

COVID-19 AND MATERNAL MENTAL HEALTH

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ABSTRACT

The world is facing unprecedented times. The global pandemic announced in 2019 is having a significant impact on many aspects of people's lives. Amongst other things, the pandemic is revealing the consequences of decades of cuts in public health investments. Health systems around the world are struggling to face surges in demand. Pregnant women and the mental health of new mothers is being undermined by numerous COVID-related changes in antenatal and postnatal care. For instance, perinatal care is reduced or provided only virtually, to comply with social distancing measures. This means fewer opportunities for health professionals to identify foetal distress and prenatal or postnatal maternal distress. Considering that maternal well-being is one of the main determinants of children's well-being, the present article highlights the importance of improving health and support services for pregnant women and new mothers. Future generations are at risk of developing mental health problems because of the current pandemic; this can be prevented, but only if urgent action is taken.

I. INTRODUCTION

The present article is about the impact of the current pandemic on perinatal mental health, with a particular focus on England (UK). Perinatal refers to 'the period encompassing pregnancy and the first-year post-birth' (Watson *et al.*, 2015: 103). The first section offers an overview of the context in which the present article is written. A global pandemic was declared in March 2020 following the global spread of a novel coronavirus, COVID-19, which has changed and continues to change the way people live, causing health issues, isolation, and fear. The second section focuses on the impact of the current pandemic on pregnant women and new mothers'

mental health. For instance, antenatal and postnatal consultations are often reduced or conducted remotely, with subsequent limited surveillance of pregnancies. This may cause increased anxiety for mothers-to-be who are concerned about their unborn babies' health. Furthermore, as further discussed below, mothers' perinatal mental health is strongly linked to children's development and mental health.

The article proceeds by highlighting the main consequences of perinatal anxiety and depression (PAD), arguing that urgent action is needed to improve maternal mental health and avoid long-term mental health impacts on children.

II. PANDEMIC AND INFODEMIC: A TRANSFORMATION CATALYST

This section presents the context in which the present article is written, highlighting the significant impact that the novel coronavirus is having on individual lives, and discussing the role that the ‘infodemic’ is playing within this unprecedented atmosphere of uncertainty.

In December 2019 a new virus, COVID-19, was identified in Wuhan (Hubei, China) (Readfearn, 2020). Professor John Watson from the World Health Organisation (WHO) argued that it was very difficult to ascertain the origin of COVID-19, which might have crossed the borders of China before its detection in Wuhan (cited in Powell, 2021). COVID-19 consists of a severe acute respiratory syndrome, which can easily be spread from one person to another through droplets that people produce when coughing, breathing, sneezing, singing, and talking (WHO, 2021a). Whilst some infected people do not require any medical attention, others (e.g. vulnerable people such as pregnant women) become seriously ill, and might even die from it (WHO, 2021a). On the 11th of March 2020 WHO declared that COVID-19 can be considered as a global pandemic (WHO, 2020a).

Different measures have been adopted by governments around the world to slow down the spread of COVID-19: lockdown measures (e.g. where all non-essential services are suspended and non-essential travelling is not allowed), compulsory face masks, and self-isolation for those who test positive to COVID-19 testing or have been in contact with someone who tested positive (Cabinet Office, 2020). A COVID-19 vaccine was introduced in 2020 which enabled the gradual lifting of the restrictions with face masks being recommended in crowded spaces (Cabinet Office and Department of Health and Social Care, 2021).

COVID-19 has caused many people to develop mental health issues, mainly due to the fear of contracting the virus and getting severely ill from it, financial difficulties related to many non-essential activities having to close down, as well as social isolation, hence lack of support and loneliness (Barbisch, 2015; Bao *et al.*, 2020; Hessami *et al.*, 2020; Vindegaard & Benros, 2020; Chen *et al.*, 2021). Although the recent relaxation of lockdown measures has allowed social life and activities to resume, it might also have caused emotional distress due to the associated fear of contracting the virus (Mental Health Foundation, 2021).

Healthcare infrastructures have been required to handle considerable workloads under significant pressure (Jazieh & Kozlakidis, 2020). With a specific focus on maternal health services, The Royal College of Midwives (2020; 2021) highlighted how COVID-19 caused staff shortages due to staff members having to self-isolate for being vulnerable or for being infected with the new virus.

Alongside COVID-19, a parallel epidemic is arguably represented by the ‘infodemic’, defined as:

‘An overabundance of information...deliberate attempts to disseminate wrong information to undermine the public health response’ (WHO, 2020b).

Tagliabue *et al.* (2020) discuss some non-medical professionals publicly referring to COVID-19 as a ‘simple flu’, which leads many people to deny the existence of COVID-19, hence refusing to comply with social protection measures. Social media is considered the main facilitator of the spread of unfiltered information. The latter is often generated or amplified by the public or other actors, such as journalists (Eysenbach, 2020). The overwhelming amount of contrasting information provided by different sources, such as TV, newspapers, and social media, is detrimental to people’s physical and mental health (WHO, 2020b). It plausibly creates confusion and uncertainty, debilitates social cohesion, and undermines attempts to stop the pandemic for example, through campaigns against immunisation (WHO, 2020b). There is no substantial evidence on the impact of the ‘infodemic’ on the specific population of pregnant women and new mothers, but the ‘infodemic’ can possibly exacerbate perinatal mental health, considering that new mothers and mothers-to-be are concerned not only about their health, but also about their infants’ health. To provide an example, NHS England (2021a) confirms that pregnant women can safely have their COVID-19 vaccination. However, the relatively new nature of the virus means that limited data exist on the uptake and safety of COVID-19 vaccine in pregnancy (Blakeway *et al.*, 2021). The ‘infodemic’ might generate even more confusion, hence vaccine-related safety concerns amongst mothers to be, spreading contrasting (often unreliable) information.

Given the arguments stated above, ‘the COVID-19 pandemic [arguably] acts as a transformation catalyst’ (Jazieh & Kozlakidis, 2020: 1), that is, becoming a ‘reality-check’ for health systems (i.e. testing the preparedness for crisis) and suddenly transforming the way people live their lives (Jazieh & Kozlakidis, 2020; Matvienko-Sikar *et al.*, 2020; Cena *et al.*, 2021). This transformation is true especially for the most vulnerable people, such as expectant and new mothers, as discussed in the next section.

III. COVID-19 AND INCREASED PERINATAL MENTAL HEALTH PROBLEMS

Pregnant women and new mums are at higher risk than the general population of developing mental health problems, such as perinatal anxiety and depression (PAD) (Cena *et al.*, 2021). This is possibly due to the significant physical and psychological changes they go through, such as weight gain, pregnancy-related hormonal imbalances, and psychological preparation for mothering (e.g. new responsibilities awaiting) (Smith, 1999; Allan *et al.*, 2013; Uguz *et al.*, 2019; Cena *et al.*, 2021; Chen *et al.*, 2021). They are also more susceptible to infections than the general population, considering the 'unique immunological condition caused by pregnancy', that is, the developing immune system of the foetus changes the way the mother's immune system responds to the environment (Mor & Cardenas, 2011: 425). This can amplify the risk of developing PAD, due to the fear of contracting viruses (Cena *et al.*, 2021; NHS England, 2021b).

Within the context of the current pandemic, expectant women and new mothers are afraid of becoming infected with the relatively unknown COVID-19 and transmitting it to the foetus or the newborn (Brooks *et al.*, 2020; Karimi-Zarchi *et al.*, 2020; Matvienko-Sikar *et al.*, 2020; Schwartz & Graham, 2020; Sun *et al.*, 2020; Zanardo *et al.*, 2020; Chen *et al.*, 2021). The same was observed in various countries such as Italy (Saccone *et al.*, 2020; Zanardo *et al.*, 2020), Qatar (Farrell *et al.*, 2020), Canada (Lebel *et al.*, 2020), and Turkey (Durankus & Aksu, 2020). Amongst the different sources of anxiety, such as poor family support and low income, the authors found that pregnant women are now afraid of the potential effects that COVID-19 could have on their unborn babies. As argued by Chen *et al.* (2021), whilst there is not enough evidence to support the vertical transmission (from mother to foetus) of COVID-19, this does not necessarily mean that vertical transmission is not possible. In England, the NHS (2021b) says:

Pregnant women are [at]...moderate risk... because you can...be more at risk from viruses...if you are pregnant... [but] it is not clear if this happens with COVID-19... because it's a new virus...if [pregnant women]...get COVID-19...later in pregnancy...there's a small chance ...[their] baby may be born early or...[they] may be advised to give birth earlier than [their] due date.

One might argue that the fact that COVID-19 is a 'new virus' and little is known about it (NHS England, 2021b), might cause distress for pregnant women who are concerned about the health of their unborn child. Uncertainty is generally one of the main causes of mental health issues (Chen *et al.*, 2020).

In this climate of uncertainty, pregnant women and new mothers are often offered reduced or remote (online or via telephone) perinatal appointments, to avoid social contacts (Motrico *et al.*, 2021; Caparros-Gonzales & Alderdice, 2020). This means limited surveillance of pregnancies (Kotlar *et al.*, 2021), which might hinder the opportunity for healthcare professionals to identify maternal and foetal distress (Kotlar *et al.*, 2021). Whilst The Royal College of Midwives (2020) recognises the importance of face-to-face appointments for pregnant women and new mothers, it also recommends the use of remote appointments for some routine antenatal and postnatal appointments (e.g. to discuss birth plans and early parenting advice) during the pandemic, as part of COVID-19 risk management guidance. Moreover, pregnant women and new mothers' mental health is further exacerbated because of birth partners being often granted limited access to hospitals, hence women being deprived of family support (NCT, 2020; Cena *et al.*, 2021; Kotlar *et al.*, 2021). It is important to highlight that approaches continue to vary across different countries and regions, possibly due to a lack of consistent guidance (Farewell *et al.*, 2020). For instance, in England, visiting (from birth partners) depended on local NHS Trust rules until June 2021 (NCT, 2020). Visitors are now allowed in most or all maternity wards across England, although with numerous restrictions still in place (e.g. social distance, and very limited time) (NCT, 2020).

Additionally, new mothers affected by COVID-19 are also sometimes separated from their infants (Matvienko-Sikar *et al.*, 2020), which might have an impact on the bond between mother and child. The latter usually begins to develop during pregnancy and is reinforced after the birth of the child, through mother-child interaction (Britton *et al.*, 2006). WHO (2021b) recommends caution when making decisions about the interaction between infected mothers and their infants, highlighting that there is no supporting evidence for the need for infected mother-infant separation.

It is important to bear in mind that the above changes are aimed at protecting mothers and babies from COVID-19, but they are also possibly in place to address COVID-19 related staffing shortages - for example, maternity staff having to self-isolate (The Royal College of Midwives, 2020; 2021). One must also consider underlying structural issues, such as underfunding of maternity services, that have been affecting provision since before the pandemic (The Royal College of Midwives, 2020; 2021).

The next section emphasises the serious consequences that PAD can have on mothers and babies, urging action from stakeholders.

IV. PERINATAL ANXIETY AND DEPRESSION: TIME TO ACT

PAD is connected to a higher risk of pre-term birth, which might have short- and long-term impacts on a child's health and development, including issues such as breathing problems and feeding problems. It can also have an impact on the bonding between mother and child, since newborns might need to be admitted into the neonatal intensive care unit, away from their mothers. This might negatively affect children's cognitive and emotional development, hence their mental health (Allan *et al.*, 2013; Hogg, 2013; Glover, 2015; The Royal College of Midwives, 2015; Davenport *et al.*, 2020; Durankus & Aksu, 2020; Poon *et al.*, 2020; Mind, 2021):

Perinatal mental illness can inhibit a mother's ability to provide her baby with the sensitive, responsive care that he or she needs...to thrive (Hogg, 2013: 3-4).

The intergenerational impact of COVID-19 on health has been highlighted in various sources (Chen *et al.*, 2020; WHO, 2021b). As such, The Royal College of Midwives (2020) stated that it is crucially important that all professionals working with pregnant women and new mothers are consistently informed about the strong association between COVID-19 and perinatal mental health so that they can offer appropriate perinatal support. Additionally, many scholars recommend routine mental health screening for expectant and new mothers, effective referral pathways, psychological support, especially for mothers who test positive and

who have to stay separated from their newborns, and support for healthcare professionals involved in perinatal care (e.g. Chen *et al.*, 2020; Farewell *et al.*, 2020; Jazieh & Kozlakidis, 2020). As highlighted by Hogg (2013: 3):

The onset and escalation of perinatal mental illnesses can often be prevented through early identification and expert management of a woman's condition, and prompt and informed choices about treatment. Even if the illness itself is not preventable, it is possible to prevent many of the negative effects of perinatal mental illness on families.

Funding is needed for the above steps to be taken (The Royal College of Midwives, 2021).

As mentioned above, COVID-19 is transforming the way people live. It is teaching the world how to deal with unexpected circumstances. It is possibly uncovering structural issues that have existed for decades. Key practitioners should arguably take advantage of this unprecedented situation to overhaul essential services, especially considering that another wave of COVID-19 might be around the corner (Jazieh & Kozlakidis, 2020). Maternal well-being should be considered a priority, considering that children's emotional health is one of the main determinants for having happy and productive adults (Clark *et al.*, 2020). Whilst this article will be of relevance during the COVID-19 pandemic, identifying gaps in support services available for pregnant women and new mothers remains certainly important beyond any crisis, across contexts and times.

V. CONCLUDING THOUGHTS

As argued by the Director-General of the WHO Tedros Adhanom Ghebreyesus during 2020 WHO briefing (Lacina, 2020), COVID-19 is revealing how unprepared for increasing demand and global crises the 21st century health system is. Health systems are struggling as a result of the pandemic, but also due to decades of under-investment. Maternal health services are currently concerningly understaffed and underfunded, which is leading to the reduction and change of antenatal and postnatal appointments (The Royal College of Midwives, 2020; 2021). Perinatal mental health is strongly dependant on the availability and efficiency of maternal health services. Considering the strong link between perinatal mental health and children's mental health, urgent action from policy makers and

health professionals is needed. Besides its undoubtedly negative effects, COVID-19 is offering an unprecedented opportunity to make things right, but also to undermine every possible chance of improvement. Gaps in health systems such as maternal health services, could be identified and addressed; more investments should go towards rebuilding a 'resilient' health system, that is, for instance, a health system that is prepared for future shocks (WHO, 2021c). Alternatively, COVID-19 might represent the 'cherry on top of the cake' in determining the failure of health systems and future generations around the globe.

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BIOGRAPHY

The author of the present article has recently finished her MSc Policy Research at the University of Bristol as part of a 1+3 PhD programme, kindly funded by the ESRC. The broad topic of her PhD is reproductive coercion amongst young women. With a degree in Childhood Studies, she is interested in children and young people, with a passion for gender roles development and all issues related to it. Having two small girls has motivated her to pursue her studies, hoping to make a relevant contribution to existing conversations about gender (in)equality. Perhaps a visionary, surely a determined feminist.