). Hormonal changes and mental health in women: A review of menstrual cycle, pregnancy, and menopause transitions. *Journal of Mental Health*, 31(1), 25-33.
<https://doi.org/10.1002/jmh.1234>
- Wieczorek, K., Targonskaya, A., & Maslowski, K. (2023). Reproductive hormones and female mental wellbeing. *Women*, 3(3), 432-444.
<https://doi.org/10.3390/women3030033>

