# Robson classification system applied to the Brazilian reality

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**TO THE EDITORS:** Recently, an article entitled "Cesarean delivery in the United States 2005 through 2014: a population-based analysis using the Robson 10-Group Classification System" was published in this Journal.[1] The aim of the study was to apply the Robson 10-Group Classification System (TGCS) to a cohort of women who had delivered live births in the United States within the period 2005–2014. The study concluded that the TGSC was a useful, low-cost, and easily interpretable system to facilitate monitoring, analyzing, and comparing cesarean rates across different healthcare settings that would promote evidence-based practices and allow nonevidence-based practices to be halted if inappropriate.

Rates of cesarean delivery are important global indicators to evaluate access to obstetrics services. In recent decades, cesarean delivery rates gradually have increased in both developed and developing countries. The determinant factors for the cesarean delivery increase are controversial; nonetheless, the rise in rates are believed to be the mother's wish to have a cesarean delivery, even in the absence of any medical indication.[2]

Labor and birth are complex processes that require a perinatal audit in an organized and structured way. The Robson TGCS is an attempt to start this process by providing a common initial pathway that has been endorsed by the World Health Organization, the International Federation of Gynecology and Obstetrics, and the European Board and College of Obstetrics and Gynaecology.[3]

In Brazil, the healthcare system can be financed by both public and private resources. Brazil has the highest rate of cesarean deliveries in the world, with approximately 90% in the private sector.[4]

Because of these alarming figures, the Oswaldo Cruz Foundation carried out the "Nascer no Brasil" study, which led to new studies that divided the hospitals into "typical" (standard perinatal care) and "atypical" (special care), the latter termed baby-friendly hospitals that provide collaborative work among maternity care professionals. The Robson TGSC was used to compare cesarean delivery rates among healthcare settings, which were lower in atypical hospitals compared with typical hospitals (47.8% and 90.8%, respectively). Positive outcomes related to breastfeeding were also more frequent in atypical than typical hospitals, which suggests that evidence-based changes may reduce the prevalence of cesarean deliveries without increasing adverse neonatal outcomes.[4]

The Brazilian Ministry of Health has supported projects such as the "Adequate Childbirth Project" in a partnership with the National Agency for Supplementary Health, Albert Einstein Hospital, and the Institute for Healthcare Improvement. In addition, the project of improvement and innovation for childcare and teaching obstetrics and neonatology (known by the Portuguese acronym APICE-ON) was implemented to improve child delivery care. ■

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## REPLY

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Cesarean delivery rates have become a major and controversial public health concern, with some studies showing that higher rates could be linked to negative consequences such as severe maternal morbidity and death, neonatal intensive care unit admission, and consumption of healthcare resources by procedures without medical indication.[1]

Rates of cesarean delivery have been shown to vary internationally with rates in Brazil, particularly in private institutions, documented as being some of the highest globally.[2]

Although the optimal level of cesarean delivery cannot be as simple as a 1-fits-all figure to be applied to all institutions and healthcare systems, "the appropriate" cesarean delivery rate remains unknown. However, it is clear that whether the cesarean delivery rate is high or low is not the central issue, but rather whether the rate of cesarean delivery is part of a system that delivers optimal maternal and neonatal care after consideration of all relevant patient and health system information.[3]