Reviewer’s report

Title: More mental health problems after divorce in couples with high pre-divorce alcohol consumption than in other divorced couples: Results from the HUNT-study

Version: 3 Date: 5 June 2013

Reviewer: Frank A Sloan

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Review of Rognmo et al., More Mental Problems after Divorce….”

General Comments

1. Is not a 11-year time lag not too long? So much can happen within 11 years, including remarriage, newly born children, etc. The authors do categorize divorced persons according to time since divorce, but the 1-3 years category seems most germane to their analysis. Why are different lag categories used within the same paper?

2. There should be analysis to gauge the extent of non-response bias.

3. More discussion of the content, validity, and reliability of the mental health measure is needed.

4. Study hypotheses should be discussed more fully before empirical results. In some places, there is speculation rather than reliance on theory and/or empirical literature.

5. It is not clear that there are a sufficient number of observations to adequately study some of the detailed interactions.

Specific Comments

p. 11. This reviewer does not know the Expectation Maximization method of imputation. At a minimum, a reference is needed.

p. 13. Methods should not be discussed in the results section. See e.g., discussion of reference group. It is hard to understand what the units on the mental health scale are. For example, how does one interpret a value of 0.2?

Regarding Table 2, certainly the effect of divorce on mental health is expected to be duration dependent. That is, mental health 7 years after the divorce should be different from mental health in the first month following divorce. This issue is handled later in analysis conditional on having been divorced, but should it not be handled here as well.
p. 14. Were the results in Table 3 expected? The write-up has the flavor of a fishing expedition. It would be improved if explicit hypotheses were tested.

p. 15. Is the finding that men divorcing high-risk spouses experience a decline in mental health at 8-10 years a plausible result? Any prior evidence on this? Any theoretical reason for expecting this? How many observations are there for this category?

p. 16. Explain social causation model.

p. 17 top. These seem to be speculations. No empirical evidence on this?

p. 18 bottom. There must be a body of literature on healing post divorce (than just the three references listed).

p. 20. The numbers of observations for the interactions should be presented in the paper.

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.