

# Causal relationship seen for rheumatoid arthritis and adverse pregnancy outcomes

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There is a positive causal association for rheumatoid arthritis and adverse pregnancy outcomes (APOs), according to a study [published](#) online July 31 in *BMC Pregnancy & Childbirth*.

Tongmin Chang, from the Cheeloo College of Medicine at Shandong University in Jinan, China, and colleagues explored the potential causal relationships between rheumatoid arthritis and APOs using a bidirectional two-sample Mendelian randomization (MR) analysis in European and Asian populations.

In the European population, the researchers observed a causal association between rheumatoid arthritis and gestational hypertension (odds ratio [OR], 1.04), preeclampsia (OR, 1.06), fetal growth restriction (OR, 1.08), and preterm delivery (OR, 1.04). There was no evidence that APOs had causal effects on rheumatoid arthritis in the reverse MR analysis. In an East Asian population, there was no association between rheumatoid arthritis and APOs. Furthermore, no heterogeneity or horizontal pleiotropy was detected.

"In conclusion, this study confirmed the [causal relationship](#) between rheumatoid arthritis and adverse pregnancy outcomes in the European population," the authors write.

"It highlights the importance of more intensive prenatal care and [early intervention](#) among [pregnant women](#) with [rheumatoid arthritis](#) to prevent potential adverse obstetric outcomes. However, due to the limitations of the study, further research is warranted."

**More information:** Tongmin Chang et al, Rheumatoid arthritis and adverse pregnancy outcomes: a bidirectional two-sample mendelian randomization study, *BMC Pregnancy and Childbirth* (2024). [DOI: 10.1186/s12884-024-06698-3](#)

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