Reviewer's report

Title: A systematic review on the use of healthcare services by undocumented migrants in Europe

Version: 0 Date: 18 Nov 2017

Reviewer: Allan Krasnik

Reviewer's report:

The topic of the review is extremely important in the light of the growing number of undocumented migrants in Europe and the need for better evidence on their health and their access to health care. Studies are difficult to perform and existing evidence is scarce and seems to demonstrate serious problems regarding access and utilization of services. A systematic review like this can help demonstrate what is actually documented and what is still not well known.

The review is nicely performed according to the PRISMA standards and it is a strength of the review that it includes quantitative as well as qualitative studies and thereby covers a broad range of issues. The focus on utilization only is helpful in the selection and assessment of the literature. However, the exclusion of studies only demonstrating barriers to access seems to reduce the potential of the review for identifying how best to improve access to and utilization of care.

The method section is clear and the procedures transparent, but it might help to make it more clear when the text relates to quantitative studies and when it describes the qualitative studies (line 170-180). The same could be said about parts of the discussion which relates to the methodologies of the studies.

Results

In the section on primary health utilization (and in table 3) expressions like low utilization (line 1890) and underutilization (table 3) are used. However, it is not clear what is meant by these terms. Low in comparison to which groups? Low in relation to needs?

"Low registration" with general practitioners (line 193) is presented in comparison to "the native population" - so here it is more clear, however the term "registration" can be misunderstood:
meaning that the patients are registered on the list of patients of the GP or registered with one or more visits/consultations. Please, clarify.

The following text (196-200) provides absolute numbers - but this is really not very informative without knowing the possible number of undocumented migrants in the uptake area - or even just the number of other types of patients in order to understand the proportion of undocumented migrant patients within the services. The same could be said regarding the text on homeless undocumented migrants (line 207-210).

The term "infrequent" prenatal care (line 215) is not defined (according to the norms or compared to other groups)?

Line 220 mentions differences between legislation and practice, however, nothing is explained regarding the kinds of differences and therefore not very informative.

One study has shown correlation between utilization and education. Which direction? We may guess, but a clear statement is better.

The quality assessment (line 283-86) seems to cover all studies - however controlling for selection and information bias is probably only issues in the quantitative studies? Please, clarify.

Discussion

The discussion is thorough and well structured, however, a few issues are a bit unclear (similar to the results): "Low registration rate" (line 294), and "gap between entitlements and utilization" (line 311). Adjusting for confounders is obviously only relevant for quantitative studies (line 351).
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

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?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Acceptable

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