COVID-19: Pregnancy Update

Devika Maulik MD MSCr
Fetal Health Center
Children’s Mercy Hospital

No financial disclosures
Prior coronavirus pandemics

- First wave of SARS in 2002, based on small case series
  - 25% mortality rate
  - 80% preterm delivery
  - 57% risk of miscarriage

- MERS pandemic, based on small case series
  - 27% risk of maternal mortality
  - 27% risk of fetal mortality

SARS-2-COV virus

- Predicted 16,000 pregnancies in 2020 affected by COVID-19
- Currently CDC reports
  - 92,000 affected pregnancies with the virus
  - 101 maternal deaths

*There is about a 2-4 week delay in the data for a jurisdiction to confirm a case of SARS-CoV-2 in a pregnant woman and report it to CDC.

**Date of diagnosis is derived from the earliest date of either 1) when the case report was received by CDC from a jurisdictional health department or 2) the earliest available date related to the illness or specimen collection.
Labor and Delivery

- Second stage of labor not considered an aerosol generating procedure
- Multiple staff at the initial part of pandemic on Labor and Delivery infected
- Currently, N95 are encouraged when dealing with patients
**INTERCOVID Multinational trial**  
* (JAMA; Villar et al, 4/2021)  

- 43 institutions, 18 countries  
- 706 pregnancy women with COVID, 1424 without COVID  
- Higher risk of disease on preeclampsia spectrum (RR 1.74)  
- Higher risk of preterm birth (RR 1.59)  
- Higher risk of ICU admission (RR 5)  
- Severe symptoms more associated with poor neonatal outcomes (RR 4.97)  
- 13% of infants of mothers were positive for COVID-19 (unclear if postnatal exposure vs vertical transmission)
Still figuring out

• Who are the long-haulers among those who got it during pregnancy
• Suggestion it may affect fertility (though decrease in birth rate observed more purposeful)
• Questions regarding menstruation (also with regard to vaccine)

Development of vaccines
Preliminary data

- Over 35,000 pregnancies
- No difference in preterm birth and pregnancy loss
- Likely crosses into breastmilk
- Likely crosses placenta

COVID-19 vaccine hesitancy

- Harvard School of Public Health (Skjefte et al)
- 16 countries
- Looked at 5200 pregnant women, 13000 nonpregnant women
- 52% of pregnant women willing to get vaccine