**Reviewer’s report**

**Title:** Postoperative delirium assessed by post anesthesia care unit staff utilizing the Nursing Delirium Screening Scale: a prospective observational study of 1000 patients in a single Swiss institution

**Version:** 0  **Date:** 30 Sep 2015

**Reviewer:** Nathalie Clavier

**Reviewer's report:**

The question posed by the authors is not well defined. It appears (last paragraph of the background) that the the aim of the study is to evaluate the feasibility of comprehensive testing for delirium in post operative care unit (PACU), using NU-DESC by PACU staff, before implementation as a first step in a patient care improvement strategy.

Such a question seems interesting, since few studies have addressed this question in a setting such as the one described in this study (non tertiary hospital, non cardiac surgery).

It would have been interesting to have some insight in the acceptance of the testing, by the PACU staff, or the additional workload induced by the testing.

The results are well presented and show a low number of patients tested positive for delirium, as compared to other published data. This result is well discussed.

However, the speculation on the potential role of some drug used in the perioperative (line 218 - 232) seems inappropriate: there is no reporting of the other drugs used in these patients, which are known to play a role in pharmacologically induced delirium (ketamin ? antiemetic treatment ? corticoïds ….).

The negative results regarding the comparison between the patients with delirium and the patients without delirium is not discussed, and should be (small numbers).

In addition, for a better understanding, some writing improvement would be welcome:

« Formal presence of delirium » is defined only at line 102 (A total of ≥ 2 points indicated the formal presence of a delirium), in the methods section, although used before (line 76, 90 …). However, the term delirium is also used, to refer to patients in whom « formal presence of delirium » had been detected. It would be more adequate to refer to « delirium » in all cases.
The « post anesthesia care unit » (PACU) is also referred to as « post operative recovery room ». It would be better to choose between one of the two expressionS, and keep always the same for the whole paper.

The first sentence of the abstract is quite complicated (« has become a better studied, but only partially understood yet still significantly underestimated problem »), and is found strictly identical as the first sentence of the background section (line 55-56).

Regarding the references:
Some references have been inadequately quoted:

Line 66 the reference quoted does not demonstrate the sentence

Line 70 reference 15 refers to a review article from more than 20 years ago : it is inadequate to quote such a paper to argue that « very little is known about » …

Line 72 reference 18, 320 and 21 describe strategies to early recognise a state of confusion, but do not indicate that such strategies lead to better treatment options

All the references DO exist, but some of them have been wrongly quoted (not validated in the reference checking).

**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.

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.

Not relevant to this manuscript

Quality of written English
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Needs some language corrections before being published

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