

INTRAPARTUM QUALITY OF CARE AMONG HEALTHY WOMEN: A POPULATION-BASED COHORT STUDY IN AN ITALIAN REGION.

Background

Promoting healthy pregnancy and safe childbirth is a goal for the healthcare systems worldwide (1,2). To address this aim, the focus of maternity services has moved from the reduction of mortality and morbidity to the promotion and support of women's health and wellbeing (3,4). To improve maternal and neonatal health and to meet the Sustainable Development Goals(5), midwifery led care and evidence-based practices should be guarantee to all women and a systematically measurement of quality standard indicators is recommended by national and international health organizations (3,6–12). In Lombardy, an Italian region, a midwife led model of care is recommended for healthy pregnant women and a systematic measure of quality standards are suggested(12).

Aim(s)

To evaluate intrapartum quality standards indicators, in healthy pregnant women. The secondary aim was to explore the impact of an organizational aspect (number of births per year) on intrapartum quality of care.

Methods

We conducted a population-based cohort study, including all healthy pregnant women who gave birth in Lombardy between 2018 and 2022. Data were extracted from the regional database and Italian birth register (CeDaP). Quality standards were assessed by the measurement of intrapartum indicators of process and outcomes. Descriptive analysis of each quality indicators was conducted. In addition, a comparison between hospitals with more or less than 1000 births per year was performed using a Chi-Square test with a 5% significance level to evaluate the p-values. Data were analysed using STATA/MP version 15.0.

Results

The rate of healthy pregnant women was 41.07% (n=144,107/352,544), of them 71.29% gave birth in hospital with more than 1000 birth.

Considering process indicators, only 22.03% of women received one-to-one midwifery care. The presence of birth companion was guarantee to 84.46% of women and 69.09% of them experienced skin-to-skin contact. About intrapartum interventions, 25.51%, 2.83% and 0.11% of women underwent respectively epidural analgesia, oxytocin, and artificial rupture of membranes. At birth the presence of gynecologists and pediatricians were 59.21% and 31.54% respectively.

Regarding outcome quality indicators, 87.31% of women experienced a spontaneous vaginal birth and almost all newborns (99.59%) had a normal transition (Apgar score >7 at 5 minutes).

All quality indicators analyzed were significantly different ($p < 0.001$) between women who gave birth in hospitals with more than 1000 births compared to those who gave birth in smaller ones. In the larger hospital women had higher probability to experience skin-to-skin (OR 1.486) and to stay with their birth companion (OR 1.658), but they had lower probability to receive ono-to-one care (OR 0.887). In hospital with more than 1000 births, intrapartum interventions rates were higher, although the risk of cesarean section is lower (OR 0.791).

Discussion

Maternity services organization impacts on process and outcomes of quality intrapartum indicators in low risk uncomplicated pregnancy. Hospitals with more than 1000 births, exposed women to higher risk of intrapartum interventions whereas they mainly promote and offer supportive care. One-to-one was not a routine practice in both groups and further research to explore this aspect is required.

Implications and future perspectives

To ensure high quality of intrapartum care, a systematic measure of quality standards need to be improved at local and regional level.

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