Reviewer's report

Title: Prevalence and associated factors in burnout and psychological morbidity among substance misuse professionals

Version: 2 Date: 28 August 2007

Reviewer: Patrick Bovier

Reviewer's report:

General
The authors have responded to my previous comments, however several points are still problematic. I have serious doubts about how the logistic regression analyses have been conducted and how the predictors have been used in these models. The advice from a statistician is very much needed…

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract
Instruments used have to be cited in the methods.
The authors should also mention the rates of psychological morbidity and burnout in the results, then cite the main predictors, then mention the different types of stressors. A minimum of quantitative results (e.g. OR and 95% CI) are needed. The conclusion of the abstract should correspond to the main aim of the study (e.g. In this sample of substance misuse professionals, the rate of psychological morbidity and burnout was high, indicating that they are more vulnerable to burnout than other health professionals…)

Main text – background
Unless specifically permitted by the editors, please avoid bullets in text… I would propose to transform these parts of the introduction into separate paragraphs, as usually found in the scientific literature (for « Aims and objectives »). The way it is actually presented resembles to a research protocol rather than to a scientific paper…

In addition, I would suggest to include the « study hypotheses » in the method section, to justify the choice of predictors, possibly as a shorter paragraph. The last paragraph under « Study hypotheses » clearly belongs to the methods section… You could also ignore it as this information is repeated in the methods section.

Results
Page 9 : I would move the 5 paragraphs under « Job stressors » of the results section after the paragraph describing the 112 job stressors of the methods
section. Your paper is not about this scale and this information does not fit well in the results section. This scale is used to explain how job stressors influence psychiatric morbidity and burnout. You could also reduce its length, as you provided the full list of items in an Appendix.

The name of the third factor « Apprehension about family addiction » is a bit surprising, as these items also reflect fears about their own risk for addiction or HIV infection. Maybe a better term could be « Apprehension about health problems in relation with work »…

Page 12 : The rational for using a multiplicative model should be explained in the methods section, as well as the hypothetical models. In addition, you should use the logit notation for these models… The way you noted these equations is spurious…

Page 13 : As all results are presented in a table, you do not need to repeat all the results (95% CI) in the text…

Tables
I appreciate that you now provide the list of job stressors you have used and the corresponding principal component analysis in Tables 1 & 2. However, I would strongly suggest that you combine these 2 tables into one single Appendix, with a footnote mentionning the second order analysis, and the answer scale to these items (no pressure, slight pressure, …). I would also appreciate if you could say whether loadings on the other factors were < 0.4. You present only the loadings for the factors you have identified, but some are very close to .4… Do they also load on the other factors ? Finally, I would avoid to present the variance and cumulative variance in this table. You can either mention it in a footnote or in the methods section.

Table 3 : You need to provide the actual p-value corresponding to the F statistic test. The « n.s. » notation is not sufficient…

Table 4 : Regarding the logistic regression results, you need to improve your notation : e.g. for « tension », you compare the respondents with a value over the mean to respondents with a value under the mean… You could simply qualify this factor as « High level of tension » in the methods section. (same remark for alienation, e.g. « High levels of alienation »). For the age and professional categories, I have a doubt about how you presented your results… In general for this type of categorical predictors, there is always a reference group, for which the OR is 1.0 by definition. I have the impression that you have defined 3 dummy variable for age, one for each category… This is not correct, because you can only belong to one… The same is also true for professional categories, unless some respondents have several roles… Also, it seems that you used ICC and tenure as continuous predictors. This implies that the relationship between between these predictors and the outcomes is linear… Is it the case ? In general, it is better to categorize continuous predictors in 3 or 4 groups. At this point, the advice from a statistician is probably very much needed…
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Page 6, 1st paragraph: « The sampling frame was based on the number of services listed in the directory… »

Last paragraph: « Burnout was defined as a high score… and a low… ». Although you defined burnout, you did not use this outcome as a predictor…, but rather looked for predictors of EE, DP or PA… I would appreciate if you could correct this in the text.

Page 7, last paragraph: « When a factor had more… »

Page 11: last paragraph: « Point-biserial correlation analysis revealed significant positive relationship between PM… »

Statistical review: Yes, and I have assessed the statistics in my report.

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