Reviewer’s report

Title: Self-motivated medical care-seeking behaviors and disease progression in a community-based cohort of chronic hepatitis B virus-infected patients in China

Version: 1 Date: 12 Jan 2019

Reviewer: Kwenti Tebit

Reviewer's report:

Reviewer's comments

The authors assessed the self-motivated treatment behaviour and the disease progression in a community-based cohort of chronic hepatitis B virus-infected patients in China and concluded that the self-motivated treatment-seeking behaviour in the target population was low, influenced by age, low insurance reimbursement and residing in a rural area. The findings are of potential interest. The authors will have to perform additional statistical analysis of the risk factors for active treatment-seeking behaviour in the target population using multiple logistic regression adjusting for possible confounding. In addition, the manuscript will need extensive revision for grammatical errors before it is publishable. My comments to improve the quality of the manuscript are as follows;

Major compulsory comments

Title:

* Rephrase the title for clarity. What do you mean by "community chronic HBV infections"? This phrase has been used throughout the manuscript. "Community-based" should be reserved to the study design to indicate that participants were recruited from the community as opposed to the hospital. Furthermore, "chronic hepatitis B virus infections" as presented in the title is referring to the disease and not the patients (persons) with chronic hepatitis B. It is better to just use "Chronic hepatitis B virus-infected persons (or patients)". This should also be corrected throughout the manuscript. I suggest you use the title "Self-motivated medical care seeking behaviours and disease progression in a community-based cohort of chronic hepatitis B virus-infected patients in China".

Abstract:

* Pg. 3, lines 14 - 16: What do you mean by "clinical diagnosis of the latest active seeking medical care…”?
* Pg. 3, lines 28 - 30: Complete the sentence.

Background:

* Pg. 4, lines 56 - 62: Rephrase the sentence. Do you mean HBV infected patients who were not on anti-viral treatment?

Methods:

* Pg. 5, lines 17 - 18: What do you mean by "living in a community"? Are there some HBV infected patients living in the hospital?

* How was the sample size of 2422 obtained? Describe the sampling technique.

* Pg. 5, lines 58 - 61: What do you mean by "the clinical diagnosis of the latest actively sought medical care"? Change "anti-virus" to "anti-viral" throughout the manuscript.

* Pg. 6, lines 7 - 10: Can you provide a reference for the unified questionnaire used in this study?

* Pg. 6, lines 18 - 23: I suggest you include multiple logistic regression analysis adjusting for confounding as one of your analysis for risk factors of treatment-seeking behaviour of the study population.

* Can you describe clearly how self-motivated medical care behaviour was assessed? What were the criteria for classifying one as having self-motivated medical care behaviour?

Results:

* Pg. 6, 48 - 52: Table 1 already contains the data, no need to spell it out all over. Specify which Figure 1 (A or B) when citing figure 1.

* Pg. 6, line 55: Table 1 does not contain information on the number of participants that were followed up.

* Pg. 6, lines 58 - 60: The sentence is incomplete. What about the rural area?
* Pg. 7, lines 56 - 60: The sentence is not clear. What were the national criteria used for? Can you elaborate more in the methods section, providing a reference for it?

* Pg. 8, lines 12 - 16: These factors may be interrelated. As earlier mentioned, perform multiple logistic regression adjusting for confounding. Include your model in Table 3.

* Add a footnote to Table 1, 2 and 4 defining the abbreviations.

* Complete the class boundary for age in Table 1.

* Rephrase the titles of all the tables for clarity.

Discussion:

* Pg. 9, lines 28 - 33: The sentence is not clear, rephrase.

* Pg. 9, lines 37 - 38. "It might be due to the differences among diagnosis criteria". Can you elaborate further to clarify your point?

* Pg. 10, lines 5 - 10: The sentence is not clear. There are two treatment rates in the sentence. What is the difference between the two?

* Pg. 8, lines 12 - 21: "Our findings demonstrated that the age groups and insurance circumstances were the two main factors that dictated the patients' self-motivated medical behaviors and antiviral therapy reception (Table 3). The 20-29-yrs group had the highest health care visiting rate (44.4%), but the lowest antiviral treatment rate (15.3%), however, the 50-62-yrs group had lower health care visiting rate (26.0%) and the highest antiviral treatment rate (30.3%)". Can you discuss the reason(s) behind this observation?

* Pg. 10, line 53 - 54: The antiviral treatment rate was not significantly different between chronic hepatitis B virus-infected patients residing in rural and urban areas. Why bring it up here?

* Pg. 11, lines 10 - 16: The sentence is not clear, rephrase.

* Pg. 11, lines 17 - 31: Also present the equivalents of the amounts in US dollars. This will easily be understood by the international audience.
Minor revision

Abstract:

* Pg. 3, lines 2 - 4: "…treatment behaviours among a community-based cohort of chronic hepatitis B virus-infected persons…"

* Pg. 3, lines 9 - 11: We conducted a community-based prospective study on people with chronic hepatitis B infection in…

* Pg. 3, We recruited chronic hepatitis B virus-infected persons

* Pg. 3 lines 20 - 22: Among the 2422 chronic hepatitis B infected patients recruited in 2009…

* Pg. 3 lines 24 - 25: Of the 2422 participants, 1784 (73.7%) were followed up to 2014,

* Pg. 3 lines 40: …medical treatment-seeking behaviour…

* Pg. 3, line 42: change "locating" to "residing"

Methods:

* Pg. 6, lines 4 - 6: …lost to follow-up rate

Results:

* Pg.6, line 42: In all, 2422 hepatitis B virus-infected patients were enrolled…

* Figure 1 and Table 2: correct "Chinese medicine"

Discussion:

* Pg. 9, line 35: …community-based study in Zhejiang province…

* Pg. 9, lines 58 - 59: …to slow down the progression when necessary.

* Pg. 10, line 40: Compared to…
Conclusion:

* Pg. 12, line 1: What is LA?

* Pg. 12, line 9: Change "locating" to "residing"

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.

Yes

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

Yes

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

Quality of written English
Please indicate the quality of language in the manuscript:

Not suitable for publication unless extensively edited

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

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