Reviewer’s report

Title: Feasibility and usefulness of a leadership intervention to implement evidence-based falls prevention practices in residential care in Canada

Version: 0 Date: 02 Jun 2019

Reviewer: Veronique Boscart

Reviewer’s report:

Thank you for the opportunity to review this manuscript. This study evaluated the feasibility of a leadership training intervention in implementing falls prevention guidelines for 10 formal and informal leaders in long-term care. This study took great care to ensure that the intervention was relevant to the needs of the long-term care staff, that staff were supported after workshops, and that barriers and facilitators were explored. The study did not find a difference in the number of falls post-intervention although this is not surprising given the small sample size and short duration. Leadership scores were generally high although a comparison of leadership attitudes before and after the intervention was not conducted. The authors do not conclude on the feasibility of the studies, but rather comment on the complexity of leadership interventions and recommend additional research into its effectiveness.

Please find below a list of recommendations for improving the clarity and structure of this manuscript.

1. **Consistent use of leadership terminology**

   Throughout the manuscript you describe point-of-care managers, clinical leaders, opinion leaders and in the results as unit manager/educators, nurses and care aids. It would improve the clarity of this study if staff cohorts were defined as formal and informal leaders with a short description of the staff roles included in each category.

2. **Sample size**

   In lines 140-149, you describe the size of the long-term care home and the number of included units and staff in the study. Please also state the number of residents within the two units and the number of staff approached for consent. It may be helpful to include a flow diagram (or revise Figure 1) showing the number of leaders (formal and informal) on the units, the size of the staff teams they direct, and the number of residents on the units. Additionally, if any staff did not consent to participate initially, please state these (originally estimated for a sample size of 13 but only 10 participated with one drop out).

3. **Fall prevention best practices**

   In line 183 and in 204-210, the fall prevention best practices are discussed. Please group this information into one section and explain the rationale for why only some of the
recommendations were included in the implementation plan. Please state if the participants eventually planned on implementing all the recommendations.

4. Individualized leadership action plan vs. team leadership action plan

In line 200, authors state that participants were required to make multiple action plans. Please explain how these differ and what strategies go into each type.

5. Scales

In lines 232-234, you discuss the Likert scale for usefulness as 1-4 with acceptable scores of at least 3. This does not seem like a big enough range to detect a primary outcome of this feasibility study. Please explain the rationale for this choice.

In lines 245-246 you describe the ILS scale validity using the Cronbach alpha statistic. This statistic really only speaks to the internal consistency of the scale. Please consider rewording the phrase on reliability to emphasize that this is not related to inter-rater reliability. Please consider finding additional sources to validate other properties of this scale.

6. Pre- post- comparisons

In the second paragraph under 'data collection', you describe comparing the number of falls and documentation on falls prevention pre- and post-intervention. Please explain why you did not assess leadership ILS scores pre- and post- as this seems like an obvious measure to help support the usability of the intervention.

7. Cost data analysis

Please include what analysis was conducted for the cost data within the data analysis section.

8. ILS response categories

Please remove the description of the ILS response categories from table 3 and list these briefly within the data analysis section (line 284) and in more detail within the results 'leadership behaviors'.

9. Table 1

Consider regrouping table 1 into formal and informal leaders as opposed to the number of participants in the workshop, interview and focus groups. This seems to be unnecessary.

10. Table 2

Please include an explanation of why referrals to physiotherapy were unavailable pre-intervention. Please also include the number of falls as a percentage of the total number of residents on the units.
11. **Action plan evaluation**

In line 347, you mention that researchers collected chart audit data. Please explain if staff were responsible for evaluating their own action plans. If staff are unable to have ongoing evaluation of their own plans, this is likely not a sustainable approach.

12. **Organizational needs**

In line 356, you describe that participants required more support in adapting the intervention into the context of their organization. Since the researchers had already met with senior leadership to discuss this, please describe what additional needs were not already identified and addressed.

13. **Table 3**

Please include correct number of significant digits.

14. **Falls prevention**

Within the discussion on line 419-427, you discuss fall data as an outcome measure. Please state additional references for the challenges in changing health outcomes in long-term care given this is a population with complex health needs, highly transitory, etc.

**Level of interest**

Please indicate how interesting you found the manuscript:

An article of importance in its field

**Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

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