

Research Brief

Rapid Review of Randomized Clinical Trials of Complex Patient Safety Initiatives in Obstetrics

Summary

Patient safety is an important issue affecting the quality of healthcare systems around the world. We identified 8 RCTs that assessed the effectiveness of patient safety initiatives within obstetrics. The results suggest that some interventions might be more effective than others (e.g., combination of financial incentive, team change, and case management; audit and feedback and provider education; or provider education alone) in improving patient outcomes.

Implications

A number of complex patient safety interventions for improving obstetrical outcomes have been studied in RCTs. Our review did not identify any RCTs reporting on litigation or cost-related outcomes from litigation. Our results are only generalizable to English-language RCTs published in the past 10 years. A future systematic review could be conducted to provide more definitive conclusions.

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What is the current situation?

- An increase in the number of litigation cases and costs in the field of obstetrics have emphasized the importance of patient safety initiatives to reduce the occurrence of preventable adverse events, thereby improving the quality of care.
- Despite the rise of patient safety initiatives in obstetrics over the years, their impact on obstetrical and litigation outcomes is unclear. Reasons for this uncertainty include the lack of evaluations of patient safety initiatives, and the difficulty of measuring change in outcomes of clinical and economical interest.

Objective

- The purpose of this rapid review is to identify randomized clinical trials (RCTs) in the obstetrical care literature that evaluate the impact and cost of complex patient safety initiatives on maternal and infant health outcomes that may lead to litigation.

How was the study conducted?

- MEDLINE, EMBASE, LexisNexis Academic, LegalTrac and the Legal Scholarship Network were searched for RCTs (using a validated search filter) in English from 2004 until August 13, 2015.
- We included RCTs that studied the impact of complex patient safety interventions on obstetrical and litigation-related outcomes. All levels of screening, data collection and quality assessments were done by two team members, independently.

What did the study find?

- Eight studies that met our inclusion criteria were conducted between 2006 and 2015 in Argentina, Uruguay, Australia, Canada, Ireland, Senegal, Mali and United States. All RCTs were publicly funded and included over 400,000 patients in total.
- The quality of the included studies was found to be good overall based on the Cochrane risk of bias assessment. Allocation concealment was the most poorly described component of bias (6/8 studies scored as unclear).
- The included complex patient safety interventions were grouped into seven categories: (1) provider education; (2) provider education with clinician reminders; (3) provider education with team changes; (4) provider education with audit and feedback; (5) case management; (6) case management with team changes and patient education, and; (7) case management with team changes and financial incentives.
- Although we searched for litigation and cost-related outcomes, the studies included in our review only addressed maternal and neonatal patient harms.
- Our review found some quality improvement strategies to be more effective for improving obstetrical patient safety than others.
 - Provider education may improve patient safety as it was found to improve outcomes in most of the RCTs that assessed this intervention.
 - Case management with team changes and financial incentives, as well as provider education with audit and feedback was also shown to improve patient safety compared to usual care.

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