Reviewer's report

Title: Hepatitis B in Moroccan-Dutch; a quantitative study into determinants of screening participation

Version: 0 Date: 04 Dec 2017

Reviewer: Gilles Wandeler

Reviewer's report:

This is an interesting manuscript that aims at assessing the main drivers and barriers of HBV testing among Moroccan immigrants in the Netherlands. HBV testing is an important determinant of HBV care and one of the cornerstones of HBV elimination strategies. The barriers to HBV testing among migrant populations are not well-described in Europe, so that the results of this study are important in shaping future strategies. However, I have several concerns regarding the methodology and the presentation/discussion of results:

- The generalizability of the results to the whole Moroccan-Dutch population is questionable, as the persons included in this study probably represent a biased sample. Why did the authors not aim at including more persons? How do the characteristics of the included patients differ from the general Moroccan-Dutch population? The candidates included in this study might be more prone to engage in health care, be more educated, etc. Also, do you have demographic data of persons who were contacted but refused to participate? What were risk factors for refusing to participate? These are questions that need to be clarified for the interpretation of the results.

- Discussion: although it is interesting to compare data from this study with results from other studies in Dutch Moroccans, I missed a more general discussion of factors associated with willingness to test for HBV in other countries. Drivers of intention can be different when HBV or cancers are screened so a comparison with other studies on hepatitis should be performed. This would also allow a more generalizable discussion outside of the Dutch context, which is what the readers of BMC medicine will expect.

- Overall, the manuscript is too long and has many repetitions (for ex. the 2 outcomes and the risk factors are described several times in detail, including in the methods, results, discussion and conclusion; the first part of first para of discussion is a repetition of intro). It is difficult to have a clear idea about the main messages of the manuscript.
Minor comments:

- Intro: too long. Should be shortened by a couple of paragraphs

- Table 1 could be included as a supplementary table

- Methods: missing data should have been imputed (better than having a separate category)

- Several concepts are not described well enough and not mentioned in the methods: marginal probability, confusion matrix, mean decrease accuracy (legend figure 1), etc.

- Results: the paragraphs on bivariate analyses could be shortened or even omitted. Also, it's difficult to make sense of everything: many variables are mentioned throughout the results section and by the end of reading it one cannot remember the most important results. I suggest to focus the results on multivariable analyses and show the main results of both "intention" analyses in a clear figure.

- Last para of results should be moved to discussion as it involves judgement of the authors. Plus, their arguments are questionable as we know that health seeking behavior is not always associated with knowledge but often driven by motivation and feelings.

- Discussion: the strengths are not always justified: 300 patients is not a large number and is probably not representative of the whole community. The fourth strength (FGM and STGM) is very difficult to understand and does not seem like a strength, and the last strength cannot be given as a strength for this study as these data are not shown here.
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?
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