Effective Health Care

Trauma Care During Pregnancy
Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Trauma care during pregnancy is not feasible for a full systematic review due to the limited data available for a review at this time.

Topic Description

Nominator: Government agency

Nomination Summary: This nomination is seeking a systematic review on the diagnosis, comparative effectiveness of interventions, and training for obstetric and non-obstetric trauma sustained during pregnancy. The nominator specifies a number of interventions, benefits, and harms to be included in the review, and indicates an interest in minority and low socioeconomic subpopulations.

Staff-Generated PICO
Population(s): Women >18 to advanced maternal age; subpopulations of interest include minorities and lower SES patients.
Intervention(s): (1) diagnostic interventions for rapid assessment (e.g., imaging studies, fetal doptones, ultrasound); (2) medical interventions (e.g., hemodynamic agents, fluid resuscitation, medications (including vasopressors, antithrombotic therapy, antiplatelet anesthetic agents); and (3) training methods for obstetric and emergency providers (e.g., simulation models for training different laboratory, radiologic, and physical diagnostic methods).
Comparator(s): See interventions above.
Outcome(s): Benefits: reductions in maternal morbidity, maternal mortality, fetal morbidity, and fetal mortality; term delivery; normal birth and neonatal course; reduced length of stay in emergency room and hospital; reduced risk for acquired infections; reduction in unnecessary interventions during pregnancy. Harms: shoulder dystocia; orthopedic neonatal injuries; forceps delivery; placental abruption; developmental disabilities; bleeding/exsanguination/thrombosis; maternal morbidity and mortality; fetal morbidity and mortality; preterm labor and/or birth; premature rupture of membranes; uterine rupture; sepsis; still birth; burns; feto-maternal hemorrhage; thoracoabdominal trauma; perimortum or emergent cesarean transfusion.

Key Questions from Nominator:

1. For patients with trauma (obstetric and non-obstetric) sustained during pregnancy, what is the comparative effectiveness of diagnostic interventions for rapid assessment of trauma to improve maternal and fetal outcomes?

2. For patients with trauma sustained during pregnancy, what is the indication for and the comparative effectiveness of medical interventions (including hemodynamic stabilization, critical care medications, surgery and multidisciplinary team approaches) and harms and benefits to prevent further harms (medical and obstetrical complications) to mother and baby as a result of the trauma?

3. What is the effectiveness and comparative effectiveness of training methods (including programs, modules) for obstetric and emergency providers in the management of trauma during pregnancy?

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.)

- There is no single good source of information on the diagnosis and treatment of trauma during pregnancy. There are no comparative effectiveness studies, and most of the literature on this topic derives from observational studies, consensus, or descriptive reports on practice parameters. The gold standard guidelines for trauma care (Advanced Trauma Life Support- ATLS) are not evidence based, and very little literature is available to address training issues. Therefore, the literature is insufficient in both quantity and quality to answer the questions of interest to the nominator.

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