System-level approaches to perinatal depression

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During pregnancy or the first year after giving birth, depression affects 1 in 5 individuals worldwide.[1,2] In addition to individual suffering and a high risk of mortality—20% of women with perinatal mental health conditions will experience suicidality or undertake acts of self-harm—perinatal depression can have profound and long-term adverse consequences for families.[3] However, less than 25% of individuals who screen positive for perinatal depression receive any mental health assessment or treatment.[4] Thus, there is an urgent need for innovative, evidence-based, system-level, and scalable approaches to address perinatal mental health problems, specifically depression. In their rigorous and important study in *The Lancet Public Health*, Nancy Byatt and colleagues[5] addressed this need, showing similar effectiveness of two such interventions.

Specifically, Byatt and colleagues[5] report their findings from an active-controlled cluster-randomised trial conducted in ten obstetric practices across Massachusetts (USA). The trial compared the effectiveness of the following two interventions: the Massachusetts Child Psychiatry Access Program (MCPAP) for Moms, a state-wide, population-based programme that seeks to extend the capacity of obstetric care professionals to provide perinatal depression care by offering provider training and perinatal psychiatric consultations; and the PRogram In Support of Moms (PRISM), comprising MCPAP plus a practice-level intervention that helps obstetric practices to integrate depression screening, assessment, and care into their practices. The authors hypothesised that PRISM would outperform MCPAP in reducing depression symptoms and showing superior initiation and sustainment of mental health treatment.

Somewhat surprisingly however, the study showed that both interventions were equally effective in reducing depression, each showing an average reduction of 4 points on the Edinburgh Postnatal Depression Scale (EPDS). This reduction was clinically meaningful, considering that patients required a score of at least 10 points to be eligible for study entry. Importantly, 71 (60·2%) of 118 participants in PRISM practices and 74 (63·3%) of 117 in MCPAP for Moms practices no longer had EPDS scores suggestive of depression at 11–13 months postpartum. Furthermore, treatment initiation and sustainment did not differ significantly between the two interventions: 78 (52·0%) participants in PRISM practices and 70 (43·2%) in MCPAP for Moms practices initiated treatment, and 38 (25·3%) participants in PRISM practices and 32 (19·8%) in MCPAP for Moms practices sustained treatment. Treatment initiation was defined as attendance at a mental health assessment or treatment visit and sustainment was defined as seeing a health-care or mental health-care provider about mental health concerns at least three times during the previous 3 months or being prescribed medication for depression.

These findings are remarkably positive: both interventions led to meaningful change through a clinically significant reduction in symptoms of depression and the effectiveness of the intervention requiring fewer supportive resources (ie, MCPAP for Moms) was similar to PRISM. However, as noted by Byatt and colleagues,[5] nearly 50% of patients with elevated depressive symptoms did not initiate treatment and more than 75% did not sustain treatment, indicating that unmet clinical needs remain. Data from other studies suggest that patient engagement in treatment varies by race, ethnicity, and socioeconomic status, and can be influenced by patient–provider concordance in relation to these factors.[6] It would have been ideal if Byatt and colleagues examined their data on treatment initiation and sustainment in relation to these potential moderators.

The low rates of treatment initiation and sustainment in the context of over 70% of patients with positive treatment outcomes also raises several questions. What was the mechanism of action in these clinical interventions leading to the therapeutic outcomes?[7] Was there a positive clinical effect, even a placebo effect, from receiving prenatal care in an environment affiliated with either programme? Is remission the natural course of perinatal depression in the context of obstetrical care attuned to mental health issues? Did the attention from tracking depressive symptoms have an ameliorative influence? In the absence of a control group (and with a low overall number of participants engaging with treatment), it is less definitive that clinical change relates to either intervention specifically.

Byatt and colleagues[5] report the median values of EPDS scores at study entry as 12 (IQR 10–15), which

are relatively low values on a scale with a maximum score of 30.[8] It is possible that a majority of patients in this study who screened positive for depression had mild to moderate depression, for which treatment guidelines indicate that the first-line approach should be psychotherapy,[9] especially for some populations (eg, Latinx) who prefer psychotherapy to medication.[10] However, this study's modest definition of treatment sustainment was not in line with the session frequency of most evidenced-based psychotherapies. Overall, these two innovative, system-based programmes may address barriers to mental health care for women with perinatal depression, primarily through increased access to psychopharmacology (28 [73·7%] of 38 sustained participants in PRISM and 24 [75·0%] of 32 sustained patients in MCPAP for Moms received psychiatric medication), often prescribed by a non-mental health-care provider. Thus, MCPAP and PRISM target supporting obstetricians' use of psychopharmacology.

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1 WHO. WHO guide for integration of perinatal mental health in maternal and child health services. Geneva: World Health Organization, 2022.
2 Woody CA, Ferrari AJ, Siskind DJ, Whiteford HA, Harris MG. A systematic review and meta-regression of the prevalence and incidence of perinatal depression. *J Affect Disord* 2017; **219:** 86–92.
3 Monk C, Lugo-Candelas C, Trumpff C. Prenatal developmental origins of future psychopathology: mechanisms and pathways. *Annu Rev Clin Psychol* 2019; **15:** 317–44.
4 Byatt N, Levin LL, Ziedonis D, Moore Simas TA, Allison J. Enhancing participation in depression care in outpatient perinatal care settings: a systematic review. *Obstet Gynecol* 2015; **126:** 1048–58.
5 Byatt N, Brenckle L, Sankaran, et al. Effectiveness of two systems-level interventions to address perinatal depression in obstetric settings (PRISM): an active-controlled cluster-randomised trial. *Lancet Public Health* 2024; **9:** e35–46.
6 Cheng AW, Nakash O, Cruz-Gonzalez M, Fillbrunn MK, Alegría M. The association between patient-provider racial/ethnic concordance, working alliance, and length of treatment in behavioral health settings. *Psychol Serv* 2023; **20** (suppl 1)**:** 145–56.
7 Nielsen L, Riddle M, King JW, et al. The NIH Science of Behavior Change Program: transforming the science through a focus on mechanisms of change. *Behav Res Ther* 2018; **101:** 3–11.
8 Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry* 1987; **150:** 782–86.
9 Yonkers KA, Wisner KL, Stewart DE, et al. The management of depression during pregnancy: a report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. *Gen Hosp Psychiatry* 2009; **31:** 403–13.
10 Lara-Cinisomo S, Wisner KL, Burns RM, Chaves-Gnecco D. Perinatal depression treatment preferences among Latina mothers. *Qual Health Res* 2014; **24:** 232–41.