

STUDY PROTOCOL

REVISED

How do social norms influence the sexual and

reproductive health of very young adolescents in sub-Saharan

Africa? A scoping review protocol

[version 2; peer review: 2 approved, 1 approved with reservations]

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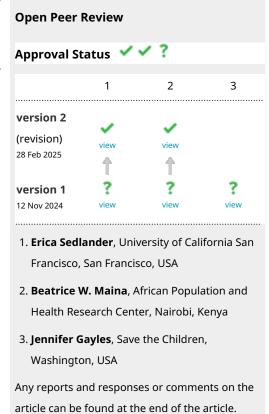
Abstract

Introduction

Introduction Very young adolescents (VYAs, aged 10-14 years) in sub-Saharan Africa (SSA) have the worst sexual and reproductive health (SRH) outcomes of this age group worldwide due to structural, behavioural, socioeconomic and other factors. Social and gender norms have important consequences for the SRH and wellbeing of VYAs both now and over their life course. SRH programming often focuses on older adolescents (aged 15-19 years), overlooking younger ones. This scoping review sets out to explore how social and gender norms influence VYAs' SRH in SSA, in addition to exploring interventions that have been effective, to inform a context-specific intervention.

Methods

We will employ the methodology developed by Arksey and O'Malley to review the available literature. We will search online databases (PubMed/MEDLINE, CINHAL, EMBASE, PsycINFO, Cochrane Library, and African Index Medicus) for original studies published between 1 January 2000 and 31 December 2024. Further, we will perform a manual search to include relevant grey literature. The steps in the review are: 1) defining the research question, 2) identifying relevant studies, 3) selecting studies, 4) charting the data, and 5) collating,



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summarising, and reporting the results.

Results

Results We will report findings in accordance with the guidance provided in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) statement. We will analyse and summarise data about study characteristics using descriptive statistics. We will use thematic analysis to analyse and summarise key themes and issues. We will triangulate quantitative and qualitative findings.

Discussion

The review will map the breadth of studies focusing on social and gender norms, and SRH among VYAs, in addition to exploring interventions that have been effective. Findings will help us and others develop context-specific, bespoke interventions.

Plain language summary

This study protocol outlines a scoping review to explore how social and gender norms influence younger adolescents' sexual and reproductive health in sub-Saharan Africa. The protocol follows the Arksey and O'Malley strategy to review the available literature. The key steps to be followed in the review are: defining the research question, identifying relevant studies, selecting studies, charting the data, and collating, summarising, and reporting the results. The review aims to inform future research on how gender and social norms influence younger adolescents' sexual and reproductive health in addition to informing and influencing interventions and evaluations in this area.

Keywords

Scoping review protocol, Social and gender norms, Very young adolescents, Sexual and reproductive health, Sub-Saharan Africa

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Conceptualization, Methodology, Resources, Supervision, Writing – Review & Editing; Dambi J: Formal Analysis, Methodology, Resources, Supervision, Writing – Review & Editing; Cowan F: Formal Analysis, Methodology, Resources, Supervision, Writing – Review & Editing;

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REVISED Amendments from Version 1

We have added an additional co-author, AL, who took part in the conceptualization, methodology, resources, supervision as well as writing review & editing of the article. We have re-worded the review title to include social norms since they encompass a wide range of norms, including gender norms. We have also included findings from the Global Early Adolescent Study, which highlights the context-specific nature of very young adolescents' sexual reproductive health realities. Previously, we used the term younger adolescents, now we use very young adolescents (VYAs) to align with World Health Organization language. In the latest version, we re-state the purpose of the review, noting that it seeks to map the breadth of studies focusing on social and gender norms, while also exploring interventions that have been effective. We have also added more literature specific to the Sub-Saharan Africa context. Further, we have added "gender norms" to the Population Concept Context framework, as well as in the search terms. Based on reviewer suggestions, we have revised research questions to reflect the range of interventions relating to social and gender norms and SRH of VYAs and their efficacy in SSA. We have also revised the conclusion to highlight how the proposed review will help us and others develop more contextspecific, bespoke interventions.

Any further responses from the reviewers can be found at the end of the article

Introduction

Adolescence is a critical life stage as it signifies the shift from childhood to physical, psychological and social maturity¹. During this phase, adolescents develop and build knowledge and abilities to address crucial aspects of their health and development while their bodies undergo maturation². Exactly when adolescence starts and ends has been a subject of debate, especially as some view a 10-year-old as a child and a 19-year-old as an adult². We are guided by the World Health Organisation (WHO) which defines "adolescents" as individuals in the 10–19 years age group, "youth" as those in the 15–24 years range, while "young people" covers those 10–24 years old³.

There are ~1.3 billion adolescents (10–19 years old) worldwide, accounting for 16% of the global population¹. About half are classified as very young adolescents (VYAs aged 10–14 years), of whom around 90% reside in low- and middle-income countries⁴. In sub-Saharan Africa (SSA), adolescents are a particularly important group as the number of young people in Africa is projected to double in the next 30 years⁵.

The World Bank predicts that Africa's ability to benefit from the projected population growth directly depends on the health and well-being of today's adolescents⁵. Therefore, it is crucial to invest in the health of adolescents across a wide range of outcomes, which can lead to broader societal gains, including improved productivity and economic gains. Focusing on sexual and reproductive health (SRH) is critical given adolescents in SSA have the worst SRH outcomes of this age group worldwide^{6,7}. For example, unmarried girls in SSA have the highest rates of abortion and abortion-related morbidity and mortality of any region^{6,7}. Rates of curable sexually transmitted infections are higher, and key SRH service indicators such as contraceptive use, antenatal visits/adherence or HIV testing are poorer than in any other World Health

Organisation (WHO) region^{8,9}. Further, adolescent girls in SSA account for 75% of new HIV infections globally¹⁰. These SRH challenges are due to a range of factors - structural, behavioural, socioeconomic and sociocultural, including social norms^{11,12}.

Social norms are unwritten or informal social rules that determine how people ought to behave in certain situations¹³. Gender norms are a subtype of social norms that dictate how men and women should behave¹³. Social and gender norms are both accompanied by sets of positive and negative sanctions for norm abiders/adherents and violators alike¹⁴. Relatedly, social and gender norms are hinged on, and reflect, the predominantly patriarchal character of most SSA societies¹⁵. Patriarchy, the social and ideological classification of men as superior and women as subordinate and dependent, is an essential determinant of gender relations¹⁶. Patriarchal structures confer power on men to control resources and dominate women, leading to social and gender norms that are favourable to the former and punitive to the latter¹⁷.

There are several other intertwined norms related to virginity, control of female sexuality, fertility and childbearing, and family planning use^{15,18,19}. These either facilitate or impede healthy SRH behaviours and service seeking. For example, females who either purchase condoms or suggest their use are considered 'loose' and therefore, both unfit and unsuitable for marriage^{15,18,19}. Such negative "sanctions" contribute to the poor SRH outcomes described earlier.

While gender socialisation begins in childhood, it intensifies in early adolescence (10–14 years) and solidifies in later adolescence (≥15 years)²0-22. However, the plasticity of the early adolescent brain offers a prime opportunity to shape self-perception and behaviour and, manipulate social constructs²¹. Intervening in early adolescence, when attitudes and behaviours are still malleable, provides the opportunity to promote gender-equitable identities and challenge inequitable gender stereotypes before they are solidified and become less amenable to change. Once positive social and gender norms are inculcated, their impact has important consequences for the SRH and wellbeing of adolescents both now and over their life course¹³.

In SSA, SRH programmes have mostly focused on older adolescents (aged 15–19 years) (aged 15–19 years)²³. This is due to at least two reasons. Firstly, early adolescence (10–14 years) is generally a time of good health, when this group is not as vulnerable to illness as when they are younger²⁴. Secondly there are (mistaken) beliefs that VYAs are too young to be provided with information on SRH and/or that they are not sexually active^{25–27}, which serve as obstacles to both research and program development. Resultantly, there are fewer initiatives focusing on VYAs²⁸. An exception is the Global Early Adolescent Study (GEAS)²⁸.

The GEAS is a longitudinal, multi-country initiative that is exploring VYAs' perceptions of the gender norms that regulate their behaviour, how they form their own beliefs about gender, and how these beliefs align with social norms in their communities, including in four African countries: Democratic Republic of Congo, Kenya, Malawi and South Africa²⁹. An

important observation has been that, as with other population groups, intervention effects do differ by context, and results can be highly contextual, even for settings generally considered 'similar'³⁰. Indeed, there is increased recognition that African masculinities are produced in unique and varying contexts of intersections (including class, ethnicity, sexuality)³¹. This points to the need for context-specific, bespoke initiatives.

The proposed review seeks tomap the breadth of studies focusing on social and gender norms, and SRH among VYAs, in addition to exploring interventions that have been effective. Findings will inform the development of a context-specific, bespoke intervention

Methods

We will employ the scoping review framework developed by Arksey and O'Malley³². The review stages include: 1) defining the research question, 2) identifying relevant studies, 3) selecting studies, 4) charting the data, and 5) collating, summarising and reporting the results³².

Stage 1: Defining the research question

The review research questions are informed by the Population–Concept–Context (PCC) framework³³. The main review question is "How do social and gender norms influence the SRH of very young adolescents (aged 10–14) in SSA?" A sub-question is "What interventions relating to social and gender norms and SRH of VYAs in SSA have been effective?". By addressing these questions, we will be able to outline the range of relevant literature around these aspects and inform the development of a context-specific, bespoke intervention.

Stage 2: Identifying relevant studies

We will develop a comprehensive search strategy to identify relevant studies written in English from 1 January 2000 to 31 December 2024. We chose 2000 as our baseline year as this is about when research on social and gender norms, VYAs, and SRH issues in SSA intensified, especially as part of the Millennium/Sustainable Development Goals' global health programmes³⁴. For example, Sustainable Development Goal (SDG) 5 recognises gender equality as a fundamental human right and a necessary foundation for a peaceful, prosperous and sustainable world³⁵.

We will search PubMed/MEDLINE, CINHAL, EMBASE, PsycINFO, Cochrane Library, and African Index Medicus to identify the relevant peer-reviewed studies. We will also search websites of organisations focusing on adolescent SRH, including, WHO, UNICEF, and The International Association of Adolescent Health (IAAH). We will conduct a multi-stage, iterative literature search in the afore-mentioned electronic databases. For instance, we will apply a combination of Boolean logic operators to glean the literature in PubMed. The first search will include comprehensive data collection utilising MeSH keywords or specific search phrases, as shown in Table 1.

To narrow this search further, we will add more MeSH or search terms, including "culture", "cultural norms/practices/beliefs/experiences/factors", "community", "indigenous/traditional African care practices/systems" to the first broad catch. As indicated in the inclusion and exclusion criteria, the search will have geographical, age and time limitations. Moreover, we will explore the reference lists of included articles to find additional relevant studies. Further, grey literature, including reports and policy documents, will be searched and included where necessary.

Stage 3: Study selection

Inclusion/exclusion criteria. Guided by the PCC framework³³, we will include studies focusing on VYAs, social norms/ attitudes or perceptions of social norms (including gender norms) and SRH and, conducted in SSA between 1 January 2000 and 31 December 2024 (inclusive) (Table 2). We will include

Table 1. Search strategy.

Concept	Search Terms
Social norms	"Social norms" OR "Cultural pluralism" OR "Social norms attitudes" OR "Social norms perceptions" OR "sociocultural restrictions" OR "protective behaviours" OR "African culture"
Gender norms	"Gender" OR "Gender norms" OR "Gender norms attitudes" OR "Gender norms perceptions" OR "Gender roles" OR "Gender attitudes" OR "Gender practices" OR "Gender Transform*"
Sexual and reproductive health	"Sexual behaviour" OR "sexual health" OR "Youth sexual behaviour" OR "Attitudes toward sex" OR "Sexuality" OR "Sexual Health In Adolescence" OR "Reproductive Health In Adolescence" OR "contraceptives" OR "family planning" OR "Protected sex" OR "HIV" OR "Sexual transmitted diseases" OR "pregnancy"
Younger adolescents	"Youth" OR "young person" OR "minor" OR "10-14 years old" OR "adolescent" OR "teenage" OR "young adolescent*" OR "Very young adolescents" OR "early adolescent"
Sub-Saharan Africa	"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 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 "Zimbia" OR "Zimbabwe" OR "Africa, South of the Sahara" OR "sub-Saharan Africa"

Table 2. Inclusion (PCC) framework.

Framework item	Item components
Population(s)	-Very young adolescents, both female and male (aged 10–14 years)
Concept(s)	-Social norms/attitudes or perceptions of social norms: -Gender norms/attitudes or perceptions of gender norms: -Sexual and reproductive health
Context(s)	-Studies conducted in SSA between 1 January 2000 and 31 December 2024 (inclusive)

studies that employed quantitative, qualitative, or mixed methods. We will exclude reviews (scoping, narrative, systematic, meta-analyses, etc.), personal opinion articles, and conceptual or theoretical articles that neither analyse primary nor secondary data. We will also exclude non-English texts. We will account for all excluded material to appreciate any potential biases or implications of the exclusions to our findings.

Search outcomes. We will perform first-level de-duplication in EndNote and second-level de-duplication will be done in Covidence. Two independent reviewers (FA & ON) will review all the included and excluded papers to avoid selection bias.

Stage 4: Data charting

Data charting refers to the process of synthesising and interpreting data through sorting, charting, and organising information based on key themes and issues³². In line with Levac *et al.*'s³⁶ recommendations, we will develop a standard Excel data charting form and populate it with key study characteristics (e.g., author(s), publication year, study title, geographical region [urban/rural], study design, study methods, and key themes and issues from each selected study vis-à-vis the review objectives. This will be an iterative process, involving back-and-forth data extraction and subsequent updating of the data charting form.

We will begin the data charting process with a pilot phase where two independent reviewers (FA & ON) will chart data from a random sample of 5–10 of the final selected studies. This piloting process will determine whether or not both reviewers' independent chartings align with the review objectives, and allow for any changes to the data charting form. Any disagreements will be discussed with a more senior researcher (WM), and the data charting form will be revised accordingly.

Results

Stage 5: Collating summarising and reporting results Following Levac *et al.*'s³⁶ suggestions, we will synthesise our data in three phases. Firstly, we will analyse and summarise all charted data about study characteristics using descriptive statistics. We will use thematic analysis to analyse and summarise all charted data relating to key themes and issues vis-à-vis the review objectives. We will present quantitative results using

tables and/or graphs and qualitative findings using key themes. Additionally, we will triangulate quantitative and qualitative findings for example, by ensuring the latter provides context and nuances to the former.

Discussion

We will discuss the results of the scoping review and their implications. By mapping the breadth of studies focusing on social and gender norms, and SRH among very young adolescents, the scoping review will provide a critical evidence base to inform the development and implementation of culturally relevant interventions and further research to help improve adolescents' SRH outcomes in SSA. Specifically, review findings will inform the co-development and evaluation of a peer-delivered gender-transformative intervention for in- and out-of-school very young adolescents to promote positive masculinity and sexual health in Zimbabwe.

By exploring what interventions have been effective, the review could be useful in conceptualising the intervention. However, as the GEAS has observed that intervention effects differ by context, and results can be highly contextual, even for settings generally considered 'similar'³⁰ an important consideration will be how to tailor the intervention to suit the Zimbabwean context.

The strength of our approach is in the application of a recognised, thorough and transparent approach³² to review the literature and report our results. However, given a significant part of SSA is Francophone or Lusophone, and programmes in these regions are disproportionately funded, this is likely to skew study results. Additionally, including only articles published in English (as we do not have resources to analyse studies in other languages) is another potential limitation of our review.

We will share review results with diverse stakeholders through various channels including peer-reviewed publications, conferences, stakeholder meetings with organisations working with adolescents (including VYAs) and other partners implementing programmes that seek to address SRH outcomes among adolescents in SSA. We aim to inform and influence future interventions and evaluations in this area.

Conclusion

Here, we present a protocol to scope existing research to understand social and gender norms and their influence on very young adolescents' SRH in SSA. The identified issues and their contextual factors will help us and others develop more context-specific, bespoke interventions.

Ethics and consent

Ethical approval and consent were not required.

Data availability

Underlying data

No data are associated with this article.

Reporting guidelines

Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) checklist is available on Open Science Framework repository.

Open Science Framework: PRISMA-P checklist for How do social and gender norms influence the sexual and reproductive health of younger adolescents in sub-Saharan Africa? A scoping review **DOI** – 10.17605/OSF.IO/EW7S5.

Data are available under the terms of the Creative Commons Zero "No rights reserved" data waiver (CC0 1.0 Public domain dedication).

References

- Cherewick M, Lebu S, Su C, et al.: Promoting gender equity in very young adolescents: targeting a window of opportunity for social emotional learning and identity development. BMC Public Health. 2021; 21(1): 2299. PubMed Abstract | Publisher Full Text | Free Full Text
- Sawyer SM, Azzopardi PS, Wickremarathne D, et al.: The age of adolescence. Lancet Child Adolesc Health. 2018; 2(3): 223–228.
 PubMed Abstract | Publisher Full Text
- 3. WHO: Adolescent Health. Accessed 8/02/2025.
- Reference Source
- Shinde S, Harling G, Assefa N, et al.: Counting adolescents in: the development of an adolescent health indicator framework for populationbased settings. EclinicalMedicine. 2023; 61: 102067.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Canning D, Jobanputra S, Yazbeck A: Africa's demographic transition: dividend or disaster. 2015.
 Reference Source
- Sedgh G, Bearak J, Singh S, et al.: Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. Lancet. 2016; 388(10041): 258-67. PubMed Abstract | Publisher Full Text | Free Full Text
- Munakampe MN, Zulu JM, Michelo C: Contraception and abortion knowledge, attitudes and practices among adolescents from low and middle-income countries: a systematic review. BMC Health Serv Res. 2018; 18(1): 909.
 - PubMed Abstract | Publisher Full Text | Free Full Text
- World Health Organization: Report on global sexually transmitted infection surveillance. 2018.
 Reference Source
- Hatzold K, Gudukeya S, Mutseta MN, et al.: HIV Self-Testing: breaking the barriers to uptake of testing among men and adolescents in sub-Saharan Africa, experiences from STAR demonstration projects in Malawi, Zambia and Zimbabwe. J Int AIDS Soc. 2019; 22 Suppl 1(Suppl Suppl 1): e25244.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Murewanhema G, Musuka G, Moyo P, et al.: HIV and Adolescent Girls and Young Women in sub-Saharan Africa: a call for expedited action to reduce new infections. IJID Reg. 2022; 5: 30–32.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Maina BW, Izugbara C, Sikweyiya Y, et al.: Gender norms and sexual behavior among very young adolescents in Sub-Saharan Africa: a scoping review. In: Odimegwu CO, Adewoyin Y, eds, The Routledge Handbook of African Demography. 1st ed. Routledge, 2022.
 Publisher Full Text
- Melesse DY, Mutua MK, Choudhury A, et al.: Adolescent Sexual and Reproductive Health in sub-Saharan Africa: who is left behind? BMJ Glob Health. 2020; 5(1): e002231.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Cislaghi B, Heise L: Gender norms and social norms: differences, similarities and why they matter in prevention science. Sociol Health Illn. 2020; 42(2): 407–422.
 - PubMed Abstract | Publisher Full Text | Free Full Text

- Wanders F, Homan AC, van Vianen AEM, et al.: How norm violators rise and fall in the eyes of others: the role of sanctions. PLoS One. 2021; 16(7): e0254574.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Mavhu W, Langhaug L, Pascoe S, et al.: A novel tool to assess community norms and attitudes to multiple and concurrent sexual partnering in rural Zimbabwe: participatory attitudinal ranking. AIDS Care. 2011; 23(1): 52-9. PubMed Abstract | Publisher Full Text
- Gruenbaum E, Earp BD, Shweder RA: Reconsidering the role of patriarchy in upholding female genital modifications: analysis of contemporary and pre-industrial societies. Int J Impot Res. 2023; 35(3): 202–211.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Ampofo AA: "When men speak women listen": gender socialisation and young adolescents' attitudes to sexual and reproductive issues. Afr J Reprod Health. 2001; 5(3): 196–212.
 PubMed Abstract | Publisher Full Text
- Mavhu W, Langhaug L, Manyonga B, et al.: What is 'sex' exactly? Using cognitive interviewing to improve the validity of sexual behaviour reporting among young people in rural Zimbabwe. Cult Health Sex. 2008; 10(6): 563–72.
 Publisher Full Text
- Mavhu W, Rowley E, Thior I, et al.: Sexual behavior experiences and characteristics of male-female partnerships among HIV positive Adolescent Girls and Young Women: qualitative findings from Zimbabwe. PLoS One. 2018; 13(3): e0194732. PubMed Abstract | Publisher Full Text | Free Full Text
- Amin A, Kågesten A, Adebayo E, et al.: Addressing gender socialization and masculinity norms among adolescent boys: policy and programmatic implications. J Adolesc Health. 2018; 62(3s): S3–S5.
 PubMed Abstract | Publisher Full Text | Free Full Text
- The Lancet Child Adolescent Health: The lost boys. Lancet Child Adolesc Health. 2019; 3(7): 437.
 PubMed Abstract | Publisher Full Text
- Marcus R, Stavropoulou M, Archer-Gupta N: Programming with adolescent boys to promote gender-equitable masculinities: a rigorous review. 2018. Reference Source
- Moreau C, Li M, De Meyer S, et al.: Measuring gender norms about relationships in early adolescence: results from the Global Early Adolescent Study. SSM Popul Health. 2018; 7: 014-14.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Igras SM, Macieira M, Murphy E, et al.: Investing in Very Young Adolescents' Sexual and Reproductive Health. Glob Public Health. 2014; 9(5): 555–69.
 PubMed Abstract | Publisher Full Text | Free Full Text
- Kaufman MR, Dam KH, Van Lith LM, et al.: Voluntary Medical Male Circumcision among adolescents: a missed opportunity for HIV behavioral interventions. AIDS. 2017; 31 Suppl 3(Suppl 3): S233–S241. PubMed Abstract | Publisher Full Text | Free Full Text
- Kaufman MR, Patel EU, Dam KH, et al.: Counseling received by adolescents undergoing Voluntary Medical Male Circumcision: moving toward ageequitable comprehensive Human Immunodeficiency Virus prevention

- measures. Clin Infect Dis. 2018; 66(suppl_3): S213-S220. PubMed Abstract | Publisher Full Text | Free Full Text
- Tobian AAR, Dam KH, Van Lith LM, et al.: Providers' perceptions and training needs for counseling adolescents Undergoing Voluntary Medical Male Circumcision. Clin Infect Dis. 2018; 66(suppl_3): S198–S204. PubMed Abstract | Publisher Full Text | Free Full Text
- Mmari K, Simon C, Verma R: Gender-transformative interventions for young adolescents: what have we learned and where should we go? J Adolesc Health. 2024; 75(4S): S62–S80.
 - **PubMed Abstract | Publisher Full Text**
- Mmari K, Blum RW, Atnafou R, et al.: Exploration of gender norms and socialization among early adolescents: the use of qualitative methods for the Global Early Adolescent Study. J Adolesc Health. 2017; 61(4S): S12–S18. PubMed Abstract | Publisher Full Text
- Mmari K: Are gender-transformative interventions effective among very young adolescents? J Adolesc Health. 2023; 73(1S): S1–S2.
 PubMed Abstract | Publisher Full Text
- Rwabyoma AS, Muriisa RK, Ochieng DO, et al.: Men and masculinity studies in East Africa: a theoretical framework for understanding masculinitiesfocused interventions. In: Chitando E, Mlambo O, Mfecane S, Ratele K, eds.

- The Palgrave Handbook of African Men and Masculinities. Palgrave Macmillan, 2024.
- **Publisher Full Text**
- Arksey H, O'Malley L: Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 2005; 8(1): 19–32.
 Publisher Full Text
- Peters MDJ, Marnie C, Tricco AC, et al.: Updated methodological guidance for the conduct of scoping reviews. JBI Evid Implement. 2021; 19(1): 3–10.
 PubMed Abstract | Publisher Full Text
- Ajayi AI, Otukpa EO, Mwoka M, et al.: Adolescent Sexual and Reproductive Health research in sub-Saharan Africa: a scoping review of substantive focus, research volume, geographic distribution and Africa-led inquiry. BMJ Glob Health. 2021; 6(2): e004129.
 PubMed Abstract | Publisher Full Text | Free Full Text
- United Nations: Transforming our world: the 2030 agenda for sustainable development. 2015.
 Reference Source
- Levac D, Colquhoun H, O'Brien KK: Scoping studies: advancing the methodology. Implement Sci. 2010; 5(1): 69.
 PubMed Abstract | Publisher Full Text | Free Full Text

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Erica Sedlander

University of California San Francisco, San Francisco, California, USA

The authors have adequately incorporated my suggestions.

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: social norms, gender norms, fertility/infertility, sexual and reproductive health

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 10 March 2025

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Beatrice W. Maina

African Population and Health Research Center, Nairobi, Nairobi County, Kenya

No further comments

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Gender and adolescent sexual and reproductive health

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 21 January 2025

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Jennifer Gayles

Save the Children, Washington, USA

General:

- It seems there may be some misalignment of the RQ and what the authors hope to produce. The title indicates a very broad focus on the role of norms in adolescent SRH while the Discussion section indicates that the review intends to identify successful strategies or best practices for addressing social and gender norms that influence ASRH in SSA. Understanding how social norms influence VYA SRH is not sufficient to "inform the codevelopment and evaluation of a peer-delivered, gender-transformative intervention for in and out-of-school younger adolescents"; that would require a different RQ focused on successful interventions. See my further comments on this in the Methods section.
- I noted that VYA is a keyword, but the paper consistently uses the term "younger adolescents". Consider aligning with WHO language (i.e. using VYAs instead of younger adolescents).
- WHO is currently coordinating a global research prioritization exercise using CHNRI method) to propose future research topics related to VYA SRHR. They have facilitated an inclusive process drawing on an Expert Reference Group, Youth Advisory Council and public survey (online) to develop questions. Analysis is nearly complete and will likely be highly relevant to this work. Keep an eye out for results!

Introduction:

- Antenatal syphilis screening is an odd choice of key SRH indicator, especially for this age group. Consider instead reporting contraceptive use, antenatal visits/adherence or HIV testing, which are more widely used in comparing SRH across regions.
- This section could benefit from more background on prevalent social and gender norms in SSA beyond just the patriarchal norms discussed in paragraph 3. There are many intertwined norms related to virginity, control of female sexuality, fertility and childbearing, and FP use that are highly relevant to this review. A brief discussion (one paragraph) on these norms and how they can impede healthy SRH behaviors and service seeking would nicely set up the final paragraph of this section.
- Last paragraph: Lack of data is certainly one reason research on VYA is light, but authors might also mention other key reasons:
 - Early adolescence is generally a time of good health, when children are not as vulnerable to illness as when they are U5 or school aged.

 (Mistaken) beliefs that VYA are too young to be provided with information on SRH and/or that they are not sexually active, which serve as obstacles to both research and program development. Integrating these concepts would strengthen the paragraph.

Methods:

- The question "What gaps exist in interventions relating to social and gender norms and SRH of younger adolescents in SSA?" is not clear. Do you intend to identify what kind of interventions have been implemented for VYA SRH in SSA -OR- the strengths and weakness of those interventions? Consider revising to "What interventions relating to social and gender norms and SRH of younger adolescents in SSA have been effective?"
- Measurement of norms is still a relatively nascent field and many studies that purport to measure norms in reality measure attitudes or perceptions of norms. This may influence the quality of studies you identify; it would be helpful to take this into account in your inclusion/exclusion criteria.
- Given how much of SSA is Francophone or Lusophone, and the fact that Western donors disproportionately fund research and programs in non-Anglophone priority countries, this is a major limitation. It may skew your results heavily.

Useful References:

- Igras S, Maciera M, Murphy E, Lundgren R. Investing in very young adolescents' sexual and reproductive health. (2014) – This was a seminal piece in the VYA SRH literature and accelerated attention and resourcing for VYAs in the 2010s. DOI: 10.1080/17441692.2014.908230
- 2. Mmari K, Simon C, Verna R. Gender-Transformative Interventions for Young Adolescents: What Have We Learned and Where Should We Go? (2024) https://doi.org/10.1016/j.jadohealth.2024.04.016 Publication based on a landscape review conducted in 2020: https://resourcecentre.savethechildren.net/document/very-young-adolescent-sexual-and-reproductive-health-landscape-where-are-we-now-where-do-we/
- 3. Passages Project published numerous studies on norms-focused programs for VYA in Mali and DRC: https://www.irh.org/projects/passages/. Publications and grey literature are (mostly) in English. Results of an SRH-focused social norms exploration among VYAs in Kinshasa may be of particular interest, though it is in French: https://www.growingupgreat.org/resources/

References

- 1. Igras SM, Macieira M, Murphy E, Lundgren R: Investing in very young adolescents' sexual and reproductive health. *Glob Public Health*. 2014; **9** (5): 555-69 PubMed Abstract | Publisher Full Text 2. Mmari K, Simon C, Verma R: Gender-Transformative Interventions for Young Adolescents: What Have We Learned and Where Should We Go?. *J Adolesc Health*. 2024; **75** (4S): S62-S80 PubMed Abstract | Publisher Full Text
- 3. Passages Project published numerous studies on norms-focused programs for VYA in Mali and DRC: https://www.irh.org/projects/passages/. Publications and grey literature are (mostly) in English. Results of an SRH-focused social norms exploration among VYAs in Kinshasa may be of particular interest, though it is in French: https://www.growingupgreat.org/resources/.

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

Partly

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: social and gender norms; adolescent sexual and reproductive health with focus on very young adolescents; design, pilot and scale up of programs

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.

Author Response 16 Feb 2025

Owen Nyamwanza

Comments:

General:

It seems there may be some misalignment of the RQ and what the authors hope to produce. The title indicates a very broad focus on the role of norms in adolescent SRH while the Discussion section indicates that the review intends to identify successful strategies or best practices for addressing social and gender norms that influence ASRH in SSA. Understanding how social norms influence VYA SRH is not sufficient to "inform the co-development and evaluation of a peer-delivered, gender-transformative intervention for in and out-of-school younger adolescents"; that would require a different RQ focused on successful interventions. See my further comments on this in the Methods section.

Response: Thank you. Based on this and other reviewers' suggestions we have revised the sub-questions to: "What interventions relating to social and gender norms and SRH of younger adolescents in SSA have been effective?" (lines 137-138).

Comments:

 I noted that VYA is a keyword, but the paper consistently uses the term "younger adolescents". Consider aligning with WHO language (i.e. using VYAs instead of younger adolescents).

Response: Thank you. We now use VYA throughout to align with WHO language.

Comments:

 WHO is currently coordinating a global research prioritization exercise using CHNRI method) to propose future research topics related to VYA SRHR. They have facilitated an inclusive process drawing on an Expert Reference Group, Youth Advisory Council and public survey (online) to develop questions. Analysis is nearly complete and will likely be highly relevant to this work. Keep an eye out for results!

Response: Thank you for the heads-up.

Comments:

Introduction:

 Antenatal syphilis screening is an odd choice of key SRH indicator, especially for this age group. Consider instead reporting contraceptive use, antenatal visits/adherence or HIV testing, which are more widely used in comparing SRH across regions.

Response: Thank you. We now cite these indicators (lines 76-78).

Comments:

This section could benefit from more background on prevalent social and gender norms in SSA beyond just the patriarchal norms discussed in paragraph 3. There are many intertwined norms related to virginity, control of female sexuality, fertility and childbearing, and FP use that are highly relevant to this review. A brief discussion (one paragraph) on these norms and how they can impede healthy SRH behaviors and service seeking would nicely set up the final paragraph of this section.

Response: Thank you. We now include a paragraph on these norms (lines 92-96).

Comments:

- Last paragraph: Lack of data is certainly one reason research on VYA is light, but authors might also mention other key reasons:
 - Early adolescence is generally a time of good health, when children are not as vulnerable to illness as when they are U5 or school aged.
 - (Mistaken) beliefs that VYA are too young to be provided with information on SRH and/or that they are not sexually active, which serve as obstacles to both research and program development. Integrating these concepts would strengthen the paragraph.

Response: Thank you. We now include a paragraph on these key reasons (lines 108-112).

Comments:

Methods:

The question "What gaps exist in interventions relating to social and gender norms and SRH of younger adolescents in SSA?" is not clear. Do you intend to identify what kind of interventions have been implemented for VYA SRH in SSA -OR- the strengths and weakness of those interventions? Consider revising to "What interventions relating to social and gender norms and SRH of younger adolescents in SSA have been effective?"

Response: Thank you for this suggestion. We have revised the sub-question as suggested (lines 137- 138).

Comments:

 Measurement of norms is still a relatively nascent field and many studies that purport to measure norms in reality measure attitudes or perceptions of norms. This may influence the quality of studies you identify; it would be helpful to take this into account in your inclusion/exclusion criteria.

Response: Thank you. We now include attitudes or perceptions of norms in the search strategy (Table 1) and inclusion/exclusion criteria (Table 2).

Comments:

 Given how much of SSA is Francophone or Lusophone, and the fact that Western donors disproportionately fund research and programs in non-Anglophone priority countries, this is a major limitation. It may skew your results heavily.

Response: Thank you. We now include this limitation (lines 225-227).

Comments:

Useful References:

- 1. Igras S, Maciera M, Murphy E, Lundgren R. Investing in very young adolescents' sexual and reproductive health. (2014) This was a seminal piece in the VYA SRH literature and accelerated attention and resourcing for VYAs in the 2010s. DOI: 10.1080/17441692.2014.908230
- 2. Mmari K, Simon C, Verna R. Gender-Transformative Interventions for Young Adolescents: What Have We Learned and Where Should We Go? (2024) https://doi.org/10.1016/j.jadohealth.2024.04.016 Publication based on a landscape review conducted in 2020:
 - https://resourcecentre.savethechildren.net/document/very-young-adolescent-sexual-and-reproductive-health-landscape-where-are-we-now-where-do-we/
- 3. Passages Project published numerous studies on norms-focused programs for VYA in Mali and DRC: https://www.irh.org/projects/passages/. Publications and grey literature are (mostly) in English. Results of an SRH-focused social norms exploration among VYAs in Kinshasa may be of particular interest, though it is in French: https://www.growingupgreat.org/resources/

Response: Thank you for the references. We have incorporated some of these.

Competing Interests: No competing interests were disclosed.

Reviewer Report 23 December 2024

https://doi.org/10.21956/wellcomeopenres.25481.r115191

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Beatrice W. Maina

African Population and Health Research Center, Nairobi, Nairobi County, Kenya

Title: Needs clarity on whether the focus is gender norms or social norms. Social norms encompasses gender norms, hence it gives a broader perspective. The PCC inclusion criteria also refers to social norms.

Abstract: the abstract needs to be strengthened. The "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation" might be useful.

The objective of the intended scoping review is not clear. The authors argue there is limited evidence among younger adolescents, which is true, as there are studies that have shown limited but growing evidence on social norms (and the sub-components) among younger adolescents. The only difference maybe the time period and therefore need to articulate what new knowledge the review is bringing forth.

Introduction

The article "Sawyer, Susan M et al. The age of adolescence. The Lancet Child & Adolescent Health, Volume 2, Issue 3, 223 - 228" might be useful when defining the broad adolescence age-range and the sub-groups therein

Methods

The second research question brings in an intervention angle nor clearly mentioned prior. This may also have implications on the framework used. Perhaps PICO.

In the PCC framework as well as the search terms, there is nowhere gender is mentioned as a concept.

Authors could also consider other concepts such as "teenage", "adolescent", "pregnancy" etc. Under study selection, the authors indicate they will include studies that meet at least one of the criteria. This may create a pool of studies that are not within the current scope of the review. Will the searches for the two research questions be combined or will they be conducted separately? And what is research questions 2 exactly aims to answer? For instance research gaps in what?

On quality appraisal, might be good to mention some examples of appraisal tools to be used, and also an indication on whether any studies will be dropped if they do not meet a certain threshold.

Results

Will be important to add how quantitative and qualitative findings will be triangulated to inform key findings and discussions. Additionally, how will the results form the two research questions will be presented needs to be outlined.

Discussion

The discussion section seems to capture the goal of the study "mapping the breadth of studies focusing on social and gender norms, and SRH among younger adolescents" which is more clearer than the objective stated earlier.

The discussion should focus on the results of the scoping review. The discussion is envisioned to respond to a specific need, that is, to inform an intervention in Zimbabwe for in- and out- of school younger adolescents. This information is presented abruptly in the discussion. While the review could be useful in conceptualizing the intervention, noting the diversity of norms in the continent, there maybe need for a more contextualized focus on Zimbabwe.

Conclusion

May need to highlight the strengths and limitations of the study

References

1. The age of adolescence Sawyer, Susan M et al. The Lancet Child & Adolescent Health, Volume 2, Issue 3, 223 - 228.

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

Partly

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: Gender and adolescent sexual and reproductive health

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.

Author Response 16 Feb 2025

Owen Nyamwanza

Comments:

Title: Needs clarity on whether the focus is gender norms or social norms. Social norms encompasses gender norms; hence it gives a broader perspective. The PCC inclusion criteria also refers to social norms.

Response: Thank you. Based on this and the other reviewer's comment, we now just use "social norms" in the title.

Comments:

Abstract: the abstract needs to be strengthened. The "PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation" might be useful.

Response: Thank you. We have strengthened the abstract but keeping in line with the word limit. Also, we will report findings in accordance with the guidance provided in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols (PRISMA-P) statement

(lines 36-37).

Comments:

The objective of the intended scoping review is not clear. The authors argue there is limited evidence among younger adolescents, which is true, as there are studies that have shown limited but growing evidence on social norms (and the sub-components) among younger adolescents. The only difference maybe the time period and therefore need to articulate what new knowledge the review is bringing forth.

Response: Thank you. Based on this and the other reviewers' comments, we now state how the Global Early Adolescent Study has observed that intervention effects do differ by context, and results can be highly contextual, even for settings generally considered 'similar'. We also state that there is increased recognition that African masculinities are produced in unique and varying contexts of intersections (including class, ethnicity, sexuality), which points to the need for context-specific, bespoke initiatives. We then state that the proposed scoping review seeks to identify and analyse literature on how social and gender norms influence younger adolescents' SRH in SSA and that the identified issues and their contextual factors will help us develop a context-specific, bespoke intervention (lines 112-127).

Comments:

Introduction

The article "Sawyer, Susan M et al. The age of adolescence. The Lancet Child & Adolescent Health, Volume 2, Issue 3, 223 - 228" might be useful when defining the broad adolescence age-range and the sub-groups therein.

Response: Thank you for pointing us to this article. We now sate that, "Exactly when adolescence starts and ends has been a subject of debate, especially as some view a 10-year-old as a child and a 19-year-old as an adult [3]. We are guided by the World Health Organisation (WHO) which defines "adolescents" as individuals in the 10-19 years age group, "youth" as those in the 15-24 years range, while "young people" covers those 10-24 years old [4] (lines 60-63).

Comments:

Methods

The second research question brings in an intervention angle nor clearly mentioned prior. This may also have implications on the framework used. Perhaps PICO.

Response: Based on this and other reviewers' suggestions we have revised the subquestions to: "What interventions relating to social and gender norms and SRH of younger adolescents in SSA have been effective?" (lines 137-138).

Comments:

In the PCC framework as well as the search terms, there is nowhere gender is mentioned as a concept.

Response: Thank you. We already mention "gender norms" in the PCC framework (Table 2).

We now include "gender norms" as a concept and include search terms (Table 1).

Comments: Authors could also consider other concepts such as "teenage", "adolescent", "pregnancy" etc.

Response: Thank you for these very helpful suggestions. We have added these to the search terms (Table 1).

Comments: Under study selection, the authors indicate they will include studies that meet at least one of the criteria. This may create a pool of studies that are not within the current scope of the review.

Response: Thank you. We have revised this section (lines 169-172).

Comments:

Will the searches for the two research questions be combined or will they be conducted separately? And what is research questions 2 exactly aims to answer? For instance research gaps in what?

Response: The searches for the two research questions will be combined. Based on this and other reviewers' suggestions we have revised the sub-questions to: "What interventions relating to social and gender norms and SRH of younger adolescents in SSA have been effective?" (lines 137-138).

Comments:

On quality appraisal, might be good to mention some examples of appraisal tools to be used, and also an indication on whether any studies will be dropped if they do not meet a certain threshold.

Response: For a separate scoping review, reviewers have discouraged us from conducting a quality appraisal as this is not usually done in scoping reviews. We therefore no longer mention "Quality appraisal' here (but stand guided).

Comments:

Results

Will be important to add how quantitative and qualitative findings will be triangulated to inform key findings and discussions.

Response: Thank you. We now mention this (lines 207-208).

Comments:

Additionally, how the results from the two research questions will be presented needs to be outlined.

Response: We now outline this (lines 203-207).

Comments:

Discussion

The discussion section seems to capture the goal of the study "mapping the breadth of studies focusing on social and gender norms, and SRH among younger adolescents" which is clearer than the objective stated earlier.

Response: Thank you. We have now revised the study goal to reflect this (lines 125-127).

Comments:

The discussion should focus on the results of the scoping review.

Response: We now state that the Discussion will discuss the results (line 211).

Comments:

The discussion is envisioned to respond to a specific need, that is, to inform an intervention in Zimbabwe for in- and out- of school younger adolescents. This information is presented abruptly in the discussion. While the review could be useful in conceptualizing the intervention, noting the diversity of norms in the continent, there may be need for a more contextualized focus on Zimbabwe.

Response: Thank you. We now sate that, "By exploring what interventions have been effective, the review could be useful in conceptualising the intervention. However, as the GEAS has observed that intervention effects differ by context, and results can be highly contextual, even for settings generally considered 'similar' [34] an important consideration will be how to tailor the intervention to suit the Zimbabwean context (lines 219-222).

Conclusion

May need to highlight the strengths and limitations of the study.

Response: Thank you. We now include these (lines 224-229).

References The age of adolescence Sawyer, Susan M et al. The Lancet Child & Adolescent Health, Volume 2, Issue 3, 223 - 228.

Response: Thank you for the reference. It has helped us discuss the age of adolescence (lines 60-63).

Competing Interests: No competing interests were disclosed.

Reviewer Report 10 December 2024

https://doi.org/10.21956/wellcomeopenres.25481.r111447

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? Erica Sedlander

University of California San Francisco, San Francisco, California, USA

Summary: The authors present a clear, succinct protocol for a scoping review protocol on how social and gender norms influence the sexual and reproductive health of younger adolescents in SSA.

Major comments:

My main comment is that the protocol is quite broad in that it argues that there is a gap around how social norms affect younger adolescents specifically. However, authors do not cite all the existing work. They only state there is a gap in the literature on social norms among young adolescents. The Global Early Adolescent Study is one example of a huge effort focused on this topic specifically. https://www.geastudy.org/.

Additionally, the reason for conducting this review is that adolescents are ignored but then in the discussion, they go into a very specific intervention. Perhaps more specific reasons than just a lack of literature is warranted.

Minor comments:

 Title: Gender norms are a subset of social norms so you can just use "social norms" in the title

Abstract

- Sentence 1: "Younger adolescents (aged 10–14 years) in sub-Saharan Africa (SSA) have disproportionate sexual and reproductive health (SRH) outcomes due to structural, behavioural, socioeconomic and other factors.
- I believe they have unique needs not more outcomes.

Discussion

- The review will generate the most up-to-date evidence and identify gaps in THE literature in addition to informing future research on how gender and social norms influence younger adolescents' SRH in SSA.
- VAGUE: Findings will inform and influence future interventions and evaluations in this area.
 You have a more specific goal listed in the discussion.

Introduction

- What's the age range of what's considered adolescents in SSA?
- Suggested edit: "75% of NEW HIV infections globally."
- Too much of a jump to social norms paragraph (need a transition).
- "Resultantly, there is a paucity of research on the influence of gender and social norms on younger adolescents' SRH." The DHS doesn't collect data on social or gender norms specifically. They collect data on individual attitudes and beliefs which is different from

norms.

Methods

- "We do not have resources to analyze studies written in other languages, and we recognise that this is a potential limitation of our review." Save for a limitations section.
- Quality appraisal. We will assess quality using relevant tools and approaches depending on a study's design and methodology. There are specific quality appraisal tools like MMAT mixed methods appraisal tool.
- "Any disagreements will be discussed with an expert (WM)." Is WM an expert in scoping reviews?

Results

• How will you present qual versus quant results?

Discussion

- Suggest removing the word "current." Knowledge around influence of social and gender norms on SSA's younger adolescents' SRH is currently limited¹⁰. This scoping review will synthesise current literature to address this critical knowledge gap."
- o In the discussion you state, "Specifically, review findings will inform the co-development and evaluation of a peer-delivered gender-transformative intervention for in- and out-of-school younger adolescents to promote positive masculinity and sexual health in Zimbabwe. The ultimate goal is to develop an effective model for scale-up to influence constructs of positive masculinity." However, the abstract is much more vague and feels broad. Perhaps grounding in it why you need this information for your study will infuse it with more concrete examples of what is missing and how that will inform this peer-led intervention. Since you are missing existing data on young adolescents, its hard to be specific about the exact gaps. You just state a dearth without telling us what you need to know and how that will inform your intervention or anyone's intervention.

Conclusion

"The review will provide valuable insights for the development of tailored interventions for this important group." This is vague and not that helpful. A brief review of existing literature which illuminates the gaps will show what this review could provide for your intervention and others.

References

1. Global Early Adolescent Study. Reference Source

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

Yes

Is the study design appropriate for the research question?

Ves

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

Yes

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

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: social norms, gender norms, fertility/infertility, sexual and reproductive health

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.

Author Response 16 Feb 2025

Owen Nyamwanza

Comments:

Summary: The authors present a clear, succinct protocol for a scoping review protocol on how social and gender norms influence the sexual and reproductive health of younger adolescents in SSA.

Response: Thank you for noting that this is a clear, succinct protocol.

Major comments:

My main comment is that the protocol is quite broad in that it argues that there is a gap around how social norms affect younger adolescents specifically. However, authors do not cite all the existing work. They only state there is a gap in the literature on social norms among young adolescents. The Global Early Adolescent Study is one example of a huge effort focused on this topic specifically. https://www.geastudy.org/.

Additionally, the reason for conducting this review is that adolescents are ignored but then in the discussion, they go into a very specific intervention. Perhaps more specific reasons than just a lack of literature is warranted.

Response: Thank you for highlighting The Global Early Adolescent Study. We now state how the Global Early Adolescent Study has observed that intervention effects do differ by context, and results can be highly contextual, even for settings generally considered 'similar'. We also state that there is increased recognition that African masculinities are produced in unique and varying contexts of intersections (including class, ethnicity, sexuality), which points to the need for context-specific, bespoke initiatives. We then state that the proposed scoping review seeks to map the breadth of studies focusing on social and gender norms, and SRH among VYAs, in addition to exploring interventions that have been effective. Findings will inform the development of a context-specific, bespoke intervention (lines 112-127).

Minor comments:

• **Title**: Gender norms are a subset of social norms so you can just use "social norms" in the title

Response: Thank you. We now just use "social norms" in the title.

Comments:

Abstract

 Sentence 1: "Younger adolescents (aged 10–14 years) in sub-Saharan Africa (SSA) have disproportionate sexual and reproductive health (SRH) outcomes due to structural, behavioural, socioeconomic and other factors.

I believe they have unique needs not more outcomes.

Response: We have revised the sentence to reflect that they have the worst SRH outcomes of this age group worldwide. Later, we provide examples (lines 73-80).

Comments:

Discussion

 The review will generate the most up-to-date evidence and identify gaps in THE literature in addition to informing future research on how gender and social norms influence younger adolescents' SRH in SSA.

VAGUE: Findings will inform and influence future interventions and evaluations in this area. You have a more specific goal listed in the discussion.

Response: We have revised to: "The review will map the breadth of studies focusing on social and gender norms, and SRH among VYAs, in addition to exploring interventions that have been effective. Findings will help us and others develop context-specific, bespoke interventions" (lines 43-45).

Comments:

Introduction

• What's the age range of what's considered adolescents in SSA?

Response: We now state that these are 10-19 years old (line 65) but state that "Exactly when adolescence starts and ends has been a subject of debate, especially as some view a 10-year-old as a child and a 19-year-old as an adult [3]. We are guided by the World Health Organisation (WHO) which defines "adolescents" as individuals in the 10-19 years age group, "youth" as those in the 15-24 years range, while "young people" covers those 10-24 years old [4] (lines 60-63).

Comments:

Suggested edit: "75% of NEW HIV infections globally."

Response: We have revised as suggested (line 79).

Comments:

Too much of a jump to social norms paragraph (need a transition).

Response: Thank you. We now introduce social norms (line 80).

Comments:

"Resultantly, there is a paucity of research on the influence of gender and social norms on younger adolescents' SRH." The DHS doesn't collect data on social or gender norms specifically. They collect data on individual attitudes and beliefs which is different from

norms.

Response: We agree. Based on this and another reviewer's comment, we have rewritten the paragraph (lines 92-96).

Comments:

Methods

"We do not have resources to analyse studies written in other languages, and we recognise that this is a potential limitation of our review." Save for a limitations section.

Response: Thank you. We now include this as a limitation (lines 227-229).

Comments:

Quality appraisal. We will assess quality using relevant tools and approaches
depending on a study's design and methodology. There are specific quality appraisal
tools like MMAT mixed methods appraisal tool.

Response: For a separate scoping review, reviewers have discouraged us from conducting a quality appraisal as this is not usually done in scoping reviews. We therefore no longer mention "Quality appraisal' (but stand guided).

Comments:

"Any disagreements will be discussed with an expert (WM)." Is WM an expert in scoping reviews?

Response: We now say, 'a more senior researcher' (line 198).

Comments:

Results

How will you present qual versus quant results?

Response: "We will present quantitative results using tables and/or graphs and qualitative findings using key themes. Additionally, we will triangulate quantitative and qualitative findings for example, by ensuring the latter provides context and nuances to the former" (lines 205-208).

Comments:

Discussion

 Suggest removing the word "current." Knowledge around influence of social and gender norms on SSA's younger adolescents' SRH is currently limited¹⁰. This scoping review will synthesise current literature to address this critical knowledge gap."

Response: Thank you. We have removed as suggested.

Comments:

 In the discussion you state, "Specifically, review findings will inform the codevelopment and evaluation of a peer-delivered gender-transformative intervention for in- and out-of-school younger adolescents to promote positive masculinity and sexual health in Zimbabwe. The ultimate goal is to develop an effective model for scale-up to influence constructs of positive masculinity." However, the abstract is much vaguer and feels broad. Perhaps grounding in it why you need this information for your study will infuse it with more concrete examples of what is missing and how that will inform this peer-led intervention. Since you are missing existing data on young adolescents, it's hard to be specific about the exact gaps. You just state a dearth without telling us what you need to know and how that will inform your intervention or anyone's intervention.

Response: Thank you. As stated above, we now state how the Global Early Adolescent Study has observed that intervention effects do differ by context, and results can be highly contextual, even for settings generally considered 'similar'. We also state that there is increased recognition that African masculinities are produced in unique and varying contexts of intersections (including class, ethnicity, sexuality), which points to the need for context-specific, bespoke initiatives. We then state that the proposed scoping review seeks to identify and analyse literature on how social and gender norms influence younger adolescents' SRH in SSA, information which is essential for the development of bespoke interventions (lines 112-127).

Comments:

Conclusion

 "The review will provide valuable insights for the development of tailored interventions for this important group." This is vague and not that helpful. A brief review of existing literature which illuminates the gaps will show what this review could provide for your intervention and others.

Response: Thank you. We have revised the conclusion to highlight how the proposed review will help us and others develop more context-specific, bespoke interventions (lines 238-239).

Competing Interests: No competing interests were disclosed.