Reviewer’s report

Title: A cross-sectional observational study of unmet health needs among homeless and vulnerably housed adults in three Canadian cities

Version: 1 Date: 20 December 2012

Reviewer: Anton Kunst

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Major compulsory revisions

1. The detailed results for mental health, presented in table 3, are presented only for a bivariate regression model. According to the last row of table 2, the results for mental health could dramatically change after adjustment for other factors in a multivariate model. I therefore suggest including in table 3 the results of a multivariate analysis.

Minor essential revisions

2. At page 6-7, the recruitment of the participants may need to be described in more detail. As some homeless people and vulnerably housed people were recruited from meal programs, I wonder whether they could be clearly distinguished at these places. Furthermore, it seems that, by recruiting some of the vulnerably housed people at community health centers, this might perhaps have overrepresented those whose health care needs are met. Related to this, the authors may discuss in more detail the potential for bias noted at page 13 (last rows).

3. Chronic conditions to be reported by respondents had to last six months or more, and had to be diagnosed by a health professional (page 8, row 3-4). The latter criteria may lead to underreporting of chronic conditions by those with unmet health care needs. Could this have biased the results presented in table 2?

4. At page 12, row 13-15, the results for ‘provincial health insurance number’ are not correctly interpreted. The authors suggest no relationship with unmet health care needs. However, the Odds Ratios in table 2 of 0.68 suggest an about 30 percent lower prevalence of unmet needs among those with a provincial health insurance number. The lack of statistical significance could be due to lack of power. Thus, the authors should be aware of drawing a ‘false negative’ conclusion.

5. At page 13, row 12, it is unclear which causal relationships are meant under the ‘possible causative association’. The possible relationships could be discussed in a bit more detail.

Discretionary revisions

6. At page 12, last rows, some results are repeated without further discussion.
Such sentences may be deleted.

7. Related to this, the heading “multivariate analysis” at page 12 might be omitted.

8. In the Discussion of table 2, the authors may point to the consistent and large differences (although not statistically significant) in unmet health care needs according to age. Furthermore, they may note that –surprisingly- the relationship with educational level is non-linear in the multivariate analysis.

**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