Reviewer's report

Title: Life years lost to incarceration: inequities between Aboriginal and non-Aboriginal Canadians

Version: 1 Date: 17 February 2014

Reviewer: Gary M McClelland

Reviewer's report:

This is potentially an important paper. However, there are several important revisions needed to accomplish this. The paper also has a number of what I believe are important omissions that need to be remedied. For this reason, my recommendation is currently “unable to decide until revisions are completed.”

I’ve included a few editorial notes in what follows, and also attached a .pdf with additional copy edits.

This manuscript complements an important piece of work done in the United States on years of life lost to imprisonment (Hogg et al 2008). It has the potential to compare the years of life lost among minorities in Canada to those in the United States.

I believe the timeliness and importance of this research make the investment in these tasks worthwhile, and that the manuscript once revised will be an important contribution to the journal.

Additional comments follow.

I. FOUR CRITICAL OMISSIONS:

1. There is a substantial amount of literature on life lost to prison that is not framed in a specifically epidemiological methodology that should be gleaned and cited. The author appears naïve because of these exclusions.

2. There is also a very substantial body of work on the public health impact of incarceration in the U.S. context. The authors need not – indeed, should not – be citing studies of Bangkok to establish the very important point (cite # 15) that prison has deleterious effects on health. This has been established for North America and other OECD areas.

3. The authors should expand the discussion beyond strictly health-related issues and discuss the impact of imprisonment on child well-being, family structure, joblessness, community cohesion and so on. This need not be extensive, but these are important issues to get into the conversation.

4. The authors should discuss the huge differences in years of life lost to incarceration between Canada and the U.S. Hogg et. Al. 2008 have startlingly different findings.

II. MINOR REVISION Present the formula for the Sullivan method – the notation from this formula is used throughout and it cannot be assumed the reader knows
the formula.

III. MINOR REVISION The discussion of data sources is choppy and very difficult to follow. The authors should introduce Table 1 early on and use it for a guide. Table 2 should not include rows for data you do not have – Prince Edward Island, for example. These NA provinces should either be in Table 1 or not reported at all.

IV. IMPORTANT REVISION: The age distributions in table 3 should be consistent across panels. Using 18-55 for BC and 18-65 for Canada is incorrect. This renders the two panels of the table non-comparable; this confounding factor is not obvious from the title or the table so the results might be cited incorrectly.

V. Minor revision. The authors should use “years of life lost” or “years of life lost to incarceration” throughout, not “life lost to prison” or “prison life expectancy.” The latter is easily misconstrued. This is especially true at the first usage at Abstract paragraph 1.

VI. Table 1:
“Demographics” should be “Demographic Data”
Can the “sex distribution” and “age distribution” rows be combined? They are identical except for the one word.

VII. Table 2.
As above, exclude the lines with “NA”.
IMPORTANT REVISION: Please include a RR with CI to the right of the final column.

VIII. Table 3.
IMPORTANT REVISION: Why are the C.I.s omitted from this table? Definitely include them.
IMPORTANT REVISION: Add a RR and C.I. to each pair of rows to compare Aboriginal to non-Aboriginal. This table is the punch line to the entire manuscript and should have these measures of association for impact.

IX. The RR with a numerator of 1.0 should probably just be excluded. I leave that to the author’s judgment.

X. Results, last sentence: To my mind, comparing male aboriginal to female non-aboriginal would better be comparing aboriginal overall to non-aboriginal. This currently has a feel of cherry picking because the huge differences between male and female incarceration and the mechanisms leading to incarceration (in the U.S. I am sure, and I suspect in Canada as well) are legion. Male and female incarceration just are not the same animal. The latter number – aboriginal vs. non-aboriginal overall -- might also be mentioned in the abstract and/or included in a table.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being
published

**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.