

COVID-19 infection at any time during pregnancy boosts mother's risk of death

*And is associated with serious illness in mothers and newborns
Findings reinforce need for targeted interventions, including vaccination, say
researchers*

COVID-19 infection at any time during pregnancy boosts the mother's risk of death and is associated with serious illness in both mothers and their newborns, finds a pooled data analysis of international evidence, published in the open access journal **BMJ Global Health**.

The findings reinforce the need for global efforts to minimise these infection risks during pregnancy through targeted vaccination campaigns and other protective measures, say the researchers.

There's a vast and growing body of research on COVID-19 infection during pregnancy. But extensive differences in study design, methods, and comparison groups make it difficult to reach any firm conclusions, added to which few studies have been done in low income countries, say the researchers.

The researchers formed an international consortium in April 2020 to obtain high quality prospective data from relevant studies being carried out in several countries and applied a uniform analytical approach to avoid the issues associated with previous research.

The current research, which comprises the results of the first individual level pooled data analysis of those studies, assesses the risks of ill health and death among pregnant women with or without confirmed or probable COVID-19 infection.

The analysis is based on participants in 12 studies involving 13,136 pregnant women in Ghana, China-Hong Kong, Italy, Kenya, Nigeria, South Africa, Spain, Sweden, the Democratic Republic of Congo, Turkey, Uganda, and the USA.

It shows that pregnant women infected with SARS-CoV-2, the virus responsible for COVID-19 infection, were nearly 8 times as likely to die as their uninfected peers.

And they were nearly 4 times as likely to require intensive care; 15 times as likely to require mechanical ventilation; and more than 5 times as likely to need any type of critical care.

They were also more than 23 times as likely to be diagnosed with pneumonia and more than 5 times as likely to have serious blood clots.

Babies born to women with COVID-19 infection were nearly twice as likely to be admitted to a neonatal care unit; nearly 3 times as likely to be born moderately premature (before 34 weeks); and 19% more likely to be underweight at birth than babies born to uninfected women.

But unlike the findings of previous reviews, COVID-19 Infection wasn't linked to a heightened risk of stillbirth at or beyond 28 weeks of pregnancy, nor restricted growth.

The researchers point to some limitations of their study. The selection of pregnant women with COVID-19 depended on when and how they were tested for SARS-CoV-2; this changed over time across sites along with the availability of test kits. The analysis didn't consider the differential impact of SARS-CoV-2 variants that have emerged since the pandemic started. Some outcomes weren't monitored for a clinically meaningful period either.

Notwithstanding these caveats, "These findings underscore the need for global efforts to prevent COVID-19 during pregnancy through targeted administration of vaccines and non-pharmaceutical interventions," say the researchers.

This is particularly important as: "Global guidance has been equivocal on the potential risks of infection and benefits and safety of vaccination, and more than 80 countries do not currently recommend that all pregnant and lactating women should be vaccinated," they point out.