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Factors that influence the uptake of routine antenatal services by pregnant women: a qualitative evidence synthesis

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[Qualitative Protocol]

Factors that influence the uptake of routine antenatal services by pregnant women: a qualitative evidence synthesis

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ABSTRACT

This is a protocol for a Cochrane Review (Qualitative). The objectives are as follows:

To identify, appraise, and synthesise qualitative studies exploring:

- women's views and experiences of antenatal care; and
- factors influencing the uptake of antenatal care arising from women's accounts.

BACKGROUND

There has been widespread and continuing concern about rates of maternal and neonatal deaths and serious morbidity across the world (UN 2015). Antenatal care offers the promise of screening women and their foetus for actual and potential problems as the pregnancy progresses, and for treating any complications that may arise. Antenatal care is therefore a core component of maternity care provision in most contexts around the world. The main measures for the adequacy of antenatal care provision are the time of the first visit, and the number of antenatal sessions attended (WHO 2002). Current World Health Organization (WHO) recommen-

dations for routine antenatal care for women with no existing or historical health problems propose a four-session Focused Antenatal Care (FANC) programme during pregnancy, starting before 16 weeks gestation, with specific interventions and activities at each visit (WHO 2002). The number of visits and the content of each visit are based on the WHO antenatal care trial (Villar 2001).

Although the percentage of women who attend antenatal care programmes early in pregnancy, and who go on to attend at least three more sessions is rising, the percentage is still very low in some countries (UN 2014). Until recently, it has been assumed that lack of attendance is largely driven by the 'three delays' model

(Thaddeus 1994), characterised as: (1) delay in the decision to seek care; (2) delay in arrival at a health facility; and (3) delay in the provision of adequate care. When services are provided in central locations, and transportation is infrequent, expensive or non-existent, this is a clear barrier to attendance, especially in cultures where women do not have the autonomy to decide to attend, or to pay for transportation, or both. However, more recent data suggest that, even when services are more accessible and affordable, women do not always use them, especially if they are members of marginalised population groups (Downe 2009; Finlayson 2013). This observation holds true in both high- and low-income settings. These studies also note that the biomedical assumptions on which formal antenatal care is based might not fulfil the needs of all pregnant women, especially in cultures where a more psychosocial approach is culturally normative. The growing recognition of the degree to which women are subject to disrespect and abuse by caregivers in formal maternity care systems, also provides an insight into why women may not attend antenatal care programmes, or why they may attend once, and then not again (Bohren 2015; Bowser 2010).

Apart from these potential barriers to access, a recent Cochrane review of three cluster-randomised controlled trials (cluster-RCTs) (including the original WHO trial), suggested that reduced models of antenatal care might be associated with increased risk of perinatal mortality (Dowswell 2015). This led to a secondary analysis of the results of the original WHO trial, which indicated that, in some cases, the WHO FANC programme might be associated with higher levels of perinatal mortality at 32 to 36 weeks gestation in particular (Vogel 2013). In addition, anecdotal accounts and local audits suggest that the care package is not always delivered with fidelity to the original, tested protocol. Under these conditions, while women may attend for the requisite number of visits, the content, or quality of care, or both may not be appropriate for their needs.

Recent studies of alternative types of antenatal care provision, including observational studies of relationship-based programmes, such as, 'Centering Pregnancy' (Carlson 2006), and RCTs of community women's groups (Prost 2013), suggest that they may yield beneficial outcomes for women and babies. While quantitative reviews of existing programmes provide information on the efficacy of standard biomedical antenatal care interventions and programmes (Catling 2015; Dowswell 2015), they do not explain why some women do not access them. They also offer no insights into the underlying mechanisms of effect of programmes that integrate psychosocial aspects of care. Qualitative research is the ideal vehicle for answering questions of acceptability, and for exploring the kinds of values and beliefs that might frame uptake of future antenatal care programmes. Data arising from qualitative studies can inform the content, delivery, and provision of antenatal care, so that it is more effective, acceptable, accessible, and of higher quality, particularly for marginalised women. Qualitative data can

inform individual studies and reviews of effectiveness, by suggesting hypotheses that are relevant to women, as well as generating hypotheses that can be tested out, for example, in future subgroup analyses. In addition, these methods can inform guidelines by answering questions around the acceptability and feasibility of implementing different aspects of antenatal care, in policy and practice.

This review is designed to complement the existing Cochrane reviews of antenatal care provision (Catling 2015; Dowswell 2015), and to provide insights to further develop guidelines and care provision in the future.

Description of the topic

Antenatal care has been defined as "the routine care that all healthy women can expect to receive during their pregnancy" (NICE 2008). Globally, there is wide variation in the number and content of routine antenatal care sessions provided, including a greater or lesser degree of technical monitoring and testing (Dowswell 2015). Generally, the central purpose is prophylactic, through the monitoring and support of whole populations of pregnant women and of their babies, to maximise the health and well-being of the majority, and to identify, treat and/or refer the minority who develop actual or potential complications as the pregnancy progresses.

Description of the phenomenon of interest

This review is focused on access to and uptake of antenatal care. Pawson has theorised that "programmes are theory incarnate" in social and health care (Pawson 1998). The mismatch between the theoretical assumptions of routine antenatal care by those who design and deliver it, and those of the cultural context in which it is set, is beginning to be understood as an important barrier to the uptake of antenatal care. Much of what has been termed 'standard' antenatal care is based on an assumption that pregnancy is a fundamentally risky state clinically, and so women need to be assessed for actual or incipient risks regularly. It also assumes that pregnancy is a socially positive condition, that women recognise their pregnancies relatively early, that they have the desire to announce their pregnant state, that they see antenatal care as valuable, and that they have the social, economic, and political power to access care when it is provided. In contrast, in many countries, pregnancy is seen as a largely healthy physical state, but socially risky. For example, announcing a pregnancy can result in the risk of being subject to the evil eye if jealous neighbours find out (Finlayson 2013). Reluctance to attend clinics among some women may, therefore, be because they feel there is no need to do so if all is well; or because attending an antenatal clinic reveals the pregnancy, and risks spiritual damage; or because of the extra physical, financial, and social risks of long journeys through difficult terrain. For marginalised women in high-income countries,

reluctance to attend central clinics for antenatal care includes fear of exposure of being pregnant, and consequent social disgrace (for instance, in the case of teenage mothers) (Downe 2009). These new insights add to a barriers model in maternity care systems research that has included resource issues (lack of transport options to facilities, lack of funding for transport, need for ‘under-the-counter’ payments) and other wider cultural blocks, including the need for women in some societies to ask the permission of male elders to travel) (Thaddeus 1994). The growing concern over the impact of disrespectful and even abusive attitudes and behaviours by healthcare staff towards pregnant women and their families, also suggests a further barrier to accessing care (Bohren 2015; Bowser 2010).

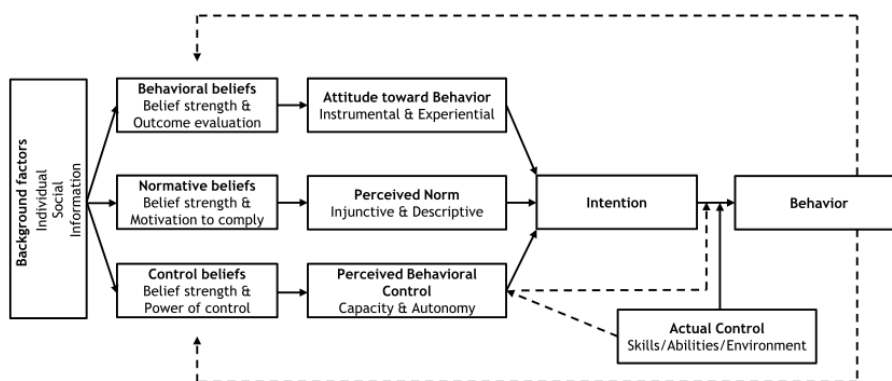
There is very little in the literature about factors that support the use of routine antenatal care, or of other kinds of antenatal care provision. Many existing antenatal care programmes that are, in theory, subject to some of the factors seen as barriers in other settings (such as distance to travel, long waiting times, the need for under-the-counter payments) have high attendance figures, and some new models appear to be attractive to women in settings, or social groups, or both, where uptake is not traditionally high. These include explicitly partnership-focused models, such as participative women’s groups (Carling 2015; Prost 2013), and ‘Centering Pregnancy’ (Carlson 2006). It is not clear what underlying mechanisms have catalysed the success of either of these existing programmes, or the new models. Indeed, there is some evidence that individual women randomised to group-type antenatal care dislike the consequent lack of privacy, and a study of male partners attending HIV testing with women at their first antenatal care visit led to a lack of uptake of antenatal care, presumably due to fear of disclosure of HIV status (Becker 2010). Looking for both promoting as well as inhibiting factors is equally important, but this should not be based on prior assumptions of what is likely to work. This review is specifically focused on studies that report on

the views of pregnant and postnatal women, and not those of other family or community decision-makers, as the intention is to find out what works from the point of view of women themselves. If they report that others have an influence on this decision-making process, this will be captured by the review findings.

The phenomenon of interest for this review, therefore, is the factors influencing the uptake of routine antenatal care from the perspective of pregnant and postnatal women.

There is little theoretical research that is directly focused on healthcare uptake, though there is a wide spectrum of research on components like knowledge, understanding of, and beliefs about benefits, and about design features, like the services that are available, accessible, acceptable, appropriate, and of good quality - AAAQ model (Potts 2008). The underpinning theory for our review is the reasoned action approach (Fishbein 2010). This was chosen by consensus among the review team as it is widely used in healthcare behavioural research, and it appeared, a priori, to have a good potential explanatory power for the phenomenon we were interested in. Logic models based on this theory should include input factors relating to attitudes, subjective norms, and behavioural control. These input factors are hypothesised to lead to the output of intended behaviour. In the right context, intended behaviours then result in actual behaviours. The reasoned action approach further states that the input factors are, themselves, preceded by three psychosocial domains, relating to behavioral, normative, and control beliefs. We hypothesise that the action of attending local antenatal care services is mediated by women’s intentions to attend, which are, in themselves, moderated by their prior attitudes to and beliefs about the value of antenatal care provided locally, local social norms around such attendance, and by the degree to which they have control over enacting those beliefs and norms, for example, through having the autonomy and finances to travel to where antenatal care is provided. The a priori logic model for the review, based on the reasoned action approach, is given in Figure 1.

Figure 1. Reasoned action approach



We will initially examine the studies included in the review to establish emerging themes, and how far these fit with the initial theoretical logic model. We will then construct amended logic model(s) to take account of all of the findings, as a basis for informing quantitative reviews, guideline development, and implementation in policy and practice in the future. A separate review will look at the views of staff in terms of factors influencing the provision of good quality antenatal care.

Why is it important to do this review?

Given the low levels of uptake of antenatal care in some countries and among some population groups, it is important to determine how antenatal care can be rendered more acceptable and accessible if it is to fulfil its promise of benefitting women and babies in the future. The WHO has recognised the potential problems with the FANC model, and, in some settings, the continuing lack of access to antenatal care as it is currently designed. At the same time, the use of some technologies and techniques, notably ultrasound, is rapidly increasing, with little evidence of added benefit, and some suggestion of possible iatrogenic damage. For example, termination for female gender is more likely in some settings when the gender of the baby is identified early (Nei 2011). In other settings, some women are overwhelmed with information, and there is no time for proper discussion or authentically informed decision-making (Carolan 2007). While antenatal care has common-sense value, there is still no strong evidence of impact from RCTs on key maternal and infant outcomes related to uptake of antenatal care as it is currently delivered around the world. This may be because of the wide variation in content, and in the degree to which care is delivered in a way that is acceptable and appropriate for, and accessible to, the women it is intended for. Qualitative review data can provide information on acceptability and accessibility alongside the findings of the current Cochrane reviews in this area. It can also inform the design of future reviews, to ensure that they capture the elements of antenatal care that are important to pregnant women. The review will therefore compliment the existing Cochrane intervention reviews on antenatal care programmes for healthy women and babies (Catling 2015; Dowswell 2015), and allow policy-makers, and those designing and delivering services, to better understand what works, and what does not, and how what works could be extended into service development and subsequent interventions in the future.

The beneficiaries of this review will be women (and their offspring) using the antenatal care services, if policy-makers, funders of the maternity services, and health workers use the findings alongside the existing quantitative Cochrane reviews to design, fund, and provide antenatal care that is better aligned with the cultural norms, views, experiences, and expectations of local women. The results will also form part of the evidence base for WHO antenatal

guidelines. The review will complement existing qualitative and quantitative reviews in this area, as described in Table 1.

OBJECTIVES

To identify, appraise, and synthesise qualitative studies exploring:

- women's views and experiences of antenatal care; and
- factors influencing the uptake of antenatal care arising from women's accounts.

METHODS

Criteria for considering studies for this review

Types of studies

This is a systematic review of qualitative primary studies. According to Merriam 2009, "qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world." To achieve this, the review will include studies using qualitative designs, such as ethnography, phenomenology, case studies, grounded theory, and mixed methods. These studies will use appropriate methods of data collection for the methodology employed, including interviews, focus groups, open-ended survey questions, diaries, and other narrative data collection methods. We will exclude studies that collect data using qualitative methods but do not perform a qualitative analysis (for example, where qualitative data are only reported using descriptive statistics). We will include mixed methods studies where it is possible to extract findings derived from qualitative research. We will include studies regardless of whether they have or have not been carried out alongside studies of effectiveness of antenatal care, and, if they are graded C or higher on our chosen quality appraisal tool (Downe 2007; Walsh 2006), and are therefore assessed as not having significant flaws (see 'Appraisal of study quality' for more details).

Types of participants

The review will include studies that report views about, and experiences of, routine antenatal care, as given by pregnant women, and those who have been pregnant at some time since 1998 (allowing for these accounts to be published by 2000 or subsequently). This time span accounts for changes in antenatal care since the publication of the previous WHO recommendations on antenatal care in 2001 (Villar 2001), which have influenced the provision of antenatal care around the world.

We will only include studies of healthy women, to ensure compatibility between this review, and the content of the WHO antenatal care guidelines that it is primarily designed to inform. Factors influencing uptake of services that are only provided for women/foetuses with particular health or social conditions (such as HIV, malaria, or in-utero interventions for malformation) are likely to differ from those influencing the behaviours of the majority of pregnant women, who see themselves as healthy.

We will not include papers if they only report what staff, caregivers, partners, or families say about the views and experiences of pregnant women.

Setting and care provider

Antenatal care provision for healthy women and babies can take place in hospitals, community institutions, primary care, and/or at home; we will include all settings. This might also include care provided through e- or m-health platforms.

Types of interventions

We will include studies about antenatal care provision for healthy women and babies. We define antenatal care as routine care provided for healthy women during their pregnancy. Care can be provided by a range of providers, including midwives, nurses, health-care workers, lay health workers (including trained traditional birth assistants), obstetricians/gynaecologists, general physicians, and/or peer supporters; we will not impose any restriction on care provider in the study selection.

We will include studies exploring the views and experiences of any or all of the following components of antenatal care.

- Content of care: consultations, tests, treatments, information, education, advice, support related to maintaining and monitoring a healthy pregnancy, and helping women to prepare for birth and parenting, where these are provided as part of formal antenatal care provision (either publicly or privately funded) for women/foetus without complications.

- How care is provided: including the perceived attitudes and behaviours of staff, and biomedical, psychosocial, relational, and other approaches to care provision.

The review will not include the following.

- Antenatal care programmes/interventions designed for women and babies with specific complications.

- Programmes/interventions that are only about antenatal education (for childbirth and/or for parenting). These programmes do not include clinical care, tests, and treatments, and they are not usually provided routinely to whole populations of women.

Phenomena of interest

The phenomenon of interest is the **factors that influence the uptake of routine antenatal services from the perspective of pregnant and postnatal women.**

Search methods for the identification of studies

Electronic searches

We will search PDQ-Evidence (pdq-evidence.org) for related reviews in order to identify eligible studies for inclusion, as well as the following electronic databases.

- MEDLINE
- Embase
- CINAHL
- PsycINFO
- AMED
- LILACS
- AJOL

We chose these databases as we anticipate that they will provide the highest yield of results based on preliminary, exploratory searches. Using guidelines developed by the Cochrane Qualitative Research Methods Group for searching for qualitative evidence (Booth 2011), we will develop search strategies for each database. We will not impose any language or geographic limit on the searches.

We will use text word searches to identify relevant studies from the selected databases. We chose not to use qualitative research filters as these are not consistent across databases. Our preliminary text word searches proved to be equally effective in locating relevant material when compared to database specific research filters. An example of a PsycINFO search strategy is shown in Appendix 1. We will include eligible studies published between 1 January 2000 and the date the search is run. This date range is intended to capture women's views and experiences of care provision since the introduction of focused antenatal care (FANC) programmes.

Searching other sources

We will scrutinise the reference lists and key authors in the reference lists and undertake backchaining and forward checking for any references not identified in the search that may be relevant.

These papers will then be subject to the same inclusion/exclusion and quality checking criteria as those identified from the search terms above.

We will check the contents pages of over 50 relevant journals as they are issued through Zetoc alerts, over the period the review is undertaken.

We will not include conference abstracts.

Data collection and analysis

Selection of studies

Assessing abstracts and full-text according to the inclusion criteria

We will collate records identified from different sources into one database and remove duplicates. Two review authors (SD, KF) will independently assess each abstract to determine inclusion against the a priori inclusion criteria. We will then retrieve and independently assess the full-text of all the abstracts we have assessed as potentially relevant, and then agree on the final list of included studies. In the event of continuing lack of agreement for a particular study, a third review author (OT) will adjudicate. Where appropriate, we will contact the study authors for further information.

Translation of non-English language papers

For papers that are not published in a language that can be understood by the review authors (i.e. other than English, French, Spanish, Portuguese, Turkish), the abstract will be subject to initial translation through open source software (Google Translate). If this indicates inclusion, or if the translation is inadequate to make a decision, we will ask members of the multilingual networks associated with the research teams of the review to translate the full-text. If this cannot be done for a study in a particular language, the study will be listed as 'inclusion not yet confirmed', to ensure transparency in the review process.

Conceptual translation between languages and cultures is recognised to be an issue in both qualitative and quantitative research (Al-Amer 2015; Stevelink 2013). Regmi 2010 discusses the issues of translation (a direct and literal word-for-word process) and transliteration (a process of translating meaning which may not be word-for-word) in undertaking qualitative research in different language and cultural groups. They use the term 'elegant free translation', from Birbili 2000 which is an approach that, in Birbili's analysis, can help the reader to 'know what is going on' even if it is less faithful to the original text. Regmi et al see this as "a process involving transcription of only the key themes or few quotes, putting in the context" (via a kind of transliteration). They

recognise that this risks the loss of some precision and meaning, but that it is a pragmatic solution to the complexity and resource demands of full translation in primary qualitative research.

Given that the current review did not aim to be philosophically phenomenological, and that the key aims are about the relatively broad concepts of influencing factors, we have taken the pragmatic decision to use the 'elegant free translation' approach to the transliteration of our included studies, rather than translating them word-for-word. We will apply this approach both at the stage of decisions about inclusion, and for data extraction and analysis.

Potential sampling from the included studies

Large numbers of studies can threaten the quality of the analysis in qualitative evidence syntheses. In addition, syntheses of qualitative studies aim for greater variation in concepts as opposed to an exhaustive sample that aims to avoid bias. To allow for the broadest possible variation within the included studies, if more than 30 studies are included, we will consider the use of maximum variation purposive sampling to select from the eligible studies. Key areas of variation that we may consider will include the cadre of healthcare worker, the type of antenatal care provision, and the geographical setting. Once these variables have been determined, we will create a sampling frame and will map all eligible studies onto the frame. We will then review the number of studies in each frame and reach a decision regarding how many studies in each cell we will include in the review.

Recording of study characteristics

We will record study characteristics using a form designed specifically for this review. The study characteristics form will record details of first study author, date of publication, language, country of study, context (urban/rural), participant group (parity, sociodemographics), type of antenatal care received (caregiver group, location, FANC, or other), theoretical/conceptual perspective of the study, research methods, sample size, method of analysis, and key themes (as recorded by the study authors in each case).

Assessment of methodological limitations of included studies

Appraisal of study quality

Our inclusion criteria specify that to be included, a study must have used qualitative methods for both data collection and data analysis. This criterion constitutes a basic quality threshold, as studies that 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 check for discrepancies. Disagreements will be resolved through discussion or by consulting a third review author. We will use the criteria from Walsh 2006 and the A-D grading of Downe 2007. This 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 Gubas 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.

Both stages will be carried out by two review authors independently, then agreed by consensus. If agreement cannot be reached, the third review author will arbitrate. We will analyse studies with a grading of C or more. Studies that are graded less than C after this process will be listed, but not included in the central analysis. As can be seen from the summary criteria given above, grading a study as D in our taxonomy means that it is judged to have 'significant flaws which are very likely to affect the credibility, transferability, dependability, and/or confirmability of the study.' We acknowledge that some qualitative researchers believe that all qualitative data have potential value in understanding phenomenon of interest, but we have argued consistently that including poor quality studies in systematic reviews risks a misunderstanding of the final phenomenon, which has potentially important consequences if the findings are to be used in a practice or policy context (Walsh 2006).

Data extraction and analysis

Following the principles of meta-ethnography (Noblit 1988), we will undertake data extraction and analysis simultaneously, for each included study in turn. Meta-ethnography uses an approach based on constant comparative analysis, where the analysis is built up study by study. The process requires the researcher to be open to the emergence of new themes, to ensure that unexpected phenomenon can be captured and examined, by subjecting the initial assumptions about what is in the data to both confirmation ('reciprocal analysis') and disconfirmation ('refutational analysis') against each study in turn. This ensures that the product of the review is continually refined as each study is included. Using the principles of Framework analysis (Gale 2013), this process will not start from a position of no knowledge, but will be used to test and, where necessary, amend the original theoretically-informed logic model (the 'framework') given in Figure 1.

Starting with the earliest published paper, we will read each included study in detail, and we will extract the relevant verbatim text, along with the themes/theories/metaphors used by the study authors. These findings will then be used to ratify and/or amend the components of the logic model iteratively before moving on to the next study. Two review authors will undertake the analysis, and any disagreements on the thematic structure/theory/amendments to the logic model will be agreed by consensus throughout the extraction and analysis process.

Framework analysis is used when there are some existing theories about what might be in the data. In the case of the current review, we had already determined that we were looking for factors influencing uptake within the more general data on views, attitudes, and experiences, and that the theory of reasoned behaviour might offer good explanatory power for the findings (as expressed in the logic model given in Figure 1).

Line of argument synthesis and final logic models

We will then synthesise the final thematic structure into a 'line of argument' synthesis. This is a phrase or statement that summarises the main findings of the study and the theoretical insights that they generate. A line of argument synthesis includes logical connections between concepts, and it will therefore reflect the final logic model(s) that are constructed from the data. In the case of the current review, we will use the line of argument, and the resulting logic model(s), to explain what might underpin perceived factors influencing women's intended and actual use of local antenatal care, in terms of social, behavioural, and control beliefs, and the contextual factors that interact with these factors to prevent or enable uptake of antenatal care. These could be used to interpret the findings of existing quantitative reviews in this field; to explain how and why the outcomes identified in the accompanying antenatal care guideline 'work', for who and in what context; and to identify areas for future effectiveness research in this field. The models will also demonstrate how far the reasoned action approach does or does not explain these factors on the basis of the data included in the review.

Reflexive note

In keeping with quality standards for rigour in qualitative research, the review authors considered their views and opinions on antenatal care as possible influences on the decisions made in the design and conduct of the study, and, in turn, on how the emerging results of the study influenced those views and opinions. All review authors believed at the outset, that contact with formal and informal caregivers throughout pregnancy was valuable, but that formal antenatal care provision is generally over-focused on clinical procedures and the assessment of risk/ill-health, with too little focus on psychosocial aspects of pregnancy. We therefore used refutational analytic techniques ('disconfirming analyses') to min-

imise the risk that these presuppositions would skew the analysis and the interpretation of the findings.

Planned subanalysis

Two broad areas of subanalyses are planned as follows.

- Data from low-/middle-income countries, and those from high-income countries.

We propose this subanalysis due to differences in uptake, health beliefs, and health system accessibility and quality between these two types of settings.

- Type of respondent (pregnant women; postnatal women; those who have and who have not used antenatal care).

This subanalysis is proposed because expectation and experience may result in different accounts, and those who have not attended antenatal care may have different experience of influencing factors than those who have used antenatal care.

Depending on what emerges from the data, we might consider other subanalyses, including the type of antenatal care that the views and experiences relate to (for example, FANC; classic schemes with more than four routine visits; partnership-based models); and care setting/location of antenatal care provision. Other subanalyses might also be suggested by the emerging data, and these will be reported as post-hoc examinations.

Appraisal of the confidence in the review findings

We will use Confidence in the Evidence from Reviews of Qualitative research (CERQual) to assess the confidence that may be placed in review findings (Lewin 2015). This approach has been developed by the GRADE-CERQual Project Group 2004. It uses the following four concepts to assess confidence.

- 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.
- 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.
- Coherence of the review finding: 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.

- Adequacy of the data contributing to a review finding: an overall determination of the degree of richness and quantity of data supporting a review finding.

The above assessments will result in an overall assessment of our confidence in each individual review finding as either high, moderate, low, or very low. We will conclude the appraisal of confidence in each review finding by drafting a table that will summarise the key findings, level of confidence in each, and an explanation for our assessment of each finding.

Using the synthesised qualitative findings to supplement the Cochrane intervention reviews

As part of data synthesis, we plan to explore how the findings from our review relate to, and help to explain the findings of, the related Cochrane intervention reviews (see Table 1). We will also use the findings to inform panel judgements on the acceptability and value of proposed components and interventions for new WHO antenatal care guidelines. In this review, we will build on the emerging experience of others in the field (Ames 2015), by using a narrative approach to explore how the reviews relate, and how the findings from the qualitative review inform the findings from the intervention reviews and vice-versa. At least two review authors will work together to map our review findings in relation to the intervention reviews, and to the antenatal care guideline development process.

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* Indicates the major publication for the study

ADDITIONAL TABLES

Table 1. Existing reviews in the area of routine antenatal care for healthy women and babies

Authors, date	Title	Focus	Methodology	What the current review adds
Dowswell 2015	Alternative versus standard packages of antenatal care for low-risk pregnancy	Effectiveness of reduced schedule of ANC visits (FANC).	Quantitative (Cochrane Review)	Data that might explain why reduced visit schedules work/do not work for some women/groups
Catling 2015	Group versus conventional antenatal care for women	Effectiveness of different approaches to ANC.	Quantitative (Cochrane Review)	Data that might explain why reduced visit sched-

Table 1. Existing reviews in the area of routine antenatal care for healthy women and babies (Continued)

				ules work/do not work for some women/groups
Downe 2009	Why marginalised women don't use ANC (HICs)	Exploration of women's views and experiences of non-use of ANC in HICs	Qualitative meta-synthesis	A wider scope, as the proposed review includes all women from all settings, and includes facilitators as well as barriers
Finlayson 2013	Why marginalised women don't use ANC (LMICs)	Exploration of women's views and experiences of non-use of ANC in LMICs	Qualitative meta-synthesis	A wider scope, as the proposed review includes all women from all settings, and includes facilitators as well as barriers
Phillippi 2009	Women's perceptions of access to prenatal care in the United States	Exploration of women's views and experiences of access to ANC in the US	Qualitative meta-synthesis	A wider scope, as the proposed review includes all women from all settings
Downe 2016	What matters to women	Exploration of what pregnant women might want and need to support them through pregnancy	Qualitative meta-synthesis	This review excluded women who were reporting on their actual experience of ANC. The proposed review will include these accounts

ANC: antenatal care

FANC: focused antenatal care

HICs: high-income countries

LMICs: low- and middle-income countries

APPENDICES

Appendix I. Example: PsycINFO Search Strategy

S11	S9 NOT S10	
S10	TI/Ab [breastfeed\$ OR intrapartum OR postpartum OR contracepti\$ OR men\$ OR male\$ OR obstetric\$ OR abortion OR terminat\$ OR "logistic regression" OR chi OR statistic\$]	

(Continued)

S9	S7 AND S9	
S8	Date Limit 1 st Jan 2000 - present	
S7	S5 AND S6	
S6	Ti/Ab [qualitative OR ethnograph\$ OR phenomenol\$ OR “grounded theory” OR hermeneutic\$ OR “lived experience\$” OR “symbolic interaction\$” OR narrative\$ OR “life experience\$” OR “action research” OR observation\$ OR “focus group\$” OR interview\$ OR “mixed method” OR “multi-method”]	
S5	S1 AND S2 AND S3 AND S4	
S4	Ti/Ab [want\$ OR like OR desire\$ OR require\$ OR expect\$ OR anticipat\$ OR view\$ OR experience\$ OR perspective\$ OR perception\$ OR opinion\$ OR assum\$ OR know\$ OR understand\$ OR encounter\$ OR belief\$ OR believe\$ OR attitude\$ OR help\$ OR promot\$ OR enable\$ OR empower\$ OR permi\$ OR encourage\$ OR barrier\$ OR prevent\$ OR obstacle\$ OR delay\$ OR deny OR denial]	
S3	Ti/Ab [woman OR women\$ OR patient\$ OR consumer\$ OR “service user\$”]	
S2	Ti/Ab [care OR support\$ OR health\$ OR clinic\$ or outpatient\$ OR session\$ OR matern\$ OR service\$]	
S1	Ti/Ab [antenatal\$ OR prenatal\$ OR antepartum OR perinatal\$ OR pregnan\$]	

CONTRIBUTIONS OF AUTHORS

- OT conceived and commissioned the study.
- SD and KF drafted the protocol with revisions from OT.
- All authors read, amended, and approved the manuscript.

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