

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	The impact of major disease outbreaks in the third millennium on adolescent and youth sexual and reproductive health and rights in Low and/or Middle Income Countries: a systematic scoping review protocol
<b>AUTHORS</b>	Akbarialiabad, Hossein; Shidhaye, Rahul; Shidhaye, Pallavi; Cuijpers, Pim; Weaver, Marcia; Bahrololoom, Mina; Kiburi, Sarah; Njuguna, Irene; Taghrir, Mohammad Hossein; KUMAR, MANASI

### VERSION 1 – REVIEW

<b>REVIEWER</b>	Mwaisaka, Jefferson International Centre for Reproductive Health Kenya
<b>REVIEW RETURNED</b>	22-May-2021

<b>GENERAL COMMENTS</b>	Line 7: SRHR is Sexual and Reproductive Health and Rights (SRHR) Need to be reviewed by a native English speaker Line 15 – 16 on 11% of annual births needs to be referenced Line 50 on the outcome, the authors could include access to SRHR services likely to be affected by shifting priorities to the pandemics
-------------------------	---

<b>REVIEWER</b>	Lara, Lúcia University of São Paulo, Department of Gynecology and Obstetrics
<b>REVIEW RETURNED</b>	30-May-2021

<b>GENERAL COMMENTS</b>	The manuscript entitled The impact of major disease outbreaks in the third millennium on adolescent and youth sexual and reproductive health and rights in LMICs: a systematic scoping review protocol aimed to map the range, extent, and nature of articles related to the effects of H1N1, Ebola virus, Zika virus, and SARS-COV-2 on sexual health and rights (SRHR) adolescents and youth in LMICs: Also this protocol aimed to respond the following questions -What is the existing evidence regarding the impact of the Zika virus outbreak on adolescents and youth SRHR in LMICs? - What is the existing evidence regarding the impact of the H1N1/09 virus outbreak on adolescents and youth SRHR in LMICs? - What is the existing evidence regarding the impact of the Ebola virus outbreak on adolescents and youth SRHR in LMICs? - What is the existing evidence regarding the impact of the SARS-COV-2 virus outbreak on adolescents and youth SRHR in LMICs?
-------------------------	---

	<p>That are many objectives displayed immediately, out of the subtitle “objectives”, and this should appear at the end of the introduction. The subtitle “objectives” should be “Research questions”</p> <p>Do not use acronyms in the title (LMICs).</p> <p>Use the acronym in the text only after the first full citation (SRH, GBD, LMICs, UNDP).</p> <p>Organize the section entitled “Value of the proposed review”. It is not necessary to mark each disease with letters and you need to standardize the subtitles (uppercase and normal letters?). The elaboration of a table containing Key concepts and definitions for the study questions could facilitate the interpretation of the study data.</p> <p>This protocol needs a careful format revision.</p>
--	--

<b>REVIEWER</b>	Temmerman, Marleen Aga Khan University - Kenya, Centre of Excellence Women and Child Health
<b>REVIEW RETURNED</b>	29-Aug-2021

<b>GENERAL COMMENTS</b>	<p>Interesting protocol for a scoping review impact of major disease outbreaks on adolescent and youth SRHR in LMIC.</p> <p>The paper is well written and deserves publication after addressing the following concerns/comments:</p> <ol style="list-style-type: none"> <li>1. The paper is developed by authors who belong to the 2 professional categories, including psychology, mental health and data sciences/metrics. What is missing are experts familiar with SRHR and with adolescents/youth SRHR</li> <li>2. This is obvious throughout the paper; just 1 example is line 24: maternal mortality is 278 in 10-14 year old girls. The MM is expressed as a ratio per 100,000 live births. Hence, it should read the MMR is 278/100,000 live births, which is high in the west but in LMICs we have MMRs in the total population that are much higher (up to &gt;500/100,000)</li> <li>3. the topic is interesting but why only LMICs? This is of course valid for Ebola and perhaps Zika, but covid-19 is global and has consequences in HICs as well. Eg VAW and SGBV is even more increased in some countries in the West than in LMICs</li> </ol> <p>Recommendation for the authors:</p> <ul style="list-style-type: none"> <li>-Involve SRHR and Adolescent&amp;Youth SRHR experts</li> <li>-Consider including all countries in your scoping review.</li> </ul>
-------------------------	--

## VERSION 1 – AUTHOR RESPONSE

### Response to Reviewer 1

The comments made by reviewer 1 have been implemented in the manuscript with grey highlights. The following specific edits have been made.

1. Line 7 the acronyms SRHR was written in full.
2. Line 15 – 16 on 11% of annual births needs to be referenced

Response- we reformatted it in a different way; In 2016, it was found that those 15-19 years old in developing countries had 21 million pregnancies and more than half of these (12 million) resulted in live child birth.

The reviewer suggested we add access to SRHR services in outcomes

Response- we have added this on the table of outcomes as well as outcome section as such.

#### Response to Reviewer 2

The comments made by reviewer 2 have been implemented in the manuscript with blue highlights. The following edits have been made in the manuscript as per reviewers' guidance.

1. The subtitle "objectives" has been inserted at the end of the introduction.
2. The subtitle "objectives" was changed to "Research questions"
3. The acronyms were replaced with the full words and the acronyms were put in brackets after the first full citation.
4. The letters in the section "Value of the proposed review" were omitted and the section was organized to a better format.- we have organized that better.
5. We have tidied the research question and objective sections and we hope the overall concepts will flow better.

#### Response to Reviewer 3

The comments made by reviewer 3 have been implemented in the manuscript with pink highlights.

The reviewer recommended involvement and Adolescent & Youth SRHR experts

Response – several of our authors have been actively working around public health issues covering SRHR and HIV in the region. However closer to the time we will consider engaging with Prof Temmerman and Dr John Kinuthia (from Kenya who is a obs/gynecologist, public health SRHR researcher).

The reviewer also suggested that we consider including all countries in our coping review

Response - we are not able to expand the search to global context as since we wrote this much work has taken place in this space and as a team we are interested in the setbacks in LMICs. we do however acknowledge the importance of what the reviewer has conveyed here.

We hope you would find that we have significantly improved the paper.

Thank you very much for your consideration.

With regards,

Dr Hossein Akbarialiabad and Dr Manasi Kumar on behalf of the authors.