Author's response to reviews

Title: Drug utilization patterns and reported health status in ethnic German migrants (Aussiedler) in Germany: a cross-sectional study

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Author's response to reviews: see over
Manuscript title:
Drug utilization patterns and reported health status in ethnic German migrants
(Aussiedler) in Germany: a cross-sectional study

Authors:
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Response to reviewers

5 April 2011
Reviewer 1: Jacob Spallek

Reviewer's report:
The paper has a clear structure, however, it lacks precision in background, methods and discussion section. I recommend the paper for publication after major revisions.

Title
The title of the paper is appropriate.

Abstract
Overall, the summary section gives a good overview of the conducted study.

Minor Revisions:
1. Discussion starts with: “Migrants seem to differ only slightly…”. This is an inadequate generalization. The results of the study do not support the statement that “all” migrants differ or not, restriction to the “Aussiedler” only is required.

Answer: We agree, the sentence has been corrected accordingly

2. In the methods section the deprivation ATC is not explained.

Answer: We agree, it has been added

Background
The background in general is appropriately written but in some parts more details would be helpful.

Major Revisions:
3. Please be more careful in writing about “the migrants”. Migrants are a very heterogenic group from very different countries of origin, cultural backgrounds and very different SES, age, health behaviour and health risks, so a more precise description of which migrants exactly are meant is necessary in various sections of the manuscript.

Answer: We agree that the results refer to a particular group of migrants, and that these cannot be generalized to all migrant groups. Therefore we replaced “migrants” by “Aussiedler (ethnic German migrants)” at several places

4. Second sentence: “Even in the countries where access to the health services is ensured,…” Which countries? Ensured by what? Ensured for all (e.g. including illegal migrants)?

Answer: Western countries with an access to the health services to the overall population were meant. This has been added

5. Third sentence: “Many studies…” in western countries?

Answer: Yes, this has been added

6. Third paragraph, second sentence: “Some studies…” where?, “…have
observed that migrants” from where?

**Answer:** We refer to the studies conducted with immigrants in Spain, this has been added

7. Fourth paragraph, first sentence: “Another aspect … is the lack” maybe add the “possible” lack.

**Answer:** We agree with the proposal, the word “possible” has been added

8. Fifth paragraph. Please add a number about the size of the Aussiedler population. How many Aussiedler came in which time period to Germany, from where.

**Answer:** This information has been added

9. Sixth paragraph, second sentence: “A representative study on comparisons of migrants…” migrants from where? Only Aussiedler or other migrants?

**Answer:** We refer only to Aussiedler, this is now specified in text

10. Add the end of the background section the aim of the study is described as studying the proportion of medication handling errors (suggestion: change this to inadequate use) in migrants. “We therefore…” I understand the results section more in the way that describing the major health risks was the main focus of the study. The results section shows interesting results about current health status and common risk factors and only 5 lines deal with handling of medicines. The results section does not fit on the last sentence of the background section.

**Answer:** We have modified the last sentence in the background section to bind it better with the results. We believe, however, that “medication handling and administration” is more specific than “inadequate use” and we therefore did not make a change here.

**Methods**

Major Revisions:
11. Third paragraph, second sentence: Please explain ATC groups in a short sentence, a reference can be helpful.

**Answer:** ATC groups have been explained, reference has been added

12. Fourth paragraph, third sentence: “200 of 559 non-responders were contacted by phone.” Please explain why exactly 200?

**Answer:** The time frame for the study has been fixed in advance. At the end of this period, 200 contacts have been made. Explanation has been added in the manuscript.

13. Fifth and sixth paragraph: For comparisons with the German population…” & “Information on drug intake in the German population…” please explain, if this “German population” contains only autochthonous Germans without migration background or if this population is the general population living in Germany, thus including ~20% migrants.
The RKI survey and IMS Health Disease Analyzer refer to the total population living in Germany, however, the response rates are usually significantly lower in migrants.

14. Please describe, for which reasons the data of “IMS Disease Analyzer database” are collected and what IMS is.

**Answer:** Explanation on Disease Analyzer has been included.

**Minor Revision:**

15. First paragraph, second sentence: Change “gender” to “sex”

**Answer:** Proposed change has been made

**Results**

**Minor Revisions:**

16. Paragraph “Current health status and common risk factors”. Change “gender” to “sex”

**Answer:** Proposed change has been made

17. Paragraph “Current health status and common risk factors”. “However, the proportion of migrants who report some degree of dissatisfaction… (25.5% and 11% respectively).” Please add the p-value.

**Answer:**

The p-value has been added.

**Discussion**

The discussion section is well-structured. The limitations and strength of the study are described clearly.

**Major Revision:**

18. A sentence should be added, why no stratification for socio-economic factors is shown, because smoking and alcohol consumption are influenced significantly by socio-economic factors in migrant populations (see. for example a study from Reeske et al. 2009 about smoking patterns of Turkish migrants in Germany).

**Answer:** We agree that a relation between socio-economic factors and smoking/alcohol exists; however, the numbers are unfortunately too small to do a detailed stratified analysis. Our analyses therefore give a crude (unadjusted) comparison only. We have added a sentence accordingly in the results and in the discussion.

19. Please discuss more explicitly the possibility of a selection bias, e.g. due to low response rate and the high proportion of participants with high educational level.
Answer: Possibility of a selection bias has been discussed more explicitly in the text.

20. Eighth paragraph: “to allow a generalization of the results on the overall population of migrants in Germany”. Change “migrant population” to “population of Aussiedlers”, see comments above.

Answer: Proposed change has been made.

Discretionary Revisions

21. Last paragraph: Low participation rates are not only a problem in migrant studies. But just as a suggestion: it would be interesting to learn how the authors rate the effect of their migrant sensitive recruitment methods (questionnaire sent in German and Russian language, interviews in German and Russian).

Answer: In general, we rate positively use of migrant sensitive recruitment methods. However, quite a few of Aussiedler did not have much trust into the study when they saw texts in Russian.

Reviewer 2: Maninder Singh Setia

Reviewer’s report:
It is an interesting study. The authors have described the issues well.
I have the following suggestions.
General.
Please be sure that all the abbreviations have been clearly defined. IMS Disease Analyzer ..

Answer: All abbreviations in the text have been clarified.

The authors have compared the drug utilisation and disease in the immigrant population with the German population. Is all the information collected in the same way. for example the authors mention that for immigrants it is self reported whereas for the German population it is diagnosis. What about other comparisons such as drug utilisation?

Answer: Data provided by the Robert Koch Institute are self-reported data. Data on drug utilization from Disease Analyzer Database are collected from physicians’ practices.

It will be nice to have a table of all the demographics of the sample under study. This could be the first table.

Answer: We have added a new table 1

Additional comments from the authors:
1. Since three new references have been added as a result of the article review, overall numbering of the references has been changed.
2. Current address of Prof. Thilo Bertsche on the Cover page has been put in English.