

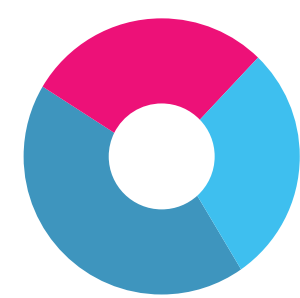
Effects of psychosocial work factors on preterm birth: Systematic Review and Meta-analysis



An estimated 13.4 million babies were born preterm in 2020



Across countries, the rate of preterm birth ranges from 4–16% of babies born in 2020



Preterm birth complications caused around 900,000 child deaths in 2019

Authors

Mr Haimanot Abebe Adane, A/Prof Ross Iles, A/Prof Jacqueline A. Boyle, Dr Asmare Gelaw, and Pro Alex Collie

Affiliations

School of Public Health and Preventive Medicine, Monash University, Australia

1 Background Preterm is defined as babies born alive before 37 weeks of pregnancy

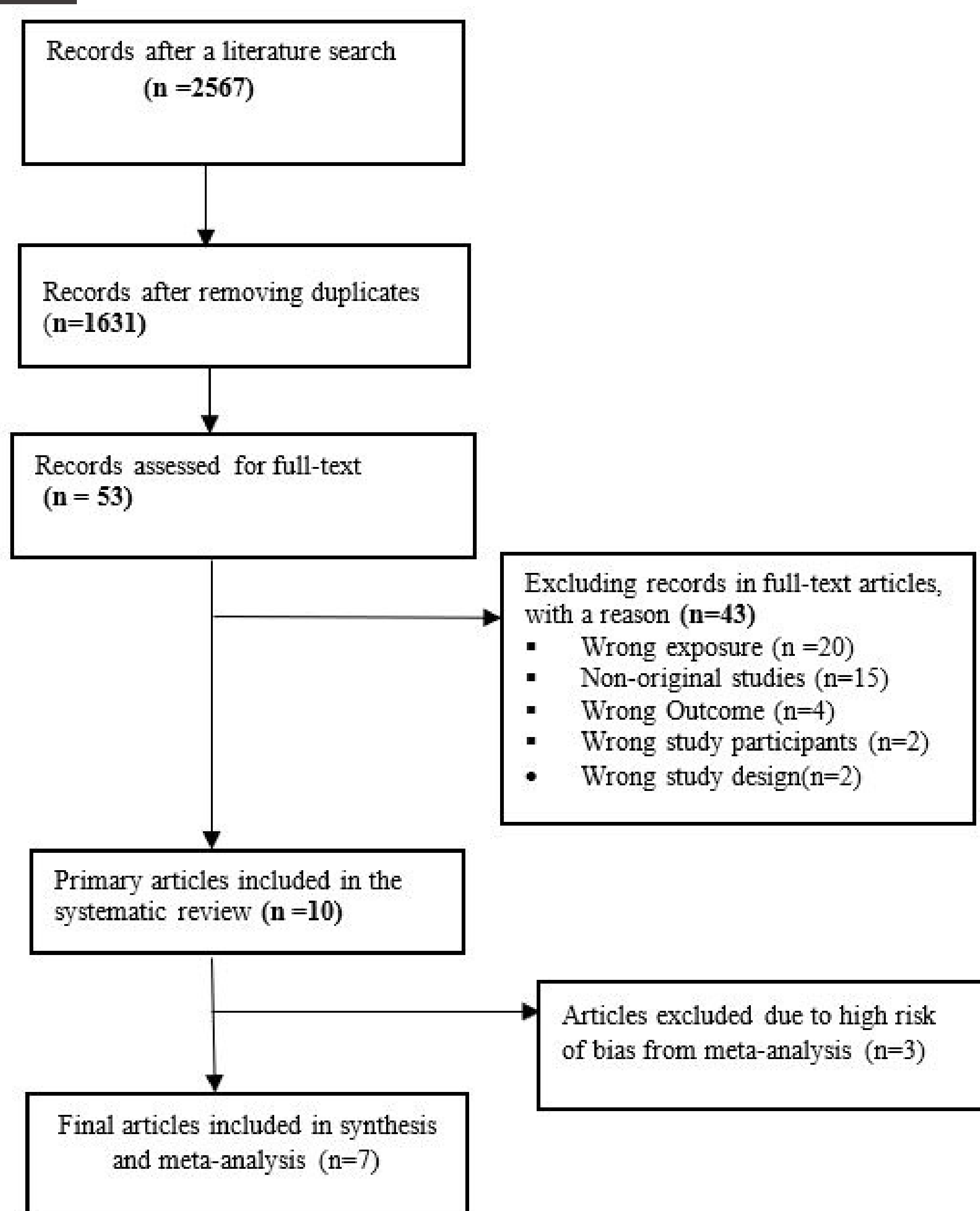
2 Research Questions

- Does job strain affect preterm birth rates in working pregnant women?
- What is the effect of organisational injustice on the risk of preterm birth in employed pregnant women?
- Does workplace effort-reward imbalance affect preterm birth risk in pregnant employees?

3 Methodology

- Registered in PROSPERO
- JBI Risk of bias assessment
- GRADE quality assessment
- Systematic literature review and Meta-analysis/random effects modelling

4 Results



4.1. Characteristics of included studies

4.1.1. Study design

- Cohort studies (n=4)
- Case-control (n=4)
- Cross-sectional (n=2)

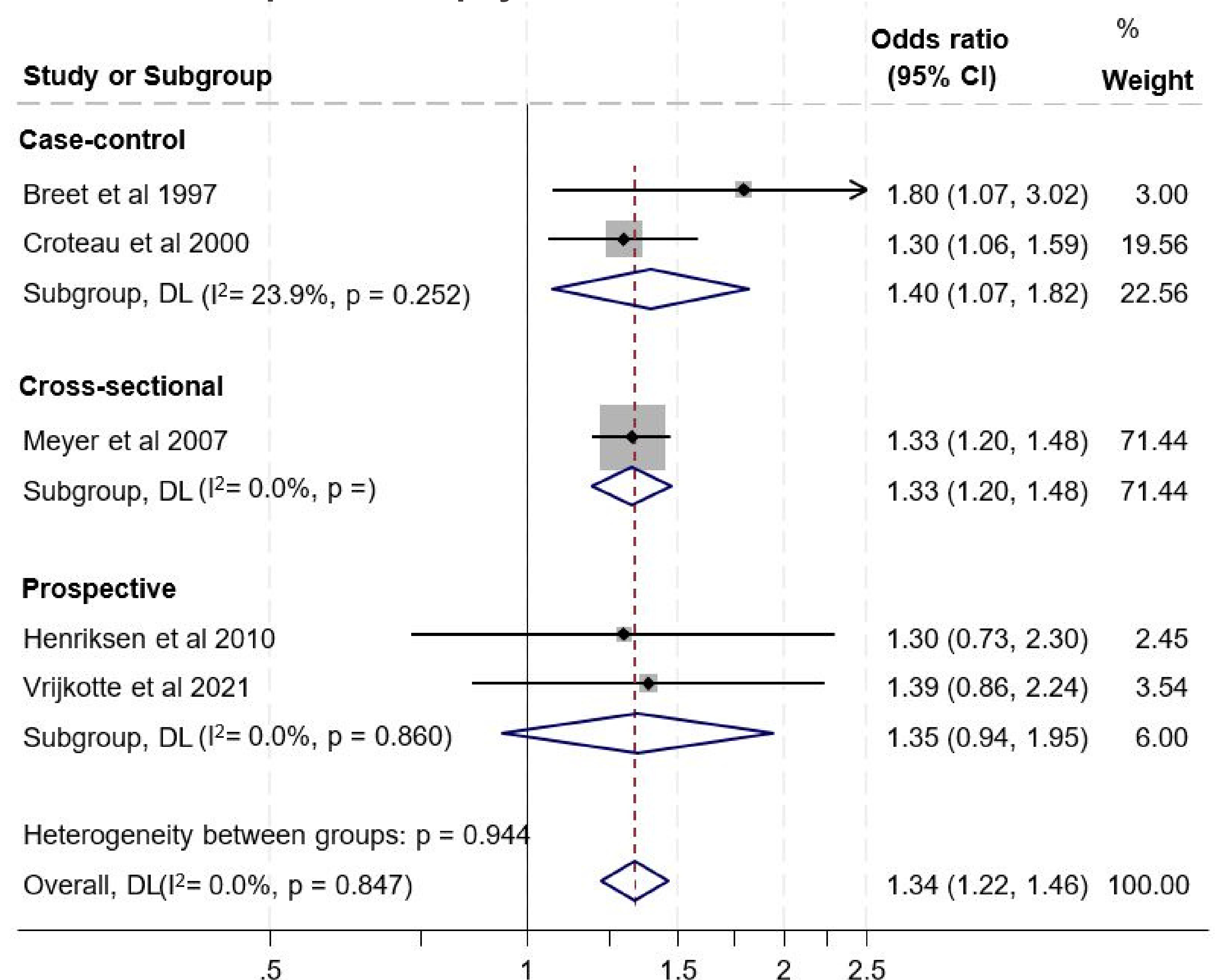
4.1.2. Country of origin

- USA (n=3)
- Denmark (n=3)
- Canada, Mexico, Netherlands and Spain (n=1 each)

4.1.3. Risk of bias (ROB)

- Low ROB (n=5)
- Moderate ROB (n=2)
- High ROB (n=3)

4.2. Relationship between psychosocial work factors and Preterm birth



5 Conclusion

- Pregnant women who experience high levels of psychosocial job strain are more likely to give birth prematurely.
- Thus, employers should create supportive work environments,
- Clinicians should screen and support affected pregnant women,
- Pregnant women themselves should also be vigilant in reducing their exposure to harmful psychosocial factors at work,
- Future studies should also examine the impact of different psychosocial work factors on preterm birth

6 Contact

Haimanot Abebe Adane
School of Public health and Preventive Medicine
Monash University

Acknowledgments

- My supervisors: Prof. Alex Collie, A/Prof. Ross Iles, A/Prof. Jacqueline A. Boyle
- Funding: Monash Graduate Scholarship

References

1. Ohuma E, Moller A-B, Bradley E (in press). National, regional, and worldwide estimates of preterm birth in 2020, with trends from 2010: a systematic analysis. *Lancet*. 2023
2. Perin J, Mulick A, Yeung D, et al. Global, regional, and national causes of under-5 mortality in 2000-19: an updated systematic analysis with implications for the Sustainable Development Goals. *Lancet Child Adolesc Health* 2022; 6(2): 106-15



MONASH
University