
Addressing the Disregard of Emotional Rhythm of Womanhood: Psychoneuroendocrinology, Solutions, and the Call for Compassion

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ABSTRACT:

Mood swing is a popular feminine trait. Although mood swings are commonly associated with femininity, societal understanding and response remain limited, often shaped by stigma and misconception. This editorial/short communication explores the neuroendocrine mechanisms underlying hormone-related mood changes and outlines evidence-based interventions to improve both clinical care and public perception. Emotional fluctuations during a woman's reproductive years typically follow a cyclical pattern, aligned with hormonal shifts. Disorders such as premenstrual syndrome (PMS), premenstrual dysphoric disorder (PMDD), and premenstrual exacerbation (PME) are discussed in relation to their psychological and physical manifestations, neurochemical sensitivities, and hormonal changes across menstrual phases. Particular attention is given to how these fluctuations are often misunderstood, dismissed and disregarded by medically unaware and moralistic societies. Finally, practical strategies—including pharmacological treatment, psychotherapy, lifestyle modifications, and digital symptom tracking—are discussed to support mental and emotional well-being.

KEYWORDS: *Mood Swings, Womanhood, Premenstrual Syndrome, Premenstrual Dysphoric Disorder, Premenstrual Exacerbations, Digital Mood Tracker.*

List of Abbreviations

PMS: Premenstrual syndrome, PMDD: Premenstrual dysphoric disorder, PME: Premenstrual exacerbations, FSH: follicular stimulating hormone, LH: Luteinizing hormone.

INTRODUCTION:

The female reproductive system comprises internal and external organs that facilitate menstruation and procreation. This organ system is responsible for producing gametes (termed eggs or ova), regulating sex hormones, and maintaining fertilized eggs as they develop into mature fetuses ready for delivery.

A woman's reproductive lifespan spans from menarche to menopause [1].

During this phase, a woman's body undergoes significant physical changes. Notable signs include breast development, voice modulation, hair growth in specific areas, and most importantly, the onset of menstruation. As a result, the body experiences

regular changes in hormone levels that control reproduction and can affect a woman's emotions [2]. The mood may swing dramatically, sometimes even between depression and euphoria or beyond agitation. It is the fluctuation of these hormones that has been associated with many mood disorders, such as PMS, PMDD, PME, and depression [3]. The total proportion of PMS among women of reproductive age was estimated at 47.8 percent throughout the globe in the year 2023 [4].

Hormonal Links to Phase-Related Changes

Even if PMS and similar problems are well recognized, women who do not have them may still notice mood changes at different times in their cycle. Emotions and bodily functioning oscillate mainly because of changes in the cyclical rhythm of endocrine system [5].

Follicular Phase (Day 1–14)

During the onset of menstruation, FSH increases to stimulate the production of estradiol. This hormonal alteration usually increases energy, elevates mood, and gives a stronger mental clarity [5].

Ovulation (Day 12-19)

Ovulation and the elevation of estrogen levels occur due to the LH surge. There is also an increase in testosterone and androgens, which tend to increase sexual receptivity, attraction, and a feeling of well-being [5,6].

Luteal Phase (Day 28)

After ovulation, the corpus luteum releases progesterone which can stabilize a woman's mood for a little while. If fertilization does not happen, the corpus luteum shrivels and the levels of estrogen and progesterone decline. Low estrogen causes the hypothalamo-pituitary-ovarian axis to increase the output of noradrenaline. This, consequently, lowers dopamine, adrenaline, and serotonin. Cortisol is

most likely to be increase. This neuroendocrine diminution ensues the most in the late luteal phase and contribute to PMS and PMDD.

MANIFESTATIONS

People may experience psychological symptoms like depression, anxiety, irritability, impulsivity, anger outburst, emotional hypersensitivity and elated mood and food cravings rich in sugar or fat [7]. These disorders also manifest with bodily symptoms such as increased or decreased appetite, edema of hand and feet, lethargy, bloating and fatigue and muscular ache [8]

Mood fluctuations are seen to be attributed to the luteal phase, but this is just a general estimation. It is proven that negative mood changes happen to many women during other stages as well [9]. Interestingly, research indicates that reproductive hormone levels are similar in women with PMS and without PMS; the difference is the sensitivity of the neurochemicals [10].

Hormones have different effects on people's moods depending on their age. During menarche, adolescents often see a range of new and unexplained physical symptoms, unlike adult women, who generally build up coping skills or look for extra support.

CONSEQUENCES AND SOLUTIONS

Menstrual cycle anxiety, mood swings, impulsivity, and irritability can affect a lot of things. They are social withdrawal, interpersonal conflicts, non-suicidal self-injury, poor productivity, and school or work problems [11].

Hormonal shifts can mess with one's sleep schedule and cause mood swings to get worse. The changes of estrogen and progesterone tend to disrupt the natural sleep pattern of the body and render the female more emotionally absorbent.

Though these are the biological processes behind why many women feel such highs and lows, the effect they have on their lives depends largely on the way society sees and treats these processes. Attitudes in varying cultures may either see women getting the care they need in time or silently bearing their symptoms.

CULTURAL STIGMA AND MISINTERPRETATION

In many cultures, talking about menstruation is still forbidden which prevents many women from getting help [12]. In strict and moral societies, including South Asian states, menstruation and related mood symptoms remain sensitive or stigmatized topics. Disorders such as PMS and PMDD can go unnoticed. The fluctuations in emotions in women might be ascribed to weakness (emotional or personal), exaggeration, and are often not considered. This cultural silence and ignorance can delay diagnosis. It also prevents women from seeking help, especially in areas with limited mental health resources. Addressing these barriers through culturally aware education and care models is essential for improving outcomes [13][14]. Although stigma can be diminished through education programs that are culturally specific, little data exist regarding the durability of these gains with time and cultural changes. These disorders and complaints are often normalized and slightly taken in healthcare system [15].

PRACTICAL SOLUTIONS

The management strategies may either be medical or non-medical, and may be classified for clarity and easy reference.

1. Medical Interventions:

SSRI medications and birth control pills are some of the most commonly taken medications to treat mood symptoms associated with depression and PMS [16]. RCOG guidelines (2016) instated the DRSP and

Premenstrual Symptoms Screening Tool (PSST) in the detection of PMS [22].

2. Psychological Interventions:

Cognitive behavioral therapy (CBT) and mindfulness-based therapies that are increasing in popularity are used to handle emotional fluctuations and premenstrual mood states [16,17].

3. Lifestyle Interventions:

Regular exercising and changing the diet are effective ways to enhance mood control [17,18]. Lifestyle changes involve cutting down on sugary foods, using less refined salt and carbonated drinks, avoiding alcohol, and having a strong preference for non-processed foods. Among the nutrients that are known to benefit include tryptophan, stearic acid, zinc, magnesium, calcium, and sufficient vitamin D [19]. Nevertheless, such promising relations are accompanied by the limited number of high-quality randomized controlled trials and the difficulty of following dietary recommendations in real life.

4. Technological Tools:

Smartphone apps and wearables, including Pink Diaries, Heymoon, Apple Health, and Women Period Calendar, enable individual women to track their patterns of symptoms and cycles, and provide clinicians with valuable information [20,21]. Nevertheless, the problem is in the high dependence on self-report and the small sample sizes in most of the studies, which diminishes their generalizability and long-term reliability.

Individual care is required as the hormonal sensitivity of the mood is genetically predetermined, influenced by environmental stress, quality of sleep, mental and social life [17].

Public Health Initiative

Disease Control and Prevention (DCP3) serves as a public health initiative to listen, understand and address and to lower stigma and equalize women in attaining better psychological support in low middle income countries [23].

CONCLUSION

Comprehension of menstrual-associated mood variation as validable neuroendocrine experiences is critical in enhancing women's mental health and wellbeing. Recommendations in order of importance are:

- **Clinicians:** Considering cycle-wise mental health screening as a regular part of care will help diagnose women with PMS, PMDD, or other mood swings.
- **Policymakers:** Invest in culturally sensitive menstrual health education programs and decrease stigma and increase access to care.
- **Community Educators:** Normalizing discussion on menstrual-related changes of mood to make them seek help and make them aware.

It is not only a clinical but a social justice and a population/health imperative to identify and effectively treat mood shifts related to menstrual topics.

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