

Prophylactic antibiotics after operative vaginal delivery

In their large, randomised controlled trial on prophylactic antibiotics for prevention of maternal infection following operative vaginal delivery, **Marian Knight and colleagues¹** conclude that a change in WHO guidelines is warranted. This recommendation stems from the reduction shown in the primary outcome of confirmed or suspected infection in the 6 weeks after birth. A global recommendation for prophylactic antibiotics following operative vaginal delivery is however, not without risk.

Obstetric interventions proven effective in high-income settings have been shown to cause harm after improper implementation in low-income and middle-income contexts.² Although antibiotics unquestionably save lives in childbirth, it is crucial that improvements in infection prevention and control and water, sanitation, and hygiene are simultaneously prioritised.³ Even in this UK-based trial, the surprisingly high incidence of postnatal infections observed in both groups could have possibly been improved with better postnatal infection prevention and control ~~and water, sanitation, and hygiene practices.~~

Estimates suggest that up to 40% of women who give birth receive antibiotics pre-delivery⁴ but in a study from India and Bangladesh up to 80% of maternity units routinely administered antibiotics to all ~~labouring~~ women in labour.⁵ With virtually no routinely collected data on antimicrobial use in maternity units globally, an increase in the use of prophylactic antibiotics must be carefully monitored. Evidence-based

strategies to reduce deaths from maternal sepsis must emphasise the importance of general measures to prevent infections in all women during and after birth, and to capture the long-term efficacy of prophylactic antibiotic use in different settings, including the emergence of antimicrobial resistance.

We declare no competing interests

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- 1 Knight M, Chiocchia V, Partlett C, et al. Prophylactic antibiotics in the prevention of infection after operative vaginal delivery (ANODE): a multicentre randomised controlled trial. *Lancet* 2019; **393**: 2395–403.
- 2 Althabe F, Belizán JM, McClure EM, et al. A population-based, multifaceted strategy to implement antenatal corticosteroid treatment versus standard care for the reduction of neonatal mortality due to preterm birth in low-income and middle-income countries: the ACT cluster-randomised trial. *Lancet* 2015; **385**: 629–39.
- 3 Graham WJ, Morrison E, Dancer S, et al. What are the threats from antimicrobial resistance for maternity units in low- and middle-income countries? *Glob Health Action* 2016; **9**: 33381.
- 4 Ledger WJ, Blaser MJ. Are we using too many antibiotics during pregnancy? *BJOG* 2013; **120**: 1450–52.
- 5 Cross S, Gon G, Morrison E, et al. An invisible workforce: the neglected role of cleaners in patient safety on maternity units. *Glob Health Action* 2019; **12**: 1480085.