Reviewer's report

**Title:** Mortality as an indicator of patient safety in orthopaedics: lessons from qualitative analysis of a database of medical errors

**Version:** 1  **Date:** 18 February 2012

**Reviewer:** Rozalia Dimitriou

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This is a very interesting and well-written research article about patients’ safety in orthopaedics by analyzing a large database of medical errors. Although the main complications leading to increased mortality and the most frequent medical errors are well-known among the Orthopaedic Surgeons, this paper underlines the importance of reporting patient safety incidents and preventing avoidable deaths. Therefore, I think that this paper merits publication after revision.

Please find below my comments:

- **Minor essential revisions:**
  1) As required, please provide 3 to 10 key words representing the main content of the article.
  2) In Background, last paragraph, 2nd sentence (“…Incidents of non-fatal harm were excluded…”): This should be included in the following section of Methods in the section of “Study design and data collection” as exclusion criteria.
  3) In Results, 1st paragraph, the mean inter-rater reliability is stated. The authors should also include that in the Methods.
  4) In Results, in the example in the section “Skills of healthcare professionals”: The authors use abbreviations that should be defined in the text at first use or in a list, which should precede the competing interests and authors’ contributions.
  5) In Results, in the last paragraph of the section “Skills of healthcare professionals”: The reference number (Yule et al. 2006, reference number 34 in the current reference list) should be added and the numbering of the references should be corrected accordingly. There is also a minor error: a comma (,) after the word “the” should be deleted.
  6) In Discussion, 1st paragraph, 2nd sentence: “... revealed that majority of ...” Please add the word “the”.
  7) In Discussion, 3rd paragraph, 2nd sentence: “Some peri-operative strategies include patient showering...” Do the authors mean pre-operative strategies?
  8) In Discussion, in the 3rd and 4th paragraphs, the authors talk about the SSIs and their prevention strategies. I think that this information should be summarized in one paragraph and another paragraph should be added, discussing briefly about Clostridium difficile infections, as they found that this is the main cause (69.8%) of severe infection causing accidental death (as stated in
the Results).

9) In Conclusion, they authors should also briefly mention the main findings of their study to give a clearer explanation of their importance and relevance. As in the comment below (Discretionary revision comment C), they could add the comments included in the three last sentences of the section “Limitations of the study” in the Conclusion.

- Discretionary Revisions

A) In Methods, in the first section “The NRLS database”: I think that the authors should mention and briefly explain the NRLS in the 2nd paragraph of the Background too. Alternatively, they could summarize further the first section (about the NRLS database) and add this information in the 2nd paragraph of the Background, so that the first section of Methods can be eliminated.

B) In Methods, in the section of “Data Analysis, 3rd paragraph (“In essence, free text….“): The sentence: “In terms of this study, the texts were based on the incidents reports that are provided to NPSA over a four-year period.” can be deleted, as this information has already been provided in the section of “Study design and data collection”.

C) In Discussion, in the section “Limitations of the study”: The authors could also add as a limitation the incomplete reporting or missing cases. Furthermore, they could either change the title of this section to: “Limitations of the study and Clinical relevance” (since they also include other comments in addition to the limitations), or they could add these comments in the Conclusion.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.