

# PFMT relevant strategies to prevent perineal trauma: a systematic review and network meta-analysis

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## Abstract

**Abstract Background** Perineal trauma refers to damage to the genitalia during the birthing process and can occur spontaneously or as a result of an episiotomy or female genital mutilation (FGM). **Objective** To perform a systematic review and network meta-analysis investigating the effectiveness of different PFMT relevant strategies in the prevention of perineal trauma. **Search strategy** PubMed, Embase, the Cochrane Library, CINAHL, CNKI, CBM, WANFANG DATABASE, and ClinicalTrials.gov were searched for citations published in any language from inception to 1 July 2021. **Selection criteria** Randomised controlled trials (RCTs) of PFMT relevant prevention strategy to prevent perineal trauma in pregnant women. **Data collection and analysis** Data were independently extracted by two reviewers. Relative treatment effects were estimated using network meta-analysis (NMA). **Main results** Of 12632 citations screened, 21 RCTs were included. Comparing with usual care, “PFMT combine with perineal massage” and PFMT alone showed more superiority in intact perineum (RR=5.37, 95%CI: 3.79 to 7.60, moderate certainty; RR=2.58, 95%CI: 1.34 to 4.97, moderate certainty), episiotomy (RR=0.26, 95%CI: 0.14 to 0.49, very low certainty; RR=0.63, 95%CI: 0.45 to 0.90, very low certainty), and OASIS (RR=0.35, 95%CI: 0.16 to 0.78, moderate certainty; RR=0.49, 95%CI: 0.28 to 0.85, high certainty). “PFMT combine with perineal massage” show superiority in reducing perineal tear (RR=0.41, 95%CI: 0.20 to 0.85, moderate certainty). **Conclusion** In this systematic review, the finding on the perineal trauma indicated that “PFMT combine with perineal massage” and PFMT showed more superiority to prevent perineal trauma.

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