Reviewer’s report

Title: The mediating effect of health anxiety in the relationship between functional somatic symptoms and illness behavior in Chinese inpatients with depression

Version: 0 Date: 13 Jun 2019

Reviewer: Xiancang Ma

Reviewer's report:

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This is a meaningful manuscript, previous research has indicated that somatic symptoms (SS) is correlated with both health anxiety (HA) and illness behavior (IB). However, research has not tested mediational models of how HA may lead to IB in a clinical contexts. This manuscript exploring the possible psychological mechanisms between functional somatic symptoms (FSS) and IB using structural equation model in an inpatient sample of individuals with MDD. It concludes claiming that HA may mediate the influence of FSS on IB. In addition, age may moderated the impact of FSS on HA. I have some comments to contribute for the improvement of this manuscript.

Question 1: Introduction: In the first paragraph, I suggest to replace sentence "This misdirecting or unnecessary IB can probably misguide diagnosis, delay treatment, hinder patients' rehabilitation, and cause a huge waste of health care services" with" This misdirecting or unnecessary IB can probably result in misdiagnosis, treatment delays, rehabilitation barriers, and huge waste of health care services".

Question 2: Methods (2.1 Participants and procedure): I don't see why the authors use electronic medical records instead of asking participants to fill in directly during the collection of the duration of illness.

Question 3: Methods (2.2.1 Functional somatic symptoms) : Would be better "...... which was translated and revised by Lee et al. [26] from the original version [27]." instead of "...... which was developed by Lee et al. [26], who translated the original version [27].", in the beginning of the first sentence of 2.2.1 Functional somatic symptoms.
Question 4: Methods (2.2.2 Illness behavior): The last two sentences of this paragraph "Internal consistency of the Chinese version of the SAIB was found to be 0.88, and Cronbach’s alphas across the 5 subscales were 0.69 (diagnosis verification), 0.73 (expression of symptoms), 0.82 (medication/treatment), 0.61 (illness consequences), and 0.79 (body scanning), respectively. Cronbach’s alpha values in the present study were as follows: 0.75 for diagnosis evaluation, 0.68 for expression symptoms, 0.79 for medication and treatment, 0.53 for illness consequences, 0.83 for scanning, and 0.88 for the total score on the SAIB. " There are too many repeated phrases in these two sentences, I suggest the authors to simplify the sentence.

Question 5: Results (3.4 Moderate mediation model): There is some confusion in the description of how grouped in the second paragraph of the "3.4 Moderate mediation model". The authors described "M+SD (33.84 + 12.35) was set as the high age group and M-SD (33.84 − 12.35) as the low age group to". Are the authors mean that the two values (M+SD and M-SD) are the dividing line, and the individuals above the high value and below the low value are the high age group and the low age group respectively? Please, clarify how you grouped.

Question 6: Participants in this study are from clinical hospitalized depressed patients with severe depression and anxiety symptoms. These confounders may have effects on variables in the mediation model. This may be a limitation of this article. The result can be further validated after adjusting for confounders such as depression in a population-based study.

Question 7: Discussion: Cognitive behavioral model of severe health anxiety was introduced by researchers around 1990. The strengths of the cognitive behavioral model of severe health anxiety lies in its account of maintaining factors. Somatic symptoms is the triggering factor of health anxiety. The maintenance factor of health anxiety lies in the faulty cognitive belief. For example, health-anxiety persons are also more likely than others to attribute common somatic symptoms (e.g., headache and dizziness) to somatic causes (e.g., brain cancer). Therefore, the treatment of health anxiety aims to change these false beliefs. To further improve the manuscript, I would suggest that the authors can further discuss the intervention and treatment of health anxiety in discussion section. Authors may be interested in this following reference.


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes
**Does the work include the necessary controls?**
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Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

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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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