Abstract

Objective Financial incentives may encourage private for-profit providers to perform more caesarean section (CS) than non-profit hospitals. We therefore sought to determine the association of for-profit status of hospital and odds of CS.

Design Systematic review and meta-analysis.

Data sources MEDLINE, EMBASE and the Cochrane Database of Systematic Reviews from the first year of records through February 2016.

Eligibility criteria To be eligible, studies had to report data to allow the calculation of ORs of CS comparing private for-profit hospitals with public or private non-profit hospitals in a specific geographic area.

Outcomes The prespecified primary outcome was the adjusted OR of births delivered by CS in private for-profit hospitals as compared with public or private non-profit hospitals; the prespecified secondary outcome was the crude OR of CS in private for-profit hospitals as compared with public or private non-profit hospitals.

Results 15 articles describing 17 separate studies in 4.1 million women were included. In a meta-analysis of 11 studies, the adjusted odds of delivery by CS was 1.41 higher in for-profit hospitals as compared with non-profit hospitals (95% CI 1.24 to 1.60) with no relevant heterogeneity between studies ($\tau^2 \leq 0.037$). Findings were robust across subgroups of studies in stratified analyses. The meta-analysis of crude estimates from 16 studies revealed a somewhat more pronounced association (pooled OR 1.84, 95% CI 1.49 to 2.27) with moderate-to-high heterogeneity between studies ($\tau^2 \geq 0.179$).

Conclusions CS are more likely to be performed by for-profit hospitals as compared with non-profit hospitals. This holds true regardless of women's risk and contextual factors such as country, year or study design. Since

financial incentives are likely to play an important role, we recommend examination of incentive structures of for-profit hospitals to identify strategies that encourage appropriate provision of CS.