Reviewer’s report

**Title:** Measuring patient safety culture in Taiwan: an application of Hospital Survey on Patient Safety Culture (HSOPSC) in Eastern culture

**Version:** 2  **Date:** 29 November 2009

**Reviewer:** Caroline Brand

**Reviewer’s report:**

Major Revisions required

General comments

The topic, measuring the safety culture of health care organizations, is important, timely and of interest to readers.

The paper needs considerable editing

There is a good deal of repetition within and between sections.

The paper would be best split into two – one paper more carefully detailing the tool assessment and validation for the Taiwanese population and a second paper presenting and discussing in more detail the survey methods and results.

Specific Comments

**Aims**

The paper states two objectives; firstly to use the HSOPSC tool to examine patient safety culture in Taiwan and secondly to explore differences between East and West.

However, the second aim is not explored in any more than general terms and is therefore not a strong nor completed objective and the paper appears to be written with the following objectives; firstly, to assess the HSOPSC tool attributes in the Taiwanese population and secondly to use the tool in a survey to examine patient safety culture in Taiwan. The authors need to carefully review their main objective/s and more clearly articulate these in the introduction section.

**Introduction**

The material in the introduction needs to be reordered to remove duplication of ideas and allow the rationale to develop in a more logical fashion. Close attention needs to be paid to removing statements of little relevance that have no relationship to following sentences eg p5 – “previous researchers believed….. adverse events occurred – has no lead on to the next statement about the complexity of patient safety culture.

There is brief consideration of the difference between culture and climate but this information is again spread in different sections of the paper and would be best
collated into the early part of the paper to strengthen the rationale for using the culture survey tool. – if the audience is a global audience the information about the use of the SAQ in Taiwan is probably not necessary for this paper.

The rationale for needing the survey in Taiwan is based on adverse event reporting – however no denominator is provided so we have no idea of the burden of the problem . The reference to SAARS is irrelevant.

The background and description of the HSOPSC similarly needs to be better ordered. Whilst the content is covered, there is no information as to how this content was developed, whether the scaling is appropriate and there is variable inclusion and description of which aspects of measurement attributes have been tested. If the paper is to focus purely in survey results then there could be reference to the survey tool development and validation provided with less detail about the tool, however as the authors have chosen to focus on performance of the tool within the Taiwanese population these details are more necessary. For this reason I suggest breaking the material into two papers as outlined above.

Methods

There is inadequate detail about the adaptation and face validity/content validity testing in Chinese. Were the translations ‘backtranslated,’ and if so how many times and by whom?

In the results a number of statistical results are provided for testing internal consistency and internal validation which are not explained in the methods.

The methods of randomization are not provided in adequate detail. There is no explanation for the way in which sampling occurred, how it was adequate to represent all the hospitals, nor how internal sampling within hospitals occurred and how this adequately represented all professional groups within a proportional allocation. If the aim was to compare with West results was a sample size calculation performed on which the basis of sampling occurred?

Results

The authors do not provide any proportional results ie 42 hospitals of a total 50 randomised but of the total number of hospitals in Taiwan that would have been eligible for inclusion? – similarly for medical centres, regional hospitals & community hospitals. Similarly for professional groups. 38% were in a supervisory capacity – does this reflect the workforce in Taiwan hospititals – sounds v top heavy?

There needs to be consistency in reporting results eg n(%) 

There is discussion in the results section that should be removed

There is a statement that there are inadequate human resources based on the study however the study provides results of perceived, not actual quantitative assessments therefore this statement is not justified.
What are the correlations between responses and staff position or in hospital safety training (is the study powered to examine these correlations?)

A table summarizing the model would be useful

Table 2 includes categorical and continuous data analysis which is confusing.

Table 3 is unclear. Why are R2 being provided for each factor and not just for the overall model?

Why is Chronbach’s alpha so low and what are the implications?

Discussion

The key domains of interest that differ from other studies are identified but not discussed in enough detail especially issues around response bias and cultural differences. How are teams trained in Taiwan?

The survey results will only be useful if changes can be made. Are there examples where this has occurred? What would need to be done to facilitate change to embedded cultural behaviours?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

    i have an interest in this areas as our organisation is considering measuring safety culture. if this occurs i, and the unit with which i am affiliated, would be contributing to decision making about which tool to use and how to undertake the survey.