



Relationship between Hypertensive Disorders of Pregnancy and postpartum mental illnesses: P4 study.

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Introduction

While long-term physical effects of hypertensive pregnancy (HDP) are well documented, the long-term effects on women's mental health remain poorly understood.

Objective

Evaluate the relationship between hypertensive disorders in pregnancy (HDP) and postpartum mental illnesses by

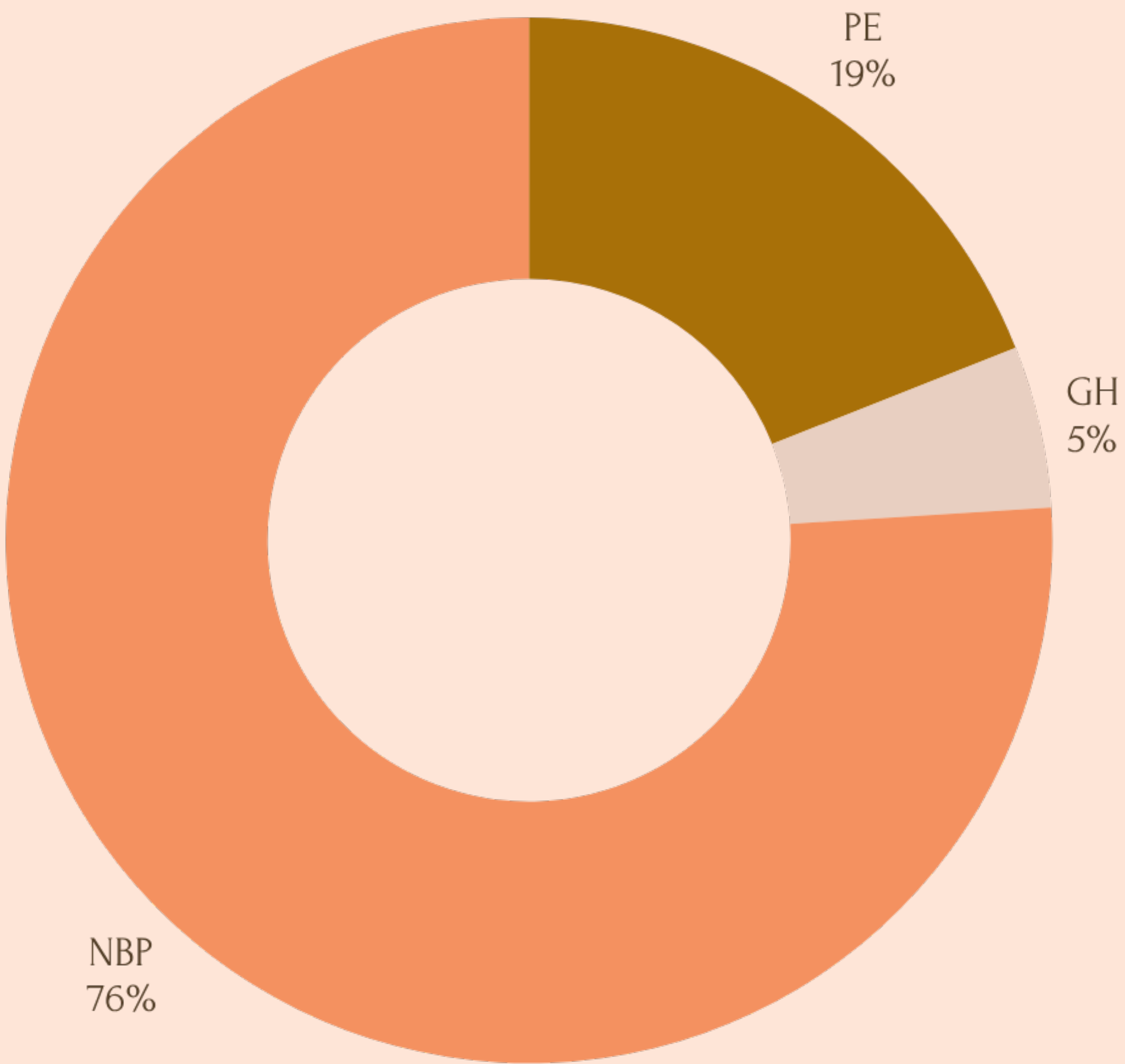
- Investigating the prevalence and severity of depression, anxiety and post-traumatic stress disorder (PTSD) 5 – years postpartum after HPD versus normotensive pregnancy
- Comparing longitudinal data 6 months, 2 years and 5 years post-partum

Method

- Prospective longitudinal cohort study (P4) of women 6 months, 2 years and 5 years postpartum with normotensive pregnancy (NBP) versus those with preeclampsia (PE) or gestational hypertension (GH).
- Five-year (final) follow up of the Postpartum, Physiology, Psychology and Paediatric (P4) cohort, women recruited following singleton birth between January 2013-December 2018 in metropolitan Australia.
- Participants (NBP, PE, GH) surveyed for prevalence and severity of depression as measured by Edinburgh Postnatal Depression Scale (EPDS>12), anxiety by 7-item Generalised Anxiety Disorder scale (GAD-7≥10) and PTSD by Post-traumatic stress Diagnostic Scale, (PDS/PDS-5 ≥28%)
- Cross-sectional 5-year postpartum data compared to longitudinal findings from 6 months and 2 years postpartum to understand changes in postpartum mental illnesses over time.

RESULTS

314 participants completed the 6-month, 2-year and 5-year survey (NBP 76% n=238, PE 19% n=59, GH 5% n=17).

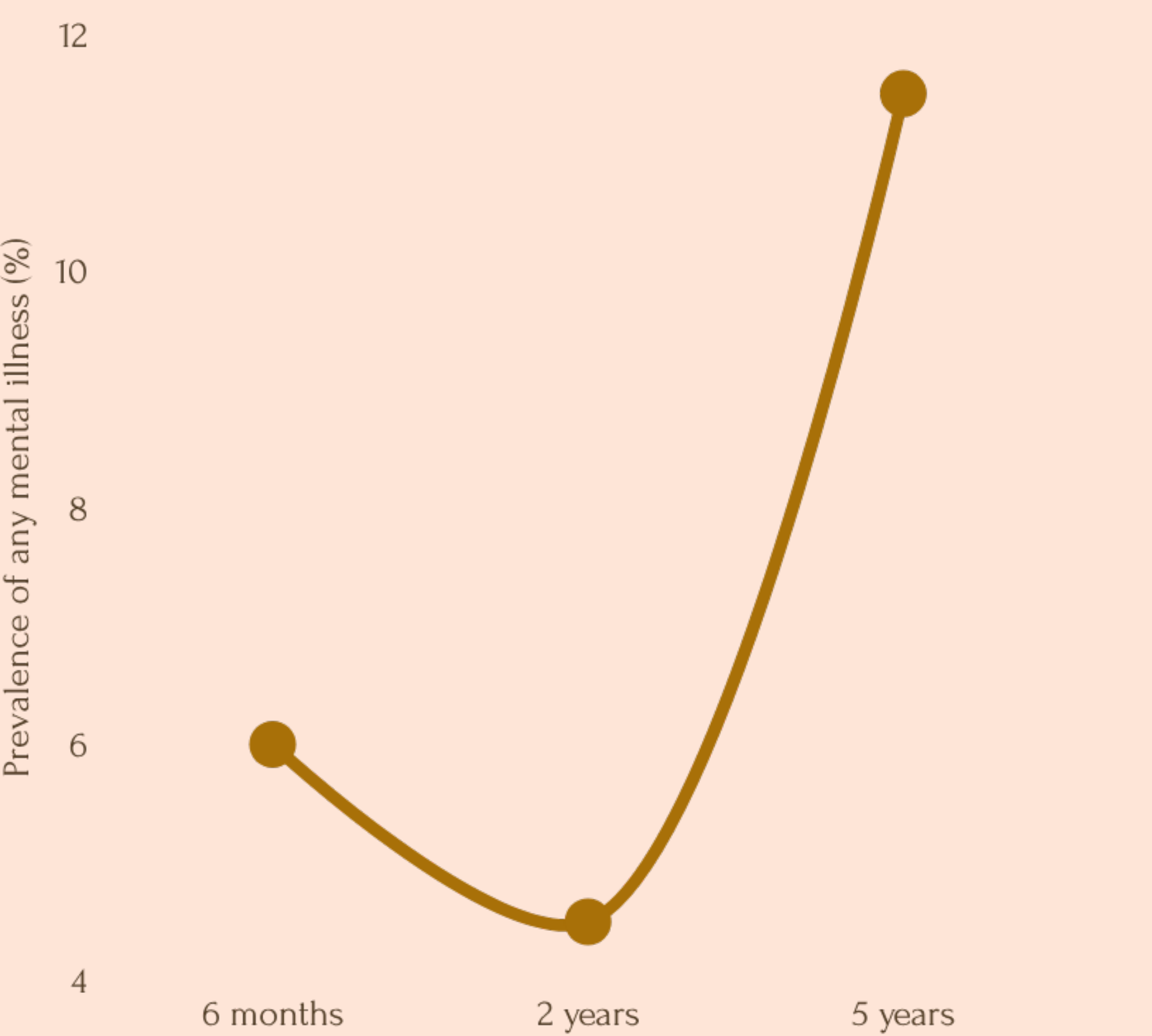


- Women who experienced PE reported rates of any mental health disorder (any of EPDS > 12, GAD 7 ≥ 10, or PTSD ≥28%) at similar rates to women who experienced normal blood pressure during pregnancy at the 5-year mark (NBP 10.9% vs PE 10.2%, p=0.27).
 - Significant predictors of any mental health illness at 5 years postpartum included mental health history at booking, smoking and being nulliparous (P<0.05).



- At 5 years, 5.4% after preeclampsia versus 0.4% after NBP recalled childbirth as traumatic (p=0.042), in line with that same cohort at 2 years (PE 9.0% v NBP 0.9% p=0.001) and 6 months (PE 6.8% v NBP 1.3%, p=0.034).

- Noticeably the rates of mental illnesses across all cohorts reported at 5-years (11.5%) were higher than reported at 2-years and 6-months (4.5% and 6% respectively, p= <0.001)



Findings

- BP status was not a significant predictor for mental illnesses at 5 years post-partum
- Significant predictors of any mental health illness at 5 years included – mental health history, smoking and parity. Mental health history was the only predictor that aligned with the 2 year data
- Although BP status was not a significant predictor for mental illness at 5 years post-partum, the recollection of birth as a traumatic experience persisted and was significantly different between the blood pressure groups throughout this study.

Conclusion

Overall rates of mental health disorder did not differ between women experiencing HDP versus NBP, however a significant increase in mental illnesses across all cohorts at the 5-year mark was noted compared to 6-months and 2-years. This suggests longer-term postpartum mental health challenges, which will require further study to identify risk factors.

References

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