The use of interventions to reduce unnecessary caesarean sections targeted at healthcare professionals: a qualitative evidence synthesis

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Citation

Carol Kingdon, Soo Downe, Ana Betrán. The use of interventions to reduce unnecessary caesarean sections targeted at healthcare professionals: a qualitative evidence synthesis. PROSPERO 2017 CRD42017059455 Available from: http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42017059455

Review question

The aim of this review is to add new evidence of what healthcare professionals think about interventions aimed at reducing unnecessary caesarean sections (including the barriers and facilitators to their use), their beliefs about caesarean section and their commitment to reducing unnecessary caesarean sections:
The objectives of the review are to identify, appraise, and synthesize qualitative studies exploring:
1. Health professionals' views, perceptions and uses of educational interventions aimed at improving adherence to evidence-based clinical practices to reduce caesarean sections;
2. Health professionals' views of the perceived benefits, barriers, facilitators and disadvantages of a policy of second opinion for caesarean section to reduce caesarean section rates;
3. Health professionals' views as to how audit, feedback and peer-review can reduce caesarean section rates.

Searches

Electronic searches:
We will search the following electronic databases for eligible studies published from 1985 to the date the final search is run:
• CINAHL (EBSCO);
• MEDLINE (EBSCO);
• PsycINFO (EBSCO);
• EMBASE (Ovid);
• Global Index Medicus;
• POPLINE;
• African Journals Online.
Using guidelines developed by the Cochrane Qualitative Research Methods Group for searching for qualitative evidence (Noyes 2011; Booth 2016), and papers detailing strategies for optimising the identification of qualitative studies in CINAHL (Wilczynski 2007), MEDINE (Wong 2004), EMBASE (Walters 2006) and PsycINFO (McKibbon 2006), we will develop search strategies for each database. We chose these databases as we anticipated that they would provide the highest yield of results based on preliminary, exploratory searches. There will be no geographic restrictions imposed on the search, and the date restriction is intended to ensure that health professional's views and experiences of interventions since the first WHO (1985) statement on appropriate technology for childbirth and use of caesarean section only when necessary are captured.
Searching other resources:
We will search the reference lists of all the included studies and key references (i.e. relevant systematic reviews), both back chaining and forward checking for any additional references not identified in the electronic searches which may be relevant. Key articles cited by multiple authors (citation pearls) will also be checked on Google Scholar, and the authors of relevant published protocols contacted.

Types of study to be included

This is a qualitative evidence synthesis, and as such, we will include all studies which have utilized

qualitative designs (e.g. ethnography, phenomenology) or qualitative methods for data collection (e.g. focus group interviews, individual interviews, observation, diaries, oral histories), and which have used qualitative methods for data analysis (e.g. thematic analysis, framework approach, grounded theory, thematic network analysis). We will also include mixed methods studies where it is possible to extract findings derived from qualitative research.We will exclude studies which collect data using qualitative methods, but which do not perform a qualitative analysis (for example, if qualitative data are only reported using descriptive statistics).

Condition or domain being studied

The following working definition of unnecessary caesarean sections will be used for the purposes of this review:
'Unnecessary caesarean deliveries are those procedures that are performed in the absence of medical indications such as substantial maternal risk factors, fetal anomalies, pregnancy complications, birth weight < 2500 g or > 4000 g, and complications of labour or delivery (Koroukian 1998). Generally unnecessary caesarean deliveries are those without medical indications in which the mother is exposed to potential harms that outweigh the potential benefits (Kabir 2004).'

Participants/population

We will include studies that focus on the views and experiences of healthcare professionals. By healthcare professionals we mean:
• Doctors of medicine (including obstetricians and gynecologists, anesthetists, and general physicians);
• Nurses and midwives.
We will focus on studies involving post-registration healthcare professionals.
Studies of medical, nursing and midwifery students and lay heath workers will be excluded.

Intervention(s), exposure(s)

In this review we will define an intervention as 'anything considered by study authors as an intervention additional to usual care undertaken with the aim of reducing unnecessary caesarean section.'
Inclusion criteria:
In accordance with the review objectives, the interventions of particular interest are:
(1) Educational interventions targeted at healthcare professionals which aim to improve adherence to evidence-based clinical practice known to reduce caesarean sections;
(2) Second opinion policies for caesarean section indication; and
(3) Audits, feedback and peer-reviews of caesarean section rates.
Some existing reviews make a distinction between clinical and non-clinical interventions for reducing unnecessary caesarean sections. Clinical interventions which could help to reduce caesarean section rates include external cephalic conversion after 36 weeks, continuous support during labour, and the use of a partogram with a four-hour action line in labour (Khunpradit 2011). In this review we are particularly interested in non-clinical interventions targeted at healthcare professionals to reduce caesarean sections in nulliparous or multiparous women without a previous caesarean section (Robson Groups 1-4) and multiparous women with a previous caesarean section (Robson Group 5).
Exclusion criteria:
We will exclude clinical interventions targetted at health professionals to reduce unnecessary caesarean sections in women with a breech presentation (Robson Groups 6 and 7), multiple pregnancies (Robson Group 8), and those who have transverse or oblique lies (Robson Group 9) or preterm births (Robson Group 10). In addition, interventions targeted at women, communities and the public, and organizations, systems or facilities will be excluded, as they are the subject of two other ongoing reviews.

Comparator(s)/control

Not applicable.

Context

We will include studies from any setting globally where an intervention concerning unnecessary caesarean section has been developed, communicated, distributed or implemented from 1985 to 2017. These settings could include public or private health facilities (e.g. hospitals, community clinics), third sector communities

(e.g. charities) and e- or m-heath platforms using internet technology. This time span has been chosen in order to reflect interventions developed since the first WHO statement (WHO 1985).

Primary outcome(s)

Studies have shown healthcare professionals' personal preferences and professional practice patterns for planned caesarean section to be varied. They suggest not only that healthcare professionals' views of caesarean sections vary according to gender, profession and socio-clinical environment, but that their views can change over time as professional opinion shifts. Policies on unnecessary caesarean sections are currently in the making and there is an urgent need to understand more about the healthcare professional's views of when or what constitutes an unnecessary caesarean section, and the beliefs which underpin their receptiveness to, or their rejection of, interventions for their reduction. This review will provide that evidence.

Secondary outcome(s)

Not applicable.

Data extraction (selection and coding)

We will collate records identified from different sources into one database and will remove duplicates. Two review authors (CK, SD) will independently assess each abstract to determine eligibility for inclusion against the a priori inclusion criteria. At this stage, we will disregard those abstracts which are clearly irrelevant to the topic of this review. The same two review authors (CK, SD) will then retrieve the full texts of all the papers that are likely to be relevant, and will independently assess them for relevance, before agreeing on the final list of included studies. In the event of any continuing lack of agreement over the inclusion of a particular study, a third review author (AB) will adjudicate, and if appropriate, we will contact study authors for further information. Study characteristics will be recorded using a form designed specifically for this review. The form will record details of: first study author, date of publication, language, country of study, setting (public, private), context (urban/rural), region (African, Americas, South-East Asian, European, Eastern Mediterranean, Western Pacific), participant group (parity, socio-demographics), the type of intervention received, the theoretical/conceptual perspectives of the study, the research methods, sample size, method of analysis, and the key themes (as recorded by the study authors in each case).

Risk of bias (quality) assessment

Our inclusion criteria specify that in order to be included, a study must have used qualitative methods for both data collection and data analysis, which are described in the paper. This criterion constitutes a basic quality threshold, as studies which do not meet this standard will be discarded.
In addition, to assess the methodological quality of included studies, one review author will apply a quality appraisal framework to each study. A second review author will then check for discrepancies. Any disagreements will be resolved through discussion, or by consultation with a third review author. We will use the criteria from Walsh (2006) and the A-D grading of Downe (2007), which includes an assessment of the study scope and purpose, design, sampling strategy, analysis, interpretation, researcher reflexivity, ethical dimensions, relevance, and transferability. We will then grade studies against Lincoln and Guba's summary criteria (Lincoln 1985), as follows:
• A: No, or few flaws. The study credibility, transferability, dependability, and confirmability is high.
• B: Some flaws, unlikely to affect the credibility, transferability, dependability, and/or confirmability of the study.
• C: Some flaws that may affect the credibility, transferability, dependability, and/or confirmability of the study.
• D: Significant flaws that are very likely to affect the credibility, transferability, dependability, and/or confirmability of the study.
Two review authors will independently conduct a pilot on three included studies to assess the feasibility of using this tool and to evaluate the integrity of the assessment, any disagreements being resolved by consensus. As previously stated, studies meeting the inclusion criteria will be included regardless of study quality. Quality assessment scores will be used when judging the relative contributions of each study in the development of explanations and relationships between studies, with the synthesis becoming "weighted" towards the findings of the better quality studies (Glenton 2013).

We will use the GRADE Confidence in the Evidence from Reviews of Qualitative research (GRADE-CERQual) approach to assess the confidence that may be placed in review findings (Lewin 2015) by applying the following four domains:
• Methodological limitations of included studies: the extent to which there are problems in the design or conduct of the primary studies that contributed evidence to a review finding.
• The relevance of the included studies to the review question: the extent to which the body of evidence from the primary studies supporting a review finding is applicable to the context (perspective or population, phenomenon of interest, setting) specified in the review question.
• The coherence of the review findings: the extent to which the review finding is well grounded in data from the contributing primary studies and provides a convincing explanation for the patterns found in these data.
• The adequacy of the data in contributing to the review findings: an overall determination of the degree of richness and quantity of data supporting a review finding.

Strategy for data synthesis

Following the principles of meta-ethnography (Noblit and Hare 1988), we will undertake data extraction and analysis simultaneously. Meta-ethnography uses an approach based on the constant comparative technique, in which the analysis is built up study by study using the principles of confirmation ('reciprocal analysis') and dis-confirmation ('refutational analysis'). Starting with the earliest published paper, we will read each included study in detail, and will extract the relevant verbatim text, along with the themes/theories/metaphors used by the study authors. Two review authors (CK, SD) will then undertake the analysis, and any disagreements on the thematic structure/theory/amendments will be agreed by consensus throughout the extraction and analysis process. We will synthesize the resultant thematic structure into a ‘line of argument’ synthesis, before assessing the degree of confidence which can be placed in the evidence from the review findings (CERQual).

Analysis of subgroups or subsets

Our data management and synthesis plan is intended to support the following sub-analysis:
Data from low- and middle-income countries, and those from high-income countries.
We propose this sub-analysis due to differences in uptake, health beliefs, and health system accessibility and quality between these two types of settings.

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Organisational affiliation of the review

World Health Organization

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Anticipated or actual start date

03 January 2017

Anticipated completion date

28 July 2017

Funding sources/sponsors

World Health Organization

Conflicts of interest

None known

Language
English

Country
England

Stage of review
Review_Ongoing

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Attitude of Health Personnel; Cesarean Section; Delivery of Health Care; Female; Health Personnel; Humans; Parturition; Pregnancy; Unnecessary Procedures

Date of registration in PROSPERO
18 May 2017

Date of publication of this version
18 May 2017

Details of any existing review of the same topic by the same authors

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

Versions
18 May 2017