PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Emotional Impact on Health Care Providers Involved in Medical Assistance in Dying (MAiD): A systematic review and qualitative meta-synthesis.
AUTHORS	Dholakia, Saumil; Bagheri, Alireza; Simpson, Alexander

VERSION 1 – REVIEW

REVIEWER	Winters, Janine University of Otago, Bioethics
REVIEW RETURNED	20-Jan-2022

GENERAL COMMENTS	Thank you for the opportunity to review this solid scholarly article on an important topic. My recommendations for minor revisions are below. I- Abstract a. The conclusion of the abstract was confusing to me. Specifically, after reading the abstract, reading the entire article and then reading the abstract again, I still cannot for a clear picture of what is meant by “role of the legal framework and the position of the health care provider in sharing this discourse” b. include in the results section of the abstract the second 'area' of conclusions that you describe in your results and conclusion section- the first 'area' is the three dimensions, "distinct emotional themes" and the second area is the narrative enquiry approach (where you describe different narratives in different jurisdictions and correlated with the requirement for a about terminal condition). I recommend this in the abstract because when I read it in the results, I was not expecting another set of descriptions and had to read it several times to understand fully where the authors were going with the ideas. c. note that the abstract presents the three dimensions “distinct emotional themes” in a different order than the results and since both are numbered is a bit confusing II- Introduction and Methods and Data Analysis a. Reads nicely, no comments! 😊 III- Results a. The Narrative summary section (from Page 13 line 8- end of page) i. needs to be signposted better (see also comment about abstract). The reader does not expect a new type of analysis at this point. ii. Even if sign-posted, the three points do not flow well, points one and two are contrasting based on the terminal condition (prognosis 6 months or less) and stand well together. Point three is difficult to understand and does not seem related to the other two, that #3 also encompasses the profession, engagement and hierarchical

	position makes it so broad and difficult for the reader to extract useful information. Consider re-working and see next comment as the proof may have an error in paragraph order and table placement.. b. Pate 14 starting at line 35-line 53-- Switches from three items that summarize narrative summary back to the three dimensions of emotional impact. Confusiong. I wonder if this paragraph may be out of place on this proof. The table and the paragraph about the GRADE CERQual approach interrupts the narrative. c. I hope the table formatting is better in the final product, it is difficult to follow in this proof and I assume/hope the type-setters will fix this. IV- Discussion a. P. 17 starting with line 2. Please increase sign-posting. I found it very confusing to parse the combination of the combination/compilation of the 3 distinct emotional themes with the 3 narrative themes into the final "Benelux versus non-Benelux" analysis. V- Limitations- a. The statement that "unbearable suffering is the driving force for patients requesting MAID" is not supported by the literature. Usually patients are driven by trying to regain control of the situation and the occurrence of pain and other physical symptoms (the usual understanding of suffering) is rarely an issue. Thank you again for an interesting and informative work.

REVIEWER	Brassfield, Elizabeth University of North Carolina at Chapel Hill School of Medicine
REVIEW RETURNED	21-Jan-2022

GENERAL COMMENTS	• p 2, lines 16-21 (Abstract, introduction): sanctity of life and dignity in death and dying are not necessarily opposing values: one could consistently hold that life is sacred and that maintaining dignity in one's death is valuable. It would be more accurate to say that there can sometimes be tension between these two values, insofar certain ways of hastening death (such as MAiD) are viewed by some as one way to preserve that dignity. • p 2, abstract, methods: exclusion criteria, the date that each database was last searched, and methods used to assess risk of bias in included studies should also be included in this section of the abstract. • p 2, abstract, results: The total number of participants in the included studies, summary of relevant characteristics of studies, info about how many studies/participants showed the three main themes identified should be included in this section of the abstract. • p 2, abstract, conclusions: general interpretation of the results & important implications should be included in this section of the abstract. • p 4, lines 8-10, "especially since MAiD involves navigating conflicting personal and professional values": This is not necessarily true for ever provider and so should be qualified (e.g., "may involve" or "sometimes involves"). As the authors note, the values at play for providers who participate in MAiD are contextual: as such, it would be helpful to more clearly outline how the values mentioned here (duty to care, reducing suffering, and sanctity of human life) might be instantiated in the case of providing MAiD (e.g., fulfilling the duty to care may require a provider to assist a patient in accessing MAiD, whereas sanctity of life may be understood as forbidding any action that hastens a patient's death). In addition to conflicts

	between personal and professional values, MAiD may also raise conflicts between two or more distinct professional (or personal) values (such as reducing suffering and prolonging life) – indeed, it may be conflicts between two professional values that are most challenging to navigate for some providers. • P 4, lines 36-39, "MAiD in Canada…euthanasia.": More precisely, legislation in these jurisdictions permits both assisted suicide and euthanasia. • p 5, lines 3-6, "Right to bodily autonomy…legislative jurisdiction: It's not clear how "right to bodily autonomy" is a criterion for participating in MAiD. Often there is a requirement that patients have decisional capacity – is this what is meant here? Please clarify. • p 5, line 18, "the physician's role in providing MAiD is perhaps the most ambiguous": Ambiguous in what way? Perhaps the authors meant ethically most ambiguous given the following discussion of principles of medical ethics. • P 9, lines 27-30: What was the rationale for conducting a search of the grey literature but then excluding any items that were not peer reviewed? Normally the reason to do a grey literature search would be to find information sources outside of peer-reviewed journal articles. • P 9, study selection process: Please provide more details about how screening was completed after the 20% of title/abstracts screened by two reviewers. (e.g., were the remaining 80% screened by a single researcher? How many authors participated in screening of the full-text grey literature?) • P 10, line 35, the authors state that the coded data was cross-checked by two researchers, but should also describe how the initial coding was conducted. • P 10, lines 45-48: The authors report that qualitative data from the primary studies is represented in Table 2 of supplementary appendix 2, but I think that this data is actually reported in Table 2 of supplementary appendix 3. • P 11, lines 53-54: Consider including a brief explanation of what a socio-cultural animator is, as I expect most readers are not familiar with this term. • P 12, thematic synthesis: numbers are provided in parenthesis next to each of the reported dimensions. Please indicate in the text what these numbers correspond to. It would be helpful to also include illustrative quotes that demonstrate the different dimensions identified, either in the text or in an additional table, as well as including • P 13: the authors report taking a "narrative inquiry approach" to explain how context might be related to the emotional impact of participating in MAiD. Narrative inquiry typically refers to primary research approaches like interviews or qualitative surveys which allow for in-depth investigation into of the experiences of individuals or groups, which is not what the authors have done in this manuscript. Narrative synthesis is a method that can be used in a systematic review which involves developing theories and exploring relationships in the extracted data and is thus the approach that would be more appropriate for this article. Further description of the method used for the narrative approach conducted by the authors should be provided in the article. (see https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/fhm/dhr/chir/NSsynthesisguidanceVersion1-April2006.pdf for guidance on narrative synthesis in systematic reviews).

	• P 17-19, discussion: The authors note an association between the emphasis of MAiD legislation in different countries and the emotional responses of clinicians participating in MAiD, and suggest that the legislative landscape shapes the emotional responses of clinicians who participate in MAiD. Why not think that the underlying cultural and moral values of the citizens within a country shape both the emotional response of clinicians who participate in MAiD and the legislation that gets passed in those countries? It seems likely to me that there is likely a bi-directional influence between the predominant values of a society and its legislation, such that values shape legislation and legislation in turn normalizes certain choices and in doing so influences societal values. • Supplementary appendix 1: the search strategies for the Ovid MEDLINE database and each of the grey literature databases are included. The authors should also report their search strategies for EMBASE, CINAHL, and Scopus. • Supplementary appendix 2: A table legend should be added to the table included in supplementary appendix 2, which is currently unlabeled. The column headings appear to correspond to the item numbers in the JBI critical appraisal tool used, but this should be specified in the table legend and a short descriptive title for each item should be included in the column headings along with the numbers. The JBI critical appraisal tool should also be applied to the items identified through the grey literature search. • Supplementary appendix 3, table 3: It is difficult to understand what is going on in this table as it is currently presented. Is this a complete list of every item from each study that was coded as a particular theme, or only representative examples? Are these direct quotes from participants in each of the studies, quotes pulled from portions of the articles written by the authors of those articles, a combination, something else? • Figure 1: As currently set up it is very hard to follow and should be re-organized. For example, the application of the JBI appraisal tool and CERQual assessment are shown in the flow diagram as branching off of excluded studies, when these tools were actually applied to the included studies. Excluded studies are best represented as terminal branches in the flow diagram. Good examples of flow diagrams can be found in the data supplement of the 2020 PRISMA guidelines.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1
Dr. Janine Winters, University of Otago
Comments to the Author:
Thank you for the opportunity to review this solid scholarly article on an important topic.
My recommendations for minor revisions are below.
I- Abstract
a. The conclusion of the abstract was confusing to me. Specifically, after reading the abstract, reading the entire article and then reading the abstract again, I still cannot for a clear picture of what is meant by “role of the legal framework and the position of the health care provider in sharing this discourse”

-Thank you for the feedback. We have edited and changed the discussion more specific, removing general terms of “role of the legal framework and the position of the health care provider in sharing this discourse” as it was generating confusion. We have incorporated the two main take home messages—firstly, the emotional impact on HCPs in legislations allowing MAiD for terminal illness only, and secondly, the influence of professional values and degree of engagement of HCPs in the MAiD process into the abstract.

b. include in the results section of the abstract the second 'area' of conclusions that you describe in your results and conclusion section- the first 'area' is the three dimensions, "distinct emotional themes" and the second area is the narrative enquiry approach (where you describe different narratives in different jurisdictions and correlated with the requirement for a about terminal condition). I recommend this in the abstract because when I read it in the results, I was not expecting another set of descriptions and had to read it several times to understand fully where the authors were going with the ideas.

-Thank you for your observation and suggestion. We have incorporated this into the results and made it more specific, illustrating the 3 descriptive themes. The two analytic themes forms the discussion section of the abstract. The narrative enquiry approach has been replaced by the analytical themes of the thematic meta-synthesis which was missing in the first draft (see response to IIIai below)

c. note that the abstract presents the three dimensions “distinct emotional themes” in a different order than the results and since both are numbered is a bit confusing

-Thank you for picking this up. We have corrected the order of the themes in the abstract to align with the order in the results.

II- Introduction and Methods and Data Analysis

a. Reads nicely, no comments! 😊

-thank you!

III- Results

a. The Narrative summary section (from Page 13 line 8- end of page)

i. needs to be signposted better (see also comment about abstract). The reader does not expect a new type of analysis at this point.

-Thank you for the feedback. We agree, the narrative enquiry approach is not necessary at this point, especially since the analytic themes from the thematic meta-synthesis will likely be sufficient. This was missing in our first draft and he was corrected that error by including the analytic themes.

ii. Even if sign-posted, the three points do not flow well, points one and two are contrasting based on the terminal condition (prognosis 6 months or less) and stand well together. Point three is difficult to understand and does not seem relatedto the other two, that #3 also encompasses the profession, engagement and hierarchical position makes it so broad and difficult for the reader to extract useful information. Consider re-working and see next comment as the proof may have an error in paragraph order and table placement..

-Thank you for the observation and feedback. This entire section has be reworked and corresponding sign posting done (p.12 to p.15)

b. Pate 14 starting at line 35-line 53-- Switches from three items that summarize narrative summary back to the three dimensions of emotional impact. Confusiong. I wonder if this paragraph may be out of place on this proof. The table and the paragraph about the GRADE CERQual approach interrupts the narrative.

-Thank you for the observation. This section has been reworked and the confusing paragraph removed. The table and paragraph about the GRADE CERQual approach has been sign posted with an brief introduction about its purpose so as to flow well with the narrative. Happy to make any further edits, if any.

c. I hope the table formatting is better in the final product, it is difficult to follow in this proof and I assume/hope the type-setters will fix this.

-Thank you for the observation. Hopefully the manuscript would be accepted and if so, we will work closely with the type-setters.

IV- Discussion

a. P. 17 starting with line 2. Please increase sign-posting. I found it very confusing to parse the combination of the combination/compilation of the 3 distinct emotional themes with the 3 narrative themes into the final "Benelux versus non-Benelux" analysis.
-This has been reworked. Signposting has been increased, the section is now divided into 4 paragraphs, each with appropriate headings.
V- Limitations-
a. The statement that "unbearable suffering is the driving force for patients requesting MAID" is not supported by the literature. Usually patients are driven by trying to regain control of the situation and the occurrence of pain and other physical symptoms (the usual understanding of suffering) is rarely an issue.
Thank you for the feedback. We agree and have modified the paragraph as "*Intolerable suffering is a common eligibility requirement for assisted death, although HCPs often struggle to understand and assess the nature and normative function of suffering. Is it the very nature of the emotonal tone of suffering which is overwhelming or is it more to do with what lies underneath that makes suffering 'intolerable'? Is there room for humanistic narratives around meaning behind and endurance of one's suffering? Such questions confront MAiD practitioners and an in-depth exploration of this nebulous concept of intolerable suffering in context of assisted death may help HCPs navigate their emotional experience while providing MAiD."*

Thank you again for an interesting and informative work.
-Thank for your excellent formative feedback that has allowed us to improve this manuscript!

Reviewer: 2
Dr. Elizabeth Brassfield, University of North Carolina at Chapel Hill School of Medicine
Comments to the Author:
• p 2, lines 16-21 (Abstract, introduction): sanctity of life and dignity in death and dying are not necessarily opposing values: one could consistently hold that life is sacred and that maintaining dignity in one's death is valuable. It would be more accurate to say that there can sometimes be tension between these two values, insofar certain ways of hastening death (such as MAiD) are viewed by some as one way to preserve that dignity.
-Thank you for the feedback. We agree, and have changed it to "…*experience a myriad of affective responses secondary to possible tensions between various normative and interwoven values, such as sanctity of life, dignity in death and dying, and duty to care."*
• p 2, abstract, methods: exclusion criteria, the date that each database was last searched, and methods used to assess risk of bias in included studies should also be included in this section of the abstract.
-Thank you for the feedback. Corresponding edits made to include exclusion criteria, the date that each database was last searched, and methods used to assess risk of bias in included studies.
• p 2, abstract, results: The total number of participants in the included studies, summary of relevant characteristics of studies, info about how many studies/participants showed the three main themes identified should be included in this section of the abstract.
Thank you for the feedback. Corresponding edits made to include total number of participants, summary of relevant characteristics of studies, info about how many studies/participants showed the three main themes identified.
• p 2, abstract, conclusions: general interpretation of the results & important implications should be included in this section of the abstract.
-Thank you for the feedback. Corresponding edits made to include general interpretation of the results & important implications in the discussion section of the abstract.
• p 4, lines 8-10, "especially since MAiD involves navigating conflicting personal and professional values": This is not necessarily true for ever provider and so should be qualified (e.g., "may involve" or

"sometimes involves"). As the authors note, the values at play for providers who participate in MAiD are contextual: as such, it would be helpful to more clearly outline how the values mentioned here (duty to care, reducing suffering, and sanctity of human life) might be instantiated in the case of providing MAiD (e.g., fulfilling the duty to care may require a provider to assist a patient in accessing MAiD, whereas sanctity of life may be understood as forbidding any action that hastens a patient's death). In addition to conflicts between personal and professional values, MAiD may also raise conflicts between two or more distinct professional (or personal) values (such as reducing suffering and prolonging life) – indeed, it may be conflicts between two professional values that are most challenging to navigate for some providers.

-Thank you for the feedback. This paragraph has been reworked and now reads as "These values are contextual, dynamic and often not in alignment with each other; for example, professional values of duty to care and reducing suffering in case of terminal illness through MAiD may conflict with the moral value of preserving sanctity of human life, as the later may involve forbidding any action that hastens a patient's death in the dying process (1, 2). In the context of assisted death, a HCP often has to navigate value-conflicts between respect for autonomy and patient right to self-determination vs. respect for individual human life, and human life in general."

• P 4, lines 36-39, "MAiD in Canada…euthanasia.": More precisely, legislation in these jurisdictions permits both assisted suicide and euthanasia.

Thank you for the picking this up. We have corrected the error and made the corresponding change.

• p 5, lines 3-6, "Right to bodily autonomy…legislative jurisdiction: It's not clear how "right to bodily autonomy" is a criterion for participating in MAiD. Often there is a requirement that patients have decisional capacity – is this what is meant here? Please clarify.

-Thank you, yes, we meant 'decisional capacity' and this replaces the 'right to bodily autonomy' in the revised manuscript.

• p 5, line 18, "the physician's role in providing MAiD is perhaps the most ambiguous": Ambiguous in what way? Perhaps the authors meant ethically most ambiguous given the following discussion of principles of medical ethics.

-Thank you for the feedback. Yes, we agree and have added a 'from ethics perspective' at the start of the paragraph so that it is clearer to the reader.

• P 9, lines 27-30: What was the rationale for conducting a search of the grey literature but then excluding any items that were not peer reviewed? Normally the reason to do a grey literature search would be to find information sources outside of peer-reviewed journal articles.

-Thank you and we apologize for this error. We are sorry for the confusion. Grey literature search was informed by search methods outlined by Godin et al and certainly included those articles which were not peer reviewed This has been corrected.

• P 9, study selection process: Please provide more details about how screening was completed after the 20% of title/abstracts screened by two reviewers. (e.g., were the remaining 80% screened by a single researcher? How many authors participated in screening of the full-text grey literature?)

Thank you for the observation. SD screened the remaining 80% for eligibility and reviewed the results with AS and AB in regular team meetings. SD, AS and AB independently screened the full texts of the academic and grey literature. This has been added to the reviewed manuscript.

• P 10, line 35, the authors state that the coded data was cross-checked by two researchers, but should also describe how the initial coding was conducted.

Thank you for the observation. We have added "SD independently coded each line of text according to its meaning and content. Codes were listed as 'free' codes, without any hierarchical structure" to described the initial coding process.

• P 10, lines 45-48: The authors report that qualitative data from the primary studies is represented in Table 2 of supplementary appendix 2, but I think that this data is actually reported in Table 2 of supplementary appendix 3.

-Thank you for pointing this out and our apologies for the error. This has been corrected.

• P 11, lines 53-54: Consider including a brief explanation of what a socio-cultural animator is, as I expect most readers are not familiar with this term.

-Thank you for the suggestion. We have included)applied sociologists who work along side communities at grass roots to develop and facilitate programs that support action for local and social change) to explain who a socio-cultural animator is.

• P 12, thematic synthesis: numbers are provided in parenthesis next to each of the reported dimensions. Please indicate in the text what these numbers correspond to. It would be helpful to also include illustrative quotes that demonstrate the different dimensions identified, either in the text or in an additional table, as well as including

-Thank you for your observation. The numbers correspond to the referenced studies in the reference list. This has been specified. A new table, table 1 with illustrative quotes has been added.

• P 13: the authors report taking a “narrative inquiry approach” to explain how context might be related to the emotional impact of participating in MAiD. Narrative inquiry typically refers to primary research approaches like interviews or qualitative surveys which allow for in-depth investigation into of the experiences of individuals or groups, which is not what the authors have done in this manuscript. Narrative synthesis is a method that can be used in a systematic review which involves developing theories and exploring relationships in the extracted data and is thus the approach that would be more appropriate for this article. Further description of the method used for the narrative approach conducted by the authors should be provided in the article.

(see https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/fhm/dhr/chir/NSsynthesisguidanceVersion1-April2006.pdf for guidance on narrative synthesis in systematic reviews).

- Thank you for your comment on the narrative inquiry and suggestion and reference for a narrative synthesis. We also reviewed and reflected on the analytic methods on qualitative synthesis (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3224695/ , https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2478656/). Along with your comments on the lack of theoretical coherence with the narrative inquiry approach, we also took into consideration reviewer 1’s feedback that the narrative inquiry as a new analysis not required at this stage. In fact, we realized that the first draft did not have a complete description of the stage 2 of the thematic meta-synthesis (generation of analytic themes) that was described in the methodology section, which possibly has led to the current confusion. Given that this qualitative synthesis adopts a thematic meta-synthesis and not a narrative synthesis approach, we have removed the section on narrative inquiry and explicitly described the results of our thematic meta-synthesis, including the analytic themes. The analytic themes explain the ‘how’ and ‘why’ to the emotional impact on HCPs, which allows us to forgo the need for any additional analysis, like narrative synthesis. Happy to make any further changes, if any.

• P 17-19, discussion: The authors note an association between the emphasis of MAiD legislation in different countries and the emotional responses of clinicians participating in MAiD and suggest that the legislative landscape shapes the emotional responses of clinicians who participate in MAiD. Why not think that the underlying cultural and moral values of the citizens within a country shape both the emotional response of clinicians who participate in MAiD and the legislation that gets passed in those countries? It seems likely to me that there is likely a bi-directional influence between the predominant values of a society and its legislation, such that values shape legislation and legislation in turn normalizes certain choices and in doing so influences societal values.

Thank you for the feedback and suggestion. We have incorporated this suggestion with signposted paragraph on “MAiD legislation, societal values, and emotional impact on the involved HCP: A complex relationship” and expanded on this relationship. We have also added a reference Schiller CJ, Pesut B, Roussel J, Greig M. But it's legal, isn't it? Law and ethics in nursing practice related to medical assistance in dying. Nurs Philos. 2019 Oct;20(4):e12277. doi: 10.1111/nup.12277. to expand on this topic. Happy to make any further changes, if any.

• Supplementary appendix 1: the search strategies for the Ovid MEDLINE database and each of the grey literature databases are included. The authors should also report their search strategies for EMBASE, CINAHL, and Scopus.

-Thank you, the supplementary appendix now contains search strategies from all 4 databases.
• Supplementary appendix 2: A table legend should be added to the table included in supplementary appendix 2, which is currently unlabeled. The column headings appear to correspond to the item numbers in the JBI critical appraisal tool used, but this should be specified in the table legend and a short descriptive title for each item should be included in the column headings along with the numbers. The JBI critical appraisal tool should also be applied to the items identified through the grey literature search.
-Thank you, the table is now signposted, has the corresponding JBI questions in column headings. The table has been extended to include JBI applied on the grey literature.
• Supplementary appendix 3, table 3: It is difficult to understand what is going on in this table as it is currently presented. Is this a complete list of every item from each study that was coded as a particular theme, or only representative examples? Are these direct quotes from participants in each of the studies, quotes pulled from portions of the articles written by the authors of those articles, a combination, something else?
-Thank you for the feedback and we apologize for the confusion. The table has been edited with adequate signposting and explanation. We have also underlined to represent the identified codes. Happy to further edit and clarify if necessary.
• Figure 1: As currently set up it is very hard to follow and should be re-organized. For example, the application of the JBI appraisal tool and CERQual assessment are shown in the flow diagram as branching off of excluded studies, when these tools were actually applied to the included studies. Excluded studies are best represented as terminal branches in the flow diagram. Good examples of flow diagrams can be found in the data supplement of the 2020 PRISMA guidelines.
-Thank you for the feedback. We have formatted Figure 1 to incorporate a better flow diagram as per the 2020 PRISMA guidelines.

Reviewer: 1
Competing interests of Reviewer: None

Reviewer: 2
Competing interests of Reviewer: I have no competing interests to declare.