Peer Review File

Article Information: https://dx.doi.org/10.21037/apm-23-501

<u>Reviewer A</u>

Comment 1: The manuscript covers a topic that is relevant and of interest for the palliative care community. It is well written and even though I did not perform a point-by-point check, seems to comply with equator-network guidance. The methods are sound, except my major comment below. Tables and figures are meaningful, clear, and concise, as well as the presentation of other results. The discussion is sound, comprehensive, and interesting.

Reply: Thank you. This was an extremely rigorous process.

Comment 2: The manuscript does not provide information about the screening and extraction process, as this should be in every review.

Reply: The current manuscript clearly identifies this in the Methods section. The processes of extraction, analysis, and synthesis were completed using the Joanna Briggs Institute scoping review methodological approach and were guided by the PRISMA checklist with Scoping Review extension. Title, abstract, and full text eligibility screening were completed systematically, and this information can be found on pages 6-8 (beginning on line 112 through new line 164), which includes: 1. both preparation and organization phases; 2. the listed Open Science Framework registered protocol for optimal transparency and reproducibility of the review (osf.io/fb48n); 3. appropriate data charting codes in table format.

Changes: none.

Comment 3a: There is no information about how many authors were involved with which assignment.

Reply: Please refer to the following:

Page 6 Methods, line 116, 2nd sentence

Page 7, line 147 (title and abstract screening, full-text eligibility)

Page 7, line 148 (data organization and coding)

Changes: Per Reviewer B's suggestion, table of information sources was removed and better served in text (see in red beginning on page 6, line 116 through line 121). Otherwise author involvement was stated in original manuscript.

Comment 3b: It could be that this complex review was performed by a single author, which I would find rather unusual and a little startling. Yet, as I said, the topic is of interest and the manuscript thoroughly presented.

Reply: While a scoping review typically requires multiple reviewers of the data to avoid bias, this manuscript is part of a larger dissertation within the Palliative Care PhD program at University of Maryland, Baltimore, and therefore requires sole authorship. This is stated multiple times throughout the manuscript, explicitly in the Limitations section, as well as in the registered protocol. Please refer to:

Title page, lines 10-11; Page 2 Abstract, lines 32-33; Page 18, lines 285-289 **Changes:** none.

<u>Reviewer B</u>

Comment 1: The issue of the need for psychological support of adolescents and young adults with serious illness is of extreme importance in pediatric palliative care.

Reply: Thank you, I agree.

Comment 2: Nevertheless, some substantial revisions need to be made before the paper can be considered to publication. In its current form the manuscript is not focused. Results and discussion should be much more focused.

Reply/Changes: Thank you for your expert critique, please see line by line revisions below.

Comment 3: Line 46, Keywords: Consider including Pediatric Palliative Care **Reply**: agreed **Changes**: modified text as advised, please see page 3, line 47

Comment 4: Line 86, Table 1 Reference? Reply: accidentally omitted Changes: added in-text reference to line 83 (reference #2 in red)

Comment 5: Line 104, I think it is not necessary to specify exact dates.

Reply: I thought this was strange as well, however according to PRISMA item # 7, requirements state to, "describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed." In addition, Joanna Briggs Institute recommends including the date on which any protocol was registered for optimal transparency. Therefore, I included the date on which I registered my protocol with Open Science Framework.

Changes: none unless further instructed.

Comment 6: Line 118, This table is better in text than a figure

Reply: Agreed.

Changes: modified text as advised. Please refer to red text on page 6, beginning on line 116. Table removed, and item 7 on PRISMA checklist updated accordingly.

Comment 7: Line 134, Methods: Why do you use this age range (10-45 years) as AYA? In Figure 1 (line 168) you talk about 10-39. Some authors describe AYA as people with 15-29 or 39 years old.

Reply: This is a great question, and one that I presumed would come up. The text in parentheses after the age range is given states "(varying choices respective to each database)," which means to clarify that not all databases offered a search limiter entitled "adolescents and/or young adults." Rather, each database gave varying age ranges, and ages 10-45 encompass all age range limiters offered among the collective databases, which include that 15-39 age range that you referenced. I hope this brings some clarity.

Changes: modified text to include above clarification, please see red text on page 7, sentence beginning on line 134, including a reference for the North American definition of AYA on line 136. The clarifying information ends on new line 139 in red.

Comment 8: Line 148, Methods: I need more information and detail about the Barriers.

Reply: Thank you. I can see how this could be confusing, given the table does not show these subcategories. Barriers and facilitators are further delineated through text on original manuscript page 8, lines 149 through 153 (NEW/REVISED numbered manuscript, page 8, lines 154-158).

Changes: modified text to further elaborate on Barriers as advised, please see red text on page 16, beginning on new line 239.

Comment 9: It is necessary to include percentages in the different figures.

Reply: I do understand how this would make more scholarly sense. However, given each subcategory of findings has a different number of TOTAL references depending on its topic, I chose to use the number of references for clarity, and for accurate representation of the literature found. One of the major conclusions is that there are very little data regarding this population, and I want to make it clear that this is an area worth studying.

Changes: none for now.

Comment 10: It is necessary to review the type of graphics and see if some figures can be merged with others, or if some content is exclusively in the text of the article.

Reply/Changes: I also wondered if too many graphics would be confusing to the reader. I appreciate this critique. Subsequent comments revolve around this primary concern. Please see the following for changes and omitted/combined graphs.

Comment 11: Line 195, Figure 6 it is not necessary.

Reply: I agree.

Changes: modified text as advised, please see page 12, lines 199-201). Left gender information as text-only and removed figure. Changed subsequent figure #s (in red) and PRISMA item references as appropriate (attached).

Comment 12: Line 201, It is better to modify figure 7 to make it clearer and provide percentages.

Reply: Tree maps are good for displaying data in nested rectangles, which use dimensions to define the hierarchy of quantities and patterns among the data. This graph was chosen as direct recommendation from Pollock and colleagues' paper on data charting, extraction, and analysis for scoping reviews, also referenced within my manuscript. I like this graph because it shows how qualitative methods of study were the most prevalent, followed by reviews, and so on. It also shows the great need for more education in the field, in colorful form on the bottom right-hand corner where professional competencies/guidelines and symposia are few. I feel that showing the number of hard references makes a larger impact on the need for further study in the field of psychiatric distress for adolescents and young adults facing death. However, please see changes below which should provide clarity to each figure, based on this feedback.

Changes: Added type of graph in title of figure (please see red text above each figure). Added the above reasoning to page 12, see red text beginning on line 204. *Also modified as advised, by adding percentages to text above graphs*. Unfortunately, I no longer have access to Tableau as my student license has expired. However, I feel that the combination of adding percentages to text and keeping number of references in graphs has more impact in this scoping review. Thank you.

Comment 13: Line 204, Figure 8 mixes methodology with type of publication, which are not exclusive and are difficult to understand.

Reply: This is a good point. This graph really only points to the fact that most studies focused on the palliative team, rather than the patient or family. Therefore, the bubble graph above it (figure 4) suffices.

Changes: Removed Figure 8 and its accompanying text from pages 12 and 13. Adjusted numbers of figures accordingly (in red) as well as PRISMA checklist as appropriate.

Comment 14: Figures 11 & 12, I need more information about the difference between psychotherapy in general and the rest of interventions.

Reply: You're right, great suggestion. Thank you.

Changes: modified text as advised, providing clarity to the term "psychotherapy" in red on page 15, beginning on line 231.

Comment 15: In general, the discussion is poor, it does not compare the results of the review with other studies. I propose to go deeper into it. It is possible that the text on lines 282 to 312 could be part of the discussion.

Reply: Thank you for the suggestions. Line 282 is explicitly answering part of the research question and should therefore remain in the conclusion as per Tricco et al. and Pollock et al.'s scoping review standards according to JBI guidelines for scoping reviews. It nicely transitions into the next line regarding implications for practice, so it fits well here. However, I agree that the summary of the evidence should 1) include an overview of the concepts within the current literature; 2) be linked to the research questions and objectives; and 3) discuss their relevance to key groups (as also required by the PRISMA ScR checklist). Line 312 is the beginning of the Acknowledgement section, and I am unsure if maybe this reviewer meant a different line.

Changes: modified text as advised, please see red text on page 17, beginning on new line 257 through 272.

Comment 16: Appendix Table 1, It is necessary to modify the design of the table so that the analysis of the different variables is understandable for each population.

Reply: I agree that the table includes a plethora of information. I am happy to change the format according to more specific guidelines by the editorial board. However, I am unsure how to rearrange the material to make it easiest for the reader when looking at one column and one page to get the gist of results for each reference. Does Reviewer B suggest categorizing the data in the table according to discipline? If changes are required, I believe discipline (MD, APP, psych, SW, etc.) would fit better than population (PPC team, patient, family) as far as answering the research questions, potentially. The table was designed based on requirements of the journal (chronological order based on citations in the text) as well as the sample provided in the Pollock, et al. paper written according to JBI guidelines for scoping review.

Changes: None for now. If this change is required, would need journal's guidance on numbering references within the table.