

Disparities In Miscarriage: A Systematic Review Of The Socioeconomic Inequalities In Early Pregnancy Loss.

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Introduction

- Pregnancy loss is a very emotive topic, which can affect up to 24% of all recognised pregnancies. This can have severe lasting consequences for deteriorations in mental and physical health. [1]
- We conducted a systematic review to investigate which socio-economic factors had an impact on a pregnant woman's risk of experiencing early pregnancy loss, which we defined as before 20 weeks of gestation.

Methodology

Criteria

Predefined 'Population, Exposure, Comparison and Outcome' (PECO) criteria were used to select studies for inclusion (See Table 1). We searched MEDLINE, CINAHL, EMBASE and COCHRANE library on the 18/10/2024.

Inclusion

Human controlled clinical trials, case-control studies, cohort studies and cross-sectional studies. Ectopic pregnancies, molar pregnancies were excluded, as well as those studies carried out in assisted reproductive settings.

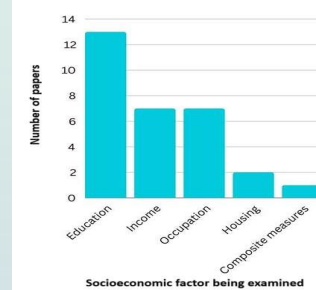
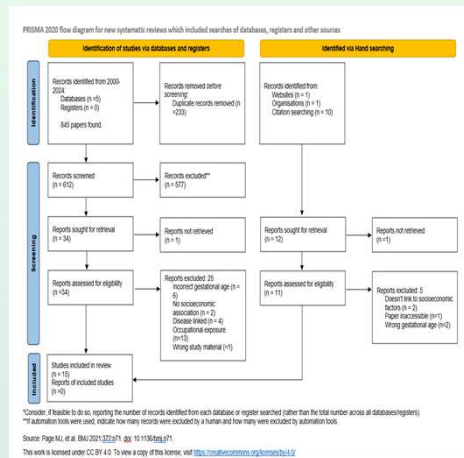
Factors

Socioeconomic including occupation, unemployment, income, education and housing were examined.

Protocol

Full protocol available at PROSPERO registration: CRD42024598538.

Results



- This graph shows the relatively small papers available for each factor
 - Total population size was 1,112,128.
 - Only income was consistently associated with EPL.

Discussion

Socioeconomic status

- Increased income reduces the risk of EPL.
- Positive association with a composite measure of socioeconomic quintile reduces risk of EPL, confluent with existing literature [3,4]

Strengths

- Refined search method.
- Comprehensive MeSH terms were utilised
- Conclusions drawn align with existing and accepted literature.

Weaknesses

- Poor geographical distribution of paper's country of origin
- Lack of consistent definitions in literature
- Small group of papers available



Figure 2 – World map showing geographical distribution by country of our included studies

Conclusion

- Income is associated with a woman's risk of EPL, as is a composite measure of socioeconomic status, likely to include income.
- The lack of available data severely limits the strength of conclusion and more research is needed for equitable healthcare and a lowered EPL rate.

References

- [1] Norwitz FL, Espinosa L, A Regier T, Margen CE, Andersen PK, Nybo Andersen AM. Socioeconomic position and the risk of spontaneous abortion: a study within the Danish National Birth Cohort. *BMJ Open*. 2012 Jun 23;2(3):e001077. doi: 10.1136/bmjopen-2012-001077. PMID: 22734116. PMC3038888.
- [2] Ahmed P, Jankovic JJ. Maternal occupation and adverse pregnancy outcomes: a Finnish population-based study. *Obstet Med (Lond)*. 2007 Sep;5(3):417-23. doi: 10.1093/oxfordjournals.008.0002.007 Jun 12. PMID: 17566872.
- [3] Thompson R, Miffal M, Alota D, Janssens A, Richmond C, O'Leary A, et al. Socioeconomic inequalities and adverse pregnancy outcomes in the UK and Republic of Ireland: a systematic review and meta-analysis. *BMJ Open*. 2021;11(3):e024793. doi: 10.1136/bmjopen-2020-024793.