

Does Provision of Antenatal Care in Southern Asia Improve Neonatal Survival? A Systematic Review and Meta-Analysis

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Background

- Southern Asia has one of the highest burdens of neonatal mortality worldwide (26/1000 livebirths)
- Ensuring women receive antenatal care with a skilled provider may play an important role in reducing it
- Previous research to assess antenatal care as an intervention has often been inconsistent

Objective:

To determine whether antenatal care with a skilled provider reduces neonatal mortality in Southern Asia

Methods

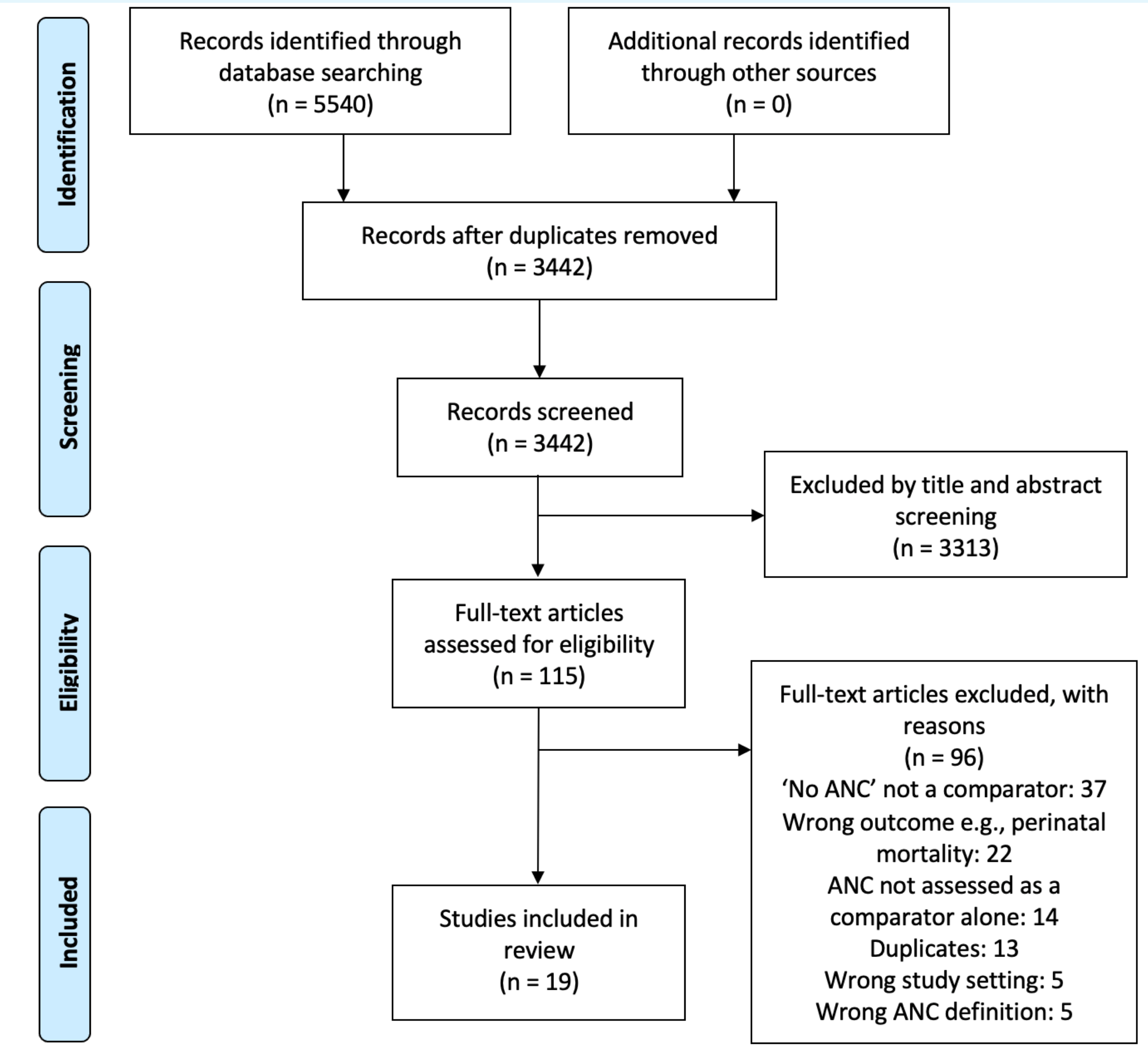
Databases: MEDLINE, EMBASE, Cochrane library, CINAHL, PubMed, PsycINFO, IBSS

Search terms: 'neonatal mortality', 'antenatal care' and 'Southern Asia'.

Inclusion: Non-randomised comparative studies conducted in Southern Asia reporting on neonatal mortality in women who receive antenatal care compared to those who did not

Risk of Bias Assessment tool for Non-Randomised Studies was used to assess the quality of studies

A random effects model based on odds ratios with 95% confidence intervals was used for data analysis

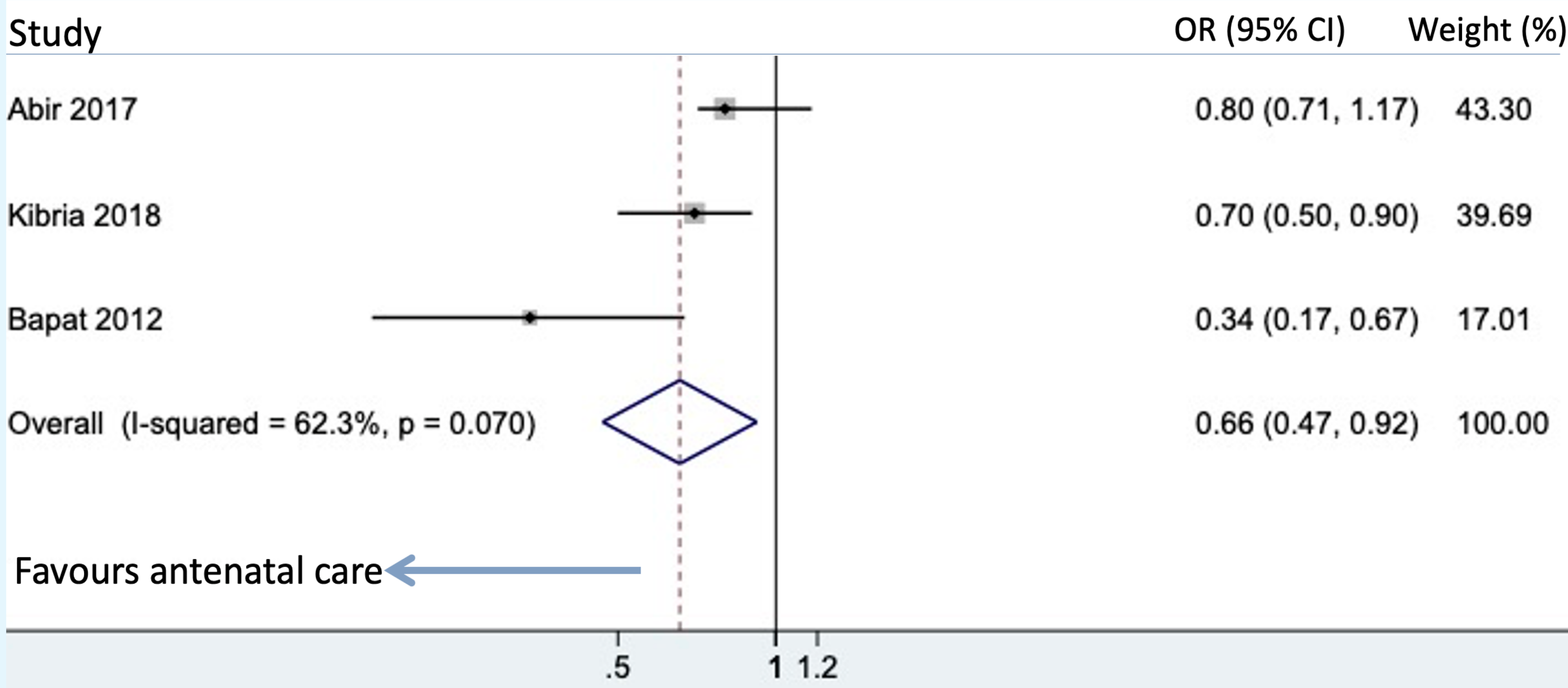


Primary analysis of adjusted results showed receiving antenatal care to be associated with a 34% reduction in neonatal mortality in Southern Asia.

Fourteen studies could not be included in the final analysis due to lack of adjustment for confounders. A meta-analysis of these supported the primary finding however the conclusions drawn were limited.

Conclusions

- Neonates in Southern Asia born to women who received antenatal care have a lower risk of death in the neonatal period than those born to women who did not.
- This evidence should encourage health policy to invest more efforts into strengthening antenatal care programs in Southern Asia and increasing their uptake.
- Emphasis is needed to ensure future observational studies are high quality to be able to evaluate the true impact.



A forest plot showing the result of the meta-analysis including the three studies which adjusted for confounders