

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/172035/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Gordon, Jennifer, Chenji, Sneha, Di Florio, Arianna , Hantsoo, Liisa, MacDonald, Sandi, Peters, Jessica, Ross, Jaclyn, Schmalenberger, Katja and Eisenlohr-Moul, Tory 2025. Suicidality should be considered for inclusion in the diagnostic criteria for PMDD. The Lancet Psychiatry 12 (2) , pp. 90-92. 10.1016/S2215-0366(24)00288-8

Publishers page: https://doi.org/10.1016/S2215-0366(24)00288-8

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Suicidality should be considered for inclusion in the diagnostic criteria for PMDD

Premenstrual dysphoric disorder (PMDD) is a depressive disorder that affects 1-3% of individuals assigned female at birth.¹ It is characterised by psychiatric symptoms during the luteal phase, which subside post-menstruation. On behalf of the International Association for Premenstrual Disorders (IAPMD), we wish to highlight suicidality as a symptom of PMDD, which should be investigated for possible inclusion in its diagnostic criteria. Suicide is a leading cause of death in reproductive-aged individuals²; improved identification and treatment of underlying conditions like PMDD are key to addressing this public health crisis. It is also worth noting that diagnostic criteria for other depressive disorders, namely major depressive disorder and bipolar disorder II, list suicidality in the DSM-5-TR and ICD-11.

A 2022 IAPMD PMDD Roundtable, funded by the Patient-Centered Outcomes Research Institute, highlighted suicidality as a common issue among patients.³ A global survey by IAPMD of 599 individuals reporting a diagnosis of PMDD confirmed by their healthcare provider via two menstrual cycles of prospective daily ratings, found that the lifetime prevalence of passive suicidal ideation was 79% and the lifetime prevalence of suicide attempts was 28%.⁴ In a metaanalysis, people with provisionally diagnosed PMDD (i.e., retrospectively reported at a single timepoint) had a 4-times increased risk of suicidal ideation and 7-times increased risk of suicide attempts compared to those without PMDD.⁵ A limitation of this research is that provisional or self-reported diagnosis of PMDD might include individuals with other diagnoses marked by mood cyclicity and elevated risk of suicidality. Most recently, a Swedish population-based matched cohort study found that individuals assigned female at birth with clinically diagnosed premenstrual disorders (n = 67,748) were nearly twice as likely to die by suicide relative to unaffected matched controls.⁶ However, PMDD diagnosis was not necessarily confirmed through prospective daily ratings. A study of 110 individuals assigned female at birth with prospectively confirmed PMDD who attended the pre-randomization assessment for two randomized trials found that 39% of participants endorsed suicidal ideation while in the late luteal phase.⁷ This rate is comparable to the prevalence of suicidal ideation seen in major depressive disorder.⁸ Though limited by its small treatment-seeking sample and its assessment of suicidal ideation restricted to the luteal phase, this study provides perhaps the strongest evidence to date that suicidal ideation is highly prevalent in prospectively confirmed PMDD.

The link between PMDD and suicidality is perhaps unsurprising given the numerous cognitive, affective, and social processes that are common to both, including altered inhibitory control, emotion regulation and rejection sensitivity.⁹ But while the available evidence supports suicidality as a common symptom of PMDD, we recognize that additional research is needed before this can be reflected in the DSM and ICD. There is understandably a heavy burden of proof for proposed changes to well-established diagnostic criteria. Critical questions that require answers include the following. Does suicidality in PMDD follow the same on-off pattern as other symptoms, appearing in the luteal phase and subsiding post-menses? Though suicidality has been shown to increase perimenstrually in other psychiatric conditions,¹⁰ this has yet to be confirmed in PMDD. How would including suicidality as a symptom affect the prevalence of PMDD? Would including suicidality aid in distinguishing PMDD from other psychiatric

diagnoses? Would the inclusion of suicidality be clinically useful and would it lead to improved intervention and treatment?

While acknowledging the need for the answers to these questions, we see numerous potential benefits to one day including suicidality in the diagnostic criteria for PMDD. First, it would highlight the need for clinicians to screen patients with PMDD or suspected PMDD regularly for suicidality, including tracking cyclical changes in suicidality. Suicidal thoughts and behaviours are potentially fatal symptoms that, if frequently a component of any disorder, warrant particular attention and care, even if not universally present. Second, it could prevent an incorrect assumption that the presence of suicidality indicates another psychiatric condition that clearly feature suicidal ideation, such as borderline personality disorder and bipolar disorder, possibly decreasing the misdiagnosis of PMDD. Third, it would inform treatment, identifying the need to target suicidality across the menstrual cycle and within PMDD. Finally, PMDD symptom tracking tools could be updated to include optional items related to suicidal thoughts and actions.

We call for researchers in reproductive psychiatry to help fill the gaps in our knowledge surrounding suicidality and PMDD. First, by prospectively tracking suicidality across the menstrual cycle in all studies of PMDD. Second, by addressing the questions above regarding the clinical implications of treating suicidality as a PMDD symptom. It is our hope that if these data are collected and provide convincing evidence for suicidality as a common PMDD symptom, this work would result in the inclusion of suicidality in the DSM and ICD, improving the diagnosis and treatment of PMDD and ultimately preventing the unnecessary loss of life.

Jennifer L Gordon^{1,2*}, PhD, Sneha Chenji^{1,2}, PhD, Arianna Di Florio^{2,3}, MD, PhD, Liisa Hantsoo^{2,4}, PhD, Sandi MacDonald², BACS, CPS, Jessica R Peters^{2,5}, PhD, Jaclyn M Ross^{2,6}, PhD, Katja Schmalenberger^{2,6}, PhD, Tory A Eisenlohr-Moul^{2,6}, PhD

1. Department of Psychology, University of Regina, Regina, Saskatchewan, Canada.

2. International Association for Premenstrual Disorders, Boston, MA, USA.

3. Division of Psychological Medicine and Clinical Neurosciences, Cardiff University, United Kingdom

4. Department of Psychiatry & Behavioral Sciences, The Johns Hopkins University School of Medicine, Baltimore, MD, USA.

5. Department of Psychiatry and Human Behavior, Brown University Warren Alpert Medical School, Providence, RI, USA.

6. Department of Psychiatry, The University of Illinois at Chicago, Chicago, IL, USA.

Disclosures: Sneha Chenji is a paid independent contractor of the International Association for Premenstrual Disorders (IAPMD). All other authors are unpaid members of IAPMD's clinical advisory board and report no financial relationships with commercial interests.

Acknowledgments: IAPMD is the recipient of an Engagement Award from the Patient-Centered Outcomes Research Institute (PCORI; grant #EAIN-20240). JLG receives salary support through a Tier 2 Canadian Institutes of Health (CIHR) Canada Research Chair.

***Corresponding author at**: 3737 Wascana Parkway, Regina, SK, Canada, S4S 0A2, <u>Jennifer.gordon@uregina.ca</u>

References

1. Reilly TJ, Patel S, Unachukwu I, et al. The prevalence of premenstrual dysphoric disorder: Systematic review and meta-analysis. *Journal of Affective Disorders* 2024.

2. Mars B, Heron J, Klonsky ED, et al. What distinguishes adolescents with suicidal thoughts from those who have attempted suicide? A population-based birth cohort study. *Journal of child psychology and psychiatry* 2019; **60**(1): 91-9.

3. Patient-Centered Outcomes Research Institute. PMDD Community Coalition (PCC) Roundtable. 2022. <u>https://www.pcori.org/research-results/2020/pmdd-community-</u> <u>coalition-pcc-roundtable</u>.

4. Eisenlohr-Moul T, Divine M, Schmalenberger K, et al. Prevalence of lifetime selfinjurious thoughts and behaviors in a global sample of 599 patients reporting prospectively confirmed diagnosis with premenstrual dysphoric disorder. *BMC psychiatry* 2022; **22**(1): 199.

5. Prasad D, Wollenhaupt-Aguiar B, Kidd KN, de Azevedo Cardoso T, Frey BN. Suicidal Risk in Women with Premenstrual Syndrome and Premenstrual Dysphoric Disorder: A Systematic Review and Meta-Analysis. *J Womens Health (Larchmt)* 2021; **30**(12): 1693-707.

6. Opatowski M, Valdimarsdóttir UA, Oberg AS, Bertone-Johnson ER, Lu D. Mortality Risk Among Women With Premenstrual Disorders in Sweden. *JAMA Network Open* 2024; **7**(5): e2413394-e.

7. Wikman A, Sacher J, Bixo M, et al. Prevalence and correlates of current suicidal ideation in women with premenstrual dysphoric disorder. *BMC women's health* 2022; **22**(1): 35.

8. Cai H, Jin Y, Liu S, et al. Prevalence of suicidal ideation and planning in patients with major depressive disorder: a meta-analysis of observation studies. *Journal of affective disorders* 2021; **293**: 148-58.

9. Owens SA, Eisenlohr-Moul T. Suicide risk and the menstrual cycle: a review of candidate RDoC mechanisms. *Current psychiatry reports* 2018; **20**: 1-11.

10. Ross JM, Barone JC, Tauseef H, et al. Predicting acute changes in suicidal ideation and planning: a longitudinal study of symptom mediators and the role of the menstrual cycle in female psychiatric outpatients with suicidality. *American journal of psychiatry* 2024; **181**(1): 57-67.