



ACADEMY OF MEDICINE SINGAPORE



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ADVISORY

SAFETY OF COVID-19 VACCINE IN PREGNANT WOMEN, BREASTFEEDING WOMEN AND WOMEN PLANNING TO CONCEIVE

Vaccination against COVID-19 has been approved by the Ministry of Health, Singapore for pregnant women and breastfeeding mothers. Both the COGS and OGSS are supportive of this development. This is consistent with the advice from many international associations, including the Centers for Disease Control and Prevention (CDC), the American College of Obstetricians and Gynaecologists, the American Academy of Pediatrics and the Royal College of Obstetricians and Gynaecologists in the UK.

Pregnant women infected with COVID-19 are at increased risk of serious complications including admission to intensive care unit and requiring additional oxygen treatment. Their babies are at almost twice the risk of preterm birth which may require admission to the neonatal intensive care unit. Moreover, pregnant women who are older, overweight or obese, or who have conditions such as diabetes or high blood pressure, are at an increased risk of developing serious complications. The current emergence of new COVID-19 variants and a resurgence of community-transmitted cases locally justify the vaccination of pregnant women during the ongoing pandemic.

While the large clinical trials on COVID-19 vaccines did not include pregnant women, real world data in almost 4000 women in the USA has demonstrated safety of the mRNA COVID-19 vaccines (Pfizer and Moderna), with no increased risks of adverse pregnancy outcomes, nor any obvious adverse events.

There have been concerns about thrombosis (blood clots) developing in association with adenovirus vector vaccines (e.g. AstraZeneca); however, these risks are very small compared to the actual risks of developing serious COVID-19 complications in pregnancy. These vaccines are currently not available in Singapore.

In Singapore the mRNA vaccines (Pfizer and Moderna) are being used. There have been reports of a rare thrombosis complication (cerebral venous sinus thrombosis) reported in people who received these vaccines. This complication is extremely low, and the risk of developing it is not increased after receiving the mRNA vaccine compared to the incidence in the general population. Indeed, the risk of developing CVST is ten times higher if the pregnant woman is infected with COVID-19.

COVID-19 vaccination is safe for breastfeeding mothers, with none of the vaccine components passing into the breastmilk. Women can continue breastfeeding after receiving the vaccine.

Vaccination has been shown to produce antibodies in both pregnant and breastfeeding women. These antibodies are transferred to the babies before birth, and to the breastmilk, which could provide protection for the babies against COVID-19.

The vaccines are safe for women who are planning to conceive. There is no evidence that these vaccines will harm their fertility and they may opt to complete vaccination prior to planning a pregnancy.

We strongly recommend that all pregnant and breastfeeding women discuss vaccination with their obstetricians or health care provider prior to making an informed decision.

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