Peer Review File

Reviewer A

COMMENT 1:
Strengths:
* The review comprehensively summarizes the current literature on an important yet understudied area - end-of-life care for cancer patients with pre-existing severe mental illness. Understanding care for this vulnerable population is a key equity issue.
* Multiple rigorous systematic review methods were properly applied, including a comprehensive search strategy, PRISMA reporting guidelines, dual independent screening and extraction, and quality assessment using a standardized Newcastle-Ottawa tool. This inspires confidence in the review itself.
* The authors clearly summarize results for different mental health conditions, allowing unique issues for disorders like schizophrenia vs depression to emerge. The consistency of themes across disorders also emerges clearly.
* Conclusions are evidence-based and avoid overstatement. The authors appropriately call for more primary research to understand reasons for differences in intensity of end-of-life cancer care by mental health status.
REPLY 1: Thank you so much for the nice words.
CHANGES IN THE TEXT: None

COMMENT 2:
Weaknesses:
* The included studies draw from only 3 countries/regions - the US, France, and Taiwan. More geographic diversity could have improved generalizability of themes.
REPLY 2: We very much agree, as we also have stated as a limitation in the original manuscript in lines 371-372: 'Relatively few studies were included, and the fact that they only stem from three countries/regions, USA, France, and Taiwan is seen as a limitation.' However, a systematic review is depending on the published papers. We hope more study will follow in the future.
CHANGES IN THE TEXT: None

COMMENT 3:
* Over half the included studies were from one French research group. More diversity in research settings and patient populations could better establish if themes hold across contexts.
REPLY 3: Again, we agree, as we also have stated as a limitation in the original manuscript (lines 373-375): 'Also, five of the ten included studies were conducted by the same research team with similar methodology which challenge the generalizability of the results. However, the homogeneity of their methodology can also be seen as a strength.'
CHANGES IN THE TEXT: None

COMMENT 4:

* As the authors note, the review is unable to dig into reasons behind differences in intensity of end-of-life care between groups. Are there patient, provider, or health system drivers? More primary research is still needed.

REPLY 4: We very much agree as we have also stated it in the 'What is the implication, and what should change now?-section' in line 81-83.

CHANGES IN THE TEXT: To state it in the paper as well, we have inserted the text the 'Strengths and weaknesses-section' in lines 383-385 : 'All studies were retrospective cohort studies and were not able to identify at what level (patient, health care provider or health care system) and for what reason HIEOL care were less intense in the patient group.'

COMMENT 5:

* Discussion of policy implications is limited. Expanding on challenges and opportunities in addressing differences in care could better highlight need and pathways for intervention.

REPLY 5: We are happy that you brought this up. When we started to conduct the systematic review, we thought that we would find inequality in EOL for patients with SMD. And in that context a text on policy implications would be very much in place. However, with the ambiguous results of low HIEOL care and high EOL care for this patient group it is much harder to describe policy implications.

CHANGES IN THE TEXT: (lines 365-368). 'Lastly, policy makers have to be aware that there is a group of patients that are treated differently in EOL and the results call for focus and attention to potential equalities among patients with SMD, maybe not according to palliative services but to disease and life-saving treatments.'

COMMENT 6:

Overall the review still provides a high quality systematic summary of the state of evidence and gaps therein. Addressing some limitations could expand perspectives. But major strengths of the methods and reporting instill confidence in the conclusions.

REPLY 6: Thank you very much. As stated in Reply 4 and 5 we have added text about implications.

CHANGES IN THE TEXT: See Reply 4 and 5

Reviewer B

COMMENT 7:

People with severe mental disorders have disparities in cancer treatment and cancer mortality. This systematic review focuses on end-of-life care in this population and addressing an important topic that has received little attention in this area. The paper is concise and well described.

REPLY 7: Thank you so much!

CHANGES IN THE TEXT: None

COMMENT 8:
Comments
#1
As the authors describe in clinical and research implications, particular attention will be needed in interpreting the results regarding High-intensive-End-of-life (HIEOL) care. It is questionable whether findings of less HIEOL care among people with severe mental disorders than in the general population mean they receive higher quality EOL care than the general population. Ultimately, it will be necessary to evaluate achievement of a good death and satisfaction with EOL care among cancer patients with pre-existing severe mental disorders.
REPLY 2: As written in the original manuscript, we totally agree. The interpretation of HIEOL care is ambiguous and difficult. Se also Reply 5.
CHANGES IN THE TEXT: None

COMMENT 9:
#2
It may be helpful to the reader if the Search strategy in the main text includes Pubmed search terms.
REPLY 9: We have added the search terms for Pubmed.
CHANGES IN THE TEXT: The section 'Search strategy' now states (lines 155-167): 'The literature search was performed in three databases: Medline, Embase and Science Direct the 1st of September 2023. Hand searching was done by going through the reference list on reports that were included in the study.
As an example, PubMed were searched using the search string:
("Neoplasms"[MeSH] OR "neoplasm"[Title/Abstract] OR cancer[Title/Abstract] OR onco*[Title/Abstract]) AND ("Bipolar Disorder"[Title/Abstract] OR "major depression"[Title/Abstract] OR "unipolar depression"[Title/Abstract] OR "Schizophrenia"[Title/Abstract] OR Mental[Title/Abstract] OR psychiatric[Title/Abstract]) AND ("Palliative Medicine"[Mesh] OR "Palliative Care"[Mesh] OR "Terminal Care"[Mesh] OR "Hospice Care"[Mesh] OR palliat*[Title] OR end-of-life[Title] OR terminal*[Title]) AND (2000:2023[pdat]) NOT ("meta-analysis"[Publication Type] OR "review"[Publication Type] OR "systematic review"[Filter]). See Appendix 2 for search strings for the other databases.'