

## PEER REVIEW HISTORY

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## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Health-related quality of life measures in incarcerated populations: protocol for a scoping review
<b>AUTHORS</b>	Talaat, Habeba; Bashayan, Seniyyeh; Raymakers, Adam; Bayoumi, Ahmed; Papatheodorou, Stefania; Sediqzadah, Saadia

## VERSION 1 – REVIEW

<b>REVIEWER</b>	Essex, Ryan University of Greenwich
<b>REVIEW RETURNED</b>	25-Aug-2021

<b>GENERAL COMMENTS</b>	<p>Thank you for giving me the opportunity to review this paper.</p> <p>This paper presents a protocol for a scoping review that seeks to explore quality of life measures in incarcerated populations. I can see the importance and need for such a study and I do believe that with some changes it could be published. I provide more specific feedback below.</p> <p><b>Strengths and limitations</b> I am not sure all of these are strengths/limitations, for example point two about following PRISMA methodology. Also, see my comments below about potentially missing qualitative studies – this could also be a limitation in how we understand HRQoL.</p> <p><b>Introduction</b> The introduction is clear and makes the case well that health-related quality of life in incarcerated populations is an important issue and that there is a need for this scoping review.</p> <p>I would like to know a little more about HRQoL, what it is and how it relates to QoL. Are there any potential limitations by only focusing on HRQoL measures (and not qualitative studies – see below) for example? Also, how might incarceration shift/change/impact HRQoL – if there is a literature on this, it might be good to mention.</p> <p><b>Eligibility criteria</b> It would be better here if you could include a small table following a PICO (or similar format). This would make things a little clearer. I also think you will need greater clarity on each of your criteria. For example, you say that “Incarcerated population will be defined as individuals who are in detention” You then go on to clarify that “Arrested individuals who stay in police custody, prisoners of war, and prisoners in concentration camps will be excluded”. Are you planning on including immigration detainees? How will you define</p>
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	<p>'detention' – this can vary as well, people can serve home detention for example.</p> <p>Could you also give more details on how you might define a HRQoL instrument?</p> <p>It seems from this eligibility criteria that you will largely exclude qualitative studies (assuming they don't utilise these instruments). Is this the plan? If so, could this be a limitation of this review? Also, could this impact your synthesis (see below).</p> <p>Information sources Could you please note if there are any date ranges for these databases. Also will you search reference lists? If so, how will this be done, who will do this etc. How will you deal with studies where you cannot obtain the fulltext?</p> <p>Data items The data that you plan to extract in appendix 2 appears to be robust. You say in your introduction that "We seek to not only capture the overall scores but also disaggregated values for each domain of a HRQoL measure, for the purpose of identifying nuances that can be lost in an average score". Could you provide more detail here – are you going to extract qual and quant data from these instruments?</p> <p>Synthesis It would be good if you could provide more detail regarding your synthesis. If the aim is to explore quality of life measures, it may be best to organise the synthesis around the types of instruments used for example. In this case it may be most appropriate to turn to a textual narrative synthesis (or something similar – see reference below for example).</p> <p>I understand that this is a scoping review, so certain quantitative analyses might not be appropriate – but I could see this review being particularly helpful if it outlined instruments, scores and sub scales – along with the details of the study, to provide an overview of what measures have been used where are what their scores reveal. I can see you have said you will include tables, again more detail would be great. Even without running a search, you could explore some common HRQoL measures, this might provide some insight into how you might best synthesise your findings.</p> <p>More generally, I completely understand that this might be difficult to predict and your synthesis will largely depend on the search results, however it would be good to be more specific here and even detail how you might decide what synthesis is most appropriate - there is a substantial literature on qual synthesis for systematic/scoping reviews.</p> <p>Barnett-Page &amp; Thomas (2009). Methods for the synthesis of qualitative research: a critical review</p> <p>Minor typos Strengths and limitations - Please consider amending the first point "focus on the HRQoL in the incarcerated population" Methods and analysis</p>
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	- "we chose to conduct a scoping review" – perhaps we are planning a scoping review?
<b>REVIEWER</b>	Attafuah, Priscilla University of Ghana College of Health Sciences, Community Health Nursing
<b>REVIEW RETURNED</b>	05-Sep-2021
<b>GENERAL COMMENTS</b>	Reviewers comments 1. Generally, it's an interesting and relevant protocol. Authors should kindly define what they mean by incarcerated populations in the introduction. 2. Well explained protocol.

## VERSION 1 – AUTHOR RESPONSE

### Reviewer 1:

**1. "Strengths and limitations- I am not sure all of these are strengths/limitations, for example point two about following PRISMA methodology."**

#### *Our response:*

Thank you for your feedback. We included the following of the PRISMA guidelines as a strength as we wanted to emphasize transparency and rigour; however, we agree that it may not be a strong advantage worth listing. Therefore, we omitted this strength.

**2. "Introduction- The introduction is clear and makes the case well that health-related quality of life in incarcerated populations is an important issue and that there is a need for this scoping review."**

**I would like to know a little more about HRQoL, what it is and how it relates to QoL."**

#### *Our response:*

Thank you for your feedback. We agree that we could be more explicit about the distinction between HRQoL and QoL to provide background context on these terms. Therefore, we have added this information to the revised paper (page 4; under "Introduction")

“Quality of life (QoL) is a measure of overall well-being, including physical, social and emotional aspects of life. We conceptualize HRQoL as the intersection between conventional QoL assessments and health status and functioning.<sup>13,14</sup>”

**3. “Introduction- Are there any potential limitations by only focusing on HRQoL measures (and not qualitative studies – see below) for example?”**

*Our response:*

Thank you for your feedback. Certainly, QoL and HRQoL can be measured both qualitatively and quantitatively. Quantitative measures of QoL and HRQoL may miss important qualitative information, and this is a limitation worth mentioning in our manuscript (see below). However, since the objective of our scoping review is to inform health economic models, we will be using HRQoL numerical measures/scales from validated and standardized questionnaires.

We have also indicated that a potential limitation under the “Strengths and Limitations” section as shown below (page 3; under “Strengths and Limitations”):

“This scoping review is being conducted in the context of using preference-based HRQOL measures to inform economic evaluation and will focus on summarizing these data. As such, qualitative findings will not be included.”

**4. “Introduction- Also, how might incarceration shift/change/impact HRQoL – if there is a literature on this, it might be good to mention.”**

*Our response:*

Thank you for your feedback. We have added the following to the introduction section, as shown below (page 4; under “Introduction”):

“Previously published literature suggests that prisoners’ health and HRQoL can be significantly affected by the prison environment. A cross-sectional study conducted in 2013 assessed the HRQoL in a male prison in Greece.<sup>16</sup> They used the 36-Item Short Form Survey (SF-36) and the EQ-5D HRQoL instruments.<sup>16</sup> They reported that prisoners had high values in all scales of the SF-36 instrument except for the mental health scale.<sup>16</sup> Among the different EQ-5D dimensions, the majority

of the prisoners had no problems with mobility, self-care, usual activities, or pain/discomfort. By contrast, for the dimension of anxiety/depression, many respondents reported having some/extreme problems.<sup>16</sup> The authors found that prisoners saw the greatest toll on their mental health, while improvement in HRQoL is associated with being able to leave the prison regularly on temporary license.<sup>16</sup> They concluded that the conditions of incarceration influenced HRQoL.<sup>16</sup> ”

**5. “Eligibility Criteria- It would be better here is you could include a small table following a PICO (or similar format). This would make things a little clearer.**

*Our response:*

Thank you for your feedback. We agree. Therefore, we created a PICO table summarizing the eligibility criteria and it can be found in the supplementary appendix 1. We have added the following sentence at the end of the “Eligibility Criteria” paragraph (page 5) and we have pasted the Table below for your review:

“A PICO table can be found in Supplementary Appendix 1 summarizing the eligibility criteria for our scoping review.”

PICO	Inclusion Criteria	Exclusion Criteria
Population	<ul style="list-style-type: none"> <li>• Incarcerated population which are individuals in detention in prisons who are serving sentences for more than a year with no restrictions regarding age, gender or ethnicity</li> </ul>	<ul style="list-style-type: none"> <li>• Arrested individuals who stay in police custody</li> <li>• Prisoners of War</li> <li>• Persons from concentration camps</li> <li>• Immigration detainees</li> <li>• Prisoners in psychiatric units</li> <li>• Those awaiting trial, sentencing, or transfer to prison,</li> <li>• Local jails</li> <li>• Home detentions</li> </ul>

Intervention	<ul style="list-style-type: none"> <li>Any form of health-related quality of life measurement including but not limited to: <ul style="list-style-type: none"> <li>Physical functioning</li> <li>SF-6D</li> <li>SF-36</li> <li>EQ-5D</li> <li>15D</li> <li>QWB</li> <li>QWB-SA</li> <li>AQoL-4D</li> <li>AQoL-6D</li> </ul> </li> <li>Any form of health state utility measurement</li> </ul>	
Comparison	No comparison group	
Outcomes	<ul style="list-style-type: none"> <li>Health-related quality of life value</li> <li>Health state utility score <ul style="list-style-type: none"> <li>Health utility index</li> </ul> </li> <li>Quality-adjusted life year</li> <li>Quality-adjusted life expectancy</li> </ul>	<ul style="list-style-type: none"> <li>Exclude non-English articles</li> </ul>

**6. “Eligibility Criteria-** I also think you will need greater clarity on each of your criteria. For example, you say that “Incarcerated population will be defined as individuals who are in detention” You then go on to clarify that “Arrested individuals who stay in police custody, prisoners of war, and prisoners in concentration camps will be excluded”. Are you planning on including immigration detainees? How will you define ‘detention’ – this can vary as well, people can serve home detention for example.”

*Our response:*

Thank you for highlighting this. We have amended our eligibility criteria of the population, as shown below (page 5; under “Eligibility Criteria”):

“Incarcerated population” will be defined as individuals who are in detention in prisons designed to hold inmates serving sentences of more than a year, with no restrictions regarding age, gender, or ethnicity.<sup>1</sup> Arrested individuals who stay in police custody, prisoners of war, prisoners in concentration camps, those awaiting trial, sentencing, or transfer to prison, prisoners in psychiatric units, local jails, home detentions and immigration detainees will be excluded.<sup>22</sup>”

**7. “Eligibility Criteria- Could you also give more details on how you might define a HRQoL instrument?”**

*Our response:*

Thank you for your feedback. We have included more information on HRQoL under the introduction section. We chose to include it under the introduction section instead of the eligibility criteria section because of flow since we are introducing HRQoL in the introduction section. The following are the added parts (page 4 and 5; under “Introduction”):

“There are two main approaches to measuring HRQoL: generic instruments that provide an overview of HRQoL, and specific instruments that relate to a particular disease or group.<sup>15</sup> This study will summarize the findings of generic instruments to provide a broad overview of incarcerated populations. One focus of this work will be on measures that can generate utility weights, which are summary HRQoL measures anchored at death (0) and best possible health (1) (although states worse than death are included in some utility scales).<sup>15</sup> Utility measures are recommended for use in health economic analysis; however, the quantitative measure of HRQoL is a disadvantage as a single numeric score can constrain data interpretation.<sup>15</sup>

Utility scores are commonly derived from preference-based measures of HRQoL.<sup>15</sup> The valuation component of preference-based HRQoL instruments is a procedure for scoring each health state defined by the questionnaire.<sup>15</sup> Commonly used preference-based HRQoL instruments include: the 15D, the Assessment of Quality of Life (AQoL), the EQ-5D, the Health Utilities Index (HUI), the Quality of Well-Being Scale (QWB), and the SF-6D.<sup>15</sup> This scoping review will focus on generic preference-based HRQoL instruments.<sup>15</sup>”

**8. “Eligibility Criteria- It seems from this eligibility criteria that you will largely exclude qualitative studies (assuming they don’t utilise these instruments). Is this the plan? If so, could this be a limitation of this review? Also, could this impact your synthesis (see below).”**

*Our response:*

Thank you for your feedback. We have expanded on this matter above when asked about the limitations of focusing on only quantitative studies.

**9. “Information sources- Could you please note if there are any date ranges for these databases. Also will you search reference lists? If so, how will this be done, who will do this etc. How will you deal with studies where you cannot obtain the fulltext?”**

*Our response:*

Thank you for your feedback. We have included information on the date ranges for these databases as shown in our revised paper (page 6; under information sources):

“There are no date restrictions in our database search.”

We will not be searching reference lists and indicated so in our scoping review (page 6; under “Information Sources”):

“Two investigators (HT and SB) will also be searching reference lists by hand-searching the references of the full-text eligible papers.”

We described what actions will be taken if we are unable to obtain the full text as shown in our revised paper (page 5; under “Eligibility Criteria”):

“If full-text articles cannot be obtained, we will contact the authors. If we receive no response, the article will be excluded at this stage. However, this is an extremely rare situation.”

**10. “Data items- The data that you plan to extract in appendix 2 appears to be robust. You say in your introduction that “We seek to not only capture the overall scores but also disaggregated values for each domain of a HRQoL measure, for the purpose of identifying nuances that can be lost in an average score”. Could you provide more detail here – are you going to extract qual and quant data from these instruments?”**

*Our response:*

Thank you for your feedback. The disaggregated values will be quantitative data. The goal is to identify not only the “whole” but also the “parts” of each HRQoL measure. For example, an average HRQoL may miss the nuance of a reduction in mental health. This will be helpful information to include in our scoping review.

**11. “Synthesis- It would be good if you could provide more detail regarding your synthesis. If**



the aim is to explore quality of life measures, it may be best to organise the synthesis around the types of instruments used for example. In this case it may be most appropriate to turn to a textual narrative synthesis (or something similar – see reference below for example).

I understand that this is a scoping review, so certain quantitative analyses might not be appropriate – but I could see this review being particularly helpful if it outlined instruments, scores and sub scales – along with the details of the study, to provide an overview of what measures have been used where are what their scores reveal. I can see you have said you will include tables, again more detail would be great. Even without running a search, you could explore some common HRQoL measures, this might provide some insight into how you might best synthesise your findings.

More generally, I completely understand that this might be difficult to predict and your synthesis will largely depend on the search results, however it would be good to be more specific here and even detail how you might decide what synthesis is most appropriate - there is a substantial literature on qual synthesis for systematic/scoping reviews.”

*Our response:*

Thank you for your feedback. As described earlier, we will focus on quantitative studies. We have also outlined the instruments, scores and scales in the introduction. As shown in supplementary appendix 3, we will also be extracting disaggregated values for each domain of the HRQoL measure.

With regards to how to best organize the synthesis, we have indicated in our protocol that we intend to use a systematic narrative synthesis: “We will report the data using a systematic narrative synthesis in which the results are presented narratively and organised thematically, supplemented with tables of descriptive statistics on included studies and their outcomes.” Also, according to the PRISMA-ScR guidelines, it is recommended to describe the data narratively.

## **12. “Minor typos; Strengths and limitations- Please consider amending the first point “focus on the HRQoL in the incarcerated population”**

*Our response:*

Thank you for your feedback. The correction has been made (page 3; under “Strengths and Limitations”):

“This scoping review protocol is the first to focus on HRQoL in incarcerated populations.”

**13. “Minor typos; Methods and analysis- “we chose to conduct a scoping review” – perhaps we are planning a scoping review?”**

*Our response:*

Thank you for your feedback. The correction has been made (page 5; under “Methods and Analysis”):

“As we are interested in examining what is known about the HRQoL outcomes in incarcerated populations broadly, we are planning a scoping review.”

## **Reviewer 2**

**“1. Generally, it’s an interesting and relevant protocol. Authors should kindly define what they mean by incarcerated populations in the introduction.”**

*Our response:*

Thank you for your kind feedback. We are pleased that you approve of our manuscript. We have included a definition of incarcerated populations in the introduction (page 2; under introduction):

“Incarcerated populations, which we defined as the number of inmates under the jurisdiction of state or federal prisons who are sentenced to more than one year of incarceration.<sup>1</sup>”

**“2. Well explained protocol.”**

*Our response:*

Thank you kindly for your feedback. We appreciate your time.

## **VERSION 2 – REVIEW**

<b>REVIEWER</b>	Essex, Ryan University of Greenwich
<b>REVIEW RETURNED</b>	07-Apr-2022

<b>GENERAL COMMENTS</b>	Thanks to the authors for addressing my comments/suggestions - I hope they were helpful. I believe the manuscript is now ready for publication.
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