Reviewer's report

Title: Disease-specific differences in the use of traditional Korean medicine in Korea

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Reviewer: Jung Nien Lai

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Comments to the Author

The authors presented the results of a study to determine the relative preference for traditional Korean medicine using data acquired nationwide. The main findings were (1) Among disease groups, traditional Korean medicine use was higher in patients with nervous system and musculoskeletal system diseases. (2) And patients with musculoskeletal and nervous system diseases such as arthrosis were the most likely to use traditional Korean medicine particularly in an outpatient setting. (3) Korean characteristics of service use resemble the complementary and alternative medicine use in other countries. My comments are listed below.

- **Major Compulsory Revisions**

1. The writing of the study design and patient selection is not clear, which raised a big concern about the validation of the study method. Many factors will influence the results of this paper: medical insurance of western medicine and TKM, regions, personal income, the total number of western doctors/TKM doctors, patients’ age, gender, the number of chronic diseases, and medical condition such as cancer, surgery, chemotherapy, or radiotherapy. Any descriptive epidemiological study should describe the characteristics of the study population in detail. Taking the aforementioned variables into consideration, using appropriate statistic method describes the findings. All are lack in this paper.

2. What difference of characteristics between TKM non-user and TKM user?

3. Using the number of cases to calculate proportion is not right. Some patients received one week of western medication or TKM, others might receive one month’s medication according to different diseases and different severity of illness condition which will belong to the same proportion in the present study.

4. Since TKM doctors are not allow to use ultrasound, blood tests, X-ray, etc. to make accurate diagnosis, The diagnosis of a disease among western doctors will be not equivalent to TKM doctors’ resulting in introducing the measurement bias into this study.

5. Previous studies indicated that age, gender, the distribution of medical resource, education etc. are highly associated with CAM use. How can authors
draw the conclusion that Korean characteristics of service use resemble the complementary and alternative medicine use in other countries when they did not measure or test aforementioned factor. The author should adjusted this confounder and discuss this issue.

- Discretionary Revisions

1. I recommend that authors explain why there is the difference between TKM users and non-users.

2. Proportion alone is not an appropriate way to describe an epidemiological study.

3. Authors did not provide enough information or rationale for outcome measure, treatment modalities, and frequency of TKM use.

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests