



BMJ Open Fatherhood and men's participation in antenatal care in rural sub-Saharan Africa: a scoping review protocol

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ABSTRACT

Introduction Men's participation is imperative for improving antenatal care (ANC) access and mother and child health outcomes in sub-Saharan Africa (SSA). Research looking at improving men's participation in ANC often focuses on their instrumental and psychosocial roles and on biomedical ANC systems. There is limited understanding of how context-specific cultural experiences of fatherhood influence men's participation in ANC within broader communal support networks and across different ANC systems in SSA. Against this background, and to understand how local communities in SSA conceive men's participation in ANC, a scoping review will be undertaken to synthesise existing literature around local cultural experiences of fatherhood and men's participation in ANC in rural settings in SSA.

Methods and analysis The classical scoping review methodology developed by Arksey and O'Malley will be used to conduct the scoping review described above. Empirical studies published between 1 January 2000 and 31 August 2024 will be systematically searched for in key online databases (eg, PubMed/MEDLINE, CINAHL, EMBASE, PsycINFO, Cochrane Library, African Index Medicus, African Journals Online) and grey literature (eg, reports from key organisations like UNICEF and the WHO). Literature reviews, personal opinion articles and theoretical or conceptual articles that do not systematically analyse data, and non-English texts, will be excluded. Data will be extracted from the included texts in the form of study characteristics, which will be analysed using descriptive statistics, and key issues to be analysed thematically.

Ethics and dissemination No ethical approvals are needed for this scoping review since data will be abstracted from already-published literature and no additional data will be collected. The findings will be shared with policymakers, practitioners, researchers, students and local communities through peer-reviewed journal publication(s), conference presentations, public lectures and policy-focused stakeholder and community meetings in and outside SSA.

INTRODUCTION

Despite significant improvements over the years, sub-Saharan Africa (SSA) persistently experiences the poorest mother and child health outcomes globally.^{1,2} As of 2022, SSA had a maternal mortality ratio (MMR) of 536

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The planned scoping review will be the first to synthesise the existing literature around local cultural experiences of fatherhood and men's participation in antenatal care (ANC), including how men's participation operates within broader communal networks and across different ANC systems in rural sub-Saharan Africa (SSA).
- ⇒ A systematic approach following Arksey and O'Malley's framework (with recent improvements by the Briggs Institute) will be used to conduct the scoping review, ensuring that the review is transparent and replicable, and the findings are rigorous.
- ⇒ The scoping review will generate comprehensive understandings around fatherhood and men's participation in ANC in rural SSA that will inform the development of culturally appropriate policy strategies and further research priorities.
- ⇒ Limitations of this scoping review are the exclusion of non-English texts and no assessment of the quality of the studies included in the review

deaths per 100 000 live births, two times as high as the global MMR of 223.² The region has the highest under-five mortality rate (U5MR) which, as of 2022, was estimated as 74 deaths per 1000 live births, nearly twice the global U5MR of 38.¹ These high maternal and U5MR, even higher in rural communities, reflect gaps in access to antenatal care (ANC) that must be addressed to prevent many more women and children from dying from preventable pregnancy-related causes in SSA.^{3,4} ANC refers to care provided to pregnant women by a skilled provider to achieve the best health outcomes for mothers and children.^{5,6}

Men's participation in ANC is recognised internationally and in SSA as imperative to improving ANC access and mother and child health outcomes.^{7,8} Men's participation refers to 'the involvement (...), engagement or support of men in all activities related to maternal (and child) health' (p1).⁹ Although



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evidence of its relationship with ANC utilisation is limited,¹⁰ men's participation in ANC is associated with improvements in birth preparedness, skilled birth attendance, institutional births, timely initiation of breast feeding, postnatal care uptake, maternal mental health, reproductive health knowledge, family planning services uptake, reduced maternal and newborn mortality rates and enhanced couple communication in SSA.^{8 11 12}

How men participate in ANC or mother and child health issues is largely shaped by their local cultural experiences of fatherhood.¹³ Fatherhood is 'a social status about a biological or procreative reality and/or the actuality of playing the role of father' (p388).¹⁴ In most SSA contexts, it goes beyond biology and denotes responsibilities to lead, provide for, protect and nurture one's family.^{15 16} Although many studies have documented men's or fathers' roles in ANC,⁸ there is still limited understanding of the specific ways fatherhood experiences shape men's participation in ANC in SSA. Despite SSA's cultural diversity, current literature generally treats fatherhood in the region as monolithic (ie, defined by a homogenous set of generally unchanging customs, norms, experiences, etc).¹⁷ Moreover, traditional cultural norms around male authority, leadership or control are often seen as retrogressive or harmful with limited or no fair and respectful engagement¹⁸ with *both* the benefits and negatives of these norms.¹⁹

Nsamenang adds that many cultures in SSA perceive fatherhood as 'a relational status that connotes a partnership in the preparation of the next generation' (p388).¹⁴ This understanding reflects the community that characterises most SSA peoples' ways of life.²⁰ Here, community means having harmonious relationships with others in society, not just some specific geographical area.²¹ A harmonious relationship entails sharing a sense of identity (ie, sharing a specific way of life and experiencing oneself as bound up with others) and exhibiting solidarity with others (ie, acting for the good of others).²² Community is evident too in pregnancy, ANC and childbirth in SSA.²³ Men or fathers *collaborate* with other (extended) family and local community members to facilitate access to mother and child healthcare, including ANC.^{24 25} Thus, both fatherhood and male participation in ANC in SSA are embedded within communal systems or networks and must be understood in that regard.¹⁵

Studies increasingly show that families in SSA access, often concurrently, multiple forms of local indigenous African and mainstream biomedical ANC,^{26 27} a phenomenon Musiwa, Sinha, Hanley, Ruiz-Casares and Skovdal termed *ANC pluralism*.²⁸ Indigenous African ANC entails forms of pregnancy and childbirth care based on indigenous African health and knowledge systems.²⁹ Biomedical ANC includes forms of pregnancy and childbirth care grounded in (originally Western) medical and biological understandings of pregnancy.³⁰ ANC pluralism reflects multiple ways of experiencing pregnancy, ANC, childbirth, illness and health in SSA.^{31 32} It complicates the understanding of men's participation in ANC, with some

studies indicating some variations between local indigenous and biomedical ANC systems.^{33 34} Further analysis of these issues can enhance understandings around fatherhood and men's participation in ANC in SSA.

We will conduct a scoping review to synthesise current knowledge about *underlying* influences of local cultural experiences of fatherhood on men's participation in ANC in rural SSA. More specifically, the existing literature will be examined to map out issues related to *why*, from a fatherhood perspective, men or fathers act in specific ways to enhance (or restrict) access to ANC in rural SSA. Existing research will be scoped to understand how fatherhood and men's participation fit within and are shaped by broader experiences of community during pregnancy, childbirth and ANC in rural SSA. Given rural SSA's cultural diversity, current studies will be scoped for any similarities and variations in how local experiences of fatherhood shape men's participation in ANC across rural SSA.

OBJECTIVES

The planned scoping review aims to synthesise current knowledge about how local cultural experiences of fatherhood influence men's participation in ANC in rural SSA. Its specific objectives are to:

1. Describe the empirical issues and theoretical/conceptual and methodological approaches used in current research around local cultural experiences of fatherhood on men's participation in ANC in SSA.
2. Define current knowledge about how fatherhood and men's participation in ANC fit within, or are shaped by, the broader contexts of community and ANC pluralism in SSA.
3. Identify gaps and further research priorities in the existing literature around fatherhood and men's participation in ANC in SSA.

METHODS AND ANALYSIS

An emerging research methodology, scoping reviews are similar to systematic reviews in their structured approach but different in their purpose and methodologies.³⁵ Because the aims of this scoping review are broad, a scoping review was deemed more appropriate than a systematic review. A scoping review was chosen as the most suitable design for the study described in this article because it will enable the synthesis of current understandings around fatherhood and men's participation in ANC in rural SSA in ways that have not been done before.³⁶ The framework developed by Arksey and O'Malley,³⁷ which Levac *et al* and Colquhoun *et al* expanded on, and Peters, Godfrey *et al* further outlined in the Joanna Briggs Institute Manual (V.2020),^{38–40} will be employed for this scoping review. The stages of the review include: (1) defining the research question, (2) identifying relevant studies, (3) selecting studies, (4) charting the data and (5) collating, summarising and reporting the results.³⁷

Table 1 Inclusion framework for a scoping review on fatherhood and men's participation in ANC in rural SSA

Framework item	Item components or definitions
Population(s)	<ul style="list-style-type: none"> ▶ All men or women ▶ Expectant women or mothers of under-five children regardless of age ▶ Spouses of expectant women or mothers of under-five children regardless of age
Concept(s)	<ul style="list-style-type: none"> ▶ <i>ANC</i>: care provided to expectant women by a 'skilled provider' to achieve the best health outcomes for mothers and children.^{5 6} ▶ <i>Fatherhood</i>: '(A) social status about a biological or procreative reality and/or the actuality of playing the role of father. It is a relational status that connotes a partnership in the preparation of the next generation by procreative partners—a male and a female. The status of father is attained through paternity, but sometimes through a social process of sustaining and supporting the development of children without regard to whose paternity is involved' (p. 388).¹⁴ ▶ <i>Men's participation</i>: 'the involvement, participation, engagement or support of men in all activities related to maternal health' (p. 1).⁹ ▶ <i>Community</i>: Relating harmoniously to other beings in society. In SSA, community is often conceptualised as relationships, not just some geographical area out there (see more details in the <i>Introduction</i>).^{21 22} ▶ <i>ANC pluralism</i>: use of multiple forms of care for health and wellness in pregnancy or childbirth.²⁸
Context(s)	Studies conducted in SSA between 1 January 2000 and 31 August 2024 (inclusive)

ANC, antenatal care; SSA, sub-Saharan Africa.

The review will be conducted from 1 March 2024 to 31 August 2024.

Stage 1: defining the research question

The Population–Concept–Context (PCC) framework was used to identify the main concepts in the primary review question and to inform the search strategy (see [table 1](#) for more details). The primary review question will be:

How do local cultural experiences of fatherhood influence men's participation in ANC in rural SSA?

A subquestion to our primary question will be:

What do we know from the existing literature about how men or fathers perceive their responsibilities in ANC within their local cultural contexts in rural SSA?

The above questions will facilitate a mapping of the range of relevant literature around these aspects and inform the direction of future research.

Stage 2: identifying relevant studies

A comprehensive search strategy will be developed to identify relevant studies written in English from 1 January 2000 to 31 August 2024. Due to resource limitations, studies written in other languages will be excluded, and this is a potential limitation of this scoping review. The year 2000 was chosen as the baseline year as this is around the time when research about men's participation in reproductive, maternal and child health issues started gaining momentum in SSA, particularly within the context of global health programmes under the Millennium Development Goals.^{7 41} To identify relevant studies for this scoping review, key online databases will be systematically searched mainly:

- ▶ PubMed/MEDLINE
- ▶ CINAHL

- ▶ EMBASE
- ▶ PsycINFO
- ▶ Cochrane Library
- ▶ African Index Medicus
- ▶ Africa Journals Online
- ▶ Social Sciences Abstract
- ▶ Sociology Collection
- ▶ Social Sciences Citation Index.

Websites of organisations interested in ANC and maternal and child health, including WHO, UNICEF, UNFPA and International AIDS Society, will be searched as well.

A multistage, iterative literature search will be conducted in the electronic databases mentioned above. A combination of Boolean logic operators will be applied to glean the literature. The first search will be a broad capture using key Medical Subject Headings (MeSH) or search terms, including 'father', 'fatherhood', 'fathering', 'parenting', 'men's/male participation/involvement/engagement/inclusion', 'decision-making', 'communication', 'caregiving', 'antenatal care', 'access', 'use/utilization' and 'Angola or Benin or Botswana or Burkina Faso or Burundi or Cameroon or Cape Verde or Central African Republic or CHAD or Comoros or Congo or Congo Democratic Republic or Djibouti or Equatorial Guinea or Eritrea or Ethiopia or Gabon or Gambia or Ghana or Guinea or Guinea-Bissau or Cote d'Ivoire or Ivory Coast or Kenya or Lesotho or Liberia or Madagascar or Malawi or Mali or Mozambique or Namibia or Niger or Nigeria or Sao tome and Principe or Rwanda or Senegal or Seychelles or Sierra Leone or Somalia or South Africa or South Sudan or Sudan or Swaziland or Tanzania or Togo or Uganda or Zambia or Zimbabwe' OR 'Africa, South of the Sahara' OR 'sub-Saharan Africa'.

Next, this broad search will be narrowed down to studies that consider local cultural experiences of fatherhood by supplementing the first broad capture with more MeSH or search terms like ‘culture’ and ‘cultural norms/practices/beliefs/experiences/factor’. Finally, search terms and their combinations like ‘community’, ‘communal’, ‘networks’, ‘medical pluralism’, and ‘indigenous/traditional African care practices/systems’ will be added to capture studies that consider the broader communal and ANC pluralism contexts that shape or influence men’s participation in ANC in rural SSA. All identified studies will be downloaded and imported into a reference library using EndNote. A draft copy of our search strategy that includes the target databases, key search terms, filters and preliminary yields is attached as online supplemental file 1.

Stage 3: study selection

Inclusion/exclusion criteria

Using the PCC framework proposed by the Joanna Briggs Institute,³⁶ studies that meet at least one of the criteria in each category in [table 1](#) will be included. All studies that employed qualitative, quantitative or mixed methods, including systematic analysis of primary or secondary data and application of relevant theoretical or conceptual frameworks to draw data-driven conclusions, will be included.^{42 43} The studies will include peer-reviewed publications and grey literature accessed through the online platforms mentioned earlier. The reference lists of all included studies will be screened to ensure that the literature search is saturated and does not miss any relevant publications.

Literature reviews (scoping, systematic, narrative, meta-analyses, etc), personal opinion articles and theoretical or conceptual articles that do not systematically analyse primary or secondary data, as well as non-English texts, will be excluded. All excluded materials will be accounted for to understand any potential biases or the implications of such exclusions to the final findings.

Search outcomes

A complete dual review strategy will be employed where two reviewers will independently select studies at the title/abstract and full-text screening stages.⁴⁴ Double screening reduces bias, ensures transparency in study selection and enhances the reliability of the results.⁴⁵ Using DistillerSR software and based on the inclusion criteria specified earlier, two independent reviewers (ASM and LM) will first pilot study selection on a random sample of studies identified per step 2. At the title/abstract and full-text screening stages, Cohen’s kappa will be computed to measure the extent of (dis)agreement in study selection between the two reviewers. The kappa statistic is much more preferable to the percentage approach as it accounts for the possibility that reviewers’ decisions to include or exclude some studies may be based on chance.⁴⁶ In the event of a kappa statistic below 0.8 (inadequate agreement), the two

reviewers will discuss and resolve any disagreements and revise the study selection criteria.⁴⁷

After finalising the study selection criteria, two research assistants will independently screen the identified studies according to the objectives and inclusion criteria of this scoping review. Similar to the dual review steps described above, the research assistants will select studies for this scoping review in two stages: title/abstract and full-text screening. They will discuss and resolve any disagreement by consensus, failure of which any of the two reviewers involved in piloting and finalising the selection strategy (see previous paragraph) will be consulted to serve as a tie-breaker.

The title/abstract screening stage of the study selection will start with removing any duplicate studies. Thereafter, the titles and/or abstracts of the remaining articles will be screened. A classification of ‘yes’ will be marked for all studies that meet the inclusion criteria for this scoping review. A ‘no’ classification will be given to studies that do not meet these criteria, and the reason(s) for exclusion will be specified for each excluded article. For studies that the research assistants involved in study screening are unsure of, an ‘unclear’ designation will be applied, along with the reason(s) for such. All studies with a ‘yes’ or ‘unclear’ designation will proceed to full-text review.

In the full-text review stage, reviewers will read and further screen the selected articles as per the objectives and inclusion criteria of this scoping review. Another kappa statistic will be developed to assess (dis)agreement, and reviewers will discuss and resolve all disagreements by consensus. In the unlikely event of further disagreement(s), the author(s) of the study/ies in question will be contacted for any additional information that may help resolve the disagreement(s).⁴⁴

Quality appraisal

The quality of the final studies selected for this scoping review will not be assessed as this is not a key concern of a scoping review methodology.³⁷ This is another potential limitation of this scoping review.³⁸ However, recommendations may be suggested on how future studies can address quality issues based on the findings of this scoping review.

Stage 4: data charting

Data charting refers to ‘synthesizing and interpreting qualitative data by sifting, charting and sorting material according to key issues and themes’ (p26).³⁷ Following Levac’s *et al* suggestions,³⁹ a standard Excel data charting form will be developed and populated with key study characteristics (eg, author(s), year of publication, title of study, journal of publication, geographical region (rural/urban), study design, methods used, etc) as well as key issues and themes from each selected study vis-à-vis the objectives of this review. This process will be iterative, with back-and-forth data extraction and updating of the data charting form.³⁸

Data charting will begin with a pilot phase where two independent reviewers (ASM and LM) will chart data from a random sample of about 5–10 of the final selected studies. This pilot phase will determine if both reviewers' independent chartings align with the objectives of the scoping review and allow for any changes to be made to the data charting form.³⁹ A kappa statistic will be generated to measure reviewers' (dis)agreement in this pilot charting stage. At this stage, no significant disagreements between the independent reviewers are anticipated that may require consulting with a third-party expert. In the unlikely event that this occurs, the reviewers will discuss and resolve the disagreement(s) by consensus and, if still unresolved, consult with a third-party expert.⁴⁵ They will also revise the data charting form accordingly.

Stage 5: collating, summarising and reporting the results

Following Levac's *et al* recommendations,³⁹ data will be synthesised in three phases. First, all charted data about study characteristics (see examples in the Stage 4: data charting section) will be analysed and summarised using easy-to-understand descriptive statistics. Additionally, thematic analysis will be used to analyse and summarise all charted data relating to key issues and themes vis-à-vis the objectives of this scoping review. In the second phase, results will be reported. Quantitative results will be presented using tables and/or graphs and qualitative findings using key themes. Reporting will be conducted iteratively, and the reporting scheme will be continuously adjusted. Finally, the meanings of the findings and their implications for policy, practice and further research will be discussed in terms of the objectives of this scoping review.^{38 39}

Patient and public involvement

Patients or the public were not involved in the design, conduct, reporting or dissemination plans of this protocol or the planned scoping review. However, we acknowledge that the planned scoping review derives from a larger research project that engaged healthcare policymakers and practitioners, community-level key informants and parents or legal guardians to critically examine ANC access and associated social determinants in rural Manicaland, Zimbabwe.⁴⁸ This work hinted at complex ways by which fathers and men impacted ANC experiences. However, multiple, conflicting understandings of male participation seemed to differ between local indigenous and biomedical ANC systems. These findings reflected the range of local cultural experiences of fatherhood and the broader contexts of community and ANC pluralism that shape experiences of pregnancy, ANC and childbirth in Manicaland and, by implication, rural Zimbabwe and rural SSA. The scoping review outlined in this protocol builds on these findings through an in-depth scoping of the existing literature addressing the aims and objectives mentioned above.

Ethics and dissemination

No ethical approvals are needed for this scoping review since data will be abstracted from the already-published literature, including grey literature. No primary data will be collected for this scoping review. Reviewers will declare any conflicts of interest with regard to studies included or excluded from the scoping review.

The findings of this scoping review will inform the design and implementation of culturally relevant initiatives and further research to enhance men's participation and mother and child health outcomes in rural SSA. Knowledge sharing will be embedded throughout the implementation of the review. While this will not be done with all SSA countries, key stakeholders (health-care policymakers and practitioners, community-level key informants, parents, etc) in Manicaland, Zimbabwe will be engaged to ensure relevance with and rapid uptake of results in the ongoing work around enhancing ANC access in the province. Stakeholders in Manicaland will be engaged as this scoping review directly builds on similar previous/ongoing work there.⁴⁸ While Manicaland does not entirely represent SSA, the issues addressed in this scoping review affect most rural SSA contexts.

Furthermore, all authors of this scoping review will solicit critical feedback at several junctures during the implementation of this scoping review from their respective networks of policymakers, practitioners, researchers and students in and beyond SSA. This includes ANC-interested researchers and students in the Department of Health Research Methods, Evidence, and Impact at McMaster University, the Centre for Research on Children and Families at McGill University, the Department of International Public Health at the Liverpool School of Tropical Medicine and the Department of Health Sciences at Africa University. The input gathered through these processes will enhance the rigour and relevance of this scoping review.

The final results of this scoping review will be shared with diverse stakeholders (including local communities) from mainstream and indigenous African healthcare systems who develop, provide or receive ANC services and are interested in enhancing men's participation in ANC in and outside rural SSA. The results will be shared through a full report of the scoping review, peer-reviewed journal publication(s), conference presentations, public lectures, and stakeholder and local community meetings. Future evaluations can potentially build on this scoping review.

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Contributors ASM conceptualised the scoping review, with input from LM. RC developed the search strategy, with input from ASM and LM. ASM and LM wrote the initial draft of the scoping review protocol. WM, ON and EC provided extensive reviews to improve the initial and subsequent drafts of the protocol. All authors reviewed and approved the final draft of the protocol before submission. ASM is the guarantor.

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Competing interests None declared.

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