



## The Robson ten-group classification system for appraising deliveries at a quaternary referral hospital in Brazil

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### Objective

Data from the World Health Organization suggest that cesarean rates below 15% of all deliveries are associated with an increase in maternal and neonatal mortality. However, there is still no conclusive data indicating the ideal maximum cesarean section (CS) rate in different populations. Although CS is an important strategy to deal with delivery adversities, this invasive procedure incurs risks to women's health due to complications. Therefore, indication for CS has to be carefully defined following criteria previously established in the medical literature. The cesarean rates in Brazil have been a matter of great concern since the country exhibits one of the highest rates in the world. Indeed, approximately 84% of the deliveries performed in Brazilian private Hospitals involved CS. In 2001, Robson described a system to analyze cesarean rates that categorized pregnant women into 10 groups considering gestational characteristics. Due to the objective nature of this tool it is possible to compare CS rates among institutions worldwide, thus allowing better reasoning of the current debate on CS.

### Methods

This is an observational cross-sectional study with a descriptive analysis from a database available in electronic medical records, with the objective of evaluating the prevalence of cesarean sections and identifying the profile of pregnant women admitted between September 2015 and December 2017 for delivery at the Mater Dei Hospital, a private quaternary hospital, supplementary health care exclusively. Robson's classification system was used to outline the profile of parturients admitted by the maternity ward staff.

### Results

Although groups 3 and 4 are considered to be at low risk for cesarean section, this study showed rates of 13 and 41%, respectively. Thus, these groups deserve special attention in regards to the elaboration of measures to reduce cesarean sections, as there are some risk factors leading to this outcome such as an unsatisfactory previous experience. The proportion of cesarean deliveries in term pregnant women hospitalized outside the active phase of labor (groups 2 and 4) was elevated in this study and it suggests the importance of avoiding early admissions and support for instant admissions of women in latent phase.

### Conclusion

The hospital integrates the "Parto adequado" project (PPA), an initiative of the National Agency for Supplementary Health Care (ANS), the Hospital Israelita Albert Einstein and the Institute for Healthcare Improvement (IHI) and aims to improve childbirth care, reduction of unnecessary cesarean rates on supplementary health and stimulation of vaginal delivery, based on the identification of innovative and viable models of attention to childbirth and delivery. Although the C-section rate in the institution is declining over the last three years, the 60% C-section rate is still considered high and could suggest that our efforts to reduce unnecessary surgical procedures is getting closer to our achievement goal.