COVID-19 Vaccine Hesitancy Among Reproductive-aged Females

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ABSTRACT

Black individuals are more vaccine-hesitant than Hispanic and White individuals. Pregnant patients were less confident that the COVID-19 vaccine is safe overall as well as in pregnancy compared to those recently pregnant or not pregnant. Individuals who declined the flu vaccine were more likely to be vaccine-hesitant.

OBJECTIVE

This study aims to assess COVID-19 vaccine hesitancy in reproductive-aged females at the University of Illinois Hospital.

METHODS

The study was approved by the IRB at University of Illinois College of Medicine. A REDCap survey was created using a modified version of a validated survey tool developed by the Strategic Advisory Group of Experts (SAGE) Working Group. Over 3 months, females 18-50 years old were recruited from the inpatient and outpatient obstetric services at the University of Illinois Hospital. Surveyors asked individuals if they had been vaccinated against COVID-19. If not, they were encouraged to complete the survey using a QR code link. Data analysis included simple T-tests and ANOVA using SPSS.

RESULTS

Of 60 records, 9 records were excluded because no survey answers were recorded. 51 patients partially or fully completed the survey. The results revealed that Black individuals are more vaccine-hesitant than Hispanic and White individuals ($F(2, 44) = [3.45]$, $p = [<0.50]$). Specifically, Black women differed in the belief that the COVID-19 vaccine is safe overall ($F(2, 44) = [5.62]$, $p [<0.01]$) and in pregnancy ($F(2, 46) = [4.95]$, $p = [<0.01]$). Pregnant patients were less confident that the COVID-19 vaccine is safe overall ($F(2, 45) = [7.44]$, $p [<0.01]$) as well as in pregnancy ($F(2,47) = [6.26]$, $p = [<0.01]$) compared to those recently pregnant or not pregnant. Individuals who declined the flu vaccine were more likely to be vaccine-hesitant ($t(46) = [-4.49]$, $p = [<.001]$).

Participants' age, occupation, and contraception status were not associated with vaccine hesitancy.

Non-breastfeeding participants were more accepting of the vaccine; however the small sample size of the study rendered the results statistically insignificant.

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
If the COVID-19 vaccine became available to me, I would get vaccinated. * must provide value	☐	☐	☐	☐	☐	☐	☐
I am completely confident that vaccines are safe. * must provide value	☐	☐	☐	☐	☐	☐	☐
I am completely confident that the COVID-19 vaccine is safe. * must provide value	☐	☐	☐	☐	☐	☐	☐
I am completely confident that vaccines are safe in pregnancy. * must provide value	☐	☐	☐	☐	☐	☐	☐
COVID-19 is not so severe that I should be vaccinated. * must provide value	☐	☐	☐	☐	☐	☐	☐
Everyday stresses prevent me from getting vaccinated. * must provide value	☐	☐	☐	☐	☐	☐	☐
When I think about getting vaccinated, I weigh the benefits and risks to make the best decision possible. * must provide value	☐	☐	☐	☐	☐	☐	☐
I get vaccinated because I can also protect other people from getting infected. * must provide value	☐	☐	☐	☐	☐	☐	☐

CONCLUSION

Black and/or currently pregnant individuals were more vaccine-hesitant compared to Hispanic and non-pregnant individuals. This demonstrates vaccine hesitancy exists despite the recommendations of the CDC, ACOG, and WHO, highlighting the need to study common misconceptions regarding the safety of the COVID-19 vaccine. More research is needed to understand the reasons and origins of vaccine hesitancy in vulnerable communities in order to improve vaccine education initiatives and better align them with population and individual motivators.

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