



ECHO

Environmental influences
on Child Health Outcomes

A program supported by the NIH

Study Summary

Did COVID-19 pandemic experiences contribute to symptoms of traumatic stress in mothers in the U.S.?

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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.

Why was this study needed?

The goal of this study was to better understand the mental health impacts of the COVID-19 pandemic on mothers in the United States and Puerto Rico.

Who was involved?

This study included 11,473 mothers from 62 ECHO cohorts across the U.S. and Puerto Rico.

What happened during the study?

ECHO researchers investigated the potential impacts of the COVID-19 pandemic on maternal mental health, from April 2020 through August 2021. The researchers looked for patterns of pandemic-related changes in maternal health and health behaviors, healthcare visits, work and finances, and coping strategies. They then used these data to group the mothers by those who had more or fewer pandemic-related changes to examine whether these groups reported higher or lower symptoms of traumatic stress related to the pandemic.

What were the study results?

The study identified two groups of mothers based on their pandemic experiences. One of these groups experienced more changes to their daily life routines, more isolation from friends and family, and more changes to their health behaviors, when compared to the other group who experienced fewer pandemic-related changes in their lives.

Mothers who reported more life changes also reported more symptoms of traumatic stress due to the pandemic. The mothers who fell into the group that experienced more changes and reported more symptoms of traumatic stress tended to be women with higher incomes and higher education. Sixty-six percent of the women in the high change group were white. The women in the high change group were more likely to report financial concerns as a cause of stress. They were also more likely to report that the pandemic affected their healthcare.

In contrast, the group that reported fewer changes tended to have lower education and lower income. The women in this group were primarily Black and Native American. Hispanic women were split evenly between the two groups.

Both groups reported similar rates of COVID-19 infection in the household and similar work changes.

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.

Impact

As compared to fathers, during the COVID-19 pandemic more mothers have been affected by job and income losses, taken on more childcare burdens related to remote schooling, and have made major adjustments to their daily routines. This study found that mothers who had the most changes to their work, health, and social support systems also reported the highest amounts of traumatic stress due to the pandemic. These findings suggest that the association between sociodemographic, stressful life events, and mental health should be considered in future studies examining the long-term outcomes of the COVID-19 pandemic.

What happens next?

Future studies could examine how changes over the course of the pandemic affect mothers' stress and well-being.

Where can I learn more?

Access the full journal article, titled "COVID-19 Pandemic Experiences and Symptoms of Pandemic-Associated Traumatic Stress Among Mothers in the US," in [JAMA Network Open](#).

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