Reviewer's report

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

Version: 1 Date: 19 November 2006

Reviewer: Oivind Ekeberg

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General The aim of the study was to examine the effects of elective surgical pregnancy termination on mental and physical health status with intravenous sedation (IS) compared with local anesthesia (LA). 155 consecutive women from a private clinic (n=80) and a state-funded general hospital in South Africa (n=75) were assessed before and after the abortion, and at one and three months follow-up. Another hypothesis was that baseline cortisol was inversely correlated with PTSD at three months. The women had to be 16 years or older, and at 6-20 weeks of gestation.

The main findings were that patients who had LA had more pain, more dissociative symptoms and lower cortisol at baseline, but that there were no differences between the groups in PTSD at the follow-ups.

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

1. Abstract: Some figures should be presented in the results section. The main finding that there were different acute reactions according to the different anesthetic procedures should be reflected in the conclusions.
2. The choice of anesthetic treatment was determined by patient preference. This implies the study was not controlled, and is a significant limitation.
3. The treatment differed at the two treatment sites, a point that should be discussed.
4. The 3 months follow-up was conducted by telephone, contrary to the other three assessments. This point should be discussed, as the responses according to these methods may vary.
5. The CAPS, DTS, STAI and DES-T scales should be more extensively explained, i.e. the response alternatives.
6. The response alternatives for the DTS should be presented.
7. The response rate was very low, as only 37% completed all four assessments. This point is discussed, and is a significant limitation.
8. The first part of the results section is about demographics, and not answers to the research questions. These data should be presented in the method section.
9. A table showing the main measurements at the four time points would make it easier for the reader to assess the findings. As an example, it is not possible to see the BDI score at three months. In table 1, the scores of the different variables are shown, whereas in the text, the percentages of cases are presented. It would be preferable with the mean values. It is sufficient with one decimal for the variables.
10. Repeated measurements should be performed to analyze which variables that changed according to time periods.
11. It is surprising that the BDI scores at three months were much lower for the PTSD group than for the no PTSD group.
12. Women in the IS group had lower baseline cortisol than the LA group. This means that the self selected groups were different on an important variable at baseline, which weakens the findings. The correlations between cortisol and other variables should be presented, not only p-values. The same applies to the findings according to age (p 16).
13. Previous trauma should also be presented in the regression model. The bivariate correlations should be presented in a table. It is difficult to see the reason for entering both variables at T1, T2 and T3 in the regression model. T1 and T2 is OK, but the measurements at T3 are only intermediary, and do not fit logically into the model.
14. The higher rate of PTSD for women with later abortion should be discussed.
15. A substantial proportion of the women had experienced significant traumas before the abortion. This may explain the high baseline rate of PTSD. It should be discussed how the authors differentiated between PTSD symptoms that was caused by previous traumas and symptoms that were related to the abortion.
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: 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

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