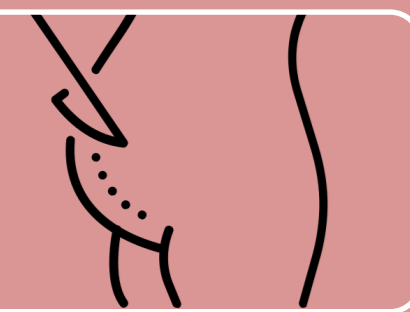


Disparities in Cesarean Delivery Rates at the District Level in Madhya Pradesh, India

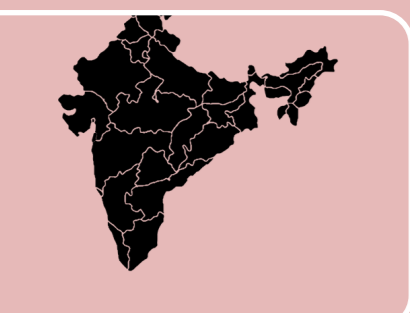
Rohini Dutta^{1,2}, Shagun Tuli², Minal Shukla², Priti Patil², Alex van Duinen², Neil Thivalapill², Rakhi Ghoshal², Anusha Jayaram¹, Nobhojit Roy², Anita Gadgil²

¹Harvard Program in Global Surgery and Social Change, Boston, MA, USA, ²WHO Collaborating Center for Research in Surgical Care Delivery in Low-Middle-Income Countries, Mumbai, India

Introduction



Cesarean delivery (CD) accounts for **21%** of births in India with **47%** occurring in private facilities.



The average CD rate in Madhya Pradesh (MP) is **12.1%**. However, this aggregated rate **does not** reveal variation that exists across districts.

Aims

To investigate **geographic and socioeconomic** disparities of CD across 51 districts in MP.

Compare the contribution of public and private healthcare facilities to the state CD rate.

Methods

Study Design: Cross-sectional study.

Data Source: National Family Health Survey (NFHS)-5 from January 2019- April 2021.

CD rates were stratified as **<10%, 10-20% and >20%** to measure equity in access as per WHO.

We found that **districts with more poorer populations are unable to access CD and depend on public government-funded healthcare facilities** access to which decreases as we move further away from the capital city. **Continuous monitoring of CD rates at the district and institutional levels as an initial step in achieving equity in access to the procedure is warranted.**

Results

6 districts

CD Rate=10%

18 districts

CD Rate < 10%

26 districts

CD Rate > 10%

- **52.3%** of the deliveries in **private healthcare facilities** were by **CDs**. **8.2%** of the deliveries in the **public facilities** were CDs.
- **CD rate decline was steeper for private health care facilities** ($R^2=0.382$, $p=0.01$) revealing a possible dependency of the poor populations on public health care facilities ($R^2=0.009$, $p=0.652$) in accessing CD.

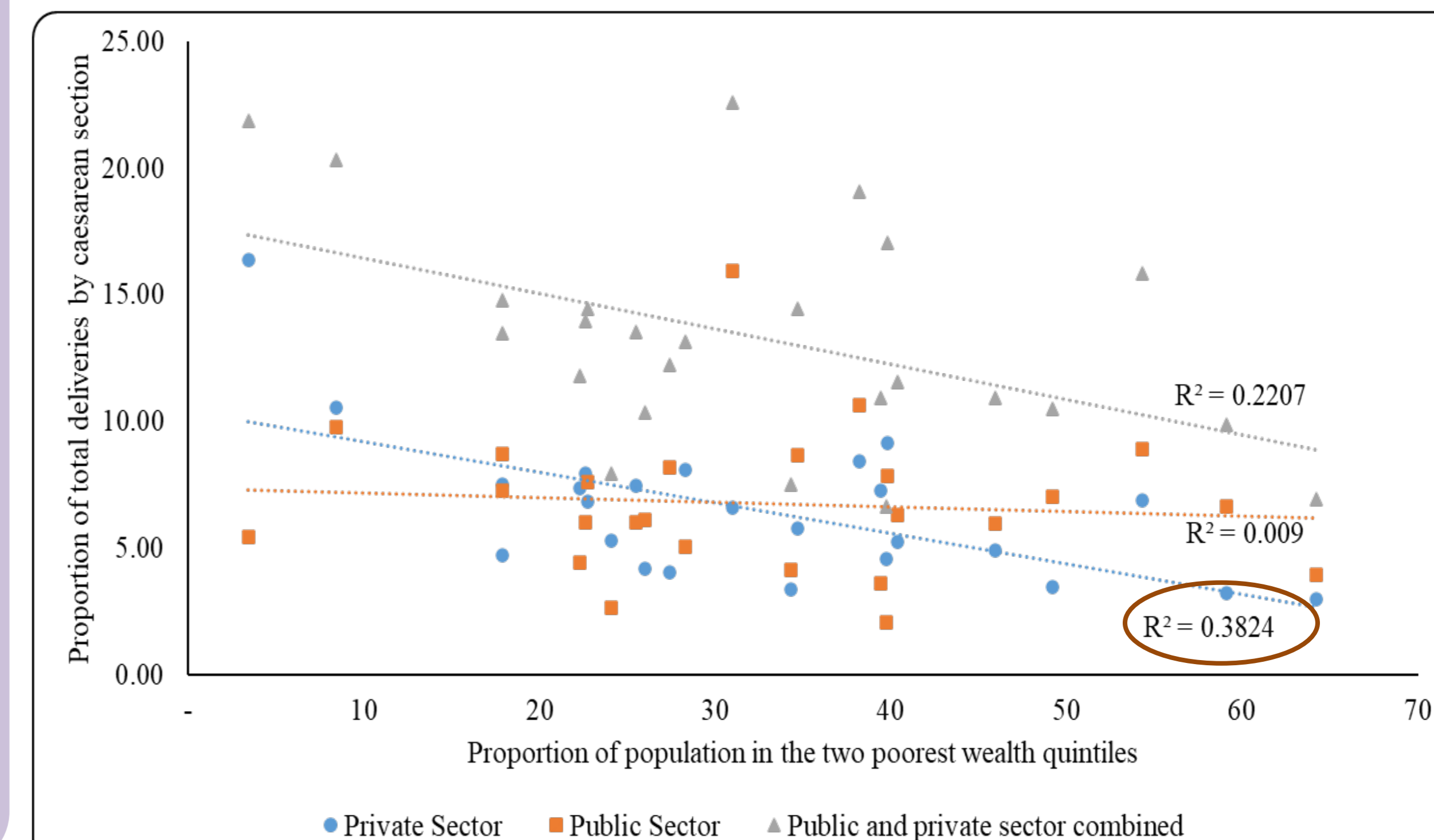


Figure 1: Proportion of the population in the two poorest wealth quintiles with the CD rate in public and private facilities

