#### **Peer Review File**

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### Reviewer A

#### 1. Comment: INTRODUCTION

The introduction provides a clear background and rationale for the study, highlighting the increasing proportion of elderly individuals worldwide and their need for hospice care. The authors also address the issue of elderly patients losing the capacity to express their desires regarding end-of-life care and the potential for over-treatment if preferences are not expressed in advance. The authors then introduce the concept of advance care planning (ACP) as a means to address these issues and provide a brief overview of the theoretical models underlying ACP.

However, the introduction does not provide information on the specific research question, study design, or methodology of the study. It also does not provide information on the demographic, clinical, or social characteristics of the study population or the study setting. For example, citation number 6 is a study from the USA, while citation number 7 is from Hong Kong – they are two different places. I think the authors should refine the demographic of the study as I see no clear aim of this research. This information is essential to understanding the significance and relevance of the study.

If you cite item 7 then you should also consider the following article, as the author of 7 has another article on death preparation among community-dwelling Chinese older adults:

Yu, A. (2022). Death preparation among community-dwelling Chinese older adults in Hong Kong. International Journal of Gerontology, 60(3), 225-239.

Furthermore, the introduction could benefit from a clearer statement of the research problem and the specific research objectives. The authors briefly mention that their study aims to present an overview of ACP's effects on older people living in communities and provide new options for end-of-life care among older adults, but they do not provide a clear and concise research question or hypothesis that guides the study.

Overall, while the introduction provides a general background and rationale for the study, it lacks specific details on the research question, study design, methodology, and

study population. The authors should revise the introduction to provide more specific information on these aspects and clearly state the research problem and objectives.

Response: Thank you very much for the reviewer's comments. We have made modifications according to the reviewer's comments.

Changes in the text: page 4 line 101-104

#### 2.METHODS

The methods section provides a clear and detailed description of the study's protocol, the literature search strategy, the inclusion and exclusion criteria, the data extraction process, the quality assessment, and the statistical analysis. However, there are several concerns with the methods:

**2.1 Comment:** The inclusion and exclusion criteria are very specific and may limit the generalizability of the study's findings. For example, restricting the study to only include randomized controlled trials with participants over 65 years old and their family members as caregivers may not be representative of the wider population. Furthermore, the exclusion of animal experiments, studies with unavailable full text, and studies with unavailable data may introduce bias and limit the completeness of the study's findings.

Response: We strongly agree with the reviewer's opinion and have revised the inclusion and exclusion criteria.

Changes in the text: page 4 line 123-140

**2.2 Comment:** The quality assessment process is limited to the Cochrane Handbook for Systematic Reviews of Interventions, which may not be appropriate for all types of studies. For example, quality assessment tools specific to observational studies or qualitative research should also be considered. Additionally, the use of 2 researchers to conduct the quality assessment may introduce bias and limit the objectivity of the results.

Response: Because we included only randomized controlled studies, we used the cochrane manual. Two researchers were used to score the articles independently, and a third person would be asked if there was any difference, so as to ensure objectivity as much as possible.

Changes in the text: page 5 line 145-149

**2.3 Comment:** The statistical analysis methods are not sufficiently detailed, and there is no explanation of how missing data or publication biases were handled. This limits the transparency and reproducibility of the study's findings.

Response: Thank you very much for the reviewer's comments. For the missing data, please contact the author for original data. For the results with publication deviation, shear and complement method can be used to explore the source.

Changes in the text: page 6 line 173-176

#### 3.RESULTS

The results section provides a clear summary of the study's findings, including the literature search outcomes, the baseline characteristics of included studies, the quality of included studies, and the meta-analysis results. However, there are several concerns with the results:

**3.1 Comment:** The number of included studies is very small, which may limit the strength and generalizability of the study's findings. Additionally, the high level of heterogeneity among the included studies for some outcomes suggests that the study's results may not be reliable.

Response: Indeed, as the reviewer worries, we did include fewer articles, but this is also due to the existence of objective factors. We also explained this point in the limitations, and we will pay special attention to this problem in the future research. Changes in the text: page 9 line 281-287

**3.2 Comment:** The sensitivity analysis conducted to investigate the stability of the results is not sufficient to rule out the possibility of publication bias or other sources of bias. A more comprehensive analysis of publication bias, such as a funnel plot or Egger's test, should be conducted to assess the presence of bias in the meta-analysis.

Response: Thanks very much for the reviewer's comments, we carried out egger test on the CPR index to evaluate its publication deviation, and the results are shown in figure 13.

Changes in the text: page 8 line 242-244

**3.3 Comment:** Overall, the methods and results sections raise several concerns about the study's design, execution, and findings, which suggest that the study may not be suitable for publication in its current form.

Response: I'm sorry that we didn't make it clear. We have modified it properly. We will also pay attention to this direction in the future research.

### **4.DISCUSSION**

The discussion section provides a comprehensive summary of the study's findings and their implications, as well as a review of the relevant literature. However, there are

several concerns with the discussion:

**4.1 Comment:** The discussion draws conclusions that are not supported by the study's findings. For example, the study's results only show an association between ACP and certain end-of-life decision-making outcomes, but the discussion states that ACP can improve the quality of life of community-dwelling elderly people and their families at the end of life. This overgeneralization of the study's findings may mislead readers and oversell the benefits of ACP.

Response: We strongly agree with the reviewer's opinion and have modified it.

Changes in the text: page 9 line 273-274

**4.2 Comment:** The discussion cites several studies that are not directly relevant to the study's research question or findings. For example, the discussion cites studies on the importance of government policies, patient education, and attitudes toward ACP, which are not directly related to the study's research question or findings. This may distract readers from the study's main findings and weaken the overall coherence of the discussion.

Response: Thank you very much for the reviewer's comments. We have deleted and modified them.

Changes in the text: page 9 line 273-274

**4.3 Comment:** The limitations of the study are not sufficiently discussed, and the potential sources of bias or confounding are not adequately addressed. For example, the discussion acknowledges the small number of studies and the potential for heterogeneity, but does not address how these limitations may affect the reliability or validity of the study's findings. Additionally, the potential for publication bias or selective reporting is not addressed, which may limit the completeness of the study's findings.

Response: Thanks very much for the reviewer's comments, we have rewritten the limitations of the study.

Changes in the text: page 9 line 281-287

#### 5.CONCLUSION

**Comment:** The conclusion is far too short and should be extended.

Response: Thanks for the reviewer's comments, we have modified them.

Changes in the text: page 9 line 290-293

OTHER GENERAL COMMENTS OF THE REVIEWER TO AUTHORS

**Comment:** I found that there are many language problems, so the article needs to be proofread again. This article should be proofread before submission. Professional English editing for the manuscript is recommended

Response: Thanks for the reviewer's comments, we have modified them.

# Reviewer B

#### 1. Figure 2:

Please revise the below two authors' names to "Chiu Wu" and "Sævareid".

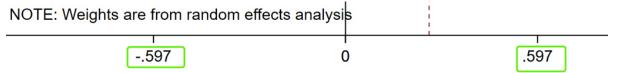


**Responds:** Thank you very much for the editor's opinion. We have modified the corresponding picture and uploaded it again.

Changes in the text: figure 2-revised

### 2. Figures 3, 5, 7, 9:

Please complete all numbers ".xxx" to "0.xxx" in your Figures, for example, to "0.597".



**Responds:** Thank you very much for the editor's opinion. We have modified the corresponding picture and uploaded it again.

Changes in the text: Figures 3, 5, 7, 9-revised

## 3. Figure 5:

The data below in your main text is "76.9%" in Figure 5.

- A total of 4 studies (18,20,22,24) investigated nasogastric gavage. A random-effects
- 225 model was employed based on the results of life-sustaining treatment ( $I^2=76.5\%$ ,
- P=0.005). The meta-analysis results revealed the incidence of life-sustaining treatment
- 227 after the intervention of ACP (rate =12%, 95% CI: 6–18%), as shown in Figure 5.

Overall (I-squared = 76.9%, p = 0.005)



0.12 (0.06, 0.18)

**Responds:** Thank you very much for the editor's opinion, we have checked and modified.

Changes in the text: line 225.

### 4. Figure 6:

Please revise the below author's name to "Sævareid".



**Responds:** Thank you very much for the editor's opinion. We have modified the corresponding picture and uploaded it again.

Changes in the text: figure 6-revised

- 5. In your included 8 studies (17-24), the reference 22 is a cross-sectional study, not a RCT. But in your Table 1, you mentioned all included studies are RCTs. Please explain.
- 431 22. Ng CW, Cheong SK, Govinda Raj A, et al. End-of-life care preferences of nursing
- home residents: Results of a cross-sectional study. Palliat Med 2016;30:843-53.

**Responds:** We are very sorry for not expressing it clearly. This article is the result expression of an rct. So we define it as RCT.