Reviewer’s report

Title: Is care staff equipped for end-of-life communication? A cross-sectional study in long-term care facilities to identify determinants of self-efficacy

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Reviewer: Lynn McCleary

Reviewer's report:

Thank you for the opportunity to review this interesting manuscript. The topic is relevant and timely, receiving increasing attention in practice and research. This research can make an important contribution to improving palliative care in facilities. There were some aspects of the manuscript that lacked clarity and I have some suggestions that the authors might consider.

Background:

1. It would be worthwhile to clarify what is meant by end of life conversations. The self-efficacy scale contains items that would be relevant for advanced care planning and for discussions about care at the end of life. The cited literature about the effects of end of life conversations is about both conversations at the end of life and advanced care planning, similarly for the literature about predictors of self-efficacy. As these are different kinds of conversations, with different professionals typically responsible for them, there may be different factors associated with self-efficacy. It is also relevant to the reader judging the validity of the self-efficacy measure.

2. Additional information about staff experiences of death in psychiatric/mental health facilities would be helpful to understand the rationale for the study. Does mental health facility mean chronic psychiatric hospital? If 400-450 people die annually due to somatic co-morbidity (I'm assuming not suicide), then how often would staff encounter death? It seems like it would be rare. The authors state that patients might require long-term complex care until death from a somatic comorbidity. Is there evidence that this is true?

Methods:

3. I wonder about the validity of the comparison of type of facility. The authors point out that mental health facilities differ with respect to who provides direct care at the end of life. This results in confounding of setting and professional designation. RNs, who are more likely to do direct care in mental health. RNs are also more likely to have authority to have end of life conversations. In many settings, care assistants do not have this authority or do not perceive that they have this authority. This should influence self-efficacy and possibly knowledge. I'm not sure
that it's possible to separate the effects of facility and professional designation. Based on the education level data provided, it seems that there would be very small numbers in some cells if professional designation were controlled for.

If it is not possible to disentangle type of facility and professional designation, the authors might consider discussing the likelihood of having had conversations about end of life in the facilities by professional designation when interpreting the findings - or leaving out this research question and focusing on a more fleshed out analysis and discussion of factors associated with self-efficacy.

4. Sampling and participants: It seems like the mental health facility participants include some people who are not nurses (p. 5, line 6 and line 21). Please clarify and explain the rationale for having them in the analyses.

5. I was confused about the measures and scoring the measures presented in the data collection and measurements section and the data analysis section.

I would have found it easier to follow if all information about scoring (e.g., cut-off scores or calculation of summary scores) was included with the description of the measures. This would help to clarify the level of measurement of each of the measures and understand what analysis approach is appropriate.

The item level responses to the S-EOLC scale are reported in categories (0-3, 4-5, and 6-7). For interpretation, it would be helpful to provide information about what the middle category means, in addition to the information about the definition of 0 and 7. On the other hand, it may be that it is reasonable to just report and analyze item means.

What is the rationale for the cut-off for the number of knowledge items correct?

Is it possible to create a summary score for time pressure? How is this calculated? What is the rationale for dichotomizing items? The description of cut of scores for this construct seem to be contradictory in the data collection and data analysis sections.

6. Data analysis

Provide information about final sample size after eliminating missing and not my responsibility responses.
What is the rationale for using non-parametric statistical analyses?

Explain the rationale for creating a dichotomized self-efficacy score and conducting logistic regression for the prediction of self-efficacy - and for the particular cut-point for dichotomizing.

Explain the rationale for step-wise modeling to control for background variables that seem to be all related to self-efficacy and to setting.

Consider reporting on tests for assumptions being met for the multivariate analyses. It seems that there would be some very small or zero cells for comparisons involving setting and level of education. Maybe I misunderstood the analyses.

7. Results

There are significant between group (setting) differences for "background" variables. Could these be controlled for in other between group analyses? If not, consider discussing the implications (not reported for knowledge analyses or confidence section).

Clarify presentation of results of the multivariable analyses. Did all control variables stay in the model?

I was surprised to see item level reports of time pressure in Table 5. This is inconsistent with the analytic approach to the other constructs being tested.

8. Discussion

Consider including literature about authority to have end of life discussions and, as previously noted, clarifying the difference between end of life discussions and advanced care planning. The recommendations for enhancing nursing education do not account for the differences in responsibilities of the various worker categories in the study. The criticism that nursing education focuses on acute care rather than chronic care or palliative care may be less relevant to care aide education than to RN education. Could the high self-reported self-efficacy be an overestimate for participants with limited experience?
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

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