The Project Appropriate Birth and Reduction of Cesarean Section Rates: an analysis using the Robson classification system

Daniela Ferreira D'Agostini Marin[1], Amanda Wernke[1], Daniela Dannehl[1], Dyulie Araujo[1], Gustavo Koch[1], Karizy Zanoni[1], Katiane Coral[1], Nathan Guimarães[1], Otto Feuerschuette[1], and Betine Iser[1]

[1]UNISUL

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Abstract

OBJECTIVE: The objective of this study was to evaluate C-section rates, before and after the implementation of the Project Appropriate Birth based on the Robson 10-group classification system. DESIGN: An observational, cross-sectional study. SETTING: Maternity hospital in South Brazil. POPULATION: All pregnant women attending, April 2016 through April 2017 (phase 1, pre-implementation of the Project Appropriate Birth) and June 2017 through June 2018 (phase 2, post-implementation of the Project Appropriate Birth). METHODS: Maternal and obstetric characteristics were evaluated, including Robson's classification, based on the characteristics of pregnancy and childbirth. Chi-square test and crude and adjusted prevalence ratios were used to analyze study variables. The significance level was set at 5%. MAIN OUTCOME MEASURES: C-section rate for each group, their contribution to the overall c-section rate and the differences in these contributions before and after PPA implementation. RESULTS: C-section rates decreased from 62.4% to 55.6%, which represented a 10.9% reduction after the implementation of the Project Appropriate Birth. Pregnant women in Robson classification groups 1 through 4 had the greatest decrease in C-section rates, ranging from 49.1% to 38.6%, which represents a 21.5% reduction. The greatest contributors to the overall C-section rates were group 5 and group 2, accounting for more than 60% of the C-section deliveries. CONCLUSION: The Project Appropriate Birth had an important impact on the reduction of C-section rates, especially in Robson classification groups 1 through 4, which indicates that providing mothers with evidence-based interventions for labor and childbirth assistance will contribute to reduce C-section rates.

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