Rising Rates of Caesarian Section Deliveries in the Czech Republic and Brazil: Determinants, Costs and Economic Implications

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ABSTRACT

The recommended ratio of cesarean section (CS) deliveries by the World Health Organization is 15% and should be appointed only when medically justified. Rising proportion of caesarean births has been a worldwide trend consecutively creating an additional financial burden. The Czech Republic used to report low CS rates nevertheless, since 2004 it has surpassed the threshold level. Currently it belongs among countries with a 25 to 30% rate. Brazil on the contrary has been the world’s leading country with CS births (57% of deliveries) reaching alarming numbers already in the 1980’s. The aim of this paper is firstly to seek the reasoning behind significantly higher numbers of CS rates in Brazil compared to the Czech Republic since the millennia by explaining the trends and mindset of social classes; and secondly to estimate extra costs related to a rising number of CS births in Brazil in comparison to the Czech Republic. Within the trend analysis we examined correlation between the number of CS births vs the mother’s age and education. Due to minor differences in social classes the Czech Republic was investigated as a single group. The estimated costs were calculated as a sum of the costs of CS births exceeding the 15% threshold level for each country over the years 2000-2013. Facing difficulties of tracing average CS costs in Brazil we employed a simplified model with a unique price estimation calculated based on the average Czech price. Trends reveal that public birth institutions in Brazil lack decent public recognition. The low and growing middle income class prefer CS deliveries (if affordable), high income class mothers prefer to pay for natural births. Births delivered by the largely numbered middle-income class can be associated with medium/higher education and a slightly higher than average age of the mother at pregnancy. On the contrary, the occurrence of CS in the Czech Republic increases with education which may be a result of higher age of the mother-to-be. The extra expenditure related to CS in the Czech Republic for the years 2000-2013 was estimated as rather negligible (0.0564% of Czech 2014 GDP) however, the total costs for the same year rose to 0.71% of Brazilian 2014 GDP. If managed to decrease the excess number of CS deliveries, these funds could be shifted to other health fields, which lack capital support.

Key words: Czech Republic, Brazil, c-section, cost, social classes

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