Reviewer’s report

Title: Suicide risk, personality disorder and hospital admission after assessment by psychiatric emergency services

Version: 0 Date: 17 Mar 2019

Reviewer: Naoki Hayashi

Reviewer’s report:

This study examined the relationship between personality disorder diagnosis and decision concerning admission to psychiatric hospital in a mobile emergency service setting, and found that the possibility of voluntary admission was lower for patients with personality disorder than those without personality disorder irrespective of the level of suicidality, while the possibility of involuntary admission was comparable between the two groups of patients when patients indicate a high level of suicidality. The authors stated that this study is the first one that has elucidated the relationship between suicidality and admission decision among those with personality disorder. These findings are usable for presenting the present status of Dutch psychiatric emergency services, and possibly of some help for considering hospital admission policy of those with personality disorder in other countries. Overall, this study has a potential to elicit more clinically valuable results.

However, the manuscript contains some inconsistencies and inadequacies, and needs further statistical analysis and thorough revision.

Comments for revision are listed below.

1) To strengthen the message of this study, the authors need to consider what influences personality disorder diagnosis has on admission decision in relation to Danger to others, Motivation for treatment, Admission request by family and Family involvement among suicidal patients

2) Aims subsection in Abstract: To present solely the association between suicidality and admission among persons with personality disorder suffices for the aims of this study?

3) Aims subsection in Abstract and the last sentence of Conclusion section: Isn't it usual that these parts need to present the relevance of this study for future research and psychiatric services?

4) The last sentence in Aims of the study subsection of Introduction section: Is it appropriate to situate this sentence here? Additionally, the variable list included in the sentence is exactly the same as that presented in Method section? In the whole manuscript, variable list included in statistical analyses are not clearly presented.
5) Psychiatric diagnoses subsection in Method section: this part does not appear to describe appropriately the data structure of diagnoses. There is an inconsistency between descriptions of this part and the corresponding part of Table 1.

6) Statistical analysis subsection in Method section: The ROC curve analysis this part mentions are sufficiently treated with in Results and Discussion sections?

7) Result section: Descriptions of statistical significance are totally lacking. Additionally, several indispensable figures for result presentation are also lacking.

8) The last paragraph of Results section: The description of statistical (logistic regression) models that drew the results are insufficient. The readers cannot conceive the analytic methodology.

9) Table 1: Does the title represent well the content of this table? Figures this table contains are counts or percentages? What are denominators and numerators of the percentages?

10) Table 2: Is the first line of this table necessary?

11) The last phrase of Figures 1A and 1B titles: Is it possible to control variables of Age and Danger to others in making these graphs?

**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

**Quality of written English**
Please indicate the quality of language in the manuscript:
Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal