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RCM Clinical Briefing – COVID -19

Topic: Effect of COVID-19 on pregnant women

Key findings on effect of COVID-19 on pregnant women based on national and international literature. This constitutes a short briefing enabling midwives to have evidence-based conversations with women and families, full findings are available on the joint RCM-RCOG guideline.

<https://www.rcog.org.uk/globalassets/documents/guidelines/2021-08-25-coronavirus-covid-19-infection-in-pregnancy-v14.pdf>

Current key guidance

The following briefing is provided as a resource for midwives based on a combination of available evidence and expert advice for the care of women diagnosed with COVID-19. Please be aware that this continues to be an evolving situation and this guidance will be updated as new information becomes available.

The joint RCM-RCOG guideline on COVID-19 infection in pregnancy has been updated to reflect the growing body of evidence on the effect of COVID-19 in pregnancy. Notably, pregnant women have an increased likelihood of severe illness when compared to the general non-pregnant population. WHO (2020) found that pregnant women or recently pregnant women who are older, overweight, and have pre-existing medical conditions such as hypertension and diabetes seem to be at increased risk of developing severe COVID-19. Furthermore, when pregnant women develop severe disease, they are more likely to require care in intensive care units than non-pregnant women of reproductive age.

All women have the right to high quality care and to a positive birthing experience whether or not they have a suspected or confirmed positive COVID-19 infection (WHO, 2020). The pandemic has heightened stress and anxiety in all population groups and particularly amongst pregnant women (Salehi et al, 2020). Midwives are perfectly positioned to address those anxieties and provide advice and information on the effect of COVID-19 infection in pregnancy, based on the latest evidence. In doing so, midwives can support women and families to achieve a safe and positive childbirth experience.

Current Evidence base

Severe illness in pregnant women- Key findings:

- most pregnant women with COVID-19 are asymptomatic (more than two-thirds)
- most symptomatic women will only experience mild or moderate cold/flu like symptoms
- severe illness is more common in the third trimester or peripartum
- compared to non-pregnant women with COVID-19, pregnant women with confirmed COVID-19 infections:

- have higher rates of ICU admission, this may reflect lower thresholds for admission, rather than more severe disease
- have higher need for ventilation and extra corporeal membrane oxygenation (ECMO)
- Compared to pregnant women without COVID-19, pregnant women with symptomatic COVID-19 have overall worse maternal outcomes, including an increased risk of death, although the risk remains very low (the UK mortality for COVID-19 is 2.2 per 100,000 maternities). *

* In comparison of the 2.2 million women who gave birth in the UK during 2016-2017: 34 Black women died among every 100,000 giving birth, compared with 15 Asian women in 100,000, and eight white women in 100,000.

Effect on pregnancy:

Preterm Birth

Women with symptomatic COVID-19 infections have an increased likelihood of preterm birth, approximately threefold, principally from iatrogenic causes (94% iatrogenic of which 47% for maternal compromise and 15% for fetal compromise). Pregnant women with asymptomatic COVID-19 have a slight increased risk of preterm birth (9% gave birth before 37 weeks).

Stillbirth and neonatal deaths

The PregCOV-19 Living Systematic Review (Allotey, et al, 2020) found that maternal Covid infection is associated with increased likelihood of stillbirth (although this remains a rare outcome). Neonatal death rates were not significantly raised for women with COVID-19.

Maternal COVID-19 is also associated with an increased rate of caesarean birth. The UKOSS data have found a 49% caesarean birth rate for women with symptomatic COVID-19, compared to a 29% caesarean birth rate for a historical control group from 2018 (before COVID-19).

Considerations for midwives discussing effect of COVID-19 with women

- Women should be informed that most pregnant women with COVID-19 are asymptomatic
- Women should be informed that the UK maternal mortality rate from COVID-19 is very low (2.2. per 100,000)
- Women with a confirmed COVID-19 infection should be informed of the increased likelihood of ICU admissions, possibly due to lower threshold for admission to ICU in their group
- Women with a confirmed COVID-19 infection should be informed of the increased need of ventilation and extra corporeal membrane oxygenation (ECMO)
- Women with symptomatic COVID-19 infection should be informed of the increased likelihood of iatrogenic preterm birth
- Women with a confirmed COVID-19 infection should be informed of the increased likelihood of caesarean birth (approximately 1:2 women)
- Women with a confirmed COVID-19 infection should be informed that stillbirth, although rare, is associated with COVID-19 infection
- Neonatal death rates are not significantly raised for women with COVID-19 and morbidity for babies is associated to preterm birth rather than COVID-19 infection.

References and links to online and virtual support and guidance

Allotey, J., Stallings, E., Bonet, M., et al, (2020) Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. *Bmj*, 370

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WHO (2018) Recommendations: intrapartum care for a positive birth experience. Available at <https://apps.who.int/iris/bitstream/handle/10665/272447/WHO-RHR-18.12-eng.pdf?ua=1>

WHO (2020) Q&A: Pregnancy, childbirth and COVID-19. Available at <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-on-covid-19-pregnancy-and-childbirth>