

Caesarean delivery rates and pregnancy outcomes: the 2005 WHO global survey on maternal and perinatal health in Latin America

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Summary

Background

Caesarean delivery rates continue to increase worldwide. Our aim was to assess the association between caesarean delivery and pregnancy outcome at the institutional level, adjusting for the pregnant population and institutional characteristics.

Methods

For the 2005 WHO global survey on maternal and perinatal health, we assessed a multistage stratified sample, comprising 24 geographic regions in eight countries in Latin America. We obtained individual data for all women admitted for delivery over 3 months to 120 institutions randomly selected from of 410 identified institutions. We also obtained institutional-level data.

Findings

We obtained data for 97 095 of 106 546 deliveries (91% coverage). The median rate of caesarean delivery was 33% (quartile range 24–43), with the highest rates of caesarean delivery noted in private hospitals (51%, 43–57). Institution-specific rates of caesarean delivery were affected by primiparity, previous caesarean delivery, and institutional complexity. Rate of caesarean delivery was positively associated with postpartum antibiotic treatment and severe maternal morbidity and mortality, even after adjustment for risk factors. Increase in the rate of caesarean delivery was associated with an increase in fetal mortality rates and higher numbers of babies admitted to intensive care for 7 days or longer even after adjustment for preterm delivery. Rates of preterm delivery and neonatal mortality both rose at rates of caesarean delivery of between 10% and 20%.

Interpretation

High rates of caesarean delivery do not necessarily indicate better perinatal care and can be associated with harm.