

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Service delivery models for enhancing linkage to and retention in HIV care services for adolescent girls and young women and adolescent boys and young men: A protocol for an overview of systematic reviews
AUTHORS	Jonas, Kim; Zani, Babalwa; Ramraj, Trisha; Chirinda, W.; Jama, N.; Basera, W.; McClinton Appollis, Tracy; Pass, Desiree; Govindasamy, D.; Mukumbang, Ferdinand; Mathews, C.; Nicol, Edward

VERSION 1 – REVIEW

REVIEWER	Swaminathan, Shobha Rutgers New Jersey Medical School
REVIEW RETURNED	14-Mar-2022

GENERAL COMMENTS	Thank you for providing a framework for evaluation of service delivery models. A more detailed analysis plan will be helpful for the review.
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REVIEWER	Qur'aniati, Nuzul Airlangga University
REVIEW RETURNED	11-Apr-2022

GENERAL COMMENTS	<p>Service delivery models for enhancing linkage to and retention in HIV care services for adolescent girls and young women and adolescent boys and young men: A protocol for an overview of systematic reviews.</p> <p>Thank you for the opportunity to review your paper. Understanding service delivery models for enhancing linkage to and retention in HIV care services is important to enhance the quality of life.</p> <p>Background</p> <ul style="list-style-type: none">– Can the authors please include additional information about retention in HIV care service (such as are there any data regarding transferred out, stopped treatment or been lost to follow up) which is not only related to ART adherence (lines. 31-32) and perhaps what is their living situation?– Can the authors include additional information regarding the review in the context of what is already known supported by existing studies (lines 32-35)? It seems that other existing studies already addressed the proposed protocol, such as https://pubmed.ncbi.nlm.nih.gov/24354712/ (DOI: 10.1080/09540121.2013.869536); https://bmjopen.bmj.com/content/10/9/e034793
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	<p>Methods</p> <ul style="list-style-type: none"> – The authors please check singular and/or plural nouns (such lines. 35, 42, 50, 54 etc should be plural). – For PICO, I suggest the authors use P for Population (line. 7). – Would it be possible to provide information, such as years considered, and publication as criteria for eligibility for the review? Can you say more about why the years considered will not be included in the study process (line. 31) – Study design p. 5, inclusion criteria in the overview are quantitative studies (RCT, Non-RCT, controlled before and after studies) and mixed method, but table 1, study design in p. 7 line 51 will use systematic review and meta-analysis of quantitative and qualitative studies. Please specify and clarify. – Heading search methods for identification of studies, p. 7 lines 31-33 will use four databases, but p. 7, table 1, line 56 was written five databases, including google scholar for searching grey literature – Data extraction and management, page 8, lines. 49-50 stated, “two or more reviewers will independently perform data extraction for each review and populate a predefined table”. Regarding “a predefined table” does it like standardised data extraction forms? – Please clarify the heading data synthesis and presentation: retention in HIV care service (page. 10, lines 44-51) informs 1 month, 3 months and/or 6 months after being initiated on ART while outcomes on page eight lines 11-12 plans from 2 weeks to 1 year). <p>Conclusion and limitation are not available and may need to be informed in the text.</p> <p>References</p> <ul style="list-style-type: none"> – I suggest that the authors review the reference standards again and please update the old references.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Dear Author

Thank you for providing a framework for evaluation of service delivery models. A more detailed analysis plan will be helpful for the review.

Response: Thank you for the review. We have added more information on our data synthesis plan in addition to the existing content.

We will present the summary using tables and figures as ‘Overview of reviews table’, including the characteristics of included systematic reviews. We will denote systematic reviews that contain overlapping outcomes using appropriate footnotes.

Reviewer:

2

Comments to the Author:

Manuscript Number: bmjopen-2022—060778

2

Service delivery models for enhancing linkage to and retention in HIV care services for adolescent girls and young women and adolescent boys and young men: A protocol for an overview of systematic reviews. Thank you for the opportunity to review your paper. Understanding service delivery models for enhancing linkage to and retention in HIV care services is important to enhance the quality of life.

Response: Thank you for the review comments and feedback.

Background

– Can the authors please include additional information about retention in HIV care service (such as are there any data regarding transferred out, stopped treatment or been lost to follow up) which is not only related to ART adherence (lines. 31-32) and perhaps what is their living situation?

Response: This comment is noted. We have added the below extract.

Although most PLHIV know their HIV status, retention in HIV care services is a challenge. For example, in South Africa only 70% of those who knew their HIV status were on ART in 2017.⁹ Bisnauth et al. (2021) found that mobility, such as moving house or relocation, ART side effects or pill burden, and time constraints were some of the most common reasons reported for disengagement from care or loss to follow-up by PLHIV.¹⁰ Retention in HIV care for ART services for vulnerable populations, such as adolescents, is particularly challenging and has been noted as a global priority for action.¹¹⁻¹³ Previous studies also confirmed that retention in care, treatment adherence, and treatment outcomes for adolescents in southern Africa are worse, compared with other age groups.¹³⁻¹⁶

– Can the authors include additional information regarding the review in the context of what is already known supported by existing studies (lines 32-35)? It seems that other existing studies already addressed the proposed protocol, such as <https://pubmed.ncbi.nlm.nih.gov/24354712/> (DOI: 10.1080/09540121.2013.869536);<https://bmjopen.bmj.com/content/10/9/e034793>

Response: Not quite. Our review is focusing on HIV services and treatment for young people rather than the general population living with HIV. The two reviews referred to by the reviewer in here are addressing linkage to and retention in HIV care for the general population. The first review is a systematic review which is included in our study. The second review is an overview of reviews specifically focusing on people living with HIV with specific vulnerable populations, which our study is not focusing on but adolescent girls and young women and adolescent boys and young men. I hope this clarifies. We have also added more information to clarify why this proposed overview of systematic reviews is needed, see extract below:

We identified one overview of systematic reviews. Mbuagbaw et al. (2020) conducted an overview of systematic reviews focusing on treatment initiation, adherence to ART and retention in care for vulnerable populations, but their overview did not explore the results of reviews among adolescent and young populations.³⁷ Our proposed overview of systematic reviews will specifically focus on AGYW and ABYM, as the infection rates are increasing and death rates are declining slower among these subpopulations. AGYW and ABYM are a vulnerable group which recently emerged as a priority in the global fight against HIV/AIDS. Compared with older populations, adolescents and young people experience different barriers to HIV treatment, such as less autonomy and more limited access to resources, and less independence.³⁸ The overview of systematic reviews we propose will fill in this gap and provide evidence synthesis specific to interventions or SDMs for linking and retaining adolescents and young people in HIV care services.

Methods

– The authors please check singular and/or plural nouns (such lines. 35, 42, 50, 54 etc should be plural).

Response: Thank you for this comment, this has been looked at.

– For PICO, I suggest the authors use P for Population (line. 7).

Response: Thank you, this has been done.

– Would it be possible to provide information, such as years considered, and publication as criteria for eligibility for the review? Can you say more about why the years considered will not be included in the study process (line. 31)

Response: Thank you for this comment. It is unclear what the reviewer is referring to here as we do not have any limits of the years of publication. However, we have added this justification in the manuscript:

We will not limit publication dates or location of studies to capture all relevant systematic reviews published covering all the HIV/AIDS treatment and management guideline strategies. The international guidelines for HIV treatment and management has changed over the years where initially, only advanced AIDS clinical stages were used as criteria to initiate treatment. Following this, guidelines were updated and CD4 count, and viral load levels were revised to allow treatment initiation much earlier in the disease progression. Recently, the UTT strategy is being implemented. Therefore, our overview of systematic reviews will capture evidence covering the period of these varying HIV treatment policies.

– Study design p. 5, inclusion criteria in the overview are quantitative studies (RCT, Non-RCT, controlled before and after studies) and mixed method, but table 1, study design in p. 7 line 51 will use systematic review and meta-analysis of quantitative and qualitative studies. Please specify and clarify.

Response: This was an error from our part, thank you for picking it up. We have now clarified

Systematic reviews or meta-analyses including randomized controlled trials, non-randomized controlled trials, controlled before and after studies, interrupted time series studies, and other mixed-methods studies (quantitative, qualitative, or mixed).

– Heading search methods for identification of studies, p. 7 lines 31-33 will use four databases, but p. 7, table 1, line 56 was written five databases, including google scholar for searching grey literature

Response: This was an error from our part, it has been corrected.

– Data extraction and management, page 8, lines. 49-50 stated, “two or more reviewers will independently perform data extraction for each review and populate a predefined table”. Regarding “a predefined table” does it like standardised data extraction forms?

Response: This is an excel table developed by the review team to standardize data extraction by the multiple reviewers who will extract the data. It has now been clarified.

The predefined table is an excel table developed by the review team to standardize data extraction by the multiple reviewers who will extract the data.

– Please clarify the heading data synthesis and presentation: retention in HIV care service (page. 10,

lines 44-51) informs 1 month, 3 months and/or 6 months after being initiated on ART while outcomes on page eight lines 11-12 plans from 2 weeks to 1 year).

Response: Thank you picking up this error. This is meant to be from 1 month as well. The error has been corrected. It is linkage to care that spans from 2 weeks under the UTT strategy.

However, according to the universal test and treat (UTT) strategy, a shorter period between testing HIV positive and initiating ART is necessary to indicate successful initiation onto ART which can be immediately or within 2 weeks of diagnosis. Therefore, we will include all reviews with the definitions covering the period before and including the period when UTT strategy was introduced.

Retention in care is defined as remaining in contact with HIV care services, once linked to the services, collecting treatment, based on the frequency of clinic visits (varying from 1 month to 1 year), or the number of viral load tests conducted each year.⁴¹⁻⁴²

-Conclusion and limitation are not available and may need to be informed in the text.

Response: Thank you for this, we have added some text in manuscript to indicate this.

Conclusions are not available as this is a protocol. Limitations of this protocol are described under the discussion section above.

References

– I suggest that the authors review the reference standards again and please update the old references.

Response: Thank you for this, we have updated our references accordingly.

VERSION 2 – REVIEW

REVIEWER	Qur'aniati, Nuzul Airlangga University
REVIEW RETURNED	13-Jun-2022

GENERAL COMMENTS	<p>Overall, the protocol has been improved; however, minor point in the protocol needs clarification and refinement to improve it as below:</p> <p>Abstract</p> <ul style="list-style-type: none"> <input type="checkbox"/> The purpose of the study in the abstract only mentions one, but three objectives were written in lines 23-31. <p>Background</p> <ul style="list-style-type: none"> <input type="checkbox"/> It would be more helpful for the readers to understand more about the updated data on the epidemiology of HIV (lines 23-24). As well, the achievement of 95-95-95 targets on HIV/AIDS needs to be updated in the recent year (such as using the data year 2020/2021 instead of the data year 2028, lines 34-36). <input type="checkbox"/> What sorts of program exists to facilitate retention in care and medication adherence globally as the concept of HIV care continuum addressing linking to care and retained in care is already well-known. <p>Methods</p>
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	<p><input type="checkbox"/> All processes have been updated. However, a few areas need to be clarified. For example, population: why do the authors distinguish the age range between AGYW (15-24 years) and ABYM 15-35 years if you already explained that WHO defined adolescent girls aged 10-19 years and young women 20-24 years old and ABYM 10-19 years old and men aged 15-35 years. I think individuals in the 15-24 years old are often called youth or middle and late adolescents.</p> <p><input type="checkbox"/> Is there a statistic that will be used to identify the effectiveness of the intervention as your objective no. 1, lines 23-25 wants to identify the effectiveness of intervention and SDM at linking AGYW and ABYM to HIV care services and retaining them in HIV care and line 23 also wants to know which model that is ineffective.</p> <p>References</p> <p><input type="checkbox"/> The references potentially need to be updated based on the field of interest, such as http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2078-67512020000100004; https://www.liebertpub.com/doi/10.1089/apc.2018.0320; etc.</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer: 2

Dr. Nuzul Qur'aniati, Airlangga University

Comments to the Author:

Overall, the protocol has been improved; however, minor point in the protocol needs clarification and refinement to improve it as below:

Abstract

– The purpose of the study in the abstract only mentions one, but three objectives were written in lines 23-31.

Response: Thank you for this point. Indeed, there are three objectives for this study but we only included one in the abstract to keep it more concise. We have integrated the three objectives as shown below:

The purpose of this overview of systematic reviews is to identify HIV care interventions or service delivery models (SDMs) and synthesize evidence on the effects of these to link adolescent girls and young women (AGYW) and adolescent boys and young men (ABYM) to care and retain them in care. We also aim to highlight gaps in the evidence on interventions and SDMs to improve linkage and retention in HIV care of AGYW and ABYM.

Background

– It would be more helpful for the readers to understand more about the updated data on the epidemiology of HIV (lines 23-24).

Response: This comment is appreciated. We have updated the HIV stats, see text below:

HIV/AIDS remains one of the most serious public health challenges, with 38.4 million people living with HIV (PLHIV) and 650 000 deaths attributed to AIDS globally in 2021.¹ There were over 28.7 million people accessing antiretroviral therapy (ART) in 201, which is 75% of all PLHIV.¹

- As well, the achievement of 95-95-95 targets on HIV/AIDS needs to be updated in the recent year (such as using the data year 2020/2021 instead of the data year 2028, lines 34-36). Thank you for point- this has been updated.

Response: For example, in 2021 globally, 85% of those living with HIV knew their HIV status, 88% of those who knew their HIV status were accessing ART and among those on ART, and among these, 92% were virally suppressed.¹ Once initiated on ART, retention in HIV care is also important.

– What sorts of program exists to facilitate retention in care and medication adherence globally as the concept of HIV care continuum addressing linking to care and retained in care is already well-known. This comment is appreciated.

Response: Indeed, the concept of HIV care continuum is relatively well-known but for general population mainly and not for vulnerable groups as the ones focused on in this study (adolescent girls and boys and young women and men).

As described in pages 3-4, to facilitate linkage to HIV care, point of care CD4 testing for immediate linkage to HIV treatment, and for retention in HIV care, ART adherence clubs and support groups, are some of the common existing programmes. However, these programmes generally focused on the general population while AGYW and ABYM require special attention as access and uptake of health services is typically lower among young people. I hope this addresses your comment.

Methods

– All processes have been updated. However, a few areas need to be clarified. For example, population: why do the authors distinguish the age range between AGYW (15-24 years) and ABYM 15-35 years if you already explained that WHO defined adolescent girls aged 10-19 years and young women 20-24 years old and ABYM 10-19 years old and men aged 15-35 years. I think individuals in the 15-24 years old are often called youth or middle and late adolescents.

Response: We agree with the reviewer here. The reason we distinguished the ages of young women and men is because we wanted to capture the above 24 for the young men, otherwise without this distinction, one may assume that the young men are also in the 15-24 year age group. This is especially important for our search terms, as not all reviews would have followed the WHO definition. Also, clinically, there is a blurred line between children and young people as in some settings, young people are treated as the general adult population. I hope this clarifies the issue. We have added this justification in the manuscript:

We have defined and distinguished the ages of young women and men to able to capture interventions and SDMs that specifically address these age groups rather than the general youth or young adults as that may be treated similar to adults in some clinical settings.

– Is there a statistic that will be used to identify the effectiveness of the intervention as your objective no. 1, lines 23-25 wants to identify the effectiveness of intervention and SDM at linking AGYW and ABYM to HIV care services and retaining them in HIV care and line 23 also wants to know which model that is ineffective. This comment is appreciated.

Response: There is no statistics to be used, rather, we will report effectiveness or inefficacy as described in the included reviews and synthesize the evidence narratively. This is described in page 10-11:

We will report outcomes according to the effect measures reported in the included reviews and will describe the results with respect to the following characteristics: setting (country, facility e.g. school or health facility or community), age groups: 15–19 years, 20–24 years for AGYW and same for ABYM with additional 25-30 years and 31-35 years, whether the interventions are biomedical, behavioral or other.

Data will be presented graphically to visually demonstrate the data in terms of quality of evidence, quality of reviews and the **effect sizes where provided**. In addition, a section on 'implications for policy and practice' summarizing the results and evidence base will be presented.

References

- The references potentially need to be updated based on the field of interest, such as http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2078-67512020000100004; <https://www.liebertpub.com/doi/10.1089/apc.2018.0320>; etc.

Response: This is noted, and all references have been checked.