Reviewer’s report

Title: Development and its applicability of Hospital Survey on Patient Safety Culture (HSOPS) in Japan: a cross-sectional survey

Version: 1 Date: 18 July 2010

Reviewer: Mary Westbrook

Reviewer’s report:

Overall this is a very useful study which has established the suitability of a health systems evaluation tool for use in Japan and its comparability with the original American form. It will enable important longitudinal and cross-sectional studies of health organizations, health professional groups and the effects on patient safety of implementing health system changes. An increasing numbers of countries are doing similar studies and this sets the stage for extremely useful research comparing national and ethnic differences in health care systems and the effect of various interventions in different health systems. The research sample was large and the return rate of questionnaires commendably high. I recommend publication after some revisions. The material in the method section needs reorganising. Congratulations on a nice study.

Discretionary revisions

p. 1: There are a number of statements through the article where slight changes in wording would I think better convey the authors’ meaning. The title could be changed to ‘Development and applicability of the Hospital…’

p.2, Method, line 4: I suggest ‘from’ or ‘in’ acute care hospitals

p.2, Results, line 2: I suggest ‘and showed a sufficiently high…’

p.4, paragraph 1: The opening sentence could be a more general statement e.g. ‘The past 10 years have witnessed….’. The second sentence would more accurately say ‘…priority for health systems in…’

p.4, last line: suggest ‘…developed by the US….’

p.5, fourth last line: suggest ‘…workers from three..’ (The convention is that number less than 10 are not usually written in numeral form in the text in academic articles). I suggest the sentence ends with ‘they reported an 11 factor model, which did not include the staffing subscale, and moderate-to-strong…’.

p.5: last line/p.5: suggest ‘staff members from….’ The sentence continues on to page 5 which I suggest reads ‘…Netherlands also reported an 11-factor model and moderate reliability (Cronbach’s…’

p.6, Methods, para 1, line 1: suggest ‘in’ or ‘from 13…’. Line 3; should read ‘eight’ and ‘five’…suggest sentence conclude ‘…the other 12 were teaching…’ Final line should read ‘. (three hospitals < 300, six hospitals 300-600 [remove the < here] and four hospitals > 500 beds)
p.12, line 1: Suggest ‘showing a sufficiently high standard...’

Line 8: Suggest ‘...values for the subscale scores were...’

p13, Discussion, line 3: suggest adding ‘cited’ at the end of the first sentence.
Second last line: suggest ‘...although the Staffing factor has shown low internal...’

p.14, line 7: Suggest ‘...the 12 factor model has shown a sufficiently high standard...’
Line 9: the sentence about Blegen etc repeats what you said on the previous page (instead of putting ‘cited’ as I suggested above, you could give these two research teams’ names.
Line 13: Suggest ‘...However they generally show a lower internal consistency than in the AHRQ study; the Staffing scale being particularly low.

p.15, Line 3: suggest ‘a similar construct...’
Para 2, line 1. It would be more accurate to say ‘the important role that the Japanese HSOPS can (or could) play....’ [You might like to mention some of the uses I allude to in the first paragraph of this review]
Para. 2 line 4: this sentence is confusing. Do you mean ‘Similar results regarding the Number of Events Reported were found by AHRO’?

p. 16, line 6: Suggest ‘some’ rather that ‘parts’
Conclusions: line 3: suggest ‘...The factor structure of the Japanese HSOPS is almost identical to that of the US HSOPS, conforming better than the 11 factor models reported by...’ [Cite names of the two research teams as there are other preceding studies]
Last sentence: suggest ‘...future studies using random..’

Table 1: suggest fuller title ‘Respondent and Hospital Characteristics’
Table 3. Footnote is a bit confusing. Do you mean that the means reported have been reverse scored?

Minor essential revisions

p.2: It is the convention that sentences in academic articles do not begin with a number in numerals. In the method section either write the words six thousand, three hundred etc or more easily, change the sentence to ‘Healthcare workers (n=6,395) ...’

p.1, end of second para.: The reference should be ‘Health and Safety Commission’.

p.5, last para: these two studies may have replicated the procedure but as your findings show they failed to exactly replicate the factor structure as you point out. In the second sentence I would qualify what you say...the results were different but only to some extent i.e. they found one less factor. The numeral 4 in the last line should read ‘four’.

p.6, Second sentence: There have been a number of studies in other countries e.g. Taiwan, Turkey, so ‘very few’ is not quite accurate. Also other studies have included acute care hospitals. I suggest that both these sentences be removed. The main value of the study is to examine the applicability etc of the questionnaire in Japan and to compare the factor structure to that found in other studies, particularly the original US study.
The section ‘Sample description’ on page 11 belongs in the method section. Much of the ‘data sources’ sub-section should be combined with it as ‘sample description’. You could note there that the details of the sample composition and subjects’ workplaces are shown in table 1. Some of the material in the ‘sample description’ section on page 11 seems to belong in a ‘procedure’ sub-section in Methods. There you could include the first paragraph currently in the ‘hospital survey on patient safety culture’ sub-section which discusses the translation process, obtaining permission to use the HSOPS, the number of questionnaires distributed, and reasons for exclusion of some questionnaires. Incidentally you could mention the overall return rate of 78.3% which is extremely high for this type of research. Overall the methods section is not well organised. If you adopted the usual divisions into sample, measuring instrument, procedure and data analysis it would be easier to follow (Obviously I’m not suggesting you necessarily use these titles…e.g. Hospital Survey on Patient Culture is appropriate, or that you omit your subsection on construct validity).

Other points regarding the Method:

p.7, line 9: Should read ‘uses Likert scales’. Line 12 use ‘do not’ rather than colloquial ‘don’t’. Line 14: The statement ‘two additional variables for outcomes’ is somewhat confusing here. I suggest you cut it out. Then list the 12 sub-domains, change the final sentence at the end of the paragraph (now on page 8) to read ‘…Transitions. Additionally two further single-item measures of outcomes are included in the HSOPS; the respondents’ ratings of patient safety in their workplaces and the number of adverse events they had reported in the last 12 months’. (You may want to word this differently but avoid the suggestion, that you may currently be giving some readers, that your research team added these items to the questionnaire).

In the data analysis section are you really assessing the suitability of the preceding study by the Agency for etc.? Do you actually mean something like ‘Firstly, to assess the suitability of the HSOPS for use in Japan’…? The sentence at the bottom of page 9 might be rephrased to ‘Secondly, Cronbach’s etc was calculated to measure internal consistency.

Regarding the ‘sample description’ section on page 11, which should be placed in the method section, I suggest the following changes. Second sentence: Reorder to read ‘Questionnaires (n=629) in which participants selected “N/A” for an entire section were excluded from the analysis. A further 701 questionnaires in which fewer than half the items were answered were also excluded’. Please clarify the meaning of the next sentence: do you mean the mean score of all people in the survey on that item? The next sentence could be changed to ‘The remaining 6,395 surveys [rather than responses] were analysed. These surveys represented 74.9% of those distributed [the overall response rate was in fact higher. If the figures in brackets represent the range from various hospitals than say so].’

p.12, para 2: I think this table is incorrectly numbered

p.13, para 2: Does this refer to table 4? Clarify for readers, who may lack your statistical sophistication, how the R values are related to the table.
p.16, line 9: clarify what you mean by ‘failure mode’. Line 1:1 Should read ‘ordinal scales’ Line 13: Should read re known to result in…’
References: 1: This should I think read ‘Agency for Health Care Research and Quality: Hospital Survey on Patient Safety Culture, 2010 (you refer to the 2010 date in the article but it’s not listed in the references) and then give web address
Major compulsory revisions
Nil

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

**Quality of written English**: Needs some language corrections before being published

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

**Declaration of competing interests**: I declare that I have no competing interests