PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Experiences and resultant care gaps among women with HIV in Canada: concept mapping the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS) findings
AUTHORS	Medeiros, Priscilla; Koebel, Jill; Yu, Amy; Kazemi, Mina; Nicholson, Valerie; Frank, Peggy; Persad, Yasmeen; O'Brien, Nadia; Bertozzi, Breklyn; Smith, Stephanie; Ndung'u, Mary; Fraleigh, Annette; Gagnier, Brenda; Cardinal, Claudette; Webster, Kath; Sanchez, Margarite; Lee, Melanie; Lacombe-Duncan, A; Logie, Carmen; Gormley, Rebecca; de Pokomandy, Alexandra; Kaida, Angela; Loutfy, Mona

VERSION 1 – REVIEW

REVIEWER	Sherr, Lorraine University College London Faculty of Population Health Sciences, Global Health
REVIEW RETURNED	17-Nov-2023

GENERAL COMMENTS	Thank you for inviting me to review this manuscript. The stated aim of the manuscript was to review abstracts and publications to provide a concept analysis of patterns of findings from one large longitudinal study - focussed on HIV, Women in Canada (3 provinces). This was fed back to an "expert panel" including women living with HIV and the themes were then summarised. I have a number of comments and observations 1. The use of acronyms always make for stilted reading. Could the authors rather find a single word or shortened form. 2. The insistence of the Community role reflects a rather important issue, but of note all 24 authors appear to come from clinics or higher education establishments and user group members and their input seems confined to those who are established researchers rather than user group members. 3. Does the publication list reflect the interests of the research team and could this be a bias or skew. Were there any publications that were not accepted for publication. 4. It is important to understand to what extend the conference presentations overlapped with the publications. These could well be a duplicate and some ideas may be submitted to multiple conference before or after the findings are collated into a manuscript. This is a limitation of this method 5. lline 47 - when you state our team, including women living with HIV could you give the n for each group. 6. Surely the publications are related to the research question and data approach in the first place. Was the longitudinal cohort set up in relation to specific research questions or is it a data base with no apriori hypotheses? 7. Were the comparison groups for the data base ?

	8. Can the authors address the issue of concept mapping relying on frequency or frequency counts. If so it is vital that the disaggregation of conference abstracts and publications is made as any duplication would then be reflected in the frequency count. 9. Some sentences defy comprehension. Please clarify (eg "Understanding the intersectional complexity of the data, a social-ecological perspective was applied to further understand the interplay between multi-level factors of women living with HIV, their community, and society". What does this actually mean? 10. I am surprised to see that you then go on to also include "under review or near submission"). I think that this is a weakness. You make a good case to examine articles in the public domain which have undergone peer review, but those still under consideration or still under preparation should be excluded. 11. Table 1 needs to be redone with conference abstracts differentiated from publications. Also it is unclear where papers still under formulation or under review appear in this table. Confusing. 12. The generation of concept maps from concept coding is a novel idea. It mirrors a systematic review of one body of work in some ways, but it is important that this process tells the reader more than the individiual papers. 13. The review meeting was in 2019 (four years ago) and it is unclear why the cut off point was not more recent. 14. Please define a community researcher. 15. Who deemed that the study did not require ethical approval? Was this an ethics board or was it the authors? In my view the fact that you held 29 meetings and included researchers and community researchers (which you say include women living with HIV) surely means that ethical approval is needed. What did you do if any participants were distressed or identified needs in the course of the 29 meetings? If recruitment was on a volunteer basis can you describe how many were eligible and what the refusal rate was? Can you explain "community partners were compensated for their involvement?" Surely everyone should be compensated and not a sliding scale. What was the nature of the compensation. This needs to be set out in detail (amount of money, in kind compensation, travel/accommodation, refreshments etc). 16. Results record that there were 18 participants. The claim that there was diverse represntation across age, race ethinicity and gender identiy needs to be clarifed and supported. 17. The maps themselves are clearly described and make for interesting reading. 18. on pagae 16 you report that there were 3 lead investigators and 26 community researchers. How does this align with the 18 you report on page 14 (6 lead and 12 community researchers) 19. Discussion could be a bit more detailed. A nice job is done summarising the findings and reflecting on the policy implications (which came from the studies and publications and not from this conceptual overview). 20. It seems odd to add findings about indigenous experiences in the limitations when this was not reflected int the methods or results. The comments under limitations do not read well and it may be that this element should be included in the overview concept if it is important and indeed generated publications utilising qualitative methodology. Overall t his is a fascinating and novel piece of work trying to collate concepts in a visiual way to summarise and explore a large body of data collected over a longitudinal time period. This is the strength of the study. However, there are a number of weaknesses

	which would need addressing if this manuscript was to add to the literature. Elements of the discussion should avoid contemplating what was not done, but discuss the issues further in terms of their implications for care, their generalisability to the broader pandemic, other countries or other settings. It would be good to see if their overriding concepts align with the literature and whether any other studies have seen these clusters? A specific paragraph needs to be included to describe how this process takes the reader further than the individual papers. Some critique of concepts in the maps would also be helpful. What does higher and lower mean? Are their cut offs for example. You do this for income ($20,000) but do not clarify if this is per annum, per month? I do hope the authors can address these concerns as they provide a colourful, complex and somewhat novel way of representing a large body of work. My comments hinge on the responses and clarification regarding ethical approval.

REVIEWER	Campbell, Carole California State University Long Beach
REVIEW RETURNED	26-Nov-2023

GENERAL COMMENTS	A central strength of this work is its use of Concept Mapping. A central weakness is its lack of a thorough analysis of Composite Maps. As it is, it's not clear how concept maps 'identify a need for policy options and interventions to address women's health gaps and needs.' Nor is it clear how the results of this study would 'guide future care priorities for women living with HIV in Canada.' The manuscript provides rich description of Composite Maps but lacks sufficient analysis. The Results section could be strengthened. I suggest possible ways to do this in the paragraphs that follow. Stigma came up in Composite Maps 3, 4, and 6 and was also mentioned related to resilience. Since stigma plays such a critically important role in the lives of women living with HIV, it should be discussed more fully. Violence in Adulthood was mentioned in Composite Maps 2, 3, and 4. Research evidence indicates that interpersonal and community violence play important roles in the lives of women with HIV. Additionally, literature on trauma, trauma-informed care, and healing-centered care (related to interpersonal and community violence) may be relevant. Trauma has been linked to a reduction in cART use and adherence leading to a reduction in viral suppression. This literature may provide a way to expand on this important topic. Mental Health comes up in Composite Maps 1 and 3. Reference specifically to Depression is found in Composite Maps 4 and 6 and to PTSD in Composite Map 6. Stigma and Violence in Adulthood could be tied to this discussion. Resilience is mentioned for its importance in the lives of women with HIV. It comes up in Composite Maps 1 and 6. And it's mentioned for its tie to low SES, stigma, and discrimination. It's also in the title of the Wheel of Resilience and Support. Its relevance should be given more attention.

	More detail and elaboration on interaction with members of the community would strengthen the discussion on the concept mapping process as well as the Wheel of Resilience and Support. More discussion of interactions with community members as academic partners would serve to illustrate the process of shared decision-making. Finally, I would expect a more substantial conclusion based on the rich content presented. As it is, the conclusion is brief and doesn't sufficiently show the significance of the study, particularly for women living with HIV. I would also expect a discussion of research questions as well as future research directions stimulated by this work. The authors state that the results of their research should guide future research but neglect to specify any of their own future projects stemming from this work. While I don't support publication of the manuscript in its present form, proposed revisions don't require major restructuring. So once the analysis is strengthened, the manuscript will be suitable for publication.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1's comments and our responses:

1. The use of acronyms always makes for stilted reading. Could the authors rather find a single word or shortened form.
Response: This manuscript primarily centers around data derived from the Canadian HIV Women's Sexual and Reproductive Health Cohort Study (CHIWOS), a widely recognized and well-established cohort study in the field of women and HIV. Given the recurrent usage of the CHIWOS acronym throughout the manuscript, we have retained it and spelled it out in full at its first reference in the text. In the interest of clarity, we have updated the manuscript to remove acronyms that were infrequently used, such as WCHC (women-centered HIV Care), CBR (community-based research), and PTSD (post-traumatic stress disorder). However, we have retained the acronym cART as this is also a well-established acronym within the academic HIV sector.

2. The insistence of the Community role reflects a rather important issue, but of note all 24 authors appear to come from clinics or higher education establishments and user group members and their input seems confined to those who are established researchers rather than user group members.
Response: Twelve co-authors are community members/individuals with lived experience who are active members of the research team, with some having been involved since the inception of CHIWOS. Their compensation for time and expertise is facilitated through the research institution managing the funds, Women's College Hospital Research Institute. Consequently, we employ this affiliation in academic publications. Using this affiliation also safeguards the confidentiality of community members who may prefer not to be publicly identified as individuals living with HIV.

3. Does the publication list reflect the interests of the research team and could this be a bias or skew. Were there any publications that were not accepted for publication.
Response: No, the publication list does not reflect bias or skew. The publications encompassing qualitative CHIWOS data, utilizing only provincial data, or focusing on process or methods align with the specified criteria outlined in the methods section. While we don't have precise data on the number of CHIWOS publications that were not accepted over the years, given the multitude of researchers, students, and others analyzing the data, it's important to note that CHIWOS is a well-established

study with numerous high-quality publications, as evidenced by this manuscript. As detailed in the methods, our rigorous inclusion and exclusion criteria were designed to ensure the most comprehensive and representative analysis by incorporating all eligible manuscripts or conference abstracts.

4. It is important to understand to what extend the conference presentations overlapped with the publications. These could well be a duplicate and some ideas may be submitted to multiple conference before or after the findings are collated into a manuscript. This is a limitation of this method
Response: Please see response to comment 8 below.

5. Line 47 - when you state our team, including women living with HIV could you give the n for each group.
Response: This line has been removed from the manuscript.

6. Surely the publications are related to the research question and data approach in the first place. Was the longitudinal cohort set up in relation to specific research questions or is it a data base with no apriori hypotheses?
Response: CHIWOS was strategically set up to fill the gap in high-quality, longitudinal, and diverse data on women with HIV in Canada. The overarching research questions for CHIWOS were intentionally broad, allowing for analysis of subsets of the data, as demonstrated in our publications. Without a specific apriori hypotheses, CHIWOS aimed to establish a comprehensive database, assessing the proportion, distribution, and patterns of use and uptake of women-centered HIV care. The exploration of associated factors and estimation of the impact on overall health outcomes were additional objectives.

7. Were the comparison groups for the data base?
Response: No comparison groups, such as age-matched controls not living with HIV, were utilized in CHIWOS.

8. Can the authors address the issue of concept mapping relying on frequency or frequency counts. If so, it is vital that the disaggregation of conference abstracts and publications is made as any duplication would then be reflected in the frequency count.
Response: We appreciate the reviewer's attention to the issue of frequency counts and the potential overrepresentation of certain themes. To address this concern, we meticulously examined the content of each conference abstract and publication. Out of the 16 included conference abstracts, we identified 9 that delve into entirely novel topics not covered in any other manuscript or conference abstract. These encompass diverse subjects such as disclosure worries, sexual satisfaction of young women, tiered antiretroviral therapy adherence, the role of tobacco, infant feeding, peer support, peer leadership, trends of livebirth and therapeutic abortion, and mortality. For the remaining 7 conference abstracts, we acknowledged potential similarities or overlaps with other papers, including topics such as disclosure, pregnancy loss, cervical cancer disparities, women-centered HIV care, help-seeking, the relationship between stigma and other factors, conception in serodiscordant couples, and issues specific to trans women. It's important to note that even when there are commonalities, each conference abstract title has nuanced differences. For instance, the conference abstract focused on disclosure specifically addresses disclosure worries, while the manuscripts explore child abuse as a determinant of barriers to disclosure and awareness of the criminalization of disclosure. We believe these distinctions are crucial and warrant inclusion of all 3 publications. While we recognize that insufficient disaggregation could lead to data overrepresentation, we argue that our meticulous breakdown of conference abstracts versus manuscripts in Table 1 offers valuable insights and we have now further clarified the decision-making for including abstracts in the paper. We have incorporated relevant statements in this regard within the methods and discussion section.

9. Some sentences defy comprehension. Please clarify (e.g., "Understanding the intersectional complexity of the data, a social-ecological perspective was applied to further understand the interplay between multi-level factors of women living with HIV, their community, and society". What does this actually mean?
Response: We acknowledge the potential confusion caused by the sentence. Essentially, what we are conveying is that our data analysis examined the intricate relationships between different factors. To elaborate, we used a social-ecological perspective to explore how various elements at individual, community, and societal levels influence the experiences of women living with HIV and their communities. We have rephrased the sentence in the manuscript.

10. I am surprised to see that you then go on to also include "under review or near submission"). I think that this is a weakness. You make a good case to examine articles in the public domain which have undergone peer review, but those still under consideration or still under preparation should be excluded.
Response: We appreciate the reviewer's feedback. The inclusion of publications under review or near publication in our concept mapping analysis paper serves a specific purpose. By incorporating these works, we aim to provide a comprehensive overview of the current landscape, encompassing not only established findings but also emerging research that may contribute valuable insights. While we acknowledge the absence of peer review for these particular manuscripts, their inclusion allows us to offer a more holistic perspective, ensuring that our analysis reflects the full spectrum of relevant information available at the time of our study. Publications with a year after 2019 represent those that were previously under review or in preparation. These have since been published and the findings remain accurate to our paper, and this has been clarified in the manuscript. We have updated the “strengths and weaknesses” section of the discussion with our rationale.

11. Table 1 needs to be redone with conference abstracts differentiated from publications. Also it is unclear where papers still under formulation or under review appear in this table. Confusing.
Response: The columns titles in Table 1 have been updated to clarify manuscript vs. conference abstracts. Publications with a year after 2019 represent those that were previously under review or in preparation. These have since been published and the findings remain accurate to our paper.

12. The generation of concept maps from concept coding is a novel idea. It mirrors a systematic review of one body of work in some ways, but it is important that this process tells the reader more than the individual papers.
Response: In response to the reviewer's suggestion, we have added a new paragraph to the beginning of the discussion section, emphasizing how our methodology is a novel pursuit. We explain that the summary diagrams, in particular, play a crucial role in highlighting emergent cross-cutting themes, such as the importance of positive healthy actions and the need for women-centered HIV care. Another paragraph has also been added outlining the importance of positive healthy actions. We believe this added emphasis enhances the depth and breadth of our contribution, ensuring a more holistic interpretation of the data.

13. The review meeting was in 2019 (four years ago) and it is unclear why the cut off point was not more recent.
Response: The review meeting the reviewer is referring to was the internal team meeting held in 2019 (as outlined in step 4 of the methods section). Following this meeting, 29 subsequent reviews were conducted with external team members to validate results and create the summary diagrams with the team and design studio. This work, outlined in step 5 of the methods section, continued until spring 2021. We then spent approximately 2 years preparing this manuscript, which, given the circumstances of the COVID-19 pandemic and staff reallocation due to our hospital setting, we believe is fairly reasonable. Further, this situation reinforces the justification for incorporating

publications under review or near completion in our analysis, ensuring the relevance and timeliness of the insights presented.

14. Please define a community researcher.
Response: The role of a community researcher has now been more clearly outlined the first time the term is used in the introduction paragraph.

15. Who deemed that the study did not require ethical approval? Was this an ethics board or was it the authors? In my view the fact that you held 29 meetings and included researchers and community researchers (which you say include women living with HIV) surely means that ethical approval is needed. What did you do if any participants were distressed or identified needs in the course of the 29 meetings?
Response: The determination that the study did not require ethical approval was made by the Research Ethics Board at Women's College Research Institute via email with the team. This decision was grounded in the understanding that the Ethical Principles for Medical Research Involving Human Subjects did not apply to the nature of our study. Notably, 'participants', all of whom had prior engagement as CHIWOS research team members, were enlisted on a voluntary basis and largely participating as research consultants more so than participants and were compensated as such (community and academic). We have updated the ethics paragraph to reflect this. It is crucial to highlight that the collaborative nature of our work, with team members who had all previously been engaged in CHIWOS as community research associates, added a unique layer of familiarity and trust. The 29 meetings were characterized more by collaborative reflection and discussion rather than a traditional research framework. Nonetheless, recognizing the potential for emotional distress, project leads were trained to offer support, and the support channels established during CHIWOS were maintained for this project, ensuring the well-being of all participants.

16. If recruitment was on a volunteer basis can you describe how many were eligible and what the refusal rate was?
Response: Yes, recruitment was on a voluntary basis. We invited 26 CHIWOS community researchers to participate in the concept mapping meetings because they previously engaged in CHIWOS as community research associates. 12 of the 26 agreed given their ongoing interest in CHIWOS activities. Given that this analysis occurred several years after the conclusion of CHIWOS, those who opted not to participate cited other professional obligations or commitments that occupied their time. This pattern aligns with the nature of CHIWOS side projects, where invitations are inclusively extended to the entire team. Individuals with the capacity or specific interest choose to join, while others politely decline due to existing commitments.

17. Can you explain "community partners were compensated for their involvement?" Surely everyone should be compensated and not a sliding scale. What was the nature of the compensation. This needs to be set out in detail (amount of money, in kind compensation, travel/accommodation, refreshments etc.).
Response: Community partners were compensated with an hourly rate of pay, just like other research assistants/coordinators are. We have added some additional details about the compensation of community partners in the article. We think it is important to include this statement as many researchers who involve community and/or patients in their work do not seem to provide compensation and this is something we consider essential.

18. Results record that there were 18 participants. The claim that there was diverse representation across age, race ethnicity and gender identify needs to be clarified and supported.
Response: Socio-demographic data is unavailable for those that participated in the meetings. It was not collected from those participating in the conversations about the concept maps. We are removing this statement from the article.

19. The maps themselves are clearly described and make for interesting reading.
Response: Thank you for your comment.

20. On page 16 you report that there were 3 lead investigators and 26 community researchers. How does this align with the 18 you report on page 14 (6 lead and 12 community researchers)?
Response: We have clarified this in the text. Over 30 CHIWOS team members were invited to participate (including 7 academic researchers and 26 community researchers). From those who were invited, 6 academic and 12 community researchers agreed to participate.

21. Discussion could be a bit more detailed. A nice job is done summarising the findings and reflecting on the policy implications (which came from the studies and publications and not from this conceptual overview).
Response: Thank you for your comment. We have added some additional material in the discussion section to further contextualize our findings and their importance to CHIWOS.

22. It seems odd to add findings about indigenous experiences in the limitations when this was not reflected int the methods or results. The comments under limitations do not read well and it may be that this element should be included in the overview concept if it is important and indeed generated publications utilising qualitative methodology.
Response: Thank you for your comment. We have removed this section from the limitations and have instead reflected on ongoing work to adapt the Women-Centred HIV Care Model for priority populations including Indigenous women in the conclusion.

23. Overall this is a fascinating and novel piece of work trying to collate concepts in a visual way to summarise and explore a large body of data collected over a longitudinal time period. This is the strength of the study. However, there are a number of weaknesses which would need addressing if this manuscript was to add to the literature. Elements of the discussion should avoid contemplating what was not done but discuss the issues further in terms of their implications for care, their generalisability to the broader pandemic, other countries or other settings.
Response: Thank you for your comment. We have made changes to the discussion section to account for these concerns.

24. It would be good to see if their overriding concepts align with the literature and whether any other studies have seen these clusters? A specific paragraph needs to be included to describe how this process takes the reader further than the individual papers.
Response: Information has been added in the discussion comparing our findings to those of a similar mapping study recently done. In response to the reviewer's suggestion about a paragraph describing how this process takes the reader further than the individual papers, we have added a new paragraph to the beginning of the discussion section, emphasizing how our methodology is a novel pursuit. We explain that the summary diagrams play a crucial role in highlighting emergent cross-cutting themes, such as the importance of positive healthy actions and the need for women-centered HIV care. Another paragraph has also been added outlining the importance of positive healthy actions. We believe this added emphasis enhances the depth and breadth of our contribution, ensuring a more holistic interpretation of the data.

25. Some critique of concepts in the maps would also be helpful.
Response: The concept maps reflect the discussions that took place with the lead investigators and community partners involved in the activity of priority setting for CHIWOS. The addition of further critique would involve reconvening the group which is beyond the scope of this manuscript.

26. What does higher and lower mean? Are their cut offs for example. You do this for income ($20,000) but do not clarify if this is per annum, per month?
Response: Higher and lower is a metric to indicate impact. Income is the only instance where it refers to a cut off. The original CHIWOS survey illustrates that it is $20,000 per annum.

27. I do hope the authors can address these concerns as they provide a colourful, complex, and novel way of representing a large body of work. My comments hinge on the responses and clarification regarding ethical approval.
Response: Thank you for your comments.

Reviewer 2's comments and our responses:
1. A central strength of this work is its use of Concept Mapping. A central weakness is its lack of a thorough analysis of Composite Maps. As it is, it's not clear how concept maps 'identify a need for policy options and interventions to address women's health gaps and needs.' Nor is it clear how the results of this study would 'guide future care priorities for women living with HIV in Canada.' The manuscript provides rich description of Composite Maps but lacks sufficient analysis. The Results section could be strengthened. I suggest possible ways to do this in the paragraphs that follow.
Response: We have made several changes to the Results section as per the reviewer's suggestion to strengthen the concept map analysis (see responses to comments 2-5 below).

2. Stigma came up in Composite Maps 3, 4, and 6 and was also mentioned related to resilience. Since stigma plays such a significant role in the lives of women living with HIV, it should be discussed more fully.
Response: Thank you for the comment. We have discussed stigma more fully in the discussion section.

3. Violence in Adulthood was mentioned in Composite Maps 2, 3, and 4. Research evidence indicates that interpersonal and community violence play important roles in the lives of women with HIV. Additionally, literature on trauma, trauma-informed care, and healing-centered care (related to interpersonal and community violence) may be relevant. Trauma has been linked to a reduction in cART use and adherence leading to a reduction in viral suppression. This literature may provide a way to expand on this important topic.
Response: Thank you for the comment. We have discussed violence in adulthood more fully in the discussion section.

4. Mental Health comes up in Composite Maps 1 and 3. Reference specifically to Depression is found in Composite Maps 4 and 6 and to PTSD in Composite Map 6. Stigma and Violence in Adulthood could be tied to this discussion.
Response: Thank you for the comment. We have discussed mental health more fully in the discussion section.

5. Resilience is mentioned for its importance in the lives of women with HIV. It comes up in Composite Maps 1 and 6. And it's mentioned for its tie to low SES, stigma, and discrimination. It's also in the title of the Wheel of Resilience and Support. Its relevance should be given more attention.
Response: Thank you for the comment. We have discussed resilience more fully in the discussion section.

6. More detail and elaboration on interaction with members of the community would strengthen the discussion on the concept mapping process as well as the Wheel of Resilience and Support. More discussion of interactions with community members as academic partners would serve to illustrate the process of shared decision-making.

Response: We have elaborated about the fulsome engagement of community members in the Background and Discussion sections. We have clarified that community members were those who co-developed the summary diagrams through arts-based methods in the methodology section.

7. Finally, I would expect a more substantial conclusion based on the rich content presented. As it is, the conclusion is brief and does not sufficiently show the significance of the study, particularly for women living with HIV.
Response: Thank you for the suggestion. We have added a substantial amount of content in the discussion and conclusion about our conclusions, significance of the study, and future research directions.

8. I would also expect a discussion of research questions as well as future research directions stimulated by this work. The authors state that the results of their research should guide future research but neglect to specify any of their own future projects stemming from this work. While I do not support publication of the manuscript in its present form, proposed revisions do not require major restructuring. So once the analysis is strengthened, the manuscript will be suitable for publication.
Response: Thank you for the suggestion. We have added a substantial amount of content in the discussion and conclusion about our conclusions, significance of the study, and future research directions.

We express our gratitude once more to the editorial board for your consideration of our manuscript for publication and for undertaking a re-review of the changes we have implemented. Please do not hesitate to contact us should you require further information.

VERSION 2 – REVIEW

REVIEWER	Campbell, Carole California State University Long Beach
REVIEW RETURNED	16-Feb-2024

GENERAL COMMENTS	The revision more clearly illustrates the strength of concept mapping. The concept map analysis has been significantly strengthened. Regarding Concept Map 2, the authors may want to expand a bit more on the findings that social and peer support are related to increased access to HIV care and Indigenous heritage is associated with experiencing higher violence in adulthood as well as housing insecurity. Both are such important findings. I agree with the authors that the concept maps contribute to a deepened understanding of the complex relationships between stigma, resilience, and empowerment. The effects of stigma surrounding HIV and corresponding resilience in combating stigma are more effectively described. The authors establish a much stronger connection between mental health and violence in adulthood and more effectively highlight the important need to investigate the intersection of mental health, stigma, trauma, and violence to develop trauma-informed approaches. The authors provide a much clearer sense of direction for their own work as well as others in the field of women's HIV care. They more sharply define the significance and contribution of their study. I agree that their study provides a more comprehensive and nuanced understanding of the multi-faceted experiences of women who participated in CHIWOS.

VERSION 2 – AUTHOR RESPONSE

Reviewer 2's comments and our responses:

1. The revision more clearly illustrates the strength of concept mapping. The concept map analysis has been significantly strengthened. Regarding Concept Map 2, the authors may want to expand a bit more on the findings that social and peer support are related to increased access to HIV care and Indigenous heritage is associated with experiencing higher violence in adulthood as well as housing insecurity. Both are such important findings. I agree with the authors that the concept maps contribute to a deepened understanding of the complex relationships between stigma, resilience, and empowerment.

Response: We thank the reviewer for their reflections on the strengthening of our revision. As for the finding related to Indigenous heritage and violence (a finding from concept map 3), we have strengthened the paragraph on mental health, violence and stigma in the discussion and integrated these findings. As for the finding on social and peer support leading to increased access to HIV care, we have already expanded on this significantly in the discussion (paragraph 10), but we have updated language to make it clear this paragraph is referring to concept map 2.

2. The effects of stigma surrounding HIV and corresponding resilience in combating stigma are more effectively described. The authors establish a much stronger connection between mental health and violence in adulthood and more effectively highlight the important need to investigate the intersection of mental health, stigma, trauma, and violence to develop trauma-informed approaches.

Response: We thank the reviewer for their comments regarding our enhanced discussion on mental health, stigma, trauma, and violence.

3. The authors provide a much clearer sense of direction for their own work as well as others in the field of women's HIV care. They more sharply define the significance and contribution of their study. I agree that their study provides a more comprehensive and nuanced understanding of the multi-faceted experiences of women who participated in CHIWOS.

Response: We thank the reviewer for acknowledging the clarity and significance of our study in women's HIV care. We appreciate the feedback on our efforts to provide a comprehensive understanding of the experiences of women in the CHIWOS study.