Reviewer's report

Title: Comparison of pain, cortisol levels, and psychological distress in women undergoing surgical termination of pregnancy under local anaesthesia versus intravenous sedation

Version: 5 Date: 19 April 2007

Reviewer: Oivind Ekeberg

Reviewer's report:

General

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

This is a revised version of a manuscript that I have previously reviewed. The authors have revised the manuscripts according to the main suggestions. However, there are still some points that need clarification before publishing. My point 10 about the need for repeated measurement analyses has been skipped.

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Major concerns

1. The authors have now included a table. The variable names in the table should reflect what is measured, e.g. PTSD symptoms (CAPS), Depression (BDI), Self esteem (Rosenberg), State anxiety (Spielberger), Disability (Schneider).

2. As can be seen from table 1, the SD’s are generally so wide that the distributions cannot be normal. Accordingly, non-parametric test should be used.

3. I still mean that repeated measurements should be made, as there are many assessments at three time points. This would show whether there was any statistically significant differences according to time and between groups. It is hard to understand that the CAPS scores would not be significantly different by such an approach, as the LA group is about 80% higher at both 1- and 3 – months.

4. The linear regression is not satisfactory. It would seem more appropriate first to show the bivariate correlations/beta-values for the relevant variables (with baseline values whenever possible), showing which were significantly associated with PTSD symptoms and which were not (table 2 might be modified to show this, rather with correlations than according to PTSD or not). Then the multivariate analysis would show which were significant controlled for all the others. As it stands, there does not seem to be an association between PTSD symptoms and e.g. anxiety. If so, this is contrary to most previous studies. It is not clear how the two models emerged. The authors do not present the betas for the two variables that were significant, i.e. the relative contribution of pain is not shown. In addition, CAPS at one and three months correlated very highly, and most likely also with CAPS at baseline. If so, this variable may steal most of the variance.

5. Possible associations between IS/LA and CAPS – 3 is not analysed, controlling for other variables. This means that aim two of the study is not completely examined.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

6. A main message in the conclusion of the abstract is that there is a high rate of PTSD after abortion. There were 17.5% at one month and 18.2 at three months. Suggestion: either describe a high rate of PTSD symptoms or give the actual figure (about 1/6 or almost 1/5 with PTSD).

7. The percentages of high STAI scores at 1 and 3 months for IS and LA must be wrong as presented in the second line, page 16.

8. Table 2 might be easier to read if there were two columns, PTSD and NO PTSD.

9. Is it correct that a correlation of only - 0.1 between cortisol and self esteem is so highly significant?

10. Table 3 does not seem necessary, at it takes a lot of space to present three correlations.

11. As the possible relationship between cortisol and PTSD symptoms is the last aim (number four), it should come at the end of the results section.

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Discretionary Revisions (which the author can choose to ignore)
Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

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