Reviewer's report

Title: Management and Outcomes of Patients Presenting with Sepsis and Septic Shock to the Emergency Department during Nursing Handover: A Retrospective Cohort Study

Version: 0 Date: 15 Sep 2017

Reviewer: Katia Donadello

Reviewer's report:

Dear Authors,

You have recently submitted a manuscript to BMC Emergency.

The topic is updated and of interest.

Nevertheless, I believe that the way your data are presented and discussed is too superficial and insufficient.

ABSTRACT

Please check for the correct number of present beds (comparison with the main manuscript).

BACKGROUND

This part may be shortened: I would rephrase the introduction so as to better identify strengths and weaknesses of the present situation, as a rapid overview; the aim of this part should be of rapidly catching readers' attention and providing them with straightforward tools to better understand the novelty and power of your study. All details and comparisons could be left for the discussion.

M&M

As you did in the abstract, I would stress on the retrospective character of your study.
I wonder that severe sepsis patients were also included (as the used tools refer to 2008 and 2012 guidelines); if so, please amend, also because the sentences in brackets ("originally severe sepsis") are quite confusing.

Just a detail: the time of enrollement refers to the ED desktop record after triage, right? If so, I might consider this here and thereafter in the limitation part a salso the triage process/patient definition-etiquette could be influenced by the handover period.

RESULTS

A consort diagram would be interesting to avoid the idea to be facing a convenient sample. Would it be possible to divide study outcome not only based on the 2 periods but also on the different grades of severity of sepsis.

Have you look for other subgroups within the patient characteristics?

Data presented in Table 1 are not dealt with: I understand the lack of significant difference between the groups but I would appreciate some comments.

When you deal with mortality, is it possible to divide ED mortality and hospital mortality? That would be more precise and sensitive.

DISCUSSION

I feel that this discussion should be re-made: it does not represent the study data; it would probably benefit from some of the data and comparison taken out from the introduction as, as it is, discussion is quite lacking (no literature comparison, no hints for raisonning and implementation); this i salso reflected by the poor literature research present in the references.

The limitation part is quite superficial and could be implemented. Study sthrenghts should be included in this part and not in the conclusion.
TABLE 1

More patients characteristics could be added.

I would add a table with the differences between the various sepsis groups within the period range.

Best Regards.

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?
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?
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