Reviewer's report

Title: Offending, custody and opioid substitution therapy treatment utilisation among opioid-dependent people in contact with the criminal justice system: Comparison of Indigenous and non-Indigenous Australians

Version: 1 Date: 31 May 2014

Reviewer: Amy Smoyer

Reviewer's report:

Overall, I think the information in this paper is interesting and relevant, offering data about the criminal justice experiences of individuals who have received OST in Australia and comparing trends between Indigenous and Non-Indigenous populations. The authors' integrative analysis of several different large databases is innovative and adds to our knowledge about the impact of race/ethnicity on drug-users interactions with criminal justice systems.

My recommendations for revisions focus on improving the narrative quality and organization of the paper so that it is easier to understand and read.

a. Major Compulsory Revisions
None

b. Minor Essential Revisions

i. Decide on best language to describe your sample and stick with this throughout the paper. In the Abstract, the sample is referred to “heroin users” (line 43) and later as “opioid-dependent people.” (line 46). In my mind, these are two different groups as all opioid-dependent people are not heroin users. Reading further into the paper, the Data Sources section (line 141-151), it appears that the sample is people who have ever received publically funded OST in NSW. Later, in the Study Cohort section, the sample is described as individuals with “a recorded history of opioid dependence.” These various descriptors are confusing.

ii. Similarly, clear and consistent language is needed about the ROD database and what inclusion on this list indicates. I am not familiar with the term “finalized court appearances” (line 154), could that be described a bit more? My guess is that these are people who have been convicted of a crime, which is different from a list of people who have committed a criminal offense, as not all those who commit crimes are convicted and not all those who are convicted have committed crimes. This characteristic is alluded to differently throughout the paper as offending, charges, charge histories, convictions, etc. Picking the best word to describe this data and sticking with it would improve the readability of the paper and the interpretation of findings.

iii. Comments by section

1. Abstract
a. line 44, spell out OST the first time that it is used.
b. line 51, first sentence of methods section is an incomplete sentence/phrase.
c. line 54, substitute “gender” for “sex”?
d. line 72-73, indigenous people are charged with a greater number of XYZ than who? Complete sentence.

2. Background
a. This background section is thin and could be more complete and compelling by moving much of the information provided in the discussion section to this first section.
b. I would focus on research about Australian Aboriginal communities. Not sure about relevance of the Canadian experience.
c. The aims listed in the Background (lines 122-129) don’t match up to the aims stated in the Background Section of the Abstract. Consider adding titles to more clearly link these 4 aims to the analysis and results sections.

3. Data Sources: Whenever possible, I would encourage you to be as descriptive as possible about the data you are working with, taking out jargon and making clear statements that can be fully understood by people who are unfamiliar with Australian health and criminal justice systems.
a. In the PHDAS description, reader may not know what NSW is, who the Director-General of Health is, etc. Consider this type of revision: “The PHDAS is a comprehensive record maintained by the public health department of the government of New South Wales (NSW), the most populous of Australia’s six states. It includes the name, date of birth, gender, and treatment dates and regime of all people who have received OST through the public health system since 1985. Etc.”
b. In the ROD description, the following terms are unclear: “Finalised court appearances”, “full-time custody episodes”

4. Definitions.
a. Last sentence of the first paragraph (line 172): Consider including the number of people with unknown/missing indigenous identity (n=?)
b. In second paragraph, leave out ANZOC code numbers, unnecessary detail.

5. Statistical analyses:
a. Not clear what the phrase “follow-up time” refers to.
b. Why was time in custody analysis limited to 1/00-3/12?
c. Temporal relationship section: Where does this 2,815 sub-sample come from?

6. Results
a. Last sentence of first Offending paragraph: Not sure what is meant by the claim that a percent of these charges were “proven”.
b. Paragraph following Table 1: Twice offenders are described as being “responsible” for certain charges/offenses. (Also used in Discussion section.) Is
that the best word choice?

c. Paragraph following Figure 1: What is “environmental pollution”?

d. Time in custody: Total sample includes 34,962 who are in PHDAS and ROD and have information about indigenous identity. Of these, only 17,758 who were incarcerated between 1/00-3/12 were included in Time in Custody analysis. Why?

7. Discussion

a. Offending section, last sentence: In general, discussion addresses data already presented in the Results section. This information about 2001 is interesting and should be reported along with Appendix 3 in the Results section.

b. I would move a lot of the background information presented in the Discussion to the Background section at the start of the paper. Presented earlier, this literature review would engage the reader and suggest hypothesis/rationale for the study analysis.

c. Discretionary Revisions

None

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

**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.