

Simple fetal heartbeat monitoring still best to reduce unnecessary cesarean sections

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Newer is not always better; a study in *CMAJ* (*Canadian Medical Association Journal*) led by researchers at the University of Warwick shows that simple fetal heartbeat monitoring is still the best method for determining whether a baby is in distress during delivery and whether cesarean delivery is needed www.cmaj.ca/lookup/doi/10.1503/cmaj.202538.

Cesarean delivery is the most common surgical procedure worldwide, performed to expedite birth and avoid [neonatal complications](#).

Listening to the [fetal heart rate](#) using a stethoscope—[intermittent auscultation](#)—has been used for years to assess the fetal state and whether the baby is experiencing distress that might require a cesarean delivery. Other monitoring techniques have become common in recent years, including echocardiograms and blood tests.

"Despite extensive investment in clinical research, the overall effectiveness of such methods in improving maternal and [neonatal outcomes](#)

remains debatable as stillbirth rates have plateaued worldwide, while cesarean delivery rates continue to rise," writes Dr. Bassel Al Wattar, Warwick Medical School, University of Warwick, Coventry, United Kingdom, with coauthors.

Researchers from the United Kingdom and Spain reviewed 33 studies that included more than 118,000 women, mainly from high-income countries as well as India and Tanzania, to evaluate the effectiveness of different monitoring methods in improving outcomes for mothers and babies and reducing the number of cesarean deliveries.

They found that all methods had similar outcomes for babies, but only intermittent auscultation reduced the risk of cesarean deliveries without increased risk to babies' health. The researchers estimate that intermittent auscultation led to an average 30% reduction in emergency cesareans compared to other methods.

"Our analysis suggests that all additional methods introduced to improve the accuracy of electronic fetal heart monitoring have failed to reduce the risk of adverse neonatal or maternal outcomes beyond what intermittent auscultation achieved 50 years ago, and this may have contributed to the increased incidence of unnecessary emergency cesarean deliveries," write the authors.

The authors urge investment in developing novel techniques to monitor fetuses to make delivery safer for mothers and their babies.

"Effectiveness of intrapartum fetal surveillance to improve maternal and neonatal outcomes: a [systematic review](#) and network meta-analysis" is published April 6, 2021.

More information: Bassel H. Al Wattar et al. Effectiveness of intrapartum fetal surveillance to improve maternal and neonatal outcomes: a systematic review and network meta-analysis,

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