

COVID-19 Vaccine Acceptance Among Pregnant Women and the Reasons for Hesitancy. A Multi-Centre Cross-Sectional Survey.

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Background: On the 9th of June 2021 pregnant women were advised to receive Comirnaty (Pfizer) mRNA vaccine at any stage of pregnancy. The aim of this multi-centre study was to assess vaccine acceptance, reasons for vaccine hesitancy and determine if differences exist between health districts; to inform policy strategies for COVID-19 vaccination in pregnancy.

Methods: An online survey (developed based on the WHO Data for action and modified for the pregnant population) was administered to a sample population of pregnant women attending antenatal clinics at two metropolitan hospitals (Westmead and Royal North Shore Hospital (RNSH)) in NSW between 15th September 2021 - 22nd October 2021.

Results: 287 pregnant women were surveyed (198 (69%) Westmead, 66 (23%) RNSH, 23 (8%) no site). Demographics were similar between sites however there was a significantly lower SEIFA score (5.66 vs 9.45, $p=0.001$), fewer women born in Australia (37% vs 53%, $P=0.02$) and higher number of children (0.77 vs 0.41, $p=0.01$) amongst Westmead responders. There was lower vaccination uptake (68% vs 86%, $p=0.01$) and willingness to receive vaccine (68% vs 88% $p=0.01$) at Westmead compared to RNSH. There was increased concern that the vaccine could cause harm to the unborn baby at Westmead (38% vs 11%, $p=0.01$). 99% of participants knew where to go to get a COVID-19 vaccine (no site difference).

Conclusions: Booster campaigns are the next stage of the pandemic response and this study will inform local policy to focus vaccination campaigns to maximize uptake. Education by health care providers during pregnancy will be key.