

This systematic review identified obesity/overweight, pre-pregnancy diabetes, and microalbuminuria to be associated with preeclampsia / hypertensive disorders of pregnancy in First Nation women. Smoking was not associated with preeclampsia / hypertensive disorders for First Nations women.

Background

Preeclampsia and the Hypertensive Disorders of Pregnancy (HDP) occur more frequently amongst First Nations women and can have short- and long-term impacts on maternal and infant health and wellbeing. Preeclampsia and HDP research often include a diversity of women. However, research including a subgroup or only First Nations women, often have sample sizes too small for reliability.

Aim

To understand factors associated with increased risk for First Nations women of Canada, Australia, New Zealand, and the United States, and to lessen this issue, a systematic review and meta-analysis was conducted.

Methods



Ovid Medline / Emcare
APA PsycINFO
Scopus & Cochrane
Searched to January 2023



Countries with similar experiences, ongoing colonization, and land dispossession

Clinical indicators
i.e. diabetes, obesity
Socio-demographics indicators
i.e. age



First Nations & Indigenous women diagnosed with and without preeclampsia / HDP



Screening in EndNote, Covidence and Excel.
Data synthesis in RevMan.



PROSPERO (CRD42023381847)
Appraisal tools: JBI, CREATE and CONSIDER statements

Results

The six studies included in the final data analysis were: four cohort studies, one case control study, and one with cohort and case control phases (published in two papers). Papers were published between 2005 to 2018 with data collected between 1994 and 2014. Four studies were conducted in Australia, one in Canada, and one in the United States (two papers, same study, different time periods). No studies were identified from New Zealand.

Figure 1: PRISMA Flowchart

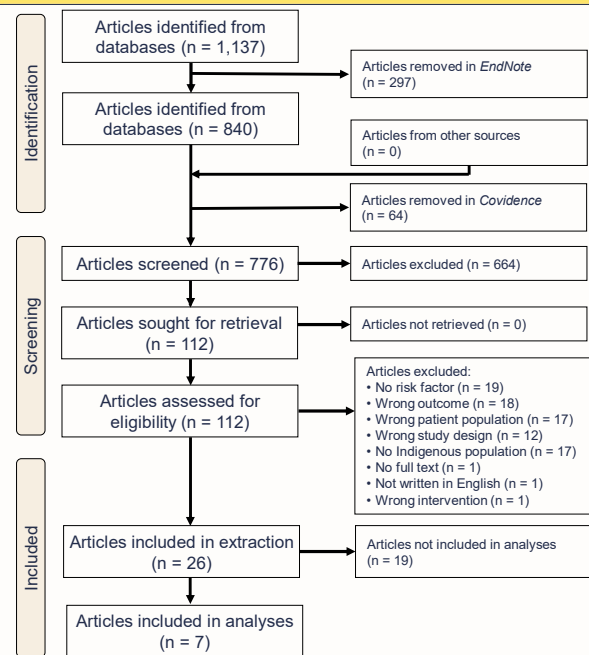


Figure 2: Associations between preeclampsia/HDP and potential risk factors among First Nations women.

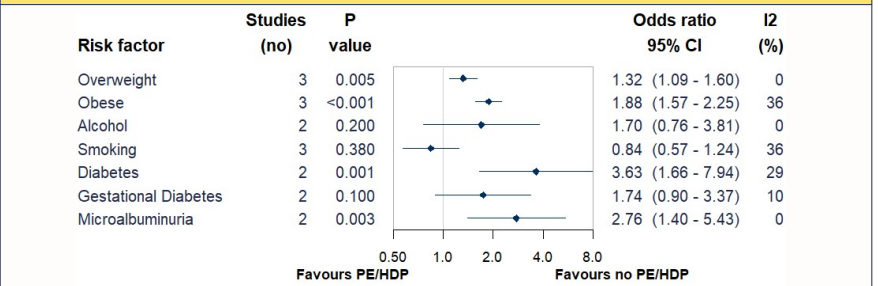
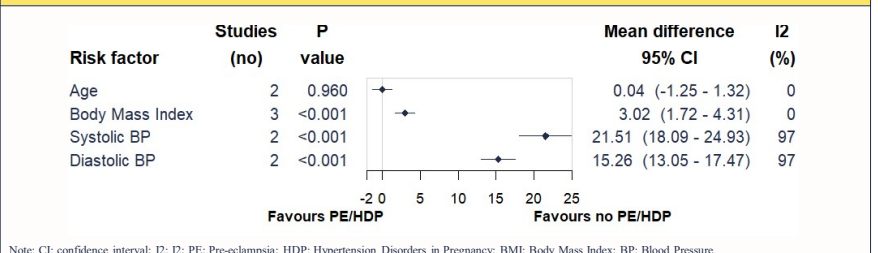


Figure 3: Pooled mean differences between preeclampsia/HDP and potential risk factors among First Nations women.



Conclusion

Understanding factors associated with increased preeclampsia/HDP risk amongst First Nations women is important to minimising adverse perinatal events and future health complications. This review demonstrates current gaps in the evidence, specifically in relation to social, economic, and environmental factors.

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