

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

MENSTRUAL HEALTH NEEDS AND EDUCATIONAL OUTCOMES AMONG ADOLESCENT GIRLS LIVING IN COUNTRIES IN SUB-SAHARAN AFRICA: SYSTEMATIC REVIEW PROTOCOL

Authors

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VERSION 1 - REVIEW

Reviewer	1
Name	Elliott-Sale, Kirsty J
Affiliation	Manchester Metropolitan University
Date	09-Dec-2024
COI	None

Thank you for giving me the opportunity to review this interesting protocol. I believe that the findings of this review will have societal impact. I wish you all the best with the review process.

Some minor comments:

Abstract

- Unusual to reference a table in the abstract – please double-check journals formatting rules
- Please double-check abstract length as it seems a little long
- How will these experts be defined and identified? This detail can be included the manuscript if the word limit can't accommodate it in the abstract.
- Please name the validated tools mentioned in the abstract

- Would ethical approval not be needed if experts are to be identified and approached for their unpublished datasets?

Introduction

- The introduction is really well-written; the rationale is really clear and well communicated.
- “This review will answer the question, is there an association between menstrual health needs and academic performance among adolescent girls in SSA?”

-consider revising to say “This review will address the question...

Methods

- Does the inclusion of PPI not necessitate ethical approval?
- Please use the SSA abbreviation consistently throughout the manuscript
- Same comment as above in abstract section about experts being defined, identified, and their non-published dataset being included [ethical approval] – more detail needed here
- “The characteristics of the comparison group will also be extracted,”
- Please revisit the comparator section and list any/all comparators
- Who will conduct the grading? Will it be more than one person?
- Some queries over ethical approval as noted before

Reviewer	2
Name	Wilbur, Jane
Affiliation	London Sch Hyg
Date	14-Feb-2025
COI	None

This is a valuable systematic review to do, and it will add much-needed data on the topic. The study is well planned, and the protocol is well written and I look forward to reading the systematic review. The area that could be strengthened most is the eligibility criteria, which is somewhat lost in the protocol. Below are specific comments on each section.

Abstract:

- Please add the tool you will use for the quality assessment in the abstract (Robbins-E).

Introduction:

- Line 26-35: You include statistics of sanitary pad use and non-use. Do you mean commercial sanitary pads or menstrual materials more broadly (ie including menstrual cloth, reusable fabric pads etc)? To ensure there is not a bias towards one menstrual product, I

would suggest using the term 'menstrual materials' and then specifying what that includes in the introduction.

- Line 45: who do you mean when you say 'vulnerable schoolgirls' – please be specific. As you are focusing on schoolgirls, include some background on menstrual health and school attainment and draw on evidence from NGOs/govts delivering school based MH interventions. Line 52-55 – reference the need to assess the effectiveness of school based interventions so it is clear who your target group is. All of this will help better emphasise the gap you are filling.
- Include a section at the end of the introduction: aims and research questions. Then move the aim to the end of the introduction after you have set out the gaps across all key areas (which you do well). Your research questions should follow this.
- Is 'truancy' the right word in your research question? That term tends to be value based and implies skipping school without good reason. Consider replacing with school absenteeism

Methods and analysis

- You include the review aim under 'patient and public involvement'. Just include it once earlier on (see my comment above).
- Your classification of grey literature is unclear. You state that you will not include case studies, etc, but it is unclear how you differentiate between grey and peer-reviewed literature. Please include a standalone section on eligibility criteria and in that clearly state what your inclusion/exclusion is and within that define what is grey and peer-reviewed literature, if you will include quant and qual, publication date range, language etc etc.
- Quality assessment: Supplementary File 3 looks comprehensive, but applying standardised quality assessment across peer-reviewed and grey literature is often tricky. Once you have set out your eligibility criteria, it will be easier to see if/how they can be compared.

VERSION 1 - AUTHOR RESPONSE

Reviewer 1 Comments

Abstract Comments:

Comment 1: Unusual to reference a table in the abstract -- please double-check journals formatting rules.

Response: We have removed the reference to Table 1 from the abstract in accordance with the journal's formatting guidelines.

Comment 2: Please double-check abstract length as it seems a little long.

Response: We have revised and shortened the abstract to comply with the journal's word limit requirements.

Comment 3: How will these experts be defined and identified? This detail can be included the manuscript if the word limit can't accommodate it in the abstract.

Response: We have included details on how experts will be defined and identified in the revised manuscript. Specifically, experts are defined as researchers with at least two published papers on menstrual health and education in sub-Saharan Africa in the last five years, or practitioners who have implemented menstrual health programs in educational settings for at least three years.

Comment 4: Please name the validated tools mentioned in the abstract.

Response: We have specified the validated tools in the abstract, specifically naming the Robbins risk of bias assessment tool

Comment 5: Would ethical approval not be needed if experts are to be identified and approached for their unpublished datasets?

Response: While ethical approval is not required for the systematic review methodology itself, we have clarified in the manuscript that appropriate data sharing agreements and confidentiality protocols will be followed when collecting unpublished data from experts.

Introduction Comments:

Comment 1: The introduction is really well-written; the rationale is really clear and well communicated.

Response: Thank you for this positive feedback.

Comment 2: "This review will answer the question, is there an association between menstrual health needs and academic performance among adolescent girls in SSA?" - consider revising to say "This review will address the question..."

Response: We have revised this statement as suggested to read "This review will address the question..."

Methods Comments:

Comment 1: Does the inclusion of PPI not necessitate ethical approval?

Response: We have clarified that the PPI activities described involved consultative engagement with stakeholders to inform research priorities and protocol development, rather than formal data collection for analysis. These consultative activities did not constitute research requiring formal ethical approval. Nevertheless, our team followed good practice principles for public involvement, including providing clear information about the purpose of consultation, obtaining verbal consent for participation, and ensuring confidentiality in discussions.

Comment 2: Please use the SSA abbreviation consistently throughout the manuscript.

Response: We have ensured consistent use of the SSA abbreviation throughout the revised manuscript.

Comment 3: Same comment as above in abstract section about experts being defined, identified, and their non-published dataset being included [ethical approval] -- more detail needed here.

Response: We have provided more details on expert identification and data sharing protocols in the methods section of the revised manuscript.

Comment 4: "The characteristics of the comparison group will also be extracted," - Please revisit the comparator section and list any/all comparators.

Response: We have revised the comparator section to clearly list all potential comparison groups that will be extracted, including: girls with adequate access to menstrual products versus those without; girls with access to private, clean sanitation facilities versus those without; girls with adequate menstrual health knowledge versus those without; pre-intervention versus post-intervention measures for studies evaluating menstrual health programs; girls experiencing menstrual-related pain or symptoms versus those who do not; and school attendance during menstruation versus non-menstruation periods.

Comment 5: Who will conduct the grading? Will it be more than one person?

Response: We have modified the section on grading to specify that two independent reviewers will conduct the GRADE assessment, with disagreements resolved through discussion or by involving a third reviewer.

Comment 6: Some queries over ethical approval as noted before.

Response: We have significantly improved the ethics section of the revised manuscript to address these concerns.

Reviewer 2 Comments

Abstract Comments:

Comment 1: Please add the tool you will use for the quality assessment in the abstract (Robbins-E).

Response: We have now included the ROBINS-E tool in the abstract as requested.

Introduction Comments:

Comment 1: Line 26-35: You include statistics of sanitary pad use and non-use. Do you mean commercial sanitary pads or menstrual materials more broadly (ie including menstrual cloth, reusable fabric pads etc)? To ensure there is not a bias towards one menstrual product, I would suggest using the term 'menstrual materials' and then specifying what that includes in the introduction.

Response: We have clarified that the statistics referenced specifically pertain to commercial sanitary pads.

Comment 2: Line 45: who do you mean when you say 'vulnerable schoolgirls' -- please be specific. As you are focusing on schoolgirls, include some background on menstrual health and school attainment and draw on evidence from NGOs/govts delivering school based MH interventions. Line 52-55 -- reference the need to assess the effectiveness of school based interventions so it is clear who your target group is. All of this will help better emphasise the gap you are filling.

Response: We have revised the text to specifically define vulnerable schoolgirls as those with limited access to menstrual health resources and support, including those from low-income households, rural areas, and marginalized communities. We have also added evidence on menstrual health's impact on educational outcomes and referenced the need to assess school-based interventions to better emphasize the research gap we are addressing.

Comment 3: Include a section at the end of the introduction: aims and research questions. Then move the aim to the end of the introduction after you have set out the gaps across all key areas (which you do well). Your research questions should follow this.

Response: We have added a dedicated “Aims and Research Questions” section at the end of the introduction as suggested, positioning it after discussing the research gaps. This section clearly articulates the primary aim of the systematic review followed by the specific research questions.

Comment 4: Is “truancy” the right word in your research question? That term tends to be value based and implies skipping school without good reason. Consider replacing with school absenteeism.

Response: We agree with this observation and have replaced “truancy” with “school absenteeism” in our research question.

Methods and Analysis Comments:

Comment 1: You include the review aim under 'patient and public involvement'. Just include it once earlier on (see my comment above).

Response: We have removed the review aim from the “patient and public involvement” section as it is now clearly stated in the new “Aims and Research Questions” section at the end of the introduction.

Comment 2: Your classification of grey literature is unclear. You state that you will not include case studies, etc, but it is unclear how you differentiate between grey and peer-reviewed literature. Please include a standalone section on eligibility criteria and in that clearly state what your inclusion/exclusion is and within that define what is grey and peer-reviewed literature, if you will include quant and qual, publication date range, language etc etc.

Response: We have added a standalone “Eligibility Criteria” section that clearly defines what constitutes peer-reviewed and grey literature in our review. This section comprehensively

outlines our inclusion and exclusion criteria, including publication types, date range, language requirements, and study designs (quantitative observational studies).

Comment 3: Quality assessment: Supplementary File 3 looks comprehensive, but applying standardized quality assessment across peer-reviewed and grey literature is often tricky. Once you have set out your eligibility criteria, it will be easier to see if/how they can be compared.

Response: Thank you for this insightful comment. It will be taken note of during the review process

VERSION 2 - REVIEW

Reviewer	1
Name	Elliott-Sale, Kirsty J
Affiliation	Manchester Metropolitan University
Date	24-Apr-2025
COI	

Thank you for addressing my comments.

Reviewer	2
Name	Wilbur, Jane
Affiliation	London Sch Hyg
Date	16-Apr-2025
COI	

Thank you for effectively addressing my comments. The protocol is strong. A minor point to consider going forward:

Eligibility criteria: 'Studies published in any language will be eligible, with translation services to be used when necessary.' This is fine, but the quality of translation will depend on what you use. E.g. if you use google scholar, there is a risk that the nuance in the paper will be missed so the quality of your review of those resources will be less strong than papers not translated. Just reflect on that as you move forward and potentially include it as a limitation when you publish your paper.