Reviewer's report

Title: Health of Adolescents Exposed to Physical, Sexual and Non-Physical Dating Violence

Version: 1 Date: 22 March 2013

Reviewer: Alison Parkes

Reviewer's report:

Major compulsory revisions

1. A statement concerning ethical approval for the study should be included in Methods, and information on anonymity of information.

2. Measures of health behaviors p5-6. Please supply more information on original response categories/scales used, and how these were used to create binary measures.

3. Please justify the grouping together of a positive response to any of the first three items in Table 1 (listed under physical/sexual) to form the measure of physical and/or sexual violence. There is a reference to poly-victimisation in the Introduction, although it appears that only a few studies have examined health effects of this. However, it seems that the authors of this paper have opted for such a measure in their own analysis although this has not been clearly stated or reasoned. Also, it would be informative to be able to compare the effects of poly-victimisation (ie physical + non-physical dating violence) with any physical, and any non-physical dating violence.

I am most concerned about Item 2 (non-physical coercion to have sex, eg verbal persuasion). As there is no information on the degree of coercion, this could be mild. I would like to know more about the response frequencies to each of the items separately, how they are correlated and what happens if the analysis of physical/sexual violence is restricted to items 1 and 3 only (representing stricter definition of physical violence). I see that the authors are having a separate paper reviewed that may contain some of this information, but nevertheless it would be highly relevant to give more details here – the statement in the Results that “Approximately 44% of subjects had been bullied” is high and we need to see a breakdown into different categories of abuse, by gender.

4. Discussion – authors should discuss the following (1) Mechanisms explaining poorer sexual and mental health outcomes for victims of abuse, (2) possibility of reverse causation (eg mental health to depression) or third variable causation (eg from childhood problems to young adult risk involvement and depression), (3) particular difficulty over sexual health measures, in not taking account of the likelihood that young adults who have sex more often in casual relationships will likely have more chance of meeting a violent partner.
Minor essential revisions

5. Reword last sentence on p3 (“However, the experience of non-physical victimization….” to insert the word “also” before “associated with adverse mental health….”)

6. P5 Numbers in the 2 studies as shown add up to 559 rather than 585. Please clarify. (Looks as though the first study should be 297 rather than 271 from figures supplied earlier, at the top of the page – but again there seems to be a mistake adding up 190 and 107 that is puzzling).

7. P5 Please clarify whether the two questions used from the 9-item Patient Health Questionnaire had the sensitivity to detect depression given, or whether it was in fact the whole 9-item scale.

8. P6 Change “At less to lose weight” to “Ate less…”

9. P6 Clarify what is meant by “based on frequency distributions….” in the paragraph on sexual behaviour measures.

10. P6 last paragraph. Change “to retrospectively assess subjects’ dating violence histories” to “to assess subjects’ dating violence histories retrospectively” (avoids split infinitive)

11. P7 Insert a space before the dash at the end of the fourth line.

12. P7 The reference to Table 1 in parentheses should come after the citation number referring to Centers for Disease Control and Prevention.

13. P9 Analysis section. Suggest remove the phrase “For the multivariable models,” from the beginning of the third sentence. Likewise remove the phrase “For the generalized linear models,” from the start of the next sentence. The use of these opening phrases is potentially confusing, eg. almost implying that they are alternative models, which is not the case.

14. P10 Multivariable analysis. First sentence: suggest insert a full stop after “adjusted for childhood abuse” and start a new sentence with “We report the results..”

15. Discussion. Please mention lack of information on severity of violence as a limitation – this applies especially to use of non-physical forms of violence such as verbal persuasion.

Discretionary revisions

16. I would like to see further analysis of the mental health outcomes, adjusting for number of sexual partners, to see whether relationship violence remains associated with the health outcomes.

**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