# Variation in Outcome Reporting Identified in Studies of Fertility-Sparing Surgery for Cervical Cancer: a Systematic Review

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#### Abstract

Background: Cervical cancer affects 3,197 women in the UK, and 604000 women worldwide annually, with peak incidence seen between 30-34 years of age. For many, fertility-sparing surgery is an appealing option where possible. However, absence of large-scale data, along with a notable variation in reported outcomes in relevant studies may undermine future efforts for consistent evidence synthesis. Objectives: To systematically review the reported outcomes measured in studies that include women who underwent fertility-sparing surgery for cervical cancer and identify whether variation exists. Search Strategy: We searched MEDLINE, EMBASE, and CENTRAL from inception to February 2019. Selection Criteria: Randomised controlled trials, cohort and observational studies, and case studies of more than 10 participants from January 1990 to date. Data Collection and Analysis: Study characteristics and all reported treatment outcomes. Main results: 104 studies with a sum of 9535 participants were identified. Most studies reported on oncological outcomes (97/104), followed by fertility and pregnancy (86/104), post-operative complications (74/104), intra-operative complications (72/104), and quality of life (5). There were huge variation and heterogeneity in reported outcomes, with only 12% being good quality and 87% being of poor quality. Conclusions: There is significant heterogeneity in the reported outcomes. An agreed Core Outcome Set (COS) is necessary for future studies to effectively harmonise reported outcomes that are measurable and relevant to patients, clinicians, and researchers. This systematic review sets the groundwork for the development of a COS for fertility sparing surgery in cervical cancer. Funding: British Medical Association's Strutt and Harper Grant.

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Figure 1 PRISMA Flowchart.docx available at https://authorea.com/users/501087/articles/581710-variation-in-outcome-reporting-identified-in-studies-of-fertility-sparing-

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## surgery-for-cervical-cancer-a-systematic-review