



Screening maternity populations during the COVID-19 pandemic

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With no end in sight to the outbreak of COVID-19, countries are struggling with strategies to halt the ‘second wave’ and mitigate economic decline. Estimated to account for around half of the infections, asymptomatic transmission of SARS-CoV-2 has been hampering the containment of the virus. Among 625 pregnant women universally screened for SARS-CoV-2 on the day of admission for delivery at three institutions in New York City, Prabhu et al. reported a positive case rate of 10%, with 80% of the women testing positive being asymptomatic at the time of testing, including pre- and post-symptomatic patients (*BJOG* 2020;127:1548–56). As evidence shows that the virus sheds before symptoms appear and may continue after the cessation of symptoms, these populations may have increased the chances of spreading COVID-19 in hospitals. Using the results from testing to inform isolation practices was not mentioned in this report, which may be because of the long turnaround times for the testing platforms used at that time.

Although the risk of nosocomial transmission is affected by clinical settings, the intimate and prolonged nature of childbirth elevates the risk of cross infection between women and midwives. The role of such nosocomial transmission is increasingly recognised,

and the severity of this problem may be greater than that of community-acquired infections. The International Confederation of Midwives has also called for governments to prioritise testing for all pregnant women and their care providers. The identification of infectious women prior to delivery could contribute to the prevention of further transmission to patients and healthcare workers, and a recent report has suggested that facilities for testing pregnant women for SARS-CoV-2 at the time of admission should be considered (Rasmussen SA et al. *JAMA* 2020;324:190–1). Evaluating contact history should also be emphasised, because of the prevalence of false-negative polymerase chain reaction (PCR) results (Woloshin S et al. *NEJM* 2020;383:e38).

Testing pregnant women for SARS-CoV-2 is crucial to ensure adequate medical management for both the mothers and the neonates. Although the outcomes for mothers and neonates seem generally favourable, data suggest that pregnancy can be associated with increased risks, including admission to intensive care units and receipt of mechanical ventilation (Ellington et al. *MMWR Morb Mortal Wkly Rep* 2020;69:769–75). Furthermore, although vertical transmission

has not yet been observed, a recent article has raised concerns regarding transplacental transmission of SARS-CoV-2 to the fetus (Vivanti et al. *Nat Commun* 2020;11:3572). The collection of longitudinal data is crucial to understanding the effects of SARS-CoV-2 infection on maternal and neonatal outcomes. The results of large-scale prospective cohort studies, such as the INTERCOVID study, are expected to provide high-quality evidence on the effects of COVID-19 in pregnancy on the health of mothers, fetuses and newborns.

Screening a maternity population during a pandemic can be one way to provide a glimpse of the distribution within the population, as capacity constraints still impede widespread testing in many countries. The recent development of faster diagnostic testing could bring improvements, but test sensitivity remains a challenge. Fundamental preventative measures and clinical management should be continued: hygiene and social distancing practices for the women themselves, and careful evaluation of each mother and fetus for care providers.

Disclosure of interests

None declared. Completed disclosure of interests forms are available to view online as supporting information. ■