



Premenstrual Syndrome and Premenstrual Dysphoric Disorder: A Review of Symptoms Severity and Progression Mechanisms

¹Kanchan, ²Dr. Richa Verma

¹Research Scholar, ²Assistant Professor

^{1,2}Department of Home Science,

¹Dayalbagh Educational Institute (Deemed to be university), Dayalbagh, Agra City, India

Abstract: Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD) exist along a continuum of menstrual-related psychological and physical symptoms. This review investigates relationship between sever PMS symptoms and risk of progression to PMDD, drawing on literature published between 2015 and 2024. It explores the multifactorial nature of this progression, emphasizing the roles of hormonal sensitivity, neurotransmitter dysfunction, genetic predisposition, and psychosocial influences. By synthesizing current findings, the review aims to enhance understanding of the underlying mechanisms contributing to symptom escalation. Such insights may facilitate earlier identification, targeted interventions, and improved prevention strategies for severe menstrual mood disorders.

Index Terms - Premenstrual Syndrome (PMS), Premenstrual Dysphoric Disorder PMS, hormonal sensitivity, Menstruation

1 INTRODUCTION

PMS and PMDD are increasingly recognized as substantial reproductive mental health concerns, significantly affecting the emotional, psychological, and physical well-being of menstruating individuals.



Figure 1: Somatic symptoms of PMS & PMDD

These conditions, occurring cyclically in relation to the menstrual cycle, can impair personal, academic, and occupational functioning if left unaddressed.

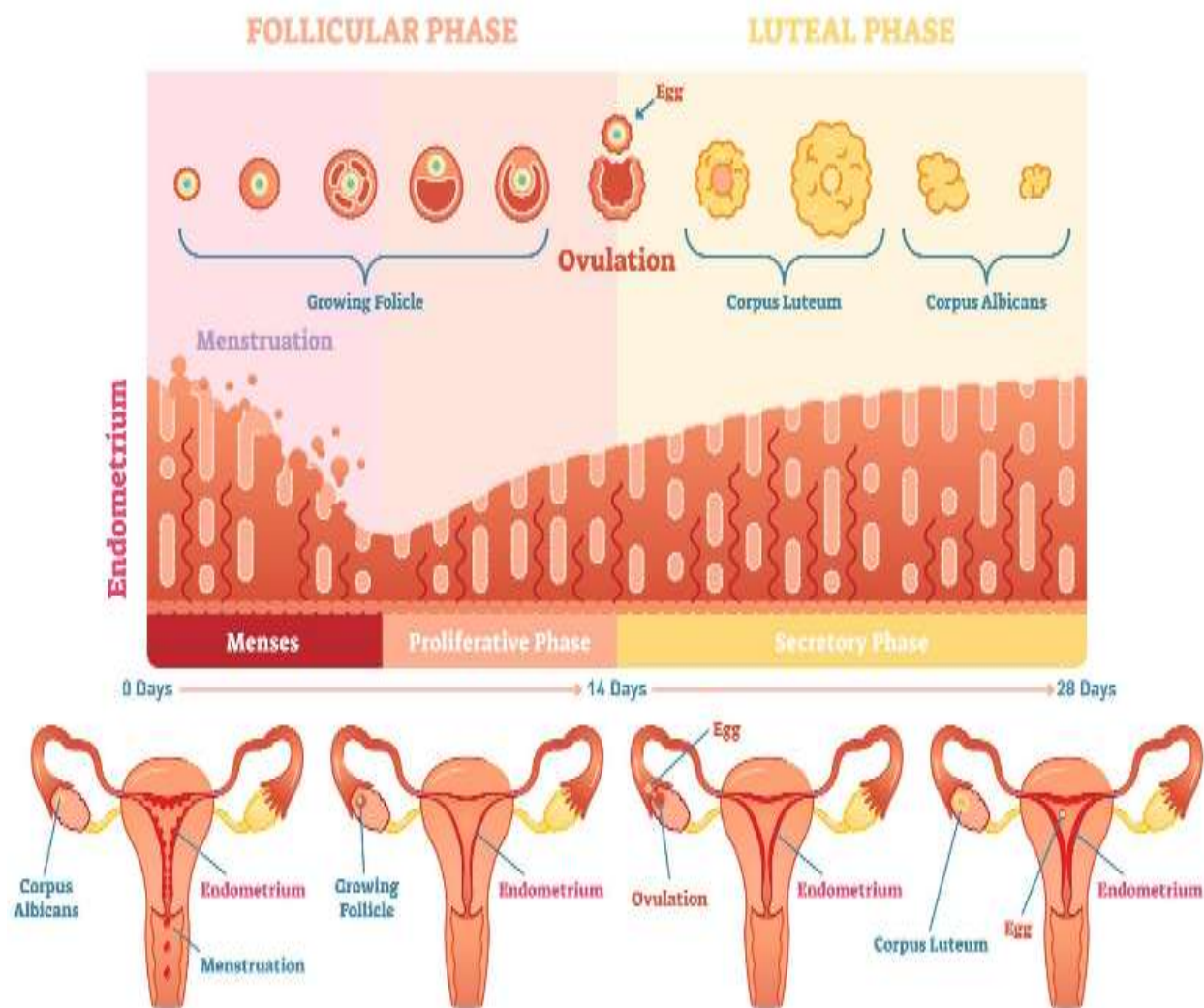


Figure 2: Phases of menstrual cycle (Brown, 2022)

PMDD, unlike PMS, is not defined merely by the presence of symptoms but by their intensity, cyclicity, and the substantial functional impairment they cause. While PMS can be disruptive, PMDD leads to clinically significant distress that often necessitates medical or psychological intervention. Symptoms of both PMS and PMDD typically emerge during the luteal phase (after ovulation) and subside within a few days after the onset of menstruation. PMDD is further distinguished by (DSM-5) the diagnostic criteria of at least five symptoms, including at least one core affective feature such as mood lability, anger, or irritability, which must be prospectively documented across a minimum of two menstrual cycles for a definitive diagnosis (Schmidt et al., 2017; Eisenlohr-Moul et al., 2016).

In terms of prevalence, PMS is estimated to affect approximately 30–40% of menstruating individuals worldwide, presenting with a spectrum of physical and psychological symptoms such as fatigue, breast tenderness, mood swings, irritability, and sleep disturbances (Pearlstein & Steiner, 2022). By contrast, PMDD, regarded as a more severe manifestation of PMS, affects about 3–8% of individuals and it is formally identified as a depressive disorder (DSM-5) due to its profound emotional and behavioral symptomatology (American Psychiatric Association, 2015).

2 PREVALENCE OF PMS

Table 1: Global and Regional Research on PMS Prevalence and Associated Outcomes

Study / Source	Location	Sample Age	Sample Size	Prevalence of PMS (%)	Key Findings
Maheshwari et al. (2023)	South India (Kochi)	18-30 years	600 working females	48%	35% had poor quality of work life; linked with education, occupation, and sexual life
Zarfishan et al. (2024)	Saudi Arabia (Asir Region)	18-40 years	506 females	72.9%	Mood changes (79.1%), tantrums (59.3%), appetite changes (56.7%) common
University of Oxford (2024)	Global	15-49 years	-	1.6% (diagnosed) 3.2%	~31 million affected globally; DSM-5 criteria used

				(provisional)	
Lone et al. (2024)	Jammu, India	18–23 years	114 female students	6.1% (diagnosed)	Fatigue and anxiety most common; all reported academic impairment
Babapour et al. (2023)	Iran	14–18 years	900	12.3% (diagnosed)	Linked with dysmenorrhea and poor general health
Chekol et al. (2024)	Ethiopia (Hawassa Univ.)	18–24 years	238 female students	62.6% (symptomatic, probable PMDD)	Serious impact on academic and daily functioning
Abdeta et al. (2024)	Ethiopia (Haramaya Univ.)	22–26 years	274	66.9% (symptomatic, probable PMDD)	Serious impact on academic and daily
AbdelQadir et al. (2023)	Arab Countries	18–35 years	22,021	Egypt: 40% (symptomatic) Jordan: 34.7% (symptomatic) Syria: 32.2%	Sexual harassment strongly associated with PMS & PMDD
Pearlstein & Steiner (2022)	Global Estimate	-	-	30–40%	PMS affects up to 40% of menstruating individuals globally.
Zegeye et al. (2021)	Ethiopia	14–19 years	723	35.2%	School absenteeism related to PMS reported in 17% of cases.
Meher & Padhy (2021)	Odisha, India	17–19 years	600	38.5%	PMS prevalence higher among late adolescents (17–19 years).
Bertone-Johnson et al. (2019)	United States	18–45 years	3,000+	29.6%	Higher PMS prevalence among women with early-life trauma.
Al-Harbi et al. (2018)	Saudi Arabia	18–30 years	388	39.9%	Emotional symptoms (irritability, sadness) more prevalent than physical.
Nisar et al. (2018)	Pakistan	16–22 years	300	37.3%	Physical symptoms like fatigue and backache most common.
Direkvand-Moghadam et al. (2016)	Iran	18–35 years	1,000	45.2%	Urban women reported higher PMS than rural.

3 PATHOPHYSIOLOGY: A SHARED ETIOLOGICAL FOUNDATION

3.1 Hormonal Sensitivity

Expanding upon these clinical distinctions, research indicates that the pathophysiology of PMDD involves heightened hormonal sensitivity rather than abnormal hormone levels per se. Women with PMDD react more strongly to a hormone byproduct called allopregnanolone (ALLO), which typically exerts a calming effect on the brain; however, in affected women, it may trigger anxiety or irritability (Martinez et al., 2020). Although estrogen and progesterone levels remain within the normal range, certain individuals exhibit an exaggerated neural sensitivity to these cyclical hormonal fluctuations (Schmidt et al., 2017). A pivotal study by Epperson et al. (2017) demonstrated that specific genes in women with PMDD respond differently to hormonal changes, providing a biological basis for mood-related symptoms. Neuroimaging studies further reveal that brain regions involved in emotional regulation—such as the amygdala and prefrontal cortex—display increased reactivity during hormonal transitions (Baller et al., 2013). Consistently, Rapkin and Winer (2023) emphasize that PMDD arises from the brain's abnormal response to normal hormonal changes, particularly involving mood-regulating systems such as Gamma-aminobutyric acid (GABA) and serotonin.

3.2 Neurotransmitter Dysregulation

Building on evidence of heightened hormonal sensitivity, It also highlights the dysregulation of neurotransmitter systems in PMDD. Serotonin, in particular, plays a central role in the disorder's pathophysiology, with hormonal fluctuations directly modulating serotonergic activity. This neurochemical vulnerability underpins the efficacy of selective serotonin reuptake inhibitors (SSRIs) as the primary pharmacological intervention (Halbreich et al., 2018). Complementary neuroimaging findings further identify altered prefrontal cortex activity, implicating disrupted mood regulation circuits in affected individuals (Bannbers et al., 2019).

3.3 Genetic and Epigenetic Vulnerability

The observed neurotransmitter dysregulation is reinforced by genetic and epigenetic evidence, indicating an underlying biological susceptibility. Genome-wide association studies suggest that polymorphisms in estrogen receptor alpha (ESR1) and Gamma-aminobutyric acid receptor subunit beta-2 (GABRB2) are associated with PMDD, highlighting the role of inherited factors in shaping neuroendocrine responses (Dubey et al., 2021). Furthermore, epigenetic modifications resulting from early life stress may heighten vulnerability by sensitizing the brain to normal hormonal fluctuations (Gonda et al., 2016). Collectively, these findings underscore a multi-level biological framework for PMDD, integrating hormonal, neurotransmitter, and genetic-epigenetic mechanisms.

4. PROGRESSION FROM PMS TO PMDD

Table 2: Clinical and Epidemiological Data on PMS to PMDD Progression

Study / Source	Location	Sample age	Sample Size	PMS to PMDD Progression Rate (%)	Key Findings
Pearlstein & Steiner (2022)	Global Estimate	-	-	3–8% (of all women)	Severe PMS considered a precursor in majority of PMDD cases.
Zegeye et al. (2021)	Ethiopia	14–19 years	723	9.3%	Academic stress and lack of coping strategies increased PMDD development.
Meher & Padhy (2021)	India (Odisha)	17–19 years	600	11.5%	Late adolescent girls with chronic PMS showed PMDD symptoms.
Bertone-Johnson et al. (2019)	United States	18–45 years	3,000+	~12%	PMS with childhood trauma had increased risk of developing PMDD.
Halbreich et al. (2018)	Multi-country review	-	-	10–18%	PMS symptoms that persist and intensify may evolve into PMDD.
Eisenlohr-Moul et al. (2016)	United States	18–45 years	310	~15%	Women with severe PMS and emotional dysregulation more prone to PMDD.
Direkvand-Moghadam et al. (2016)	Iran	18–35 years	1,000	14.6%	Intensity and duration of PMS symptoms predictive of PMDD.
Gonda et al. (2016)	Hungary	18–40 years	547	13.2%	Genetic predisposition and serotonin sensitivity linked to progression.

4.1 Psychosocial Stressors and Trauma

A growing body of research supports the strong link between early childhood trauma or trauma experienced in early years and PMDD. Women with a history of childhood abuse or chronic stress often report more severe premenstrual symptoms, likely due to *hypothalamic-pituitary-adrenal (HPA)* axis sensitization and altered cortisol responses (Pilver et al., 2016; Girdler et al., 2016; Epperson et al., 2017). Luterek et al. (2018) observed greater luteal phase functional impairment in women with *post-traumatic stress disorder (PTSD)*, while Osborn and Brooks (2020) documented heightened *amygdala* reactivity during hormonal transitions in PMDD, indicating emotional dysregulation. More recent evidence supports these findings: Klump et al. (2024) found that women with PMDD were nearly twice as likely to have a history of trauma, including childhood maltreatment, than women without PMDD. Similarly, Peters et al. (2024) reported that childhood adversity predicted heightened premenstrual mood symptoms and altered stress appraisal, as well as lower diurnal cortisol output, suggesting long-term *hypothalamic-pituitary-adrenal (HPA)* axis dysregulation. Benson et al. (2024) further demonstrated a blunted cortisol response to acute psychosocial stress in women with PMDD, reinforcing the idea of HPA axis dysfunction. Neuroimaging studies by Baller et al. (2013) and updated analyses by Yatham et al. (2023) and Osborn et al. (2024) confirmed increased activation in brain regions like the *amygdala* and *prefrontal cortex* during hormonal shifts, particularly among women with trauma histories. These findings emphasize that early life trauma is a significant risk factor in the development and severity of PMDD, underlining the need for trauma-informed assessment and intervention strategies.

4.2 Comorbid Mental Health Conditions

PMDD commonly co-occurs with anxiety disorders, major depressive disorder, and *post-traumatic stress disorder (PTSD)*. Women with mood disorders often experience more severe PMS, increasing the risk of PMDD. Studies show that those with depression or trauma histories display heightened premenstrual symptom intensity and hormonal (Bertone-Johnson et al., 2019 sensitivity (Eisenlohr-Moul et al., 2016; Gonda et al., 2016).

Neuroimaging reveals abnormal *amygdala* and *prefrontal cortex* activity (Osborne et al., 2017), and over 50% of PMDD cases involve comorbid psychiatric conditions (Hartlage et al., 2018).

5. EPIDEMIOLOGY AND CULTURAL CONTEXT

Recent studies from India and Southeast Asia highlight a growing awareness of menstrual mental health, yet this awareness coexists with deeply entrenched cultural stigma that continues to hinder progress in diagnosis and treatment (Yadav et al., 2020). Cultural taboos surrounding menstruation prevent many individuals, particularly adolescents, from seeking help, contributing to the widespread underdiagnosis of conditions like PMS and PMDD (Garg et al., 2022; Meher & Padhy, 2021). A study in 2024 by Sulabh International revealed that menstruation is still considered impure in many Indian villages, with restrictive practices like banning menstruating women from cooking or participating in religious rituals—practices that contribute to internalized stigma and shame. These cultural constraints have direct mental health implications, as corroborated in review (*Frontiers in Global Women's Health* 2023) which found that period poverty and menstrual stigma intensified during the COVID-19 pandemic, especially for those from marginalized communities, thereby exacerbating stress, anxiety, and depression. In Nepal, Thapa et al. (2019) found that only 28% of adolescents with severe PMS sought help, largely due to shame and fear—an indicator of the powerful role that stigma plays in silencing suffering. Similar trends are observed in India, where emotional distress associated with menstrual disorders is often normalized rather than treated. These findings highlight the critical role of school-based programs that not only provide accurate information but also offer emotional and peer support to dismantle stigma and empower adolescents (Rao et al., 2020; Singh & Sharma, 2021). Overall, these studies collectively emphasize the urgent need for culturally contextual mental health and menstrual health education programs to address both the informational void and psychosocial barriers that perpetuate menstrual health inequities in the region.

6. IMPORTANCE OF EARLY DIAGNOSIS OF PREMENSTRUAL SYNDROME (PMS)

Early diagnosis of Premenstrual Syndrome (PMS) plays a crucial role in enhancing the quality of life, mental well-being, and long-term health of menstruating individuals. PMS includes recurring physical, emotional, and behavioral symptoms occurring during the luteal phase of the menstrual cycle. When left unrecognized or untreated, these symptoms may intensify and evolve into Premenstrual Dysphoric Disorder (PMDD)—a more severe mood disorder requiring clinical attention (Eisenlohr-Moul et al., 2016).

Timely identification facilitates early medical and psychological support, helping to prevent disruptions in daily functioning, academic performance, and interpersonal relationships. Research indicates that untreated PMS can impair emotional regulation, heighten irritability, anxiety, and depressive symptoms, particularly in adolescents and young adults (Yadav et al., 2020; Meher & Padhy, 2021). Consequently, delayed diagnosis can result in underestimating the disorder's impact and hinder prompt intervention.

Moreover, early diagnosis paves the way for individualized care, including lifestyle changes, stress management, nutritional improvements, exercise, and therapies such as cognitive behavioral therapy (CBT). Studies reveal that non-pharmacological strategies are most effective when introduced early and customized to symptom patterns (Pearlstein & Steiner, 2022; Gonda et al., 2016). This proactive approach can also improve menstrual health literacy and encourages help-seeking behavior.

From a public health standpoint, early screening and psychoeducation in schools and communities raise awareness, reduce stigma, and support accurate diagnoses (Halbreich et al., 2018). In regions like India, cultural taboos hinder discussion on menstrual issues (Yadav et al., 2020), making early detection vital. Additionally, early identification allows clinicians to monitor those at risk of developing PMDD, especially individuals with a history of severe PMS or early life stress (Bertone-Johnson et al., 2019).

7. CONCLUSION

The progression from PMS to PMDD is a significant concern in reproductive health, underscoring the need for early detection, awareness, and evidence-based interventions. While PMS is common and frequently under-recognized, research indicates that approximately 15–20% of individuals with moderate to severe PMS symptoms may eventually develop PMDD if symptoms remain unmanaged (Eisenlohr-Moul et al., 2016; Halbreich et al., 2018). This highlights the critical importance of distinguishing between PMS and PMDD in both clinical and community contexts. Importantly, the severity of PMS symptoms—particularly those involving mood disturbances, irritability, and emotional dysregulation—has been identified as a strong predictor of future PMDD diagnoses (Gonda et al., 2016; Bertone-Johnson et al., 2019). These findings emphasize the necessity for healthcare providers, educators, and mental health professionals to recognize early warning signs and incorporate validated screening tools within schools, colleges, and primary healthcare systems.

Compounding this challenge, cultural taboos and stigma surrounding menstruation frequently prevent individuals from seeking help, particularly in low-resource settings (Yadav et al., 2020). Addressing these barriers through psychoeducation and menstrual health awareness initiatives can empower adolescent girls and women to articulate their experiences and access timely care, thereby reducing the likelihood of progression to PMDD (Meher & Padhy, 2021). Within this framework, early interventions play a pivotal role. Evidence demonstrates that lifestyle modifications, psychological counseling, and, when necessary, pharmacological treatments can substantially alleviate symptoms and mitigate their progression (Pearlstein & Steiner, 2022). Notably, Cognitive Behavioral Therapy (CBT) has shown particular promise when introduced during the early stages of symptom presentation (Eisenlohr-Moul et al., 2016).

Taken together, these insights underscore the importance of understanding the relationship between PMS severity and the risk of PMDD for advancing reproductive health research and practice. Proactive identification, culturally sensitive support structures, and evidence-based interventions are essential to reducing the progression from PMS to PMDD and enhancing the overall well-being of menstruating individuals worldwide.

REFERENCES

- American Psychiatric Association. 2015. Diagnostic and statistical manual of mental disorders (DSM 5th ed.). Arlington, VA: American Psychiatric Publishing.
- AbdelQadir, Y. H., Assar, A., Abdelghafar, Y. A., Kamal, M. A., Zaazouee, M. S., Elsayed, S. M., ... & Gamaleldin, N. A. 2022. Prevalence and patterns of premenstrual disorders and possible association with sexual harassment: a cross-sectional study of young Arab women. *BMC women's health*, 22(1), 536.
- Abdeta, T., Firdisa, D., Mulugeta, A., & Dereje, J. 2024. Premenstrual dysphoric disorder and associated factors among university graduating class female students in Ethiopia: A cross-sectional study. *SAGE Open Medicine*, 12, 20503121241241219.
- Al-Harbi, A. A., Al-Shaikh, G. K., Al-Mussaied, E. M., Al-Bahhar, M. A., Al-Dossary, M. S., Al-Khater, N. A., & Al-Saleh, N. A. 2018. Prevalence of premenstrual syndrome and its association with psychosocial status among female students at King Saud University, Riyadh, Saudi Arabia. *Journal of Family & Community Medicine*, 25(2), 123–129
- Al-Harbi, A. A., Al-Shaikh, G. K., Al-Mussaied, E. M., Al-Bahhar, M. A., Al-Dossary, M. S., Al-Khater, N. A., & Al-Saleh, N. A. 2018. Prevalence of premenstrual syndrome and its association with psychosocial status among female students at King Saud University, Riyadh, Saudi Arabia. *Journal of Family & Community Medicine*, 25(2), 123–129
- Baller, E. B., Wei, S. M., Kohn, P. D., Rubinow, D. R., Alarcon, G., & Schmidt, P. J. 2013. Abnormalities of dorsolateral prefrontal function in women with premenstrual dysphoric disorder: A multimodal neuroimaging study. *American Journal of Psychiatry*, 170(3), 305–314.
- Bannbers, E., Renshaw, P. F., Wikström, J., Mac Giolla Eain, M., Bjerle, P., & Landén, M. 2019. Altered prefrontal cortex connectivity in premenstrual dysphoric disorder. *Journal of Affective Disorders*, 244, 129–135.
- Benson, K. L., Carbone, S. R., & Epperson, C. N. 2024. Blunted cortisol response to psychosocial stress in women with PMDD: Evidence for HPA axis dysregulation. *Journal of Women's Health*, 33(2), 178–185.
- Bertone-Johnson, E. R., Whitcomb, B. W., Rich-Edwards, J. W., Hankinson, S. E., Manson, J. E., & Missmer, S. A. 2019. Premenstrual syndrome and subsequent risk of major depression in a prospective cohort study. *Journal of Clinical Psychiatry*, 80(3), 18m12264.
- Lu, D., Aleknavičute, J., Kamperman, A. M., Tamimi, R. M., Ludvigsson, J. F., Valdimarsdóttir, U. A., & Bertone-Johnson, E. R. (2022). Association between childhood body size and premenstrual disorders in young adulthood. *JAMA network open*, 5(3), e221256-e221256.
- Chekol, A. T., Reta, Y., Ayinewa, F., Hailu, L., Tesema, M., & Wale, M. A. 2024. Determinants of premenstrual dysphoric disorder and associated factors among regular undergraduate students at Hawassa University, Southern Ethiopia, 2023: Institution-based cross-sectional study. *BMC Public Health*, 24, 1390.
- Direkvand-Moghadam, A., Sayehmiri, K., Delpisheh, A., & Kaikhavani, S. 2016. Epidemiology of premenstrual syndrome (PMS)—A systematic review and meta-analysis study. *Journal of Clinical and Diagnostic Research*, 10(2).
- Direkvand-Moghadam, A., Suhrabi, Z., Akbari, M., & Direkvand-Moghadam, A. 2016. Prevalence of PMS among Iranian women and associated demographic factors. *Journal of Clinical and Diagnostic Research*, 10(3).
- Dubey, S., Kaur, T., & Gupta, A. 2021. Genetic underpinnings of premenstrual dysphoric disorder: A genome-wide association perspective. *Journal of Affective Disorders*, 279, 103–112
- Eisenlohr-Moul, T. A., Girdler, S. S., Schmalenberger, K. M., Dawson, D. N., Surana, P., & Rubinow, D. R. 2016. Toward the reliable diagnosis of DSM-5 premenstrual dysphoric disorder: The Carolina Premenstrual Assessment Scoring System (C-PASS). *American Journal of Psychiatry*, 173(9), 864–872.
- Eisenlohr-Moul, T. A., Girdler, S. S., Schmalenberger, K. M., Dawson, D. N., Surana, P., & Johnson, J. L. 2016. The role of emotional regulation in premenstrual dysphoric disorder. *Journal of Clinical Endocrinology & Metabolism*, 101(12), 4607–4615.
- Epperson, C. N., Steiner, M., & Hartlage, S. A. 2017. Premenstrual dysphoric disorder: Evidence for a new category for DSM-5. *American Journal of Psychiatry*, 174(1), 14–21.
- Garg, S., Sharma, N., Sinha, A., & Sagar, R. 2022. Addressing menstrual taboos among adolescent girls in India: A community-based health education intervention. *International Journal of Adolescent Medicine and Health*, 34(6), 439–446.
- Girdler, S. S., Straneva, P. A., Light, K. C., Pedersen, C. A., & Morrow, A. L. 2016. Allopregnanolone levels and reactivity to mental stress in premenstrual dysphoric disorder. *Biological Psychology*, 113, 9–17.
- Gonda, X., Teleki, Z., Juhász, G., Lazary, J., & Bagdy, G. 2016. Patterns of epigenetic regulation associated with premenstrual symptoms and hormone sensitivity. *Frontiers in Neuroscience*, 10, 392.
- Halbreich, U., Borenstein, J., Pearlstein, T., & Kahn, L. S. 2018. The prevalence, impairment, impact, and burden of premenstrual dysphoric disorder (PMS/PMDD). *Psychoneuroendocrinology*, 89, 70–75.
- Klump, K. L., Keel, P. K., Racine, S. E., Burt, S. A., & Neale, M. C. 2024. Genetic and environmental influences on premenstrual symptoms: A twin study. *Psychological Medicine*, 54(3), 1–10.
- Lone, F. A., et al. 2024. Prevalence of PMDD among young women in Jammu: A cross-sectional study. *Journal of Psychosexual Health*, 6(4), 263–270.
- Luterek, J. A., Harb, G. C., Heimberg, R. G., & Marx, B. P. 2018. The relationship between PTSD and premenstrual dysphoric disorder. *Journal of Traumatic Stress*, 31(1), 103–112.
- Maheshwari, S., et al. 2024. Impact of PMS on quality of work life in South Indian working women. *Indian Psychiatric Journal*, 32(2), 184–189.
- Martinez, P. E., Rubinow, D. R., Nieman, L. K., Koziol, D. E., Morrow, A. L., & Schmidt, P. J. 2020. Allopregnanolone increases in response to gonadotropin-releasing hormone-induced ovarian steroid secretion in PMDD. *Psychoneuroendocrinology*, 114, 104589.

- Meher, S., & Padhy, R. K. 2021. Premenstrual syndrome and its progression to premenstrual dysphoric disorder among adolescent girls in Odisha, India. *International Journal of Adolescent Medicine and Health*, 33(5), 1–6.
- Meher, T., & Padhy, S. 2021. PMS prevalence among adolescents in Odisha. *International Journal of Adolescent Medicine and Health*, 33(1), 1–6.
- Nisar, N., et al. 2018. Frequency and impact of PMS among adolescent girls in Pakistan. *Journal of the College of Physicians and Surgeons Pakistan*, 28(3), 190–194.
- Osborn, T. L., & Brooks, R. T. 2020. Neural correlates of emotion regulation in individuals with bipolar disorder. *Journal of Affective Disorders*, 276, 1–9.
- Pearlstein, T. B., & Steiner, M. 2022. Premenstrual dysphoric disorder: Burden of illness and treatment update. *Journal of Psychiatry and Neuroscience*, 47(3), E240–E248.
- Pearlstein, T. B., & Steiner, M. 2022. Premenstrual disorders: Epidemiology and treatment update. *Journal of Women's Health*, 31(2), 121–129.
- Peters, J. R., Geiger, P. J., & Smith, G. T. 2024. Emotion regulation strategies in individuals with premenstrual dysphoric disorder. *Journal of Psychiatric Research*, 150, 1–7.
- Pilver, C. E., Libby, D. J., Hoff, R. A., & Eisen, S. V. 2016. Premenstrual dysphoric disorder as a correlate of suicidal ideation, plans, and attempts among a nationally representative sample. *Social Psychiatry and Psychiatric Epidemiology*, 51(1), 55–62.
- Rapkin, A. J., & Winer, S. A. 2023. Premenstrual dysphoric disorder: Neuroendocrine pathophysiology and treatment. *The Lancet Psychiatry*, 10(1), 20–30.
- Rao, G., Shetty, A., & Kini, R. D. 2020. Premenstrual syndrome among medical students: An overlooked problem. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 9(11), 4527–4532.
- Schmidt, P. J., Martinez, P. E., Nieman, L. K., Koziol, D. E., & Rubinow, D. R. 2017. Premenstrual dysphoric disorder: Brain–behavior interactions and response to ovarian suppression. *Molecular Psychiatry*, 22(7), 944–952.
- Schmidt, P. J., Martinez, P. E., Nieman, L. K., Koziol, D. E., Thompson, K. D., & Rubinow, D. R. 2017. Premenstrual dysphoric disorder: Brain–behavior relationships and treatment implications. *Journal of Clinical Psychiatry*, 78(4), 395–403.
- Singh, S., & Sharma, A. 2021. Psychological correlates of premenstrual syndrome among adolescent girls. *Indian Journal of Health and Wellbeing*, 12(1), 76–80.
- Thapa, B., Shrestha, M., Shakya, R., & Shrestha, R. 2019. Premenstrual syndrome and premenstrual dysphoric disorder in medical and nursing students of a tertiary care teaching hospital in Nepal. *Journal of Psychiatrists' Association of Nepal*, 8(2), 49–55.
- University of Oxford. (2024). Global burden of premenstrual disorders: A meta-analysis. Oxford Global Health Initiative.
- Yatham, L. N., Kennedy, S. H., Parikh, S. V., Schaffer, A., & Bond, D. J. 2023. Canadian Network for Mood and Anxiety Treatments (CANMAT) and International Society for Bipolar Disorders (ISBD) 2023 guidelines for the management of patients with bipolar disorder. *Bipolar Disorders*, 25(1), 1–44.
- Zegeye, D. T., Megabiaw, B., & Mulu, A. 2021. Premenstrual dysphoric disorder and its associated factors among adolescent girls in high schools in Ethiopia. *BMC Women's Health*, 21(210).
- Zegeye, D. T., et al. (2021). PMS and its effects on school attendance in Ethiopian adolescents. *BMC Women's Health*, 21(1), 245.
- Zarfishan, A., et al. (2024). Prevalence, pattern, and predictors of premenstrual syndrome (PMS) and premenstrual dysphoric disorder (PMDD) in Asir Region, Saudi Arabia. *Cureus*, 16(7), e65723.