- Vaccination / Heart—Diseases / Pregnancy

No proof that jabs cause heart, pregnancy problems

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Covid-19 mRNA vaccines can result in various side effects, some of which may appear only years later



Heart inflammation concerns were raised after six individuals in Singapore were recently reported to have suffered myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining outside the heart) after getting an mRNA vaccine. Four of them were men younger than 30.

Some have also worried about whether reports of heart attacks and strokes after vaccination could be linked to the jab.

Others have claimed that there might be risks to pregnancy, or long-term side effects of the vaccine months, years and even decades after the jab.

A Telegram group called SG Suspected Vaccine Injuries Channel, which allows anyone to submit suspected side effects from the Covid-19 vaccine, has gained traction in recent weeks, with more than 5,100 subscribers so far.

FACT CHECK ON HEART ATTACKS AND STROKES

When trying to determine whether an event has been caused by a drug, some factors, such as how biologically plausible the event is, the timeframe after the dose was taken, and if the effect was observed again after reintroduction, need to be considered, said Dr Danny Soon of the Consortium for Clinical Research and Innovation Singapore.

Associate Professor Hsu Li Yang, vice-dean of global health at the National University of Singapore's Saw Swee Hock School of Public Health, said baseline comparisons for side effects also need to be made to see if there is higher incidence of these conditions after vaccination.

"For more common conditions like heart attacks and strokes that happen on a daily basis in Singapore, it is quite likely that one can have a stroke within a week after vaccination, but which is not actually triggered by the vaccine," he said.

Dr Soon said: "Families and loved ones are understandably distraught if their elderly relatives suffer from disability or death following a vaccination, and will seek answers. How-

ever, in the search for the truth, it is important that all parties concerned do not mistake the timing of an event with its actual cause."

Three i ndependent bodies of medical experts in Singapore have reiterated that the risk of heart conditions associated with the Covid-19 mRNA vaccine is "very small", and have recommended that people still get the vaccines in the interest of public health.

Singapore's Health Sciences Authority (HSA) said that in general, five to seven individuals per 100,000 people a year are hospitalised for myocarditis or pericarditis. The frequency of heart attacks and strokes in vaccinated people locally is within the background incidence rate, and there is no evidence currently that the vaccines can directly cause these events, HSA said.

Doctors added that the exact prevalence of these heart conditions in Singapore is not known as milder cases often go unreported.

ON RISKS TO PREGNANCY

There is currently no evidence that Covid-19 vaccination causes any problems with pregnancy, including the development of the placenta, and also no evidence that fertility problems are a side effect of any vaccine, including Covid-19 vaccines, the United States Centres for Disease Control and Prevention said.

During the Pfizer vaccine clinical trials, 23 women volunteers involved in the study became pregnant. Twelve received the vaccine and 11 were given a placebo jab. The only woman who had a miscarriage did not receive the actual vaccine, but a placebo.

The College of Obstetricians and Gynaecologists Singapore and the Obstetrical and Gynaecological Society of Singapore released a joint statement on June 3 to address some of these concerns.

Real-world data from almost 4,000 women in the US, who selfidentified as pregnant at the time of vaccination or shortly thereafter, has demonstrated the safety of the Pfizer and Moderna vaccines, with no increased risks of adverse pregnancy outcomes, nor any obvious adverse events, it said.

ON LONG-TERM SIDE EFFECTS

The mRNA vaccine and the protein it triggers production of are both broken down by the human body after a few days. This makes it highly unlikely that there will be side effects that occur only years later.

"Imagine you get a common cold, usually caused by a rhinovirus, which is an RNA virus. This RNA virus also works by giving instructions to your cells to produce a whole set of viral proteins, in order to reproduce. Yet we do not concern ourselves with the longterm effects of getting the common cold," said Dr Soon.

The majority of vaccine side effects such as injection site pain and swelling, fever and fatigue are predictable and happen within days of the injection. Severe allergic reactions can also happen, but these are rare and, for the majority of vaccines, usually occur within hours of the injection.

Some unusual side effects have been observed weeks after Covid-19 vaccinations, like facial muscle weakness and bleeding. The health authorities are continuing to monitor these nearer-term side effects as vaccinations continue, Dr Soon added.

Some people have expressed wariness about the short timeframe of trials and actual use of the Covid-19 vaccines so far.

To this point, Dr Soon explained that medicine that is taken shortterm may have shorter periods of study.

For medications for chronic illnesses such as high blood pressure or diabetes, which are taken longterm or for life, studies of up to several years may be required to better understand efficacy and safety.

On the flip side, Dr Soon noted that how long a drug has been in use need not necessarily be correlated with how safe it is.

"Paracetamol has been around for decades and is available over the counter, but it has a narrow safety margin, and is one of the leading agents of drug overdose and liver failure," he said.