Reviewer's report

Title: Patterns of medical pluralism among adults: results from the 2001 National Health Interview Survey in Taiwan

Version: 3 Date: 6 February 2010

Reviewer: Lisa Lix

Reviewer's report:

Major Compulsory Revisions:
The Background section of the manuscript requires substantial revision. The opening paragraph of the manuscript (page 4) is not relevant to this study; it focuses primarily on United States data about complementary and alternative medicine and therefore might mislead the reader into thinking that this manuscript focuses on CAM in Western countries. The topic of medical pluralism, which is the major focus of this manuscript, should be defined and discussed close to the beginning of the Background, instead of near the end where it is currently found. The Background section should summarize related research about demographic, socioeconomic, lifestyle, behavioral, and health system characteristics that are associated with the adoption of different types of medicine. In its present form, the Background section of the manuscript does not provide the reader with an adequate understanding of previous relevant research that has been conducted on the topic of medical pluralism and/or factors associated with use of alternative forms of medicine that are relevant to the design of this study.

Page 8: Gua Sha is a technique of scraping skin (misspelled word) and Baguan is form of vacuum bottle therapy (misspelled word)

Page 9: Do not use "etc." in the manuscript. Please provide a complete listing of conditions that were defined as severe diseases.

The Methods section requires reorganization and revision. The section entitled "Definition and measures" should begin with a listing of the variables that were investigated in this research and then proceed to define each of these variables in sequence.

The Statistical analysis section requires substantial revision. Results about numbers of excluded study participants should not be included in this section; rather, they should be moved to the Results section and discussed when the authors describe the characteristics of the sample. No information has been provided about methods for assessing goodness of fit of the logistic regression models. There is no indication of whether the authors investigated main effects only or also considered interactions. Table 4 results imply that there is interaction amongst a number of factors in the adoption of medical pluralism, therefore one might suspect that there would be interactions amongst study variables in their
association with the odds of adopting medical pluralism. The results from the chi-square tests and univariate logistic regression analysis will convey similar information about variable associations, therefore both are not needed. The last sentence of the Methods section requires clarification; in fact, the authors investigated adoption of medical pluralism across variety of participant characteristics. Confidence intervals should be provided for the percentages in Table 4.

In the responses to reviewers, the authors have provided substantial information that clarifies details of the Taiwanese National Health Insurance system (e.g., eligibility requirements) and elements of the survey and study design (e.g., no significant differences in age and sex of survey respondents and non-respondents). The authors should incorporate this information in order to strengthen the manuscript.

Table 2 title should be reworded. I suggest the following "Health behaviors and physician density factors of study participants by medical pluralism.

The Conclusions section is weak. In particular, the last sentence should summarize the major implications of this research. Given that this study focused primarily on sociodemographic, health behavior, and lifestyle characteristics associated with adoption of medical pluralism, the last sentence, which focuses on physician practices, seem to be an inappropriate choice.

The Abstract requires substantial revision. The authors have not defined medical pluralism in the Background section. Also, the abstract suggests that medical pluralism may lead to adverse health effects, but this is not the focus of the paper. Therefore, the Background section is misleading. The last sentence in the Methods section of the Abstract requires editing for grammar. Also, the Methods section is incomplete because it does not define the method of analysis. The Conclusions section should succinctly summarize the major findings of the research. It should also include a sentence that describe the implications or significance of the research.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:

I declare that I have no competing interests.