Reviewer’s report

Title: The high burden of interpersonal violence in South Africa

Version: 1  Date: 14 July 2010

Reviewer: Stephen Jan

Reviewer’s report:

1. Is the question posed by the authors new and well defined?

The question posed by the authors is well defined – essentially, what is the burden of disease in South Africa from interpersonal violence? The study is conducted along the lines of the WHO Comparative Risk Assessment (CRA) exercise and includes collaborators involved in that original project. As indicated in the introduction to the paper, IPV was not included in the CRA and thus this study aims to address a significant gap in evidence that exists in the context of South Africa. From this point of view the question being addressed is ‘new’ although one of the strengths of the paper is that it is not completely new – it is based on an approach that has previously been used extensively which thereby importantly, enables comparison.

One specific point – par 3 of the background suggests DALY estimates do not incorporate the mental health consequences of injury. How does this square with the CRA project and the current study? If this study includes mental health DALYs and others do not then how does this affect comparability?

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

The inevitable problem with estimating the impact of intimate partner violence is a lack of good data as under-reporting and misclassification are likely to be significant and difficult to assess. In this respect, the study appropriately adopts a conservative approach, is explicit about the assumptions employed in the analysis and uses sensitivity analysis to highlight some of the uncertainty in the estimates e.g. in relation variations in available estimates of prevalence from different studies. These methods are generally well described and, in combination with the tables, are sufficient to enable replication.

One minor point – the sourced reference for the simulation component (Barendregt) seems to have been referenced as 2009 and as 2010 (ref 31 and 32).

3. Are the data sound and well controlled?

The study draws on data from a variety of sources. This is typical of modeling studies of this nature. As would be expected the data quality is variable. Some of the limitations of the data include the use of clinic rather than population data for
prevalence estimates, the use of data from an Australian study to estimate the relative risk and significant disparities apparent in the prevalence estimates from two different sources. Although these factors are not ideal the paper comes up with a reasonable approach to managing these limitations by (as indicated above) appropriately adopting a conservative approach to estimating burden, testing for uncertainty and making explicit the assumptions used.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition

The manuscript presents the methods and findings clearly. The data sources are described well and limitations well-acknowledged.

5. Are the discussion and conclusions well balanced and adequately supported by the data

Whilst the conclusions generally are appropriately conservative reflecting limitations with the data, I do think the authors in parts may be underselling the significance of their findings. For instance the paper makes the unnecessarily apologetic point that a rough estimate of burden is better than no estimate (see par 2 page 14. I would delete this par.). My main criticism is that the discussion focuses heavily on methodological issues and limitations and relatively little on how these findings compare with BoD estimates from other studies. There is a bit of discussion of this at the end of the first par of the discussion but I certainly think this could have been expanded. Ultimately the main advantage of using the CRA approach is that the methods are consistent with other studies thereby providing a basis for comparison. Such comparison, in turn, is a natural next step from the analysis and is potentially a key to its policy relevance.

**Level of interest:** An article of importance 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'