

ASSOCIATIONS BETWEEN FAMILY HISTORY OF HYPERTENSION AND THE RISK OF PREECLAMPSIA: A META-ANALYSIS

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ABSTRACT

Background: Various variables may raise the risk of pre-eclampsia in pregnant women. The risk is even greater if there is a family history of hypertension. Left untreated, preeclampsia can lead to serious – even fatal – complications for both the mother and infant. The purpose of this study was to estimate the associations between family history of hypertension and the risk of preeclampsia in pregnant women.

Subjects and Method: Meta-analysis was carried out by searching articles from journal databases, including Google Scholar, Science Direct, and PubMed. The articles were searched using the PICO format. Population: pregnant women. Intervention: family history of hypertension. Comparison: no family history of hypertension. Outcome: preeclampsia. Keywords used preeclampsia OR “hypertension pregnancy” AND “family history of hypertension” AND “cross-sectional study”. Inclusion criteria were full text, cross-sectional studies, published in 2013 to 2023. Articles were collected using a PRISMA diagram and analyzed by RevMan 5.3 application.

Results: A meta-analysis included 10 cross-sectional studies from Ethiopia, Ghana, Kamerun, Tanzania, Uganda, Zimbabwe, and Zanzibar. The total sample was 4,970 pregnant women. Family history of hypertension (aOR= 3.08; 95% CI= 1.28 to 7.44; p= 0.001) significantly increased the risk of preeclampsia in pregnant women.

Conclusion: A family history of hypertension significantly increases the risk of preeclampsia in pregnant women.

Keywords: family history, hypertension, preeclampsia, pregnant women

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