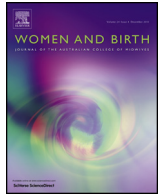




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



## Editorial

## Perinatal mental health during the COVID-19 pandemic



The COVID-19 pandemic has influenced many aspects of life, including women's pregnancy, birth and postnatal period. Due to physically and immunologically adaptive perinatal changes, it is well known that pregnant women usually have an increased susceptibility to infection. Despite this, the majority of women affected by COVID-19 to date have exhibited mild symptoms and make a good recovery [1]. However, there is no reliable evidence for transmission of COVID-19 from mother to infant during pregnancy [1,2]. COVID-19 infection does not seem to increase likelihood of need for obstetric intervention at birth, with healthy infants born vaginally to mothers with the infection [3].

Following birth, the World Health Organization (WHO) recommends women with COVID-19 initiate breastfeeding within 1 h of birth, and engage in skin to skin contact and kangaroo mother care, while practising respiratory hygiene and hand washing before and after touching the baby, in addition to application of required infection control precautions [4]. WHO recommend consideration of women's clinical condition when making decisions around maternal–infant interaction, including temporary maternal–infant separation. Despite such recommendations and the relatively reassuring evidence from the first perinatal COVID-19 studies, the approach towards pregnancy and childbirth is not yet homogeneous; women are being managed with different procedures in different countries and in different hospitals.

At the time of writing, research has not yet been published on the impact of COVID-19 on perinatal psychological well-being; though studies are examining the change of perspective towards childbirth in Italian women. There is however evidence of significant impacts of the pandemic on mental health in general populations. Stress, anxiety, depressive symptoms, insomnia, denial, anger and fear are the most commonly reported mental health difficulties [5]. There is also evidence of similar adverse perinatal mental health outcomes in comparable scenarios, such as natural disasters, and following other stressful life-events [6]. Even in the absence of stressful life events, the transitional nature of the perinatal period can lead to distress for some, though not all, women. As such there is a high likelihood that women's experiences of pregnancy, birth and the postpartum during COVID-19 will impact on their perinatal mental health.

Women during the perinatal period are likely to experience distress related to restrictions of movement, socialization and engagement in normal routines. Women are also likely to experience concerns about their own health and risk of infection, as well as health risks for their infants, and loved ones. Changes in

antenatal care also likely contribute to perinatal distress where women are concerned about access to perinatal healthcare and healthcare professionals, risk of infection in antenatal care settings, childbirth during the pandemic, and restrictions on the presence of partners at antenatal check-ups and in some instances at the birth and/or during the postpartum period in hospital. Reduced access to support networks both during pregnancy and immediately after birth during the COVID-19 pandemic are also highly likely to increased risk of perinatal distress.

It is essential to support women's perinatal mental health during this time and to enable women to protect their own mental health. There are a number of things women, and their care providers, can do to support perinatal mental health during COVID-19. Maintaining contact with loved ones and support networks is essential at this time; this importance is recognized in the shift of language from 'social distancing' to 'physical distancing'. Supportive networks are of central importance to perinatal mental health and can still be engaged with virtually during the COVID-19 pandemic. Some simple cognitive behavioural strategies with treatment and protective effects for perinatal distress include using a diary, recognizing thoughts and emotions intensity, body relaxations and so on. Mindfulness is another potentially useful strategy, and though evidence for perinatal effects are mixed [7], mindfulness and other relaxation exercises are easy to learn and use in self-isolation and lock-down contexts. Access to clear information and communication about antenatal supports, as well as about COVID-19 risks, are an important top-down strategy to ensure women are kept informed and thus can have an increased sense of understanding and control over their situations. Provision of information about diet and exercise during the perinatal period also remains important, particularly given current restrictions on movement in many countries and the increased likelihood for poor dietary behaviours during lock-down scenarios.

Support from midwives and other healthcare professionals is also critical to support women's mental health during the pandemic. It is important for those involved in perinatal care to be aware of the increased risk of poor perinatal mental health during this time and of potential resources and strategies as noted above, in addition to use of referral pathways should these be needed. This is particularly true where women are experiencing, or are at increased risk of, perinatal distress, and/or have COVID-19 infection. For example, where women are required to temporarily separate from infants following birth, the increased psychosocial support, in addition to increased breastfeeding support is needed

[4,8]. We also acknowledge however the increased stress and challenges experienced by healthcare professionals globally and their need for supports also, while supporting women during this time.

Globally, we are currently experiencing unprecedented challenges that can significantly impact on women's mental health. Awareness of, and engagement with supports for perinatal mental health difficulties will better support and protect perinatal mental health and well-being during this time.

## References

- [1] Y. Luo, K. Yin, Management of pregnant women infected with COVID-19, *Lancet Infect. Dis.* (2020).
- [2] H. Chen, J. Guo, C. Wang, F. Luo, X. Yu, W. Zhang, et al., Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records, *Lancet* 395 (10226) (2020) 809–815.
- [3] H. Zhu, L. Wang, C. Fang, S. Peng, L. Zhang, G. Chang, et al., Clinical analysis of 10 neonates born to mothers with 2019-nCoV pneumonia, *Transl. Pediatr.* 9 (1) (2020) 51–60.
- [4] WHO, Clinical Management of Severe Acute Respiratory Infection (SARI) When COVID-19 Disease is Suspected: Interim Guidance V 1.2, World Health Organization, Geneva, 2019.
- [5] J. Torales, M. O'Higgins, J. Castaldelli-Maia, A. Ventriglio, The outbreak of COVID-19 coronavirus and its impact on global mental health, *Int. J. Soc. Psychiatry* (2020), doi:<http://dx.doi.org/10.1177/0020764020915212> [Epub ahead of print].
- [6] E. O'Connor, C. Senger, M. Henninger, E. Coppola, B. Gaynes, Interventions to prevent perinatal depression: evidence report and systematic review for the US preventive services task force, *JAMA* 321 (6) (2019) 588–601.
- [7] B. Lever Taylor, K. Cavanagh, C. Strauss, The effectiveness of mindfulness-based interventions in the perinatal period: a systematic review and meta-analysis, *PLoS One* 11 (5) (2016) e0155720.
- [8] Centers for Disease Control and Prevention, About 2019 Novel Coronavirus (2019-nCoV) (CDC; 28 January 2020), (2020) Available from: <https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>.

Karen Matvienko-Sikar\*  
*University College Cork, Ireland*

Shahla Meedyia  
*University of Wollongong, Australia*

Claudia Ravaldi  
*CiaoLapo Foundation, Italy*

\* Corresponding author.

E-mail address: [karen.msikar@ucc.ie](mailto:karen.msikar@ucc.ie) (K. Matvienko-Sikar).