

INTERVENTIONS FOR TREATING OBSTETRIC FISTULA: RESULTS OF AN EVIDENCE GAP MAP

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HYPOTHESIS / AIMS OF STUDY

Obstetric fistula is a debilitating condition prevalent in low- and middle-income countries; it is estimated that there are between 50,000 to 100,000 new cases each year. The World Health Organization (WHO) aims to eradicate obstetric fistula by 2030. However, there is no overview of the breadth and quality of evidence surrounding interventions for obstetric fistula to inform current practice. Evidence gap maps (EGMs) are a type of evidence synthesis used to visualise the breadth of research on a specific topic area. This EGM aimed to collate and visualise the evidence available on obstetric fistula interventions and to identify potential research gaps.

STUDY DESIGN, MATERIALS AND METHODS

A survey was conducted so key stakeholders (e.g. clinicians, patients, the public or researchers) could rank the most important intervention categories and outcome measures for research into obstetric fistula to assist in designing the framework for the EGM. The survey was developed using Qualtrics, a secure web-based platform and was distributed on 16 February 2022 to professional and charitable organisations with an interest in obstetric fistula as well as clinical contacts. The survey invite was allowed to snowball from initial distribution contacts and remained open until 14 March 2022. Results of the survey were tabulated and analysed in Microsoft Excel by a single reviewer and used to inform the EGM framework.

Search strategies for the EGM were peer-reviewed by an experienced Information Specialist before being undertaken on MEDLINE, Embase, CENTRAL, Global Index Medicus and ScanMedicine on 16 February 2022 to identify potentially eligible systematic reviews, randomised controlled trials (RCTs), cohort studies and case-control studies. All studies were screened at title and abstract and full-text stages by a single reviewer according to a pre-defined Population, Intervention, Comparison and Outcome (PICO) criteria. A second reviewer screened 10% of records at both stages to check accuracy of decision-making. To ensure directness of the evidence in the EGM to the population of interest, only studies with at least 80% of women having fistula of obstetric aetiology were included. Where fistula aetiology was not explicitly described in demographic information but alluded to in titles, these were included in the EGM but subjected to sensitivity analysis. Forward and backward citation chaining was performed on all included systematic reviews and primary studies to identify any potentially eligible studies the searches may have missed.

Included systematic reviews and primary studies were coded by a single reviewer within EPPI-Reviewer using a pre-piloted coding tool informed by the stakeholder survey. Another reviewer coded a proportion of these records to check accuracy. Risk of bias assessments for all included reports were conducted by a single reviewer using either: AMSTAR-2 for systematic reviews; Cochrane's 'Risk of bias' tool for RCTs; or the Joanna Briggs Institute (JBI) checklists for cohort and case-control studies. A second reviewer checked 20% of these assessments for accuracy. Following coding, the EGM was generated using the EPPI-Mapper wizard and results were compared with survey findings to identify research gaps correlating with unmet needs. A single sensitivity analysis was undertaken using specific filters within the EGM to determine the amount of research where at least 80% of the included population explicitly had fistula of obstetric origin and that reported on the effects of different interventions separately.

RESULTS

In total, 39 people responded to the stakeholder survey, 59% of whom were clinicians. The respondents identified surgery for obstetric fistula as the most important intervention category for underpinning research. According to the survey, the most important outcome measures for research were: quality of life; cure and improvement of obstetric fistula; urinary incontinence; faecal incontinence; mental health; and sexual function.

Of the 9796 records originally identified by database searches, only 37 reports of 28 studies were considered eligible for the EGM (Fig. 1). In total, the EGM included: seven RCTs; six prospective cohort studies; 12 retrospective cohort studies; one historical cohort study; one case-control study; and one systematic review. Most studies (n = 17) exclusively examined women with vesicovaginal fistula. Most included studies (71%) assessed the effects of surgery on treating obstetric fistula, while one focused on psychological interventions, four on catheter insertion and one on physical therapies. No included studies assessed the effects of lifestyle interventions. Regarding outcome measures, 24 studies reported on cure or improvement of obstetric fistula, while 20 reported on urinary incontinence. Reporting of other key outcome measures identified by the stakeholder survey was limited; only two studies reported on quality of life, while two studies reported on faecal incontinence, one on mental health and one on sexual function. Furthermore, the results of the sensitivity analysis removed all studies assessing psychological or physical therapy, while no RCTs assessing surgery remained in the EGM.

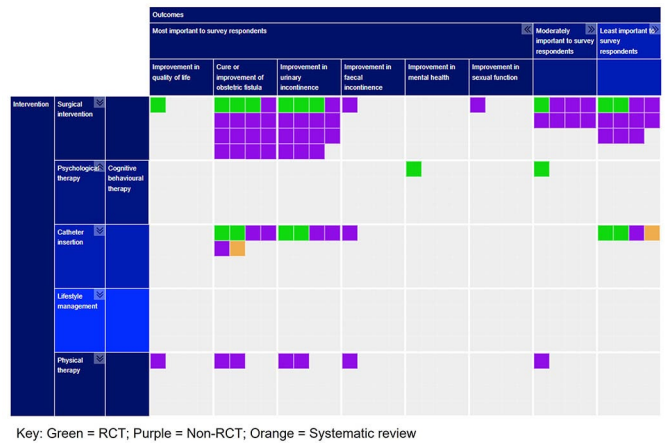
INTERPRETATION OF RESULTS

The overall lack of evidence identified for the EGM, particularly for outcome measures identified as important to key stakeholders, suggests there is currently little evidence to guide practice and policy. The results of the sensitivity analysis demonstrates that the overall applicability of the current evidence specifically to women with obstetric fistula is limited and that subsequent systematic reviews may currently not be feasible. Many of the included studies were at some risk of bias. Cohort and case-control studies were at particular risk of bias, mainly due to a lack of controlling for potential confounders.

CONCLUDING MESSAGE

Currently, there is little robust evidence to guide women and practitioners on treatment options for obstetric fistula. Further research is required to address the research gaps identified by this EGM.

FIGURE 1



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