

## "I Don't Know Why I'm Crying": Understanding Emotional Experiences of Premenstrual Syndrome in Women

Adelina Rahmawati<sup>1</sup>, Fiska Puspa Arinda<sup>2</sup>

<sup>1</sup> Universitas Negeri Semarang, Indonesia

<sup>2</sup> Universitas Muhammadiyah Surakarta, Indonesia

### Corresponding Author:

Adelina Rahmawati,

Department of Psychology, Faculty of Education and Psychology, Universitas Negeri Semarang.

Sekaran, Gunungpati, Kota Semarang, Jawa Tengah

Email: [adelarahma@mai.unnes.ac.id](mailto:adelarahma@mai.unnes.ac.id)

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### Abstract

Premenstrual Syndrome (PMS) impacts nearly half of women worldwide, with mood fluctuations being a predominant concern. However, research on young women's subjective emotional experiences, particularly in non-Western settings, remains limited. This qualitative study explored how young adult women experience and cope with premenstrual mood changes and what contextual factors shape these experiences. Using Interpretative Phenomenological Analysis (IPA), six women aged 18–25 years who consistently experienced mood-related PMS symptoms were interviewed in depth. Data analysis revealed three key themes: (1) personal recognition and meaning-making of emotional fluctuations; (2) diverse coping strategies, including behavioral self-care, cognitive regulation, and social support; and (3) contextual influences such as culture, socioeconomic status, and digital technology. A significant finding was that women who engaged in acceptance- and mindfulness-based strategies, supported by strong social networks and accessible information platforms, reported better emotional resilience and symptom management. These findings underscore the complexity of PMS as a biopsychosocial experience and emphasize the importance of culturally sensitive, personalized interventions. Practical implications include promoting emotional literacy, encouraging open communication in close relationships, and leveraging digital tools to enhance coping resources among young women.

**Keywords:** Coping Mechanisms, Emotional Experience, Premenstrual Syndrome



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## INTRODUCTION

Premenstrual Syndrome (PMS) is a complex condition that affect a substantial proportion of women of reproductive age worldwide. A recent study by Modzelewski et al., (2024) estimated the global prevalence of PMS at approximately 47.8%, with severe symptoms reported in 3-8% of women levels that significantly impair daily functioning. A cross-sectional study conducted by Abu Alwafa et al., (2021) revealed that 99.7% of women experience psychological symptoms, and 85.2% report behavioral symptoms associated with PMS (Azoulay dkk., 2020; Mamatha dkk., 2023). Traditionally, PMS has been linked to hormonal fluctuations throughout the menstrual cycle, particularly mood changes related to the decline in estrogen and progesterone levels. A systematic review by Brown et al., (2024) further emphasizes that PMS profoundly affects women's lives, often exerting control over their daily routines (Christensen dkk., 1992; Schmidt dkk., 2018). These findings suggest that the experience of PMS transcends physiological phenomena, encompassing complex psychological and social dimensions, including feelings of loss of control and disruptions across various domains of women's lives.

The widespread prevalence of PMS and its disruptive emotional symptoms underscore the public health significance of the issue (Huang dkk., 2012; Munro dkk., 2021). For many young women, PMS represents not only a physical condition but also an emotional burden that influences self-concept, social functioning, and academic or occupational engagement. Early adulthood represents a critical developmental stage marked by multiple psychosocial transitions, including identity formation, the attainment of autonomy, and the navigation of complex interpersonal relationships (Azoulay dkk., 2020; Hanbing & Harbinson, 2006). A study by Tschudin et al., (2010) reported a prevalence of moderate to severe mood-related premenstrual syndrome (PMS) symptoms in 10.7% of women, indicating that individuals in this age group are at heightened risk for experiencing the emotional impacts of PMS. Various factors such as depression, stress, and sleep disturbances have been shown to influence PMS symptoms, particularly under the constraints imposed by the COVID-19 pandemic (Yi et al., 2023). These shifting social conditions add further complexity to women's experiences of PMS. Moreover, social stigma surrounding menstruation and PMS may significantly shape how women interpret and manage their experiences (Osborn et al., 2020), underscoring the need for a more culturally and socially sensitive understanding of women's subjective experiences. Recent research by Toenders et al., (2024) highlights that mood variability in adolescent females is associated with adverse mental health outcomes. Investigating potential biological mechanisms underlying these fluctuations may offer insights into the development of mood and anxiety disorders. However, understanding such mechanisms should be complemented by a deeper exploration of how women subjectively experience and interpret these mood variations.

From an academic perspective, current literature tends to emphasize biological mechanisms of PMS, often overlooking the subjective and culturally mediated ways in which women interpret and cope with their experiences (Niriksha dkk., 2025; Steiner & Born, 2000). The dominance of research from Western contexts also limits the generalizability of findings to non-Western populations. In Indonesia, for example, discussions of menstruation are often framed by silence, taboo, or moralistic discourse—further obscuring women's emotional realities. Understanding PMS within its local sociocultural framework is therefore crucial for both advancing scholarship and informing culturally appropriate interventions (Grötsch & Ehlert, 2024; Niriksha dkk., 2025). This study addresses these gaps by exploring the lived

emotional experiences of young adult women with PMS in a non-Western setting. Using Interpretative Phenomenological Analysis (IPA), the research focuses on how women make sense of their mood fluctuations, what coping strategies they adopt, and which contextual factors influence their experiences (Kornstein & Smith, 2004; Marjanovic dkk., 2025). Beyond contributing to academic discourse, the findings have practical implications for menstrual health education, psychological intervention, and peer support system development that is attuned to young women's realities in Indonesia and similar cultural contexts.

In light of these literature gaps and the complexity of the phenomenon, this study aims to address the following research questions:

1. How do women in early adulthood make sense of mood fluctuations during the premenstrual phase?
2. What strategies do they use to cope with or manage emotional changes?
3. What contextual factors shape their interpretations and responses to premenstrual mood change?

## RESEARCH METHOD

This study employed a qualitative research design using Interpretative Phenomenological Analysis (IPA), aiming to explore the subjective emotional experiences and coping mechanisms of young adult women with premenstrual syndrome (PMS). IPA is appropriate for this research focus as it emphasizes in-depth understanding of personal meaning-making and lived experiences. A total of six participants were recruited using purposive sampling, based on the following inclusion criteria: (1) women aged 18–25 years, (2) having experienced consistent mood-related PMS symptoms over the past six consecutive menstrual cycles, and (3) willingness to engage in in-depth interviews and reflect openly on their experiences. This sampling approach aimed to ensure the selection of individuals with rich, relevant insight into the phenomena under investigation.

While qualitative research does not involve hypothesis testing in the conventional statistical sense, the study was guided by exploratory questions informed by theoretical assumptions about the psychosocial complexity of PMS (Çınar dkk., 2023; Marjanovic dkk., 2025). These assumptions served as conceptual hypotheses, such as: *that sociocultural and personal factors mediate the emotional experiences of PMS, and that coping strategies vary depending on access to support systems and self-awareness*. Data were collected through semi-structured, in-depth interviews conducted face-to-face in a private setting. Each session lasted 45–70 minutes and was audio-recorded with consent. Interview questions explored participants' awareness of emotional changes, perceptions of identity during PMS, coping efforts, and contextual influences (e.g., support systems, cultural beliefs, technology use).

All interviews were transcribed verbatim and analyzed following the six-step IPA analytical process: (1) reading and re-reading the transcripts, (2) initial noting (descriptive, linguistic, and conceptual), (3) developing emergent themes, (4) searching for connections across emergent themes, (5) moving to the next case, and (6) identifying patterns across cases. The analysis preserved the idiographic depth of each participant while identifying converging themes. To ensure trustworthiness and credibility, the study applied triangulation through independent coder checks, prolonged engagement with data, and reflexivity by the researcher to bracket assumptions (Kanamori dkk., 2025; Tsuyuki dkk., 2025). Ethical approval was obtained, and participants provided informed consent with confidentiality assured.

## RESULTS AND DISCUSSION

The findings of this study are organized into three superordinate themes: (1) Women's Recognition and Meaning-Making of Mood Fluctuations, (2) Coping Mechanisms and Emotional Regulation, and (3) Contextual Determinants in PMS Management. These themes reflect the participants' nuanced and multifaceted experiences and resonate with the conceptual hypotheses that PMS is not merely physiological but deeply shaped by sociocultural interpretations and individualized coping. The following is a more detailed description of the result of the study.

### A. Women's Experiences and Understanding of Premenstrual Mood Fluctuations

Based on the result of the interview indicates that women gradually learn to recognize early signs of mood changes and anticipate their impact on daily functioning. This process involves not only recognition of physical symptoms but also awareness of subtle cognitive and emotional shifts. Findings from a systematic review by Kleinstäuber et al., (2016) reveal that women tend to conceptualize their PMS experiences through interconnected biological and psychosocial frameworks. The majority of women attributed mood changes to hormonal fluctuations, particularly the decline in estrogen and progesterone during the luteal phase (Avila-Varela et al., 2024).

#### 1. Identity and Sense of Self During the Premenstrual Period

Women frequently report experiencing a dilemma between accepting mood changes as a natural part of their cycle versus feeling that these mood do not represent their true personality. Several women described experiencing a 'loss of control' over their emotion, which impacted their self-efficacy. Brown et al., (2024), systematically reviewed qualitative accounts of women living with PMS and PMDD. They report that women often feel "controlled by PMDs" and place the burden on themselves to understand and manage symptoms through symptom-tracking and self-advocacy.

#### 2. Contextual Factors Influencing Interpretation

Social and cultural factors play significant roles in how women interpret and respond to premenstrual mood fluctuations. In cultural context, women tend to normalize the PMS symptoms as part of being woman. Social environmental factors, including support from family, peers, and romantic partners, also influence how women understand and manage their experiences. Women with strong support systems tend to develop more adaptive coping strategies. A Turkish study by Akın & Erbil, (2023) with 452 university students found that seeking social support significantly predicted lower PMS symptom severity ( $\beta = -0.265$ ,  $p < .001$ ). "Social support" as a coping method needs to be understood through the lens of cultural beliefs.

### B. Coping Strategies and Emotional Management

#### 1. Behavioral Strategies and Self Care Practices

A set of adaptive behavioral strategies commonly adopted by women to manage mood fluctuations associated with the premenstrual phase. Four primary themes emerged, these include: (1) *anticipating and planning* through tracking tools to adjust daily routines; (2) *self-care rituals* such as relaxing baths, music, and calming hobbies; (3) *physical activity* like walking, running, and swimming; (4) *dietary adjustments* by reducing caffeine, sugar, wheat, carbohydrate, and salt while prioritizing nutritious foods. A systematic review by Ayyub et al., (2024) found that regular aerobic and resistance exercise, yoga,

and mild stretching significantly decrease PMS severity—both psychological (e.g., mood swings) and physical (e.g., cramps).

2. *Cognitive and Emotional Regulation Strategies*

Emotional suppression—which was found to offer limited benefit and, in some cases, to intensify premenstrual symptoms—women who engaged in acceptance and mindfulness-based cognitive strategies consistently reported reduced psychological distress and enhanced quality of life. These results underscore the significance of adaptive cognitive regulation as a protective factor that fosters emotional resilience during hormonally sensitive phases of the menstrual cycle. Research in PMDD populations reveals that habitual reliance on suppression and rumination correlates positively with elevated mood, affective, and somatic symptoms, while adaptive strategies like reappraisal and mindfulness have protective associations (Nayman et al., 2023).

3. *Social and Interpersonal Strategies*

Seeking social support emerged as a dominant coping strategy among women. Relying on various forms of support, including emotional support from trusted friends or family members, instrumental assistance with daily responsibilities, and informational guidance from credible sources such as healthcare providers. A particularly salient finding was the importance of open communication with romantic partners. Women who were able to articulate their needs clearly tended to receive more responsive support and experienced less interpersonal tension. These results underscore the critical role of social connectedness and communicative competence in mitigating the psychological impact of premenstrual challenges. A particularly salient finding is that open, explicit communication with romantic partners fosters more responsive support and diminishes interpersonal tension. This is supported by couple-focused intervention research demonstrating that partner involvement in symptom monitoring and mutual planning confers significant reductions in PMS-related distress and enhances relationship quality (Ussher & Perz, 2017).

C. *Impact of Socioeconomic Status, Education, and Technology*

Socioeconomic factors affect access to resources for managing PMS. Consistent with the findings from one study in Tehran Vakili et al., (2025), which showed that higher socioeconomic status contributes indirectly to the reduction of premenstrual syndrome (PMS) symptoms. Women with higher education and better socioeconomic status tend to have better access to healthcare, accurate information, and diverse coping strategies. Conversely, women from less advantaged socioeconomic backgrounds may face barriers in accessing treatment and support. Educational attainment appears to influence mental health literacy and health behaviors among women. A meta-analysis of college students indicated that higher parental education correlates with greater mental health literacy and help-seeking behaviors (Wu et al., 2024).

Digital platforms also provide spaces for peer support and experience sharing. Online forums, Facebook groups, and specialized women's health applications enable women to connect with others experiencing similar challenges. Research indicates that participation in online communities can reduce feelings of isolation and increase self-efficacy in managing PMS. A randomized clinical trial utilizing WhatsApp-based group counseling demonstrated that online peer support significantly reduced PMS symptom severity immediately and after two months post-intervention (Mohebbi et al., 2024).

This study acknowledges several limitations that may affect the generalizability and interpretation of findings. First, the small sample size ( $n=6$ ) and purposive sampling approach, while appropriate for IPA methodology, limits the transferability of results to broader populations of women experiencing PMS. The homogeneous demographic characteristics of participants—primarily young adults aged 18-25 years from similar educational backgrounds—may not capture the diverse experiences across different age groups, socioeconomic statuses, or cultural contexts. Second, the reliance on self-reported experiences of PMS symptoms without clinical verification or standardized diagnostic criteria may introduce subjectivity bias. Participants' retrospective accounts of mood fluctuations and coping strategies could be influenced by memory recall limitations and social desirability factors. Additionally, the cross-sectional nature of the interviews provides only a snapshot of participants' experiences rather than longitudinal insights into how PMS management evolves over time.

Third, the cultural context of the study, conducted within an Indonesian setting, may limit the applicability of findings to women from different cultural backgrounds where attitudes toward menstruation, emotional expression, and help-seeking behaviors may vary significantly. The absence of male perspectives or partner experiences also represents a limitation, given the interpersonal nature of PMS impact identified in the findings. Finally, while the study employed interpretative phenomenological analysis appropriately, the researcher's own perspectives and potential biases in data interpretation cannot be entirely eliminated despite reflexivity measures. Future research would benefit from larger, more diverse samples, longitudinal designs, and cross-cultural comparative studies to enhance the robustness and generalizability of findings regarding women's PMS experiences and coping strategies.

## CONCLUSION

This study provides in-depth insight into how young adult women perceive, interpret, and manage mood fluctuations related to Premenstrual Syndrome (PMS). Through interpretative phenomenological analysis, findings revealed that emotional experiences during the premenstrual phase are complex and shaped by the interplay of biological, psychological, social, and cultural factors. Women developed adaptive coping strategies—ranging from behavioral routines and emotional regulation techniques to the use of digital platforms and social support—which enabled them to navigate these recurring challenges.

The findings carry important implications for both research and practice. First, the study reinforces the need to move beyond a purely biomedical approach to PMS and embrace biopsychosocial frameworks that accommodate subjective lived experiences. Mental health practitioners and educators should recognize the importance of individualized, culturally sensitive strategies in supporting young women's emotional well-being, particularly during hormonally sensitive periods. Second, the use of mindfulness-based techniques and open communication in close relationships emerged as significant protective factors, suggesting that interventions should focus on building emotional literacy and relational skills. Third, the accessibility of digital tools and online peer communities presents promising avenues for scalable support, especially for women with limited access to formal care.

In conclusion, addressing premenstrual emotional changes requires a holistic perspective that honors both personal narratives and contextual realities. Future studies should involve more diverse populations, adopt longitudinal designs, and explore cross-cultural comparisons to deepen our understanding and expand the applicability of findings. By acknowledging the

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complexity of PMS and the agency of women in managing it, researchers and practitioners alike can contribute to more effective, empathetic, and inclusive menstrual health practices.

## REFERENCES

Abu Alwafa, R., Badrasawi, M., & Haj Hamad, R. (2021). Prevalence of premenstrual syndrome and its association with psychosocial and lifestyle variables: a cross-sectional study from Palestine. *BMC Women's Health*, 21(1). <https://doi.org/10.1186/s12905-021-01374-6>

Akin, Ö., & Erbil, N. (2023). Investigation of coping behaviors and premenstrual syndrome among university students. *Current Psychology (New Brunswick, N.J.)*, 43(2), 1. <https://doi.org/10.1007/S12144-023-04419-1>

Avila-Varela, D. S., Hidalgo-Lopez, E., Dagnino, P. C., Acero-Pousa, I., del Agua, E., Deco, G., Pletzer, B., & Escrichs, A. (2024). Whole-brain dynamics across the menstrual cycle: the role of hormonal fluctuations and age in healthy women. *Npj Women's Health* 2024 2:1, 2(1), 1–9. <https://doi.org/10.1038/s44294-024-00012-4>

Ayyub, S., Agrawal, M., Sharma, V., & Aravind, A. (n.d.). *Key messages: The Effect of Physical Activity on Premenstrual Syndrome: A Systematic Review*. <https://doi.org/10.1177/09727531241297012>

Brown, D., Smith, D. M., Osborn, E., & Wittkowski, A. (2024). The experiences and psychological impact of living with premenstrual disorders: a systematic review and thematic synthesis. *Frontiers in Psychiatry*, 15, 1440690. <https://doi.org/10.3389/FPSYT.2024.1440690>

Kleinstäuber, M., Schmelzer, K., Ditzen, B., Andersson, G., Hiller, W., & Weise, C. (2016). Psychosocial Profile of Women with Premenstrual Syndrome and Healthy Controls: A Comparative Study. *International Journal of Behavioral Medicine*, 23(6), 752–763. <https://doi.org/10.1007/s12529-016-9564-9>

Modzelewski, S., Oracz, A., Żukow, X., Ilendo, K., Śledzikowka, Z., & Waszkiewicz, N. (2024). Premenstrual syndrome: new insights into etiology and review of treatment methods. In *Frontiers in Psychiatry* (Vol. 15). Frontiers Media SA. <https://doi.org/10.3389/fpsy.2024.1363875>

Mohebbi, P., Maleki, A., Ebrahimi, L., & Mirzaeyan, H. (2024). The effect of group counseling based on positive psychology on the WhatsApp social media platform on the severity of premenstrual syndrome symptoms: a randomized clinical trial. *BMC Women's Health*, 24(1), 600. <https://doi.org/10.1186/s12905-024-03437-w>

Nayman, S., Beddig, T., Reinhard, I., & Kuehner, C. (2023). Effects of cognitive emotion regulation strategies on mood and cortisol in daily life in women with premenstrual dysphoric disorder. *Psychological Medicine*, 53(11), 5342–5352. <https://doi.org/10.1017/S0033291722002495>

Osborn, E., Wittkowski, A., Brooks, J., Briggs, P. E., & O'Brien, P. M. S. (2020). Women's experiences of receiving a diagnosis of premenstrual dysphoric disorder: a qualitative investigation. *BMC Women's Health*, 20(1). <https://doi.org/10.1186/s12905-020-01100-8>

Toenders, Y. J., van der Cruijsen, R., Runze, J., van de Groep, S., Wierenga, L., & Crone, E. A. (2024). Mood variability during adolescent development and its relation to sleep and brain development. *Scientific Reports*, 14(1). <https://doi.org/10.1038/s41598-024-59227-9>

Tschudin, S., Berte, P. C., & Zemp, E. (2010). Prevalence and predictors of premenstrual syndrome and premenstrual dysphoric disorder in a population-based sample. *Archives of Women's Mental Health*, 13(6), 485–494. <https://doi.org/10.1007/s00737-010-0165-3>

Ussher, J. M., & Perz, J. (2017). *Evaluation of the relative efficacy of a couple cognitive-behaviour therapy (CBT) for Premenstrual Disorders (PMDs), in comparison to one-to-one CBT and a wait list control: A randomized controlled trial*. <https://doi.org/10.1371/journal.pone.0175068>

Vakili, F., Nasiri, M., Jahanfar, S., Alamolhoda, S. H., Hamzehgardeshi, Z., Salehi, F., & Fini, M. H. (2025). A communicative model of premenstrual syndrome with social determinants of health: a path analysis. *BMC Women's Health*, 25(1). <https://doi.org/10.1186/s12905-025-03745-9>

Wu, J., Shen, H., Shen, Y., Liao, X., & Yu, X. (2024). *The influence of family socioeconomic status on college students' mental health literacy: the chain mediating effect of parenting styles and interpersonal relationships*. <https://doi.org/10.3389/fpsyg.2024.1477221>

Yi, S. J., Kim, M., & Park, I. (2023). Investigating influencing factors on premenstrual syndrome (PMS) among female college students. *BMC Women's Health*, 23(1). <https://doi.org/10.1186/s12905-023-02752-y>

Azoulay, M., Reuveni, I., Dan, R., Goelman, G., Segman, R., Kalla, C., Bonne, O., & Canetti, L. (2020). Childhood Trauma and Premenstrual Symptoms: The Role of Emotion Regulation. *Child Abuse and Neglect*, 108. Scopus. <https://doi.org/10.1016/j.chabu.2020.104637>

Christensen, A. P., Board, B. J., & Oei, T. P. S. (1992). A psychosocial profile of women with premenstrual dysphoria. *Journal of Affective Disorders*, 25(4), 251–259. Scopus. [https://doi.org/10.1016/0165-0327\(92\)90083-I](https://doi.org/10.1016/0165-0327(92)90083-I)

Çınar, H. Ü., Kızılkan, M. P., Akalın, A., Kiper, P. Ö. Ş., Utine, G. E., Derman, O., Kanbur, N., & Akgül, S. (2023). Assessing the Menstrual Cycle and Related Problems in Adolescents with a Genetic Syndrome Associated with Intellectual Disability. *Journal of Pediatric and Adolescent Gynecology*, 36(4), 363–371. Scopus. <https://doi.org/10.1016/j.jpag.2023.02.005>

Grötsch, M. K., & Ehlert, U. (2024). Allopregnanolone and mood in the peripartum: A longitudinal assessment in healthy women. *Frontiers in Behavioral Neuroscience*, 18. Scopus. <https://doi.org/10.3389/fnbeh.2024.1499416>

Hanbing, A. W., & Harbinson, D. (2006). Chinese herbal formulae for pre-menstrual syndrome. *European Journal of Oriental Medicine*, 5(3), 34–37. Scopus.

Huang, X. C., Liu, J., Yang, H. Y., Feng, D. N., & Wang, X. Y. (2012). A randomized controlled study of TCM psychosomatic therapy for the treatment of PMS. *IET Conf Publ*, 2012(604 CP). Scopus. <https://doi.org/10.1049/cp.2012.0505>

Kanamori, Y., Sasaki, N., Ito, Y., Iida, M., Watanabe, K., Egawa, M., & Nishi, D. (2025). Association between adverse childhood experiences and menstruation-related symptoms among Japanese female workers: A cross-sectional study. *Child Abuse and Neglect*, 161. Scopus. <https://doi.org/10.1016/j.chabu.2025.107251>

Kornstein, S. G., & Smith, K. C. (2004). Antidepressant treatment of premenstrual syndrome and premenstrual dysphoric disorder. *Primary Psychiatry*, 11(12), 53–57. Scopus.

Mamatha, S. D., Priya, S. A., & Smitha, M. C. (2023). Association of hemoglobin levels with symptoms of premenstrual syndrome in adults. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*, 16(7), 51–54. Scopus. [https://doi.org/10.4103/mjdrdypu.mjdrdypu\\_898\\_21](https://doi.org/10.4103/mjdrdypu.mjdrdypu_898_21)

Marjanovic, S. B., Bukhari, M. C. H., Kjelkenes, R., Voldsbekk, I., Barth, C., & Westlye, L. T. (2025). Assessing brain morphological correlates of premenstrual symptoms in young healthy females. *Journal of Affective Disorders Reports*, 20. Scopus. <https://doi.org/10.1016/j.jadr.2025.100916>

Munro, A. K., Hunter, E. C., Hossain, S. Z., & Keep, M. (2021). A systematic review of the menstrual experiences of university students and the impacts on their education: A global perspective. *PLoS ONE*, 16(9 September). Scopus. <https://doi.org/10.1371/journal.pone.0257333>

Niriksha, D., Bhagat, A., & Divyadarshan, C. S. (2025). Align: Empowering High School Students with PMS Awareness and Holistic Support. *ICHORA - Int. Cong. Hum.-Comput. Interact., Optim. Robot. Appl., Proc. ICHORA 2025 - 2025 7th International*

Congress on Human-Computer Interaction, Optimization and Robotic Applications, Proceedings. Scopus. <https://doi.org/10.1109/ICHORA65333.2025.11017097>

Schmidt, K., Weber, N., Steiner, M., Meyer, N., Dubberke, A., Rutenberg, D., & Hellhammer, J. (2018). A lecithin phosphatidylserine and phosphatidic acid complex (PAS) reduces symptoms of the premenstrual syndrome (PMS): Results of a randomized, placebo-controlled, double-blind clinical trial. *Clinical Nutrition ESPEN*, 24, 22–30. Scopus. <https://doi.org/10.1016/j.clnesp.2018.01.067>

Steiner, M., & Born, L. (2000). Advances in the diagnosis and treatment of premenstrual dysphoria. *CNS Drugs*, 13(4), 287–304. Scopus. <https://doi.org/10.2165/00023210-200013040-00005>

Tsuyuki, K., Egawa, M., Ohsuga, T., Ueda, A., Shimada, K., Ueno, T., Hiyoshi, K., Ueda, K., & Mandai, M. (2025). Association between maternal overprotection and premenstrual disorder: A machine learning based exploratory study. *BioPsychoSocial Medicine*, 19(1). Scopus. <https://doi.org/10.1186/s13030-025-00326-y>

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