

# Maternal Education Gradients in Infant Health in Four South American Countries

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Article

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## Abstract

*Objective* We investigate gradients (i.e. differences) in infant health outcomes by maternal education in Argentina, Brazil, Chile, and Venezuela and explore channels related to father's education, household labor outcomes, and maternal health, fertility, and use of prenatal services and technology. *Methods* We employ secondary interview and birth record data similarly collected across a network of birth hospitals from the early 1980s through 2011 within the Latin American Collaborative Study of Congenital Anomalies (ECLAMC). Focusing on children without birth defects, we estimate gradients in several infant health outcomes including birth weight, gestational age, and hospital discharge status by maternal education using ordinary least squares regression models adjusting for several demographic factors. To explore channels, we add as covariates father's education, parental occupational activity, maternal health and fertility history, and use of prenatal services and technology and evaluate changes in the coefficient of maternal education. We use the same models for each country sample. *Results* We find important differences in gradients across countries. We find evidence for educational gradients in preterm birth in three countries but weaker evidence for gradients in fetal growth. The extent to which observed household and maternal factors explain these gradients based on changes in the regression coefficient of maternal education when controlling for these factors as covariates also varies between countries. In contrast, we generally find evidence across all countries that higher maternal education is associated with increased use of prenatal care services and technology. *Conclusions* Our findings suggest that differences in infant health by maternal education and their underlying mechanisms vary and are not necessarily generalizable across countries. However, the positive association between maternal education and use of prenatal services and technology is more consistent across examined countries.

## Keywords

Child health Maternal education Health inequalities Socioeconomic status Health disparities

## Electronic supplementary material

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## Notes

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### Compliance with Ethical Standards

### Conflict of interest

The authors have no conflicts of interest with this work.

## Supplementary material

[10995\\_2017\\_2327\\_MOESM1\\_ESM.docx](#) (47 kb)

Supplementary material 1 (DOCX 47 KB)

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