Reviewer's report

Title: The impact of music therapy on managing neuropsychiatric symptoms for people with dementia and their carers: a randomised controlled feasibility study

Version: 3 Date: 29 March 2015

Reviewer: Huei-Chuan Sung

Reviewer's report:

This paper investigated the effects of music therapy for older people with dementia and their carers. However, it needs major revision before it can be considered for publication. Reviewer’s comments are addressed as follows:

# Introduction:
1. The theoretical background of the targeted variables is needed.
2. Discussion and comparisons of different types of music interventions researched in the literature is needed. What are their advantages and disadvantages?
3. What are the gaps in the literature? What is the rationale for researching active music therapy for this population?
4. The authors designed this music therapy as individual active music therapy, but there is no discussion about the importance of using individualized music therapy?
5. Several key articles of individualized music intervention study for those with dementia are not mentioned, such as studies by Gerdner, L.; Sung, H. C. etc.

# Methods
1. The sampling methods for both the residents and carers should be addressed.
2. The inclusion criteria for residents are not clear (p.6). What was the level of severity of dementia? The authors mentioned that Global Deterioration Scale (GDS) was used, but it was not included in the inclusion criteria for residents.
3. Participant allocation needs to be addressed more clearly. Participants were allocated to intervention or control group by unit. How many residents were in one unit? How were a total of 17 residents allocated by unit to the intervention or control group?
4. Who were included in the care staff participants? Were they all nurses? Or other care staff were included, such as nursing assistants, social workers. These need to be described.
5. The music intervention in the Methods should be explained more clearly. How and where was the music intervention conducted in a group setting? What are the frequency of music session in a week for 5 month period?
6. The authors indicated that weekly individual music therapy was conducted.
How did the authors individually conduct the music sessions in a group setting? Participants’ music preferences should be addressed in the methods and discussion. What elements of the music therapy indicated individualization?

7. How did the music therapist lead improvisation for residents with dementia? Were there any difficulties to conduct improvisation for this group of population?

8. How was talking as a part of the music therapy conducted in a group setting?

9. Who led the music therapy? Were all sessions conducted by music therapists? The authors mentioned that carers were encouraged to record instances in which they used music therapy with residents (p.10). How did care staff involve with conducting music therapy? Were they trained to do so?

10. The assessment tools were not consistent in the content and tables. NPI was mentioned as one of the outcome measures (p. 10), but NPI-NH was presented in table 2 and 3.

11. P.12, line 270-271: The authors used future tense to describe analysis of physiological data.

12. Sample size (p.13): Please explain how and why 16 residents and 10 staff were calculated and decided?

13. Statistical methods: Since the sample was rather small, parametric statistical tests were not appropriate. Nonparametric statistical tests should be recommended for quantitative data analysis.

14. The subtitle “recruitment” (p.15) should be moved under the “Method” section.

# Results and discussion

1. There are several one sentence paragraphs(p.15, 16, 17). These should be rewritten.

2. Qualitative data should be presented under different subtitles to make a better logical flow (p.18; 21; 22).

3. There is a need for comparison and more critical discussion of the study results with the findings of other similar studies in the Discussion section.

# Tables and references

1. Please check and prepare the tables, figures, and reference list according to the journal guidelines. Some of the terms used in the tables were not consistent. For example, s.d was used in Table 1, but SD in table 2.

2. References need to be revised and updated. Some of the references were rather old, and can be updated. Music intervention studies for patients with dementia from health care field should be compared and discussed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the
statistics.

Declaration of competing interests:

I declare that I have no competing interests’