Opioids following cesarean delivery may be over-prescribed

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Cesarean delivery is the most common inpatient surgical procedure in the United States, with 1.4 million c-sections performed each year. Opioids, most commonly oxycodone, are the standard pain medications

prescribed to women following cesarean delivery, but the number of pills that are prescribed varies between providers and institutions, and there is little data regarding how much pain medication patients actually require to manage their pain. In two papers, both published online June 8 in *Obstetrics & Gynecology*, researchers quantified the number of pills that are typically prescribed following cesarean delivery and tested a shared decision making tool, in which patients select the amount of medication they are prescribed.

"We know that leftover medications are fueling our current opioid epidemic," said Brian Bateman, MD, chief of Obstetric Anesthesia at Brigham and Women's Hospital and corresponding author of the two papers. "Quantifying the amount of medication that a woman needs to control her pain following cesarean delivery and finding ways to reduce unnecessary prescribing can reduce unused opioid pills that end up in medicine cabinets at home."

In the first paper, researchers conducted a survey of 720 women from six academic medical centers in the U.S. They found that there was variation in how opioids were prescribed following cesarean delivery, with 40 pills as the median, which was well in excess of what patients actually used. Typically, women received double the number of pills than they took and had 15 leftover pills. Two weeks after discharge from the hospital, 95 percent of patients had not disposed of their excess medication.

Researchers also found that there was no difference in pain scores when comparing women by the number of pain pills that they were prescribed, but that the women who were prescribed a higher number of pills ended up taking more medication and were more likely to suffer from the side effects of opioids such as drowsiness, nausea or vomiting, and constipation. "This was especially interesting to us, because it suggests that we are setting patient expectations based on the number of pills that

we prescribe," Bateman said.

In the second study, researchers tested the use of a shared decision making tool with 50 women who delivered at Massachusetts General Hospital. Participants viewed a tablet-based decision aid with a clinician and reviewed information pertaining to anticipated patterns of pain in the first two weeks after cesarean delivery, expected outpatient opioid use after cesarean delivery, risks and benefits of opioid and nonopioid pain medications, and information on opioid disposal and access to refills if needed. Then, women chose the number of pills (5mg of oxycodone) that they would be prescribed at discharge, up to the institutional standard of 40 pills. Use of the shared decision-making tool was associated with a 50 percent decrease in the number of opioid pills prescribed at the time of discharge.

Additionally, researchers found that the refill rate was low, regardless of the number of pills that was prescribed, and the vast majority of women were satisfied with their pain control.

"With cesarean delivery, we have the opportunity to tailor pain medication prescriptions to an individual's needs and preferences, while also limiting the number of unused pain medications that have the potential to be misused. If we can scale this concept to be widely adopted, then we can make significant improvements in both patient care and public health," Bateman said.

More information: Bateman, et al. "Patterns of Opioid Prescription and Use After Cesarean Delivery." *Obstetrics & Gynecology*. DOI: dx.doi.org/10.1097/AOG.0000000000002093

Prabhu, et al. "A Shared Decision-Making Intervention to Guide Opioid Prescribing After Cesarean Delivery." *Obstetrics & Gynecology*. DOI: dx.doi.org/10.1097/AOG.0000000000002094

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