**Reviewer’s report**

**Title:** Trained volunteers to support chronically ill, multimorbid elderly between hospital and domesticity - A systematic review of one-on-one-intervention types, effects, and underlying training concepts

**Version:** 0 **Date:** 16 Oct 2018

**Reviewer:** Larkin Lamarche

**Reviewer’s report:**

This study is a systematic review of literature aimed to identify and describe volunteer programs for care transition from the hospital to home-setting of older adults with multimorbidity. The findings are of interest to the healthcare system at large and contribute to understanding the landscape of care transition. I have several concerns to consider and/or address prior to a recommendation of publication.

**Background**

1. A definition of 'volunteer' is required - there are many definitions of volunteers in the literature, and not all articles will use the term 'volunteer' (i.e., community worker, peer, peer worker, peer system navigator, peer support, coach, community volunteer, etc). Was your definition considered in the inclusion/exclusion of articles? I noticed 'focus on family caregivers' as an exclusion criteria in figure 1. Oftentimes, caregivers are considered informal volunteers as so having a definition of volunteer would help clarify the boundaries for readers.

**Inclusion criteria**

1. I see inclusion criteria and some exclusion criteria for some categories of PICOS. Are there any other exclusion criteria that should be articulated in each section? One may be study designs which were excluded. I see in Figure 1 'inappropriate study design' - what does that mean? Also, the word 'inappropriate' should be removed as it implies to the reader 'wrong'. Excluded because of 'study design' is sufficient in the figure.

**Results**

1. Why were interventions attached to a formalized voluntary service excluded? (p.6) This may present bias in the findings. Volunteers from these organizations may make-up a fair amount of the volunteer force in the healthcare system, and their training concepts may be more publicly available.
2. Why was it decided to use pre-existing categories of volunteer tasks to categorize the articles, especially since it appears that volunteers often performed multiple tasks within studies. I do not disagree that the tasks used (emotional, psychosocial, physical, cognitive, coordinative support) make sense, but more justification for using these categories is required. Further, providing parameters around these categories would be helpful (i.e., what is meant by cognitive support?). Further, the category of psychosocial-coordinative support (p.9) includes emotional support? Also, the description of Philippi et al (p.10) sounds like tasks of coordinative (i.e., '...e.g. accompanying patients to doctor's visit...search for professional support'). Clarity around the grouping is required.

3. Were adverse events reported in the studies (either events involving the volunteer or the client)? This would be an important factor to consider in thinking about volunteers in healthcare. As a reader, I would be curious to know this side of the story (even if there were none reported).

Discussion

1. The conclusions should be discussed in light of some bias brought into the search strategy. Mainly, excluding articles involving formalized voluntary service as well as including more detailed search of only German-based institutions and not worldwide institutions (even though reasoning was provided, p. 5). It is likely that formalized volunteer services have completed program evaluations, or have done quality improvement or PDSA cycles to develop effective programs, but their end goal is not publishing these findings. These limitations should be highlighted and discussed in detail.

Tables

Table 2

1. Could the dashes be replaced with 'Not reported'

2. What was the control group for Etkin et al (2006), Stolee et al. (2012), Connelly (2008)? or was it 'not applicable'? This could be clearer in the table.

Table 3

1. Rows where information is not reported is unhelpful (i.e., Depression, Physical functioning under Psychosocial-coordinative support). Consider removing throughout. The same comment applies to Table 4

Minor suggestions
1. I find the word 'actors' used throughout awkward. Is there a different word that can be used? (community leaders, community organizations, organizations...?)

2. p. 4 'Germany between increased from 16.7% to 31.4%...' should be 'Germany between 2012 and 2022 increased from, 16.7% to 31.4%...'

3. In places throughout, the tense should be past tense, such as the objectives statements.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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