

A Narrative Review Exploring the Impact of Adolescent Pregnancy on Maternal and Neonatal Outcomes in Low- and Middle-Income Countries

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Introduction

- Adolescent pregnancy, occurring between the ages 10-19, disproportionately affects low- and middle income countries (LMICs), where 90% of cases occur.
- Global rates are declining
- Sub-Saharan Africa has the highest prevalence.
- Adolescent pregnancies pose significant health, economic and social risks, contributing heavily to the global burden of disease.
- This review highlights research gaps and opportunities for interventions and policy improvements .

Methodology and aim

This essay uses a narrative review to critically analyse the literature on adolescent pregnancy in LMICs. Papers from 2000-2023 were selected using databases and grey literature , with search terms focusing on adolescents, LMICS and pregnancy. Themes were identified and interventions aimed at preventing or improving adolescent pregnancy outcomes in LMICs were examined.

The aim of this review is to describe the burden and risks associated with adolescent pregnancy in LMICs and to explore the interventions which may improve outcomes.

Results

Adolescent mothers face heightened risk of adverse pregnancy outcomes such as higher maternal and infant mortality rates. Factors contributing to these outcomes include socioeconomic challenges, biological immaturity and limited access to healthcare.

Some adverse maternal outcomes include pre- eclampsia, PPRM (premature rupture of membranes) and PPRM (Preterm premature rupture of membranes), anemia, complications during labor, growth changes, cardiovascular risk, mental health.

Some adverse neonatal outcomes include: pre term birth, low birth weight, still birth, neonatal death.

A table summarizing strategies to prevent adolescent pregnancy

Prevention strategy	Method
Preventing early marriage	Keeping girls in school, financial incentives, enforcing legislation
Sexual education	Curriculum based sexual education enforced in combination with other strategies
Economic and support programs	Economic empowerment through education programs to improve employability and empowerment schemes.
Increased use of contraception	Revise restrictive contraception laws, adolescent- friendly health services, reducing cost, tackle stigma

A table summarizing interventions to improve outcomes of adolescent pregnancy

	Interventions to improve outcomes
Obstetric care	Reduce financial barriers to care Adolescent friendly services Consider local beliefs Improve postnatal care More research on diseases which disproportionality affect adolescent mother
Education and counselling	Educate mothers about child rearing, life skills and nutrition
Nutritional interventions	Nutritional support and supplementation to reduce deficiencies. Including iron-folic acid, calcium supplementation and multiple micronutrient supplementation

Conclusion

- Adolescent pregnancy is a significant issue in LMICs.
- There are many related adverse outcomes, however, the literature is unclear and inconsistent on the aetiology of these outcomes.
- No singular intervention has proved to be most useful, and it is likely a combination of methods is most effective.
- Recognising and adapting to contextual differences is imperative when implementing interventions.



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