## Psychological Impact of COVID-19 on Pregnancy

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epression and anxiety in the population related to fear, uncertainty, isolation, and economic distress have increased during the COVID-19 pandemic. A 2020 cross-Canada study found that 24.3% of younger adult women reported feeling depressed occasionally or most of the time in the past week, significantly higher than 18.9% of men (CAMH [Centre for Addiction and Mental Health], 2020). This is perhaps in part a reflection of the fact that these women are in their reproductive years. Women who are pregnant or postpartum have an increased risk of developing a depression or anxiety disorder. Pregnancy during this pandemic brings an added number of stressors (Durankuş and Aksu, 2020; Lebel et al., 2020; Liu et al., 2020).

A recent report from the Centers for Disease Control and Prevention (CDC) noted that pregnant women are especially vulnerable to getting more seriously ill or dying with COVID-19 (CDC 2020). This information increases women's fears for themselves and their babies. Fortunately, it does not seem as if there is an increased risk of fetal malformation if the mother has COVID-19. There does seem to be an increase in premature deliveries in women with COVID-19 (12.6%) (Delahoy et al., 2020). The risk of transmitting COVID-19 to the fetus does not seem to be high. There have been few documented cases of women with COVID-19 having babies with COVID-19, and in these cases, it is not clear whether the baby acquired COVID-19 from the mother in utero, through breastfeeding, or by other transmission. Regardless, babies who developed this tend to have mild symptoms. Nevertheless, this kind of concern puts added pressure on women and, in particular, on women of color who already grapple with social and health care inequalities. If they have jobs that require them to leave the house, they are increasingly anxious. Many quit their jobs to stay at home to be safer (Forbes, 2020), but not all women have this option. If their partners are still leaving the house to work, their anxiety is increased. Fear of attending obstetrical appointments can lead to inadequate prenatal care. They often feel quite isolated, unable to see family or friends during a time when they would like more support.

Pregnant and breastfeeding women are unsure about getting vaccinations for COVID-19. Although the CDC and American College of Obstetricians and Gynecologists (ACOG) have provided guidelines for getting these vaccines during pregnancy, there is lack of reassuring data to support decision making because pregnant women were excluded from trials (ACOG, 2020; CDC, 2021) In addition, international health care organizations varied in their recommendations. In the United Kingdom, the National Health Service initially warned against vaccination in pregnant women and recommended a delay in conception until 2 months after vaccination. After a lot of advocacy (BMJ Blogs, 2021), they reversed their decision, advising that pregnant and breastfeeding women could be vaccinated (NHS, 2021). This initial censure against the COVID-19 vaccines may have left many women confused and unsure of their safety, negatively impacting the utility and uptake of vaccination in this population.

Pregnant women also have concerns about the delivery. Their ideas of how they wanted this to occur may be dramatically altered, a known risk factor for a woman viewing her birth as traumatic. Over a quarter of women report having a traumatic birthing experience, and subsequent development of postpartum posttraumatic stress disorder can occur after mismatch of expectations of the birthing experience and the reality of it (Olde et al., 2006).

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Many hospitals have restrictions on visitors during delivery. Extended family are generally excluded from attending. For some hospitals, at the beginning of the pandemic, partners or birth support persons were not allowed to attend deliveries at all and, even now, are allowed to stay for only 2 hours after delivery. This becomes even more difficult if there are problems for the woman or the baby that require inpatient stays. Visitors are typically not allowed to come and go, so the partner either has to stay full time or is not allowed to regularly visit. This becomes an added difficulty if there are other children at home.

Postpartum is generally a stressful time with the woman dealing with hormonal changes, sleepless nights, and the responsibility of becoming a new mother or caring for a newborn and their other children. The CDC estimates that one of eight women at least may have a postpartum mood disorder. Most women look forward to the support they can get from parents, relatives, or friends. Concern about others transmitting the virus to the mother or the baby or fears that older parents coming out to visit may put themselves at more risk can interfere with the type of support that is often extremely helpful postpartum. Women often experience feelings of loss and grief related to the loss of the experience they had imagined their postpartum period to be and not being able to share milestones with their loved ones. These feelings of grief are associated with a risk of developing mental health symptoms (Liu et al., 2020).

Women may also have concerns about breastfeeding (Harvard Health Blog, 2020). It does seem as if it is possible to breastfeed even if the woman has COVID-19, as there is no evidence that it is transmitted via breast milk. Although scientifically this seems to be valid, the woman herself might feel very anxious about breastfeeding and, therefore, believe that this is something she is unable to do, which can be very disappointing.

Health care providers need to be very aware of the additional psychological stressors that pregnant and postpartum women are experiencing during this pandemic. Although screening is increasingly challenging in the context of increased telehealth visits during pregnancy and postpartum, the increased risk for mental health symptoms during the pandemic underscores the need for increased efforts to screen women for mental health concerns during pregnancy and the postpartum period. It is important that they have access to supportive care and medication if necessary. Health care providers need to have up-to-date information about COVID-19 effects on the pregnancy, baby, and breastfeeding to help allay unreasonable fears. The following resources can provide valuable information for health care providers and pregnant and postpartum women:

Centers for Disease Control and Prevention. Pregnancy, Breastfeeding and Caring for Newborns. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html

Government of Canada. Pregnancy, childbirth and caring for newborns: Advice for mothers during COVID-19. https://www.canada.ca/en/public-health/services/publications/diseases-conditions/pregnancy-advise-mothers.html

Harvard Health Blog; Pregnant and worried about COVID-19? NOVEMBER 6, 2020. https://www.health.harvard.edu/blog/pregnant-and-worried-about-COVID-19–2020031619212#q7

Massachusetts General Hospital. Coronavirus (COVID-19) During Pregnancy: Frequently Asked Questions for Pregnant Patients. https://www.massgeneral.org/obgyn/news/faq-coronavirus-during-pregnancy

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