

The Covid Pandemic's Hidden Casualties: Pregnant Women

Many expectant women have avoided vaccination, unaware that the virus poses great risks to both fetus and mother.



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5 MIN READ

Of all the groups still threatened by Covid-19 — including the elderly and the immunocompromised — it is pregnant women who seem the most unaware of the risks.

Covid can kill pregnant women and can result in miscarriage, preterm births and stillbirths even when the women have asymptomatic or mild illness. The infection may also affect the baby's brain development.

Dozens of studies have shown that the Covid vaccine is safe for pregnant women. Immunization of the mother also passes along protective antibodies to her fetus.

Yet only 70 percent of women have completed the primary vaccination series for Covid before or during pregnancy, meaning that roughly 30 percent of pregnant women have not had this basic protection. Since early September, only 15 percent have opted for a booster shot.

Even the flu vaccine has not proven popular with pregnant women this year: Just 37 percent of pregnant women had been vaccinated for flu as of the end of October, compared with nearly 60 percent at the end of September 2020.

The United States is now struggling with a mix of respiratory syncytial virus, the flu and the coronavirus, all of which can cause serious illness in pregnant women. The winter is looking grim.

"I'm concerned about it, especially given low vaccination rates," said Dr. Denise Jamieson, an obstetrician at Emory University in Atlanta and a member of the Covid expert group of the American College of Obstetrics and Gynecologists.

Even early in the pandemic, it was obvious that Covid was dangerous in pregnancy. Data from a study in June 2020 showed that among pregnant women infected with Covid, about one in three ended up in the hospital, compared with about 6 percent of women who were not pregnant.

Infected pregnant women were 50 percent more likely to be admitted to intensive-care units and 70 percent more likely to need a ventilator.

"It's very clear now that if you're pregnant, planning to get pregnant or breastfeeding, for you and for your baby, it's very important to get vaccinated," said Dr. Neel Shah, an assistant professor at Harvard and chief medical officer of Maven Clinic, a digital health care provider for women and families.

Pregnant women, their families and even their doctors may not realize the importance of immunization because of "sluggish and muddled" communication from public health agencies, Dr. Shah said.

The Centers for Disease Control and Prevention did not wholeheartedly endorse vaccination for pregnant women until September 2021, about three months before the Omicron variant swept the nation and months after the American College of Obstetricians and Gynecologists Society for Maternal-Fetal Medicine strongly recommended the shots for pregnant women.



A pregnant and intubated Covid patient in a hospital in Boise, Idaho, last year. Pregnant women are vulnerable to respiratory viruses for several reasons. Kyle Green/Associated Press

By then, mistrust and misinformation had already been sown, and only about a third of pregnant women were vaccinated. “That was a big part of the failure, honestly,” Dr. Shah said.

Scientists used to believe that pregnant women were, in essence, immunocompromised — that the body tolerates a the fetus by responding to it as it would a foreign invader and suppressing its own immune responses. “We now know that that’s not true, that’s an oversimplification,” Dr. Jamieson said.

Pregnancy is accompanied by some immune changes, she said, but they don’t compromise the ability to fend off infections, as an organ transplant or certain medical conditions might.

Still, pregnant women are vulnerable for other reasons. The growing uterus compresses the lungs, hindering the ability to take in air, for example. Pregnancy can also cause conditions like diabetes and high blood pressure, which themselves put a person at risk for severe Covid.

Studies have shown that the placenta of pregnant women who are infected with the coronavirus resembles that of women with pre-eclampsia, a form of dangerously high blood pressure in pregnancy.

The placenta is a sponge of blood vessels that enables the exchange of oxygen and nutrients between the mother and fetus. It takes on the role of lungs, liver and kidneys for the fetus, but Covid can ravage it, said Dr. Anne V. Herdman Royal, a pathologist at Tulsa Medical Laboratory who studies placental tissue.

“The placenta is essentially the lungs for the fetus, and it’s damaged in the same way that lungs are by Covid,” she said. Most babies turn out to be fine, as long as they have completed at least 30 weeks of gestation, she added.

So why have so many pregnant women avoided vaccination? Many have focused on claims of risk for which there is little to no evidence while ignoring the very real dangers of Covid, Dr. Royal said.



A makeshift entrance to an area for pregnant women and new mothers with Covid at a hospital in McAllen, Texas, in 2020. Eric Gay/Associated Press

That’s true not just of pregnant women but of friends, family, even their health care providers.

In October 2021, Maven Clinic surveyed 500 women in the United States. Nearly 70 percent said at least one person had suggested they avoid the vaccine while pregnant. In about one-third of these cases, the source was a health care provider.

Doctors were already wary of taking even the smallest risks with pregnant women, and any ambiguity in the evidence regarding Covid vaccination may have reinforced their fears, said Dr. Anne Lyerly, a bioethicist at the University of North Carolina at Chapel Hill.

Dr. Lyerly pointed to one scientific paper in the journal JAMA that was titled “Association of Covid-19 Vaccination in Pregnancy With Adverse Peripartum Outcomes.”

The researchers concluded that there was no significant association. But leaving that information out of the title surely did not reassure doctors, she said.

“Neutral messaging, like that messaging in the JAMA article, is not neutral against the backdrop of fear,” Dr. Lyerly said.

“The better-safe-than-sorry stance that so many people in the public, so many doctors — even so many public health officials — tend to take with regard to pregnancy is not safer in the end,” she added. “In fact, it puts pregnant people in harm’s way.”

She also said that public health messages had not sufficiently emphasized the risks of Covid to pregnant women and the benefits of vaccination to the fetus, she said.

Many women willingly have the Tdap vaccine — which protects against diphtheria, tetanus and pertussis — in the third trimester because they understand that it is needed to protect the baby.

But the message has not gotten through that the flu and Covid vaccines are also necessary in pregnancy, Dr. Jamieson said. In the Maven survey, for example, one in three women said they were planning to get the Covid vaccine only after giving birth.

Dr. Jamieson said she had succeeded in convincing some women to be vaccinated by first asking them about their thoughts on the vaccine, then revisiting the topic in a later appointment.

The key “is not to push so hard at the first visit,” she said, “and sometimes they will change their mind.”