Reviewer’s report

Title: Prevalence, and health- and sociodemographic associations for visits to traditional and complementary medical providers in the seventh survey of the Tromsø Study

Version: 2 Date: 15 Jul 2019

Reviewer: Carolina Ung

Reviewer's report:

The authors have used a new title (as above-mentioned) and provided new justifications "The importance of patient-centred culturally sensitive health care to conventional health care providers” care for the patients" for this study. Overall, while the justification and significance of the study have largely improved, the connections between the reasons of the study "patient-centred culturally sensitive health care", the findings, the discussion and the conclusion can be strengthened. More specific comments are as followed:

1. **Title** - "association for use" lacks clarification

2. **Objectives of the study:**
   In Title, it says "Prevalence and association for use of traditional and complementary medicine in the seventh survey of the Tromsø Study"
   In Background of Abstract, it says "to investigate the prevalence of use and possible associated factors for TM and CM separately in an urban population"

   In Background of the main content, it says "to investigate to what degree the inhabitants of Tromsø still use T&CM therapies and investigate the associations for use of TM and CM separately in an urban population"

The questions used in the questionnaire were about the participants' visits to TM or CM providers. The terms about TM and CM used in this study need to be standardized, and clarification should be made about the scope of this study that only confined to visits to practitioners (but did not necessarily include practice nor medicines as "therapies" might imply).

3. **Background**
   While the concept of "patient-centred culturally sensitive health care" has been introduced, future readers will benefit from more in-depth explanation especially about how it could be used to improve conventional health care providers' care for their patients. In other words, knowing about the patients' preference or history of TM and/or CM use, how could their practice be adjusted and improved whenever deemed appropriate? Further exploration in the context of the local population and across the countries in the Discussion would be useful.

4. **Background**
"The users of TM have shown to differ differently from the non-users of TM than the users of CM differ from non-users of such treatment modalities." - This statement is unclear.

5. Background
"To be able to offer PC-CSHC, the conventional health care providers therefore need to identify the users of TM and users of CM separately [9]." - What are the practical implications of the knowledge about the history of TM and/or CM use to the practice of the conventional health care providers?

6. Background
"As the use of T&CM is rarely shared with conventional health care providers unless specifically addressed [42, 43], the conventional health care providers need knowledge about these users to identify them." - If the knowledge about the history of TM and/or CM use is so important to the practice of the conventional health care providers, would it be more effective to collect this information as part of the patients' medical history taking? What are the practical relevance of knowing the contributing factors to the practice of conventional health care providers?

7. Background
Re-organizing of the structure of the Background will improve the readability of this session.

8. Methods
"The data used in this study is drawn from …. aged 40 and above" - should be "aged 40 or above"

9. Methods
In the third paragraph of Methods in the main content, how much of the data collected in each of the 3 questionnaires, the body chart, the clinical examination, and the biomarker test results was used in this study?

In my earlier comment "The rationale for the questions selected from the Tromso Study remain unclear. Why were self-reported health, gender, age, education, income, religiosity and ethnicity the only variables included in this study?", I was really asking if other important data collected would be relevant to this study, and if so, why they were not included in this study.

10. Methods
The design of the use prevalence questions might be confusing to the participants.

For the prevalence of TM use, the question "Have you during the past year visited a traditional healer (helper, "reader", etc.?)" was used. For the prevalence of CM use, the questions "Have you during the past year visited an acupuncturist?" and "Have you during the past year visited a CM provider (homeopath, reflexologist, spiritual healer, etc.)" were used.
The use of "etc" without specifying exactly what TM and CM refer to, and the use of "traditional healer" and "spiritual healer" without any clear definition/differentiation might cause confusion to the participants leading to possible inaccuracy of the findings.

11. Results of the study
In Results of Abstract, it says "TM users tended to be older, more religious, have poorer economy and health, and lower education compared to the CM users"

What is the definition of "more religious"?

12. Results of the study
In Results of the main content, it says "n=16,852 (80.5%) reported to have seen a GP with a mean number of 3.46 visits during the last year (SD 3.61), and n=2,297 (11%) had been hospitalized." - how does it relate to the scope of the study objectives?

13. Results of the study
"T&CM providers were visited by 2,106 participants (10%), of which n=526 (2.5%) had seen a TM provider and n=1,782 (8.5%) had seen a CM provider and n=202 (1%) had seen both TM and CM providers." - if the authors chose to use "of which", the denominator used to calculate the % of participants seen a TM provider, a CM provider and both should be 2,106.

14. Discussion
The discussion is still very focused on comparisons with previous studies. Future readers will benefit from further exploration about the implications of the patient-centred culturally sensitive health care provided by the conventional health care providers.

15. Conclusion
While "To offer PC-CSHC tailored to patients' treatment philosophy and spiritual needs, it is important that health care personnel have knowledge about their patients' use of parallel health care system." is true, this conclusion was not necessarily drawn from the findings of this study.

16. Table
The table as shown in the pdf file is not complete

17. Table
The questions/items which have missing responses should be indicated clearly. The authors should also justify why they did not use only the complete responses, and if the missing data would affect the overall findings.
It says "These numbers do not add up to the numbers presented in the prevalence chapter as the numbers in this table are mutually exclusive in contrast to the data presented for each ethnic group in the prevalence chapter." Which questions/items does this refer to? What is "prevalence chapter"?

19. Table
In Methods, it says "We used Pearson chi-square tests and one-way ANOVA tests." In the Table, it only mentioned "Pearson's chi-square test". Please indicate which part of the results was based on one-way ANOVA tests.

20. Figure 1
Please clearly indicate all the inclusion and exclusion criteria.

21. Thorough edit for English grammar prior to publication is needed.

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

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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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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