

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	A protocol for a systematic review of economic evaluations conducted on gender-transformative interventions aimed at preventing unintended pregnancy and promoting sexual health in adolescents
AUTHORS	Ncube, Janet; Adom, Theodosia; Nkonki, Lungiswa

VERSION 1 – REVIEW

REVIEWER	Lohan, Maria Queens University of Belfast
REVIEW RETURNED	03-Nov-2021

GENERAL COMMENTS	<p>This is a timely and important review addressing a key gap in the literature that will be of keen interest to academic, policy and practice communities. It is clearly written and meets high quality standards for systematic review protocols.</p> <p>The areas of improvement that I would suggest for your consideration are as follows.</p> <p>1/Abstract: introduction Gender transformative interventions are described as being about gender equality for women and about contraceptive practices, but gender transformative interventions per se are broader than contraceptive practices or SRHR. This is acknowledged later on in manuscript. Abstract: outcomes. Later on Qualys and Dalys are mentioned as outcomes but not in abstract.</p> <p>Introduction Again gender transformative interventions are described as 'Gender-transformative interventions mainly target adolescents aged 10-19 and have a focus on sexual and reproductive health, HIV and violence. [3]' However, Gender transformative interventions are much broader than this.</p> <p>Suggestion: Avoid use of this acronym: SR-EEs because it is key the reader understands what that is and it is not much used in manuscript I think. Suggestion: Consider moving this sentence down to next paragraph where references are described 'To our knowledge, a few systematic reviews of economic evaluations targeting sexual and reproductive health have been published'.</p> <p>Methodology Age: Both 10-19 and 13 to 19 are used. Suggest 10-19.</p>
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	<p>Where you state 'Studies done in non-adolescent populations will not be considered, consider how you will deal with studies where there are some adolescents and some adults and perhaps also some children and some adolescents.</p> <p>Under intervention: You state 'The economic evaluations should compare different interventions or have a control which may be the standard of care or no intervention'. Should this come under types of studies? Also, does this sound like experimental and quasi experimental only and excluding observational studies of a single intervention (without a control comparator)? You stated you wanted to include observational studies. Perhaps these should also be defined more, e.g. Will this include qualitative evaluations with economic evaluation quant data of a single intervention?</p> <p>Search Strategy: 'The search strategy will be tailored specifically for each database' Do you mean just minor adaptations to the needs of the database?</p> <p>Inclusion criteria: Are you going to exclude or include previous systematic reviews of HE (two noted) Some SR do.</p> <p>Data Extraction: Suggestion: I wonder if it would be worthwhile extracting effectiveness data of the interventions as well as EE effectiveness. Clearly your analysis is the latter but extracting effectiveness data gives you richer potential of analysis across effectiveness and economic effectiveness.</p> <p>Risk analysis – suggestion: Have you examined if any of the identified studies in the review of Ruane-McAteer et al to see if they include economic evaluations? I appreciate your review is broader as it is not just experimental and quasi exp. But, it may give you insight. Also, If it turns out that that there is a zero return of studies in your review as currently defined, you could consider including non gender-transformative interventions and you could use earlier evidence and gap map (EGM) as a potential starting point – again appreciate your review is broader than types of studies included in EGM. Finally, for what is worth, and by way of encouragement, if your review in the way that is currently defined returns only a small amount of studies, e.g. one to four, my opinion is that it would be very worthwhile and an important contribution to the field.</p>
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REVIEWER	Jackson, Louise University of Birmingham, Health Economics Unit
REVIEW RETURNED	07-Dec-2021

GENERAL COMMENTS	<p>This protocol addresses an important area of research, and as the authors articulate there is a paucity of evidence relating to the evaluation of gender-transformative interventions. On the whole, the protocol is comprehensive and clear. However, there are some areas where further explanation would be helpful.</p> <ul style="list-style-type: none"> - In the Introduction section, the authors mention the different methods of economic evaluation. They state that they differ in terms of the outcome measures used. However, there are also theoretical differences which could be mentioned (welfarism and extra-welfarism).
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	<ul style="list-style-type: none"> - On p 6 the authors state that to their knowledge 'a few' systematic reviews have been published. Perhaps this should be 'few'? - In the Methodology section it might be helpful to set out more detail on the scoping search stage. - The authors mention searches of the grey literature, but this does not seem to be fully explained and justified in the main methods section. More information is needed on the approach set out here. - Some justification on the main databases to be searched would be helpful. - The protocol states that a range of quality appraisal tools will be used and a reporting checklist. As the authors mention, there is some overlap between the tools. Further justification and explanation is needed on the use of these different tools and why it is worthwhile to use all of them. - The authors will also use the Joanna Briggs Institute matrix. Again, further explanation is needed on how this will be used and how it will add further insights.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

1/Abstract: introduction

Gender transformative interventions are described as being about gender equality for women and about contraceptive practices, but gender transformative interventions per se are broader than contraceptive practices or SRHR. This is acknowledged later on in manuscript.

Response: The introduction was rephrased to:

In the context of family planning and reproductive health, a gender-transformative approach involves helping communities understand and challenge the social norms that perpetuate inequalities between men and women and improving women's access to essential services and contraceptive methods. [Pg 2, line 16-18]

Abstract: outcomes. Later on Qualys and Dalys are mentioned as outcomes but not in abstract.

Response: Quality Adjusted Life Years (QALY) And Disability Adjusted Life Years (DALYs) have been added under outcomes in the abstract. [Pg 2, line 32-33]

Introduction

Again gender transformative interventions are described as 'Gender-transformative interventions mainly target adolescents aged 10-19 and have a focus on sexual and reproductive health, HIV and violence. [3]' However, Gender transformative interventions are much broader than this.

Response: The sentence was rephrased to:

In a systematic review, gender-transformative interventions that specifically target adolescents aged 10-19 mainly focused on sexual and reproductive health, HIV, and violence. [Pg 4, line 78-80]

Suggestion: Avoid the use of this acronym: SR-EEs because it is key the reader understands what that is and it is not much used in the manuscript I think.

Response: The acronym SR-EE has been removed from the protocol. Pg 6, line 127 and 129]

Suggestion: Consider moving this sentence down to next paragraph where references are described 'To our knowledge, a few systematic reviews of economic evaluations targeting sexual and reproductive health have been published'.

Response: Noted, the sentence on systematic reviews of economic evaluations was moved to the next paragraph.

[Pg 6, line 142]

Methodology

Age: Both 10-19 and 13 to 19 are used. Suggest 10-19.

Response: We will use the population age 10-19 years, we have made changes on the protocol [Pg, 8 line 203] and appendices [Appendix 2 Pg, 1 line 3].

Where you state 'Studies done in non-adolescent populations will not be considered, consider how you will deal with studies where there are some adolescents and some adults and perhaps also some children and some adolescents.

Response: Where there are studies with adolescents and children or adolescents and adult populations, we will include studies that have outcome measures stratified by age and identified outcomes for adolescents. If the outcome measures are not specified for different age groups, the study will be excluded. [Pg, 8 line 204-207].

Under intervention: You state 'The economic evaluations should compare different interventions or have a control which may be the standard of care or no intervention'.

Should this come under types of studies?

Response: the text has been modified to the following wording "The economic evaluations should either compare different interventions or an intervention compared to a control which may be the standard of care or no intervention." and moved under the type of studies. [Pg, 8 line 191-192].

Also, does this sound like experimental and quasi-experimental only and excluding observational studies of a single intervention (without a control comparator)? You stated you wanted to include observational studies. Perhaps these should also be defined more, e.g. Will this include qualitative evaluations with economic evaluation quantitative data of a single intervention?

Response: We will include qualitative evaluations with economic evaluation quantitative data of a single intervention. We will not include qualitative studies without economic evaluation data. We will consist of economic evaluations alongside observational studies. The following statement has been added under Types of studies "We will include qualitative evaluations with economic evaluation quantitative data of a single intervention, as well as economic evaluations alongside observational studies." [Pg 8, line 193-194]

Search Strategy: 'The search strategy will be tailored specifically for each database' Do you mean just minor adaptations to the needs of the database?

Response: Yes, the adaptations are to meet the minor needs of the database. Clarification has been made, and the statement now reads:

Minor adaptations of the search strategy will be made to meet the needs of each database when necessary. [Pg, 10 line 262-263]

Inclusion criteria: Are you going to exclude or include previous systematic reviews of HE (two noted) Some SR do.

Response: We are excluding systematic reviews of economic evaluations. However, we will review their reference lists and include the primary studies that meet our inclusion criteria. The following reasons informed our decision:

- We believe that including systematic reviews will be a duplication of work, particularly if we have reviewed their reference list and included studies that meet our inclusion criteria.
- Also, we intend to conduct a quality assessment of the primary economic evaluations; the required information may not be available in pooled data available in systematic reviews of economic evaluations.

We have included the following statement in the Exclusion criteria section “ We will exclude systematic reviews of economic evaluations. However, we will scan search their reference list for primary economic evaluations studies and include those studies if they meet our inclusion criteria.” [Pg, 10 line 245-247]

Data Extraction:

Suggestion: I wonder if it would be worthwhile extracting effectiveness data of the interventions as well as EE effectiveness. Clearly your analysis is the latter but extracting effectiveness data gives you richer potential of analysis across effectiveness and economic effectiveness.

Response: We will not be extracting the effectiveness data because there is a published systematic review of intervention studies. [Ruane-McAteer E, Gillespie K, Amin A, et al Gender-transformative programming with men and boys to improve sexual and reproductive health and rights: a systematic review of intervention studies BMJ Global Health 2020;5: e002997].

Furthermore, pooling the effectiveness data will require conducting quality assessments of the effectiveness studies. This will be beyond the scope and resources of this study.

Risk analysis – suggestion:

Have you examined if any of the identified studies in the review of Ruane-McAteer et al to see if they include economic evaluations? I appreciate your review is broader as it is not just experimental and quasi exp. But, it may give you insight.

Also, If it turns out that that there is a zero return of studies in your review as currently defined, you could consider including non gender-transformative interventions and you could use earlier evidence and gap map (EGM) as a potential starting point – again appreciate your review is broader than types of studies included in EGM.

Finally, for what is worth, and by way of encouragement, if your review in the way that is currently defined returns only a small amount of studies, e.g. one to four, my opinion is that it would be very worthwhile and an important contribution to the field.

Response: We have not identified any economic evaluations from the review of Ruane-McAteer et al., but we are still to complete reviewing their reference list of included articles. Some potential articles have been identified from other sources. We have also invited one of the co-authors of the Ruane-McAteer study to be part of this systematic review. It is our view that this will facilitate knowledge transfer between the two systematic reviews.

Reviewer: 2

In the Introduction section, the authors mention the different methods of economic evaluation, and they state that they differ in terms of the outcome measures used. However, there are also theoretical differences that could be mentioned (welfarism and extra-welfarism).

Response: Economic evaluations theoretical underpinnings are in welfare economics. Welfare economics is a branch of economics concerned with maximising social welfare. It assumes rational individuals who maximise their utilities and that the overall welfare of society is a function of individual utilities. Economic evaluations that apply welfare economics to health care are concerned with individual utility. Whereas, Economic evaluations that apply extra-welfarist economics are concerned with maximising health, including individual and social preferences. Extra-welfarist economics builds on but goes beyond the individualist focus in welfare economics. [Pg, 5 line 120-126]

On p 6, the authors state that to their knowledge, 'a few' systematic reviews have been published. Perhaps this should be 'few'?

Response: The sentence has been modified to:

To our knowledge, few systematic reviews of economic evaluations targeting sexual and reproductive health have been published. [Pg, 6 line 142-143]

In the Methodology section, it might be helpful to set out more detail on the scoping search stage.

Response: We conducted a preliminary search on PROSPERO and Cochrane Library and PUBMED to determine if similar systematic reviews were in process or had been published. The full title or keywords to describe the population, intervention and outcomes were used in the search. Of the 11 review titles identified on PROSPERO, 2 reviews on Cochrane Library and 33 titles on PUBMED (appendix 2), there were no completed or ongoing systematic reviews that matched all aspects of our proposed systematic review. [Pg, 10 line 249-254]

The authors mention searches of the grey literature, but this does not seem to be fully explained and justified in the main methods section. More information is needed on the approach set out here.

Response: The following has been included in the methods section:

A grey literature search for unpublished data will also be conducted to ensure an extensive search for articles. Databases that include MedNar or Google Scholar, ProQuest Dissertations, and the Online clinical trials registers will be searched for unpublished studies. Key words derived from the title and listed in the search strategy will be used in the grey literature search. [Pg, 10 line 264-268]

Some justification on the primary databases to be searched would be helpful.

Response: The following statement has been included under search methods for identification of studies in the methods section:

Not all relevant studies may be published in one database; therefore, we will search various databases as stated to reduce bias in the study selection. The economic evaluation database, the National Health Service EE database, has publications until March 2015 and is no longer publishing, whereas Paediatric EE Database is updated annually; therefore, general databases are helpful in finding more recent publications. [Pg, 10 line 257-262]

The protocol states that a range of quality appraisal tools will be used and a reporting checklist. As the authors mention, there is some overlap between the tools. Further justification and explanation is needed on the use of these different tools and why it is worthwhile to use all of them.

Response: We will use the Consensus on Health Economic Criteria (CHEC) extended checklist to meet the second objective of our systematic review, which is to assess the methodological quality of the economic evaluation studies. The extended CHEC guideline will include the quality assessment of modelling studies. We reviewed the Philips guideline and observed a significant overlap with the CHEC extended guideline. Therefore, we will drop the Philips guideline and focus on the CHEC comprehensive guideline for modelling studies.

The CHEERS statement will be used to evaluate the reporting standards of the included studies.

We opted to use both guidelines in their entirety despite overlapping questions because we would like to report on methodological quality and reporting standards assessments separately. [Pg,12 Line 314-316; 322-323; 333-337].

The authors will also use the Joanna Briggs Institute matrix. Again, further explanation is needed on how this will be used and how it will add additional insights.

Response: A table of the main features of the studies will be included to show similarities and differences by population, intervention, comparator, and outcome. The JBI three-by-three matrix dominance will be used to classify the cost-effectiveness outcomes of each included study. Based on the costs and health effects outcomes between the intervention and the comparator, we will classify each study as one of nine options under strong dominance, weak dominance, or non-dominance. [Pg,13 Line 349-354]

VERSION 2 – REVIEW

REVIEWER	Lohan, Maria Queens University of Belfast
REVIEW RETURNED	08-Mar-2022
GENERAL COMMENTS	Thank you for considering and completing revisions.