Reviewer’s report

Title: 'HepCheck Dublin': An Intensified Hepatitis C Screening Programme in a Homeless Population Demonstrates the Need for Alternative Models of Care

Version: 0 Date: 16 Mar 2018

Reviewer: DK van Santen

Reviewer's report:

Review:

'HepCheck': Hepatitis C and competing priorities in the homeless population

Authors of this study aimed to assess the burden of HCV among homeless individuals in Dublin, Ireland. In this study, 37% of homeless individuals screened were found HCVab+, and most of these were "new infections" (did not know they were HCV+). These findings highlights the need to expand screening in this populations, which mainly consist of people who inject/use drugs. Although a relevant study, the way the information is presented should be addressed. See my comments/suggestions below.

Abstract

I would suggest to rephrase the aim, it says to assess the burden of HCV in homeless individuals in an intensified screening program in homeless individuals - homeless individuals seems double in this sentence, makes it a bit confusing.

The conclusion in the abstract does not tell me anything on the main findings. I would suggest writing what are the most important findings that could help inform health care in Europe. Additionally, in this section 'HepCare Europe' is mentioned but this is not mentioned in the methods section of the abstract, so by reading the abstract alone I do not know what it means. Please explain or delete.

Introduction
Did reference 6 investigate the prevalence of HCV worldwide? It does not seem so as it is a review. The new number of chronically HCV infected individuals (used currently by the WHO) is 71 million. I would suggest using this number.

Methods

For me it is not totally clear what you mean by 'conventional probability methods', could you explain this in more detail?.

When did the PCR confirmation test occur? - please specify in the methods.

What do you mean by "key worker involvement"? - is that a case manager?

What do you mean by 'opportunistically' in Phase two? At random of convenience sample? That's a big difference so please specify.

If you say in the statistical analyses that negative binomial regression is better you also have to mention to which method you are comparing it with (Poisson?).

Results

Phase One

How many of those saying they were HCVab+ were actually HCVab+? Where there any discrepancies?. This could say something on how reliable self-report of HCV status is among this group.
I read that 199 are HCV+, and of these 112 are new HCV+, leaving 87 "known positives" - but it says that 100 reported being HCV+. Was the remainder not tested (13 of the 100)? Could you also say something about why not all individuals were tested for HCV (of the 597 included).

Table 1 / methods

Please define 'alcohol use': it seems low if it is just alcohol use. Or do you mean excessive alcohol use?

'Unit of alcohol per week': I am guessing this is among the alcohol users? Please add a footnote so it is easy for the reader.

Also, add a footnote on missing data. For example, why only 286 had a recorded ethnicity out of 595? - that is a lot of missing data. If it is missing data, why so much?

In this table 'Accommodation for six months": this is not defined anywhere else. Is that any kind of accommodation? For at least 6 months consecutively? Please specify.

Why did you test differences by gender in the descriptives? In the method section you mention you are comparing characteristics by groups (not defined which groups), but you do not give an argumentation for this. Please justify, I do not get why this is done.

Table 2

Previously offered treatment, 63 ==> who are these 63 individuals? I have to be able to see the table by itself and understand the numbers. I am afraid that the tables are not very clear so I would suggest letting someone else look at the tables and see if they understand the results without having read the manuscript. Tips: add footnotes as well.

Table 3
Same comments as above but also, I see here that 495 individuals had an oral swab and 71 a blood test. Is the blood test a confirmation PCR test? (define in the footnote). In line 45 of Phase 1 I read that 538 had an actual HCVab test. How can I interpret this discrepancy in numbers? I am a bit confused with the numbers.

Table 4

All abbreviation should be defined in a footnote (A+E?). Please add.

Phase 3

When reading the methods in phase three I though that all HCVab+ individuals (in this case 199) would be followed up to assess the cascade of care and associated factors. Therefore I would start with the flow-chart and then table 5. Table 5 should also have a clear title, e.g. HCV care process among HCVab+ individuals who were referred to specialized care (and why so few referred?). The latter is important as there is a big gap in testing positive and referral.

Discussion

I think it was good to mention the limitations of the referral process. Could you further expand into why did nurses or the research assistant did not refer most HCVab+ individuals? It was a point-of-care test, so why not immediate referral? Or did you wait for confirmation test?.

Are the methods appropriate and well described?

If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?

If not, please specify which controls are required in your comments to the authors.
No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

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