

## **Covid-19 vaccine and its consequences in pregnancy: Brief review**

### **ABSTRACT**

Pregnancy is linked to a higher incidence of severe Covid-19. It's critical to find safe vaccinations that elicit protective pregnant and fetal immune responses. This review summarises the rate of COVID-19 infection, maternal antibodies responsiveness, placenta antibody transmission, and adverse events after COVID-19 vaccination in pregnancy studied in epidemiological studies evaluating mRNA vaccines. Potential COVID-19 infection in pregnant women can be prevented using mRNA-based vaccinations. Gestation, childbirth, and perinatal mortality were proven unaffected by COVID-19 vaccination. Injection-site discomfort, tiredness, and migraine are the most prevalent side effects, but these are temporary. After the first dosage of vaccinations, fast antibody responses were demonstrated. The adaptive immunity is found to be more significant after booster vaccination, and is linked to improved placental antigen transmission. Two vaccination doses are associated with more robust maternal and fetal antibody levels. Longer delays between the first immunization dosage and birth are linked to greater fetal IgG antibody levels with reduction in antigen transmission proportion. The mRNA vaccines are effective in reducing the severity of COVID-19 infection and these vaccinations are regarded to be safe options for pregnant women and their unborn fetus.