



STUDY PROTOCOL

Maternity care during COVID-19: a protocol for a qualitative evidence synthesis of women's and maternity care providers' views and experiences. [version 1; peer review: 2 approved, 1 approved with reservations]

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Abstract

Background: Considerable changes in maternity care provision internationally were implemented in response to COVID-19. Such changes, often occurring suddenly with little advance warning, have had the potential to affect women's and maternity care providers experience of maternity care, both positively and negatively. For this reason, to gain insight and understanding of personal and professional experiences, we will perform a synthesis of the available qualitative evidence on women and maternity care providers' views and experiences of maternity care during COVID-19.

Methods and analysis: A qualitative evidence synthesis will be conducted. Studies will be eligible if they include pregnant or postpartum women (up to six months) and maternity care providers who received or provided care during COVID-19. To retrieve relevant literature the electronic databases of CINAHL, EMBASE, MEDLINE, PsycINFO, and the Cochrane COVID study register (<https://covid-19.cochrane.org/>) will be searched from 01-Jan-2020 to date of search. A combination of search terms based on COVID-19, pregnancy, childbirth and maternity care, and study design, will be used to guide the search. The methodological quality of the included studies will be assessed by at least two reviewers using the Evidence for Policy and Practice Information (EPPI)-Centre 12-criteria quality assessment tool. The Thomas and Harden approach to thematic synthesis will be used for data synthesis. This will involve line by line coding of extracted data, establishing descriptive themes, and determining analytical themes. Confidence in the findings of the review will be assessed by two reviewers independently using Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence

Open Peer Review

Reviewer Status

	Invited Reviewers		
	1	2	3
version 1			
18 Feb 2021	report	report	report

- Meghan A. Bohren** , University of Melbourne, Melbourne, Australia
Katherine Eddy, Burnet Institute, Melbourne, Australia
- Julia Sanders** , Cardiff University, Cardiff, UK
- Pauline Dawson** , University of Otago, Dunedin, New Zealand

Any reports and responses or comments on the article can be found at the end of the article.

from Reviews of Qualitative research (GRADE-CERQual).

Conclusion: The proposed synthesis of evidence will help identify maternity care needs during a global pandemic from the perspectives of those receiving and providing care. The evidence will inform and help enhance care provision into the future.

Keywords

COVID-19, maternity care, pregnancy and childbirth, systematic review, thematic synthesis, qualitative evidence synthesis



This article is included in the [Coronavirus \(COVID-19\)](#) collection.

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Author roles: **Smith V:** Conceptualization, Methodology, Project Administration, Validation, Writing – Original Draft Preparation; **Flaherty SJ:** Methodology, Writing – Original Draft Preparation, Writing – Review & Editing; **Matvienko-Sikar K:** Writing – Review & Editing; **Delaney H:** Writing – Review & Editing

Competing interests: VS is lead researcher on a qualitative study that explored women's experiences of maternity care during COVID-19 in Ireland. KMS is also a researcher on a survey study that explored women's experiences of maternity care during COVID-19. These studies are likely to be eligible for inclusion in the review. To avoid selection bias, VS and KMS will not be involved in screening these studies for possible inclusion, and if included, the quality appraisal and data extraction phases will be undertaken by other members of the review team.

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Introduction

As of 20 January 2021, approx. 1-year since the emergence of coronavirus disease 2019 (COVID-19), the disease caused by the strain of coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), almost 97 million people have become infected globally and over two million people have died from the disease¹. COVID-19 affects infected individuals in varying ways, although the elderly and those with underlying co-morbidities appear more vulnerable to severe adverse outcomes². The risk of contracting COVID-19 does not appear heightened by pregnancy, nor are pregnant women more likely to die from the disease; however there is some evidence to suggest that morbidity may be higher with COVID-19 in pregnancy^{3,4}. For example, in a living systematic review of risk and outcome data related to COVID-19, pregnant women with COVID-19, when compared to non-pregnant women of reproductive age, were more likely to need admission to intensive care (Odds Ratio (OR) 1.62, 95% Confidence Interval (CI) 1.33-1.96) and invasive ventilation (OR 1.88, 95% CI 1.36-2.60; 4 studies, 91,606 women). In a study comparing COVID positive and negative pregnant women, an increased risk of preterm birth (OR 3.34, 95% CI 1.60–7.00) and caesarean section (OR 3.63, 95% CI 1.95–6.76) were identified in COVID positive pregnant women⁵. Results across studies are conflicting, however, and other studies exploring risks and outcomes have found no or minimal differences between COVID positive and negative pregnant groups^{4,6}.

Irrespective of clinical risk and outcomes, as with many healthcare areas, considerable changes in the provision of maternity care internationally were implemented in response to the pandemic. Such changes, often occurring suddenly with little advance warning⁷ and, in some instances, arguably countering the core tenets of respectful maternity care⁸, continue to remain in place or have been lifted and reinstated as second and subsequent waves of increased virus transmission occurred. Changes to maternity care provision and practices include, but are not limited to, policies of restrictive visiting and access (e.g. partners not permitted to attend labour and birth; one designated parent for babies in neonatal intensive care units; no visiting in antenatal, postnatal and gynaecology wards), reconfiguration of physical space to accommodate suspected or confirmed COVID-19 positive women, and diversion of hospital outreach or community services back to the main hospital setting. Women's choice for place of birth during the pandemic has also been reduced in some countries. In the UK, for example, approx. one third of NHS Trusts suspended home birthing services⁹. This presents an interesting conundrum considering that pregnant women may have heightened concerns about exposing themselves and their babies to the virus in a hospital environment, potentially resulting in an increased demand for homebirth services at this time¹⁰. Suspensions of key services such as parent education, antenatal classes and birth reflection clinics have also occurred as a result of the pandemic and antenatal and postnatal telephone or online consultations (telehealth) have increased. Throughout the pandemic, and especially as subsequent waves of increased COVID-19 transmission occur internationally, the numbers of health or maternity care professionals available to provide care

has also been affected, with many absent from work as a result of infection, or self-isolating due to close contact with confirmed cases¹¹.

The changes to maternity care provision in response to COVID-19 are likely well intended. Central to their implementation is minimising the risk of COVID-19 transmission in pregnant women and maternity care providers. However, these changes have the potential to impact both positively or negatively on women's experiences of maternity services, and on the experiences of maternity care providers in providing care to women and their families also. For instance, restrictions on partner attendance at antenatal visits, and during the birthing process can reduce women's sense of support during pregnancy and labour¹². Conversely, restricted visiting postpartum can provide women with the space to bond with their babies or to establish breastfeeding, for example, and may create increased space for maternity care providers to spend time with women antenatally and postpartum. Restrictions on partner attendance, however, may also reduce opportunities for prenatal parental bonding due to missing important prenatal milestones and check-ups. Furthermore, the rapidity with which some changes occurred (almost overnight in some instances as countries entered lockdown phases), and the variation in these changes between and within countries may have led to confusion, uncertainty, and anxiety as women felt unprepared and uninformed of the services available to them, the processes involved, and the possible risk to themselves and their baby¹². The increased use of telehealth also poses a challenge, in particular, for individuals with poor technological literacy and/or language difficulties, potentially contributing to inequities in access to care⁸.

The COVID-19 pandemic has impacted and affected maternity care across the globe. To gain insight and understanding of the experiences of women and maternity care providers, and to explore their views and perceptions of maternity care during COVID-19, we plan to conduct a systematic review and synthesis of the available qualitative evidence; a qualitative evidence synthesis (QES). In carrying out this QES we will identify care needs during a global pandemic which will inform and help optimise and enhance care provision into the future.

Aim

To synthesise the available qualitative evidence on women's and maternity care providers' views and experiences of maternity care during COVID-19 (protocol).

The proposed review is registered with the international register of systematic reviews (PROSPERO: [CRD42021232684](https://www.crd.york.ac.uk/PROSPERO/record/CRD42021232684), 29th January 2021) and adheres to the PRISMA-P reporting guidelines for systematic review protocols (see reporting guidelines¹³).

Protocol

Review methodology

A QES will be performed. QES methodology has been chosen as it promotes an increased understanding and insight of

a phenomenon of interest by bringing together multiple perspectives, including contradictory views. A QES allows for the examination of similarities and differences across settings, and may lead to a new interpretative model or framework¹⁴⁻¹⁶. Findings from the proposed QES will offer maternity stakeholder derived evidence, based on similar and diverse experiences and perspectives of care during a global pandemic which may inform the development or implementation of maternity care guidelines or interventions into the future.

Eligibility criteria

The SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, and Research type) tool¹⁷ was used to structure the eligibility criteria for the inclusion and exclusion of primary studies in the review. These criteria are:

- **Sample:** Pregnant or postpartum women of any parity or risk status, antenatal and up to six months postpartum. Maternity care providers; that is midwives, obstetric nurses, obstetricians and/or doctors involved in caring for pregnant and postpartum women during COVID-19. Maternity care providers may extend to other professionals (e.g. physiotherapists) directly involved in maternity care provision, as might be described in an included study.
- **Phenomenon of interest:** Maternity care during COVID-19. For purposes of this review maternity care is broadly defined and may involve care within hospital, community or home birth settings, or as defined by the authors of an included study. The focus of this QES on maternity care during COVID-19 means that our sample of interest must have been recruited to/participated in a study any time onwards from 01 January 2020.
- **Design:** All identified published and unpublished studies providing qualitative data on women’s and maternity care providers’ views and experiences of maternity care during COVID-19. This will include qualitative descriptive and exploratory studies, phenomenology, grounded theory, ethnography, and action research. Studies of mixed methods design, where qualitative data can be extracted separately, will be included. Survey designs with open-ended questions that provide qualitative data **may be considered** for inclusion; surveys that provide

limited qualitative data (e.g. exemplar quotes to support quantitative ‘counts’) will be excluded, or where the qualitative data has not been subjected to a formal analytical approach (e.g. thematic analysis).

- **Evaluation of outcomes:** The outcomes of interest to this review are views, experiences and perspectives. This means that included studies must provide in-depth qualitative or narrative data that are representative of women’s and maternity care providers’ views and experiences of maternity care during COVID-19. Studies that report numerical representations (e.g. thematic ‘counts’) of views or experiences will be excluded.
- **Research type:** Published and unpublished studies, in English language, from 01 January 2020 to present will be included. Abstracts deemed eligible may be included depending on the level of data provided, and whether these data can contribute to the synthesis in a meaningful way.

Search strategy

To retrieve relevant literature, a systematic search of the electronic databases, limited by year from 01 January 2020 to present is planned. The following databases will be searched: [CINAHL](#), [EMBASE](#), [MEDLINE](#), [PsycINFO](#), and the [Cochrane COVID study register](#). Searches will not be limited on language. However, as we are unable to translate non-English publications, and to avoid misrepresentations as a result of language nuance and contextual elements in attempting to translate, studies published in English only will be included. Searching all languages will allow us identify numbers of potentially eligible non-English publications, and, depending on how many we might find, whether this presents as a source of language bias. Keywords and subject terms used to guide the search are presented in [Table 1](#), and will be adapted as appropriate across the different databases. The search strings were developed based on the sample, phenomenon of interest, evaluation of outcomes and study type eligibility criteria, with search terms related to the latter two combined in a single search string.

To ensure our search strategy is as comprehensive as possible we will additionally search the reference lists of included

Table 1. Search terms for electronic database search.

S	mother OR woman OR women OR midwives OR midwife* OR nurs* OR clinician OR physician OR doctor OR obstetric* OR professional
PI	(maternity ADJ care) OR healthcare OR ‘health-care’ OR matern* OR birth* OR childbirth OR prenan* OR labour OR labor OR antenatal OR antepartum OR postnatal OR postpartum OR post-partum OR puerperium AND coronavirus* OR corona virus* OR COVID-19 OR COVID OR Covid OR Covid2019 OR SARS-CoV* OR SARSCov* OR new CoV* OR novel CoV*
E and R	experiences OR experience OR view* OR perceptions OR perception OR voices OR narratives OR qualitative OR (mixed ADJ method) OR ‘grounded theory’ OR phenomenology OR ‘action research’

studies, grey literature websites (e.g. [Open Grey](#)), and proceedings of international maternity care conferences 2020 (e.g. Normal Labour and Birth Research Conference 2020). We will also contact maternity care researchers whom we are aware are conducting research on experiences of pregnancy and childbirth during COVID-19 for information on their study’s status, or whether unpublished data might be available for inclusion in our review.

Study selection

All citations retrieved during the searching process will be exported to EndNote and duplicates removed. Following removal of duplicates the remaining records will be uploaded to [Covidence](#), a software package designed for preparing systematic reviews, for screening and study selection. Records will be screened independently by two reviewers, initially by title and abstract, and then at full text level as relevant. Disagreements will be resolved by consensus or by involving a third reviewer if required. The screening and selection process, including results, will be reported using the PRISMA flowchart¹⁸.

Quality appraisal of included studies

The methodological quality of the included studies will be assessed using an appraisal tool developed by the Evidence for Policy and Practice Information and Co-ordinating (EPPI) Centre for use in a systematic review of healthy eating in children¹⁹. The tool consists of 12 quality appraisal criteria (A-L) across three domains; i) quality of the study reporting, ii) reliability and validity of data collection and analysis, and iii) quality of the study methods (Table 2). Each included study will be assessed independently by two reviewers on the extent to which each quality criterion is met. Considering that even poorly conducted and/or reported studies may provide relevant ‘views’ data, all studies, irrespective of quality will be included for data extraction and synthesis purposes.

Data extraction and synthesis

Data extraction will be based on the aim of the review. The following data will be extracted from each included study:

- Author (lead) and month published
- Source and type of publication (journal paper, conference proceeding, abstract, etc.)
- Aim of the study
- Description of participants and the study setting (country, health facility, etc.)
- COVID context (restrictions, lockdown, COVID-related practice changes, etc.)
- Study duration/timeframes
- Method(s) of data collection and analysis
- Findings related to women’s and providers’ views of maternity care during COVID-19

A pre-designed data extraction form will be used to extract the relevant data (extended data¹³). We will pilot the data extraction form on two studies identified from the list of included studies and refine if necessary. Data extraction will be carried out independently by two reviewers (or pairs of reviewers) and cross-checked for consistency and accuracy.

The narrative, ‘findings’ data from the included studies will be synthesised using the thematic synthesis method as described by Thomas and Harden²⁰. Data synthesis will involve three stages; i) line by line coding of extracted text, ii) development of descriptive themes and, iii) generating analytical themes from the studies’ data. To conduct line by line coding, studies’ text including relevant participant quotes, will be extracted to Nvivo11, or similar software. Similarities and differences between codes will be identified and clustered to generate descriptive themes. Analytical themes and sub-themes will be

Table 2. Quality appraisal criteria.

Quality of the study reporting	A= Aims and objectives clearly reported B= Adequately described the context of the research C= Adequately described the sample and sampling methods D= Adequately described the data collection methods E= Adequately described the data analysis methods
There was good or some attempt to establish the	F= Reliability of the data collection tools G= Validity of the data collection tools H= Reliability of the data analysis I= Validity of the data analysis
Quality of the methods	J= Used the appropriate data collection methods to allow for expression of views K= Used the appropriate methods for ensuring the analysis was grounded in the views L= Actively involved the participants in the design and conduct of the study

generated through further reflection, iteration, discussion and synthesis of descriptive themes. One member of the review team will conduct the thematic synthesis with iteration, reflection and discursive team meetings following each phase; that is, a meeting will be scheduled when the descriptive themes are described. The review team will discuss, reflect on and agree that these themes collectively represent the studies' data. A similar process will take place when the analytical themes are determined. This process will enhance rigour and transparency in synthesising the qualitative data.

Assessment of confidence in the review findings; GRADE-CERQual

To assess levels of confidence in the review findings, the Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative research (GRADE-CERQual)²¹⁻²⁶ will be applied. Using GRADE-CERQual, each discrete review finding will be assessed under four components. These are: the methodological limitations of the studies contributing to the finding, the coherence of the finding, the adequacy of data contributing to the finding and the relevance of the contributory studies to the review question. Assessments will be carried out independently by two reviewers, with final judgements based on discussions and consensus. Following these assessments, an overall assessment of confidence in each finding will be made, and categorised as High, Moderate, Low or Very Low confidence²¹. To ensure consistency, and to provide a framework

for downgrading, we have established *a priori* downgrading criteria as illustrated in [Figure 1](#). Judgements are based on an initial assumption of 'High confidence' in all findings, and then downgraded accordingly.

Dissemination of findings

The findings of this QES will be submitted for publication in an Open-Access peer-reviewed maternity-focused health journal. The findings will be shared at national and international research conferences and with identified stakeholders using dissemination methods appropriate to the stakeholder group. These will include social media posts (Facebook and Twitter), newspaper/radio media posts, and midwifery/maternity email and online forums.

Study status

Not yet commenced. Implementing the search strategy and screening studies for eligibility is planned for February and March 2021.

Discussion

The findings of this QES will provide valuable insight and understanding of women's and maternity care providers' views and experiences of maternity care during COVID-19. This information may prove valuable for assessing how care provision may be optimised, based on the experiences of those directly involved in both receiving and providing care, as the COVID-19 pandemic continues.

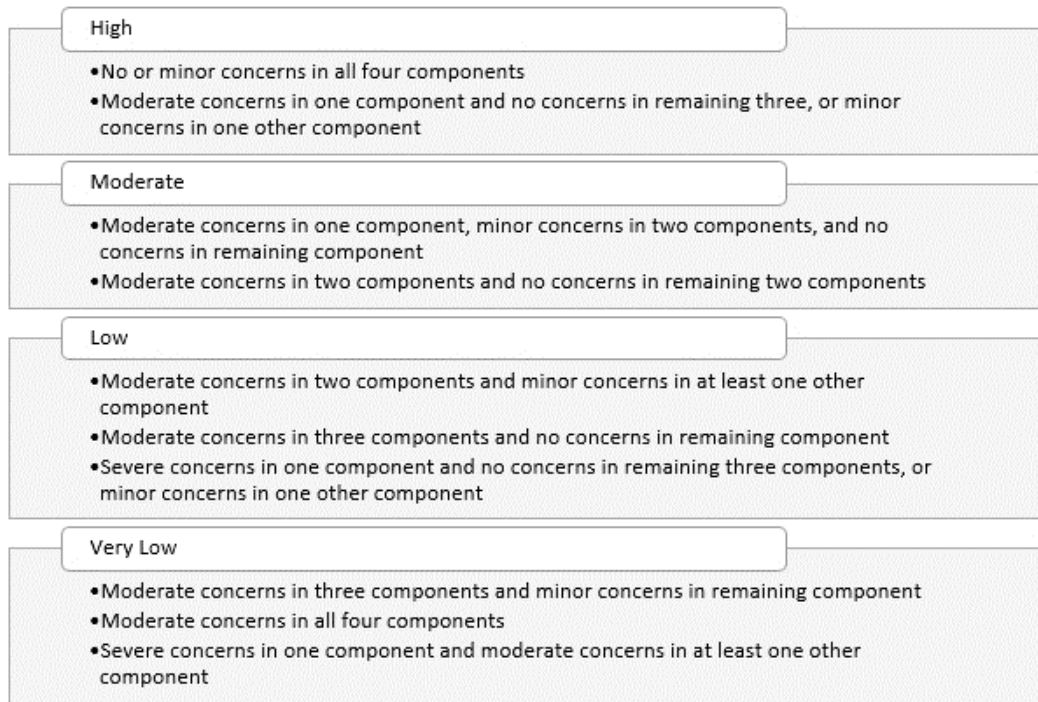


Figure 1. CERQual downgrading criteria.

Data availability

Underlying data

No data are associated with this article.

Extended data

Open Science Framework: Maternity care during COVID-19; a qualitative evidence synthesis of women's and maternity care providers' views and experiences (extended files). <https://doi.org/10.17605/OSF.IO/Z6DU2>¹³

This project contains the following extended data:

- Template Data Extraction Form.docx (Template Data Extraction Form)

Reporting guidelines

Open Science Framework: PRISMA-P checklist for 'Maternity care during COVID-19: a protocol for a qualitative evidence synthesis of women's and maternity care providers' views and experiences' <https://doi.org/10.17605/OSF.IO/Z6DU2>¹³

Data are available under the terms of the [Creative Commons Attribution 4.0 International license \(CC-BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).

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Open Peer Review

Current Peer Review Status:   

Version 1

Reviewer Report 15 July 2021

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Pauline Dawson 

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Thank you for the invitation to review this protocol. In my view, this proposal for a qualitative evidence synthesis (QES) will make a valuable contribution to the consolidation of knowledge around the experience of maternity care from the perspective of both pregnant people and carers in the context of the COVID-19 pandemic. As the authors note, maternity care was reorganised extremely swiftly in the face of the pandemic with scant evidence basis for care in such circumstances. The protocol clearly sets out a comprehensive review strategy that will inform best practice care in the future as the world continues to deal with the ongoing pandemic.

Study Design

The design is well set out and provides sound detail of the frameworks and procedures the carry out the study. The COVID-19 pandemic is a recent event and ongoing so care will need to be taken to include literature published or released while the review is being carried out. I would suggest timepoints are stipulated where searches are repeated in order to be as inclusive as possible. It is encouraging to see grey literature included and an international approach taken. However, restricting articles to the English language only may cause bias although the authors have noted an approach for assessing this in the search strategy section.

One effect of the pandemic has been a plethora of literature regarding its impact on healthcare, and there appears no shortage of qualitative literature on maternity experiences. Some of this may be due to rapid review and publishing protocols for COVID-19 related research. This factor means that a strong quality assessment protocol is required. The quality appraisal section discusses the use of the Evidence for Policy and Practice Information and Co-ordinating (EPPI) Centre tool in this process as laid out in Table 2. However, it is not clear to me how the EPPI tool quality findings will relate to synthesis when the protocol states "all studies, irrespective of quality will be included for data extraction and synthesis purposes".

I also have questions about the inclusion criteria of "pregnant or postpartum women" specifically.

I would like to see this extended to include family/whanau/support people as these too would have been significantly impacted by changing care provision. This additional inclusion has a cultural impact specifically in societies where cultural ways of being mean that birth is a collective event centred around the birthing person. This will may also gather additional data on (in)equity and cultural disparities which have also been identified in the COVID-19 period.¹

From an equity perspective, I would also suggest broadening the search terms “mother OR woman OR women” to be LGBTQ+ inclusive and so reflect all pregnant and birthing people. If these people are to be excluded, explicit justification for such should be stated.

As this is a global review, I think more specific comment needs to be made on how international diversity will be handled in analysis and presentation. Countries (and even regions e.g. in the USA) responded differently to the onset and subsequent waves of the disease. Also, varying locations have extremes in resources and healthcare systems. Experience of a publicly funded health system compared to that in a private or insurance-based system may not be able to be directly compared. Finally, there are also diverse models of maternity care which may impact experience during the pandemic. For example, a case loading continuity midwifery model may have responded differently to a medical obstetric dominated model. How these differences are accounted for in analysis needs to be addressed

Methods

The methods described are robust and utilise validated frameworks. There is enough detail to allow replication apart from, as mentioned in the review by Bohren et al. (2021) how dissent between reviewers will be resolved which needs to be expanded on.

References

1. Steyn N, Binny RN, Hannah K, Hendy SC, James A, Kukutai T, Lustig A, McLeod M, Plank MJ, Ridings K, Sporle A. Estimated inequities in COVID-19 infection fatality rates by ethnicity for Aotearoa New Zealand. *New Zealand Medical Journal*. 2020 Sep 4;133(1521):28-39. PMID: 32994635.)

References

1. Steyn N, Binny R, Hannah K, Hendy S, et al.: Estimated inequities in COVID-19 infection fatality rates by ethnicity for Aotearoa New Zealand. *medRxiv*. 2020. [Publisher Full Text](#)

Is the rationale for, and objectives of, the study clearly described?

Yes

Is the study design appropriate for the research question?

Partly

Are sufficient details of the methods provided to allow replication by others?

Partly

Are the datasets clearly presented in a useable and accessible format?

Not applicable

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Maternity care, Social determinants of health, Equity

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Reviewer Report 15 July 2021

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Julia Sanders 

School of Healthcare Sciences, Cardiff University, Cardiff, UK

Thank you for the opportunity to review this timely protocol. There is increasing interest in the experiences of women of 'socially distanced' maternity care and the impact this has had on women and wider families, and this synthesis will generate new highly relevant information to inform practice.

The methods proposed are appropriate but given the anticipated limited number of surveys conducted across different countries it may be appropriate to also include published text provided in response to open survey questions. As all published text will be a sample of that obtained in a qualitative study, and for some surveys open text replies may be detailed, the justification for excluding open text in published surveys was unclear. The authors may wish to consider this once they have a better idea of the volume of qualitative studies currently published.

Although the time frame for publications will be limited to the period of the pandemic, the attitudes and experiences of women may have varied considerably throughout the period. As the pandemic progressed understanding of viral transmission increased as did knowledge of the impact on women, babies, and staff. It would be important to consider the period of data collection in relation to the stage of the pandemic, knowledge levels of the virus and potential impact on pregnancy and babies.

Is the rationale for, and objectives of, the study clearly described?

Yes

Is the study design appropriate for the research question?

Yes

Are sufficient details of the methods provided to allow replication by others?

Yes

Are the datasets clearly presented in a useable and accessible format?

Not applicable

Competing Interests: No competing interests were disclosed.**Reviewer Expertise:** Perinatal health, safety in maternity care, intervention evaluation.**I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.**

Reviewer Report 27 May 2021

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**Meghan A. Bohren** 

Gender and Women's Health Unit, Centre for Health Equity, School of Population and Global Health, University of Melbourne, Melbourne, Australia

Katherine Eddy

Burnet Institute, Melbourne, Australia

Thank you for the opportunity to review this protocol. The proposed research on maternity care during COVID-19 is highly relevant and has potential to provide valuable insights for those involved in providing maternity care to women during a global pandemic. The authors have presented a clear and convincing rationale for conducting a qualitative evidence synthesis (QES) on this topic, and the proposed methods are generally sound. There are several things that we consider may strengthen the proposed research, which are outlined below.

Study design

Given that the COVID-19 pandemic is relatively recent (commencing early 2020) it is likely that some relevant primary studies are not yet published. It is also possible that new studies will be conducted while this QES is ongoing. The authors should endeavour to present a comprehensive and current synthesis of available evidence. In order to do this, we suggest the authors consider updating the search at various stages of the review to bring in any newly available evidence. For example, this may be undertaken at the time of finalising the analysis, and immediately prior to publication. We also agree with the authors' decision to include eligible studies from the grey literature. We also suggest the authors search for pre-prints which may be available on this topic, using databases including medRxiv.org.

This review has a relatively short timeframe for eligible studies (1 January 2020-current), and we agree that this timeframe is appropriate for the topic. However, such a short timeframe may result in a limited number of eligible studies. A qualitative evidence synthesis may be undermined by either too many or too few included studies (*ref: Booth, A. Searching for qualitative research for*

inclusion in systematic reviews: a structured methodological review. Syst Rev 5, 74 (2016). <https://doi.org/10.1186/s13643-016-0249-x>¹). It may therefore be worthwhile considering expanding this research to a mixed-methods review, thereby including relevant quantitative evidence from surveys of women and maternity care providers. For example, if the currently available qualitative evidence is considered too thin to support a particular theme, quantitative evidence may provide additional context and support for a broader finding related to this theme. (*ref: Noyes J, Booth A, Moore G, et al. Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. BMJ Glob Health 2019;4:e000893. <https://doi.org/10.1136/bmjgh-2018-000893>*²).

In the introduction, the authors describe some of the changes that have occurred in maternity care, including restrictive visiting and access policies. These types of changes are likely to affect not only the women, but also their partners and families. The authors propose to focus the review on the views and experiences of women and maternity care providers. However, we consider the views and experiences of partners and families on these changes are likely to be connected and interact with those of the women in potentially complex ways, and that the perspectives of partners and families are relevant to the broader goal, acknowledged by the authors, of optimising and enhancing maternity care provision. We consider that including these perspectives in the review would strengthen the review findings. We therefore suggest the authors consider either expanding the scope of the review to include the views and experiences of partners and families, or provide a rationale for why these perspectives are not relevant for this QES.

The authors state that they will conduct thematic analysis in accordance with the approach described by Thomas and Harden. However, the authors have not described how context will be accounted for in the analysis, or whether any subgroup analysis will be undertaken. While we note that some contextual factors may emerge during analysis and cannot be pre-specified, we consider there are several important phenomena that should be taken into account upfront. First, we note that the review includes both women's and maternity care providers' views. Even within the same setting, the perspectives and experiences of these two groups are likely to be quite different and this should be clearly accounted for in the analysis (e.g. by conducting subgroup analysis to determine which themes are relevant to each group).

Secondly, we note that this is a global review and that experiences of COVID-19 and the policies of governments and healthcare institutions have differed significantly around the world. The authors should consider including an explanation for why a global review is nevertheless appropriate, and how this diverse experience will be accounted for in the analysis and presentation of findings.

Thirdly, even within settings the experience of COVID-19 and the policies of governments and healthcare institutions have differed over time. For example, the experiences of women and providers during a first, second, or third wave and strong lockdown measures are likely to be quite different to women's experiences during periods where case numbers are lower and restrictions are relaxed. We consider that it will be similarly important for the authors to take this intertemporal variation into account, and consider the localised COVID-19 context when analysing and synthesising individual study data.

Details of methods

The authors have generally described the study methods in sufficient detail, notwithstanding the suggestions in relation to pre-specified subgroup analysis outlined above. We do have one minor

comment in relation to resolution of differences between reviewers. The authors specify that disagreements during title and abstract screening and full text review will be resolved by consensus or by involving a third reviewer if required, and that GRADE-CERQual assessments will likewise be carried out independently with final judgements based on discussions and consensus. For clarity, we suggest the authors also specify how disagreements between reviewers will be resolved in relation to the quality appraisal of included studies and data extraction.

References

1. Booth A: Searching for qualitative research for inclusion in systematic reviews: a structured methodological review. *Syst Rev.* 2016; **5**: 74 [PubMed Abstract](#) | [Publisher Full Text](#)
2. Noyes J, Booth A, Moore G, Flemming K, et al.: Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. *BMJ Glob Health.* 2019; **4** (Suppl 1): e000893 [PubMed Abstract](#) | [Publisher Full Text](#)

Is the rationale for, and objectives of, the study clearly described?

Yes

Is the study design appropriate for the research question?

Partly

Are sufficient details of the methods provided to allow replication by others?

Partly

Are the datasets clearly presented in a useable and accessible format?

Not applicable

Competing Interests: MAB is an Editor with Cochrane Effective Practice and Organisation of Care review group, and is the senior author of a research article currently under review that would meet the inclusion criteria for this QES.

Reviewer Expertise: maternal health, public health, qualitative evidence synthesis

We confirm that we have read this submission and believe that we have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.
