Inequalities in maternity care and newborn mortality among slum residents in Mumbai: a prospective study

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Abstract

Background: Aggregated urban health statistics often mask inequalities. We described maternity care in vulnerable slum communities in Mumbai, and examined differences in care and outcomes between deprived and less deprived groups.

Methods: We set up a birth surveillance system in 48 vulnerable slum localities, covering a population of over 250,000. Resident women identified births in their own localities, and mothers and families were interviewed at 6 weeks after delivery. We analysed data on 5687 births occurring over a year. Socioeconomic status was classified using quartiles of standardized asset scores.

Findings: Compared to the poorest slum residents, the least poor quartile were less likely to have married (OR 0.35, 95% CI 0.27-0.45) and conceived (0.46, 0.39-0.54) in their teens, to use public sector facilities for antenatal (0.35, 0.28-0.44), delivery (0.27, 0.19-0.39), or postnatal care (2.34, 1.69-3.24), and to have a low birthweight infant (0.70, 0.57-0.86). They were more likely to begin antenatal care before the third trimester of pregnancy (2.05, 1.41-2.96), make 3 or more visits (5.46, 3.69-8.09), and have institutional delivery (7.27, 5.08-10.38). A low female-to-male sex ratio was seen across all socio-economic groups (882 per 1000). There was a socioeconomic gradient for neonatal mortality, from 25.2 per 1000 in the poorest to 16.5 per 1000 in the least poor.

Conclusion: We found health inequalities within a population limited to poor slum residents. The fact that the poorest are much more dependent upon public sector health care suggests that quality improvement in municipal facilities is a pro-poor intervention.