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Perinatal mental health during the COVID-19 pandemic

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The COVID-19 pandemic has numerous implications for the mental health of the world's population; the perinatal population are particularly at risk of mental ill health during this time. This review presents current evidence surrounding the impact of the pandemic on perinatal mental health and lessons for clinical practice both during and beyond the current pandemic.

At the advent of the COVID-19 pandemic, concerns were raised about its potential impact on the mental health of the general population.[1] Measures to reduce transmission such as social distancing and lockdowns increase social isolation: a risk factor for mental ill health. There were also concerns about the impact of other socioeconomic stressors, such as changes in employment and financial circumstances, on the mental health of those affected.[2] Indeed, surveys from around the world have reported an increase in symptoms of the common mental disorders of anxiety and depression relative to pre-pandemic levels.[3,4] The limitations of surveys as a research tool are outlined in Box 1, as much of our current understanding of how the pandemic has affected mental health comes from surveys.

Young women – a group known to be at increased risk of common mental disorders prior to the pandemic[5] – continued to be at increased risk during the pandemic compared with other population groups.[6] Women are over-represented in front-line keyworker roles such as health care, where they may also have experienced a conflict between personal and professional responsibilities; many women have reported an increased burden of caregiving, particularly during lockdowns.[7,8] Other structural inequalities in health outcomes have been compounded by the pandemic, with those from minority ethnic backgrounds disproportionately affected, including deaths from COVID-19.[9] Indeed, data from the UK Household Longitudinal Study suggest that mental health symptoms on the GHQ-12 (General Health Questionnaire) increased during the pandemic (compared with pre-pandemic levels) most among those from minority ethnic groups.[10]

The mental health of those with pre-existing mental disorder has also been affected by a number of burdens disproportionately experienced by those with severe mental illness.[11] Social isolation may increase the risk of relapse. There have also been significant changes to the way in which mental health care is delivered: particularly in the early stages of the pandemic there was a reduction in face-to-face care for users of mental health services. While remote delivery of care, for example online or by telephone, suits some service users, there has been a growing realisation that it is not viable for some with limited access to technology or who are difficult to engage in care.[11] Those with severe mental illness are also at increased risk of COVID-19 infection due to higher rates of comorbidities such as physical ill health and socioeconomic adversities.[1] The mental health impacts of infection with COVID-19 have now been documented and in addition to an association with common mental disorders, post-traumatic stress disorder, acute delirium and other rarer neuropsychiatric syndromes have been observed.[12]

Box 1. Limitations of surveys conducted during the pandemic

- Surveys rely on respondents' willingness to take part and may induce some biases, such as individuals who are particularly distressed responding to the survey. This may lead to an over-estimation of the levels of distress. Other groups may be under-represented, such as individuals from ethnic minority backgrounds. Lack of diversity in study populations restricts understanding of groups who are potentially most at risk.
- Surveys use questionnaire tools to enquire about symptoms of mental disorder. Clearly high levels of symptoms on a questionnaire does not equate to a diagnosis of mental disorder from a health professional.
- Studies are often cross-sectional, which only provides an insight into mental health at one point during the pandemic; impacts on mental health and wellbeing may be transient. Many study populations also do not have data from pre-pandemic from which to make comparisons.
- Future research may usefully focus on the longer-term impacts of the pandemic on mental health and the needs of particular groups.

How is the pandemic affecting perinatal mental health?

The perinatal period (during pregnancy and up to one year postpartum) is a time during which women with pre-existing mental disorder may experience a relapse or mental disorder may present for the first time in women with no prior history. Indeed mental disorder is the most common morbidity of the perinatal period, affecting at least one in five women in the perinatal period and it is associated with adverse maternal and child outcomes.[13,14]

Several pandemic-related risk factors for mental ill health disproportionately affected the perinatal population. During the early phase of the pandemic, women in the UK were advised to follow stricter social distancing than the general population,[15] leading to reduced contact with friends, family and health and social care services.[16] The increase in virtual care in maternity and perinatal mental health services and reduced provision of health visitors due to redeployment[17] also likely contributed to this isolation. Many women also experienced grief associated with loss of the usual birthing experiences; for example, the absence of birthing partners during labour.[18]

Restrictions on movement can increase the potential for relationship conflict, coercive control and, in some cases, domestic violence and abuse. Domestic violence and abuse increase during the perinatal period and are associated with adverse maternal and child outcomes, including mental disorder.[19] They have also increased during the pandemic, as evidenced by an increase in calls to helplines and contact with other support services.[20] In many places, frequent lockdowns and quarantine rules have resulted in women having poor access to transport, shelters, safe houses and third sector services, exacerbating the problem.

Many women in the perinatal period are worried about the impact of COVID-19 exposure on themselves and their infant. The increased risk of COVID-19 infection in some minority ethnic groups has also been observed in the perinatal population.[21] Pregnant women with COVID-19 are at increased risk for hospitalisation and admission to an intensive care unit compared with non-pregnant women of reproductive age.[21] Data on obstetric and neonatal outcomes of COVID-19 infection are more conflicting. However, a recent systematic review found a significant increase in maternal deaths, pre-eclampsia, caesarean deliveries, pre-term birth, low birth weight, stillbirth and admissions to a neonatal intensive care unit in COVID-19 infected pregnant women compared with non-infected.[22] There is little evidence to support vertical transmission of the virus or transmission via breastmilk.[23] The longer-term impact of *in utero* exposure to COVID-19 on the developing infant remains to be seen, providing a useful focus for future research.

Perhaps unsurprisingly, meta-analyses indicate that symptoms of anxiety and depression have increased in the perinatal population relative to pre-pandemic levels.[24–26] In a Canadian cohort, higher depression symptoms were associated with more tobacco and cannabis use during pregnancy, although there was limited evidence for an increase in substance use relative to pre-pandemic levels. However, in the general population, alcohol use has increased during the pandemic, with evidence from an American (non-perinatal) sample that this increase has been more pronounced in women than in men.[27,28] Alcohol misuse in the family home may increase the risk of violence, abuse and mental ill health.[19]

In a survey of staff working in perinatal mental health services in the early stages of the pandemic, respondents reported several challenges to adequately assessing and supporting perinatal women, their babies and their wider families.[29] Staff were concerned about their ability to detect early signs of mental disorder when reviewing women remotely. Many were also worried about how to adequately assess and support the mother–infant interaction during a remote consultation and about the impact of face mask wearing on the developing infant. When staff had concerns, for example, about domestic violence and abuse or the infant's wellbeing, many felt unable to mobilise safeguarding procedures, in part related to reduced provision of health visiting and social services.

What are the lessons for mental health professionals working with the perinatal population?

While the pandemic has presented a number of challenges to the provision of perinatal mental health care, it has also shone a light on potential areas for development. For example, virtual appointments appear to suit some busy working mothers.[29] Indeed, even prior to the pandemic, the UK's National Institute for Health and Care Excellence (NICE) guidelines on antenatal and postnatal mental health suggested that remote delivery of care may be suitable in some cases.[30] However, it is important that an individualised approach to care is maintained, in recognition of the struggles faced by some users of mental health services in accessing care during the pandemic and the difficulties faced by staff supporting them. Face-to-face assessment is necessary in high risk cases as highlighted by the recent confidential enquiry of maternal deaths in the UK during the first three months of the pandemic, which included four suicides and two domestic homicides.[31] The pandemic has highlighted the need for collaborative care between mental health professionals and other agencies

Box 2. Useful resources

- The International Marce Society for Perinatal Mental Health. COVID-19 Perinatal Mental Health Resources: https://marcesociety.com/covid-19-perinatal-mental-health-resources/
- International Association for Women's Mental Health. COVID-19 Resources: https://iawmh.org/covid-19-resources/
- NIHR Oxford Health Biomedical Research Centre. How to assess and manage mental health issues in pregnancy and the perinatal period in the context of the COVID-19 pandemic: https://oxfordhealthbrc.nihr.ac.uk/our-work/oxppl/pregnancy-and-the-perinatal-period/
- Violence, Abuse and Mental Health Network. COVID-19 Resources: https://www.vamhn.co.uk/covid-19-resources.html

who can support women who are particularly at risk in the perinatal period.

Several organisations have produced guidance on supporting women with their perinatal mental health during the pandemic (Box 2). Many of these resources have emphasised the importance of acknowledging the uncertainty associated with this time and providing women with information as it rapidly evolves.[32–34] Some innovative interventions have emerged. For example, the use of public places such as pharmacies as a safe point of support for those without access to mobile technology and experiencing domestic violence and abuse. Such approaches have yet to be fully utilised by mental health services.[35] Thus the pandemic has provided those working to support the mental health of women in the perinatal period an opportunity to re-imagine and widen their vision of perinatal mental health care. Greater understanding of the experiences of perinatal women during the pandemic could guide perinatal mental health service development as we seek to move beyond the pandemic.

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Declaration of interests

No conflicts of interest were declared.

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