

Reviewer's report

Title: Depression and termination of pregnancy (induced abortion) in a national cohort of young Australian women: the confounding effect of women's experience of violence

Version: 2 **Date:** 28 December 2007

Reviewer: Stanley Henshaw

Reviewer's report:

Major Compulsory Revisions:

My doubts about the first analysis have been resolved in the revised paper.

Minor Essential Revisions:

In the discussion of limitations, there should be mention that the control for prior depression was imperfect. In addition to possible recall bias, which is mentioned, the measure is different from the dependent variable and refers to all previous points in the respondents' lives, not 1996. With better control for pre-existing depression, the association of abortion with depression might have been further reduced.

Table 1: the footnotes are mixed up.

The footnote numbers in Table 2 do not appear over the columns where they belong.

Discretionary Revisions:

Although you claim not to be looking for evidence that abortion causes depression, analyses of this type are inevitably understood in those terms. In fact, the conclusions in your abstract assume a causal relationship. Why would preventing unintended pregnancy "reduce the burden of depression" if unintended pregnancy did not cause depression? Studies of this sort are pointless if they reveal nothing about the impact of the target independent variables (abortion, domestic violence) on the dependent variable. I suggest that you deal directly with the potential causal relationship and draw conclusions such as the following:

"Although the association found between depression and prior abortion is not statistically significant, its size and near-significance might lead one to see it as evidence that choosing abortion over childbirth increases the risk of depression in younger women. We believe this would be a mistake in view of the study's limitations. First, the control for pre-existing depression was imperfect in that it referred to the woman's entire lifetime before 1996, it was subject to recall bias, and it was a quite different measure from the measure used as the dependent variable. Second, events such as a problematic partner relationship could have

intervened between 1996 and 2000 and caused both unintended pregnancy and depression. Third, for the woman deciding how to resolve an unwanted pregnancy, the study does not address the likelihood that continuing an unintended pregnancy would result in as much or more risk of depression as would terminating the pregnancy. In fact, our finding of depression among young women with two or more children suggests that an unwanted birth may adversely affect a woman's mental health." I am sure you could improve the wording.

The last sentence of the first paragraph of Background says the respondents reported fewer abortions in 2000 than the same women reported in 1996. This means that they are neglecting to report many of their earlier abortions. If this isn't the case, please correct the sentence.

It would help the reader to know the possible range of CESD.

Page 12: the confidence intervals for 2+ births in the linear regression are not clear. It appears that 2+ births is no longer significant.

What next?: Accept after minor essential revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.