



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

How did the COVID-19 pandemic affect mental health during pregnancy?

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Who sponsored this study?

The Environmental influences on Child Health Outcomes (ECHO) Program, Office of the Director, National Institutes of Health supported this research.

What were the study results?

This study compared ECHO participants who were pregnant during the COVID-19 pandemic with participants who were pregnant before the pandemic. Participants who were pregnant during the pandemic reported more stress and symptoms of depression. Lower levels of physical activity were associated with more distress, and higher levels of emotional support were associated with less distress during pregnancy for both groups. The results also showed that pregnancies during the pandemic were slightly shorter on average but there was no impact on infant birth weight.

What was the study's impact?

This study highlights the importance of providing access to emotional support and mental health care during pregnancy and identifying ways to promote physical activity to help improve maternal health and wellbeing, regardless of external conditions like the pandemic.

Why was this study needed?

Previous studies on the effects of the COVID-19 pandemic on pregnancy outcomes have been mixed. This is partly because background information about pregnant participants has been missing and partly because the effects of the pandemic are different for different populations across the country. This study involved pregnant participants from across the United States and collected information about their mental health and wellbeing along with data on their pregnancy outcomes. The study also focused on positive factors that can be used to improve pregnancy health and birth outcomes, such as physical activity and emotional support.

Who was involved?

This study included 501 pregnant participants who gave birth during the COVID-19 pandemic (between March 12, 2020 and May 30, 2021) and 501 pregnant participants who gave birth before the pandemic (prior to March 11, 2020). Participants were 31 years old on average and enrolled in one of 16 ECHO research sites across the United States.

What happened during the study?

Participants answered questions about their experiences with stress and depression, reported on their physical activity, and described the emotional support they received during pregnancy. The researchers also collected information on participants' birth outcomes from medical records and maternal reports.

Footnote: Results reported here are for a single study. Other or future studies may provide new information or different results. You should not make changes to your health without first consulting your healthcare professional.

What happens next?

More research is needed to understand how social support and physical activity during pregnancy may protect pregnant people from stress or depression during difficult times. Future research may look for more details about the types of experiences during the COVID-19 pandemic that had the most influence on pregnancy health and wellbeing.

Where can I learn more?

Access the full journal article, titled "Impact of Sedentary Behavior and Emotional Support on Prenatal Psychological Distress and Birth Outcomes During the COVID-19 Pandemic," in *Psychological Medicine*.

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