Dear Madam/Sir,

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Mental health of immigrants from the former Soviet Bloc: a future problem for primary health care in the enlarged European Union? A cross-sectional study

Thank you for your positive review of our manuscript. In the attached pages, we have addressed the reviewers’ comments point by point.

If you have any questions, please contact the first author:

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Yours sincerely,
Yulia Blomstedt,
Sven-Erik Johansson,
Jan Sundquist.
Reviewer: Yaakov Lerner

Self reported health may be a reliable indicator of general health as the authors have stated, but this may not be true for psychiatric diseases. In fact, the use of such a method may explain the lower prevalence of reported psychiatric diseases in the former Soviet Union. As the authors themselves cite from the literature: That people from the FSU tend to be ashamed of their physical and psychological problem and tend not to share them with others (Skultons V., Social Science and Medicine 2003:56:2421-2431). The same tendency was reported also by Levav et al. (Israel Journal of Psychiatry and Related Sciences 1990:27:131-144). In order to assess the validity of the data the diagnoses derived from the SALLS should be validated at least for a sub-sample in each of the different population groups, by a structured clinical instrument like the CIDI.

We agree and thank Dr. Lerner for these valuable comments. It is true that self-reported health is a reliable indicator of health, preterm mortality, and health care need. However, it has not been validated whether self-reported mental illness also is a reliable indicator (please observe a change in the name of the variable from ‘psychiatric disease’ to ‘psychiatric illness’).

We included the following statement to discuss this topic on page 13, 2nd and 3rd paragraphs (finishing at the top of page 14):

“*The most important limitation of the study, however, was that mental illness was self-reported and not clinically validated. Self-reported health is a reliable indicator of health [4, 5, 24], preterm mortality [26-29], and health care need [30-31]. However, it has not been validated whether self-reported mental health also is a reliable indicator. It is likely that an underestimation of the prevalence of poor self-reported mental illness exists in the present study since the respondents in general are probably less willing to report a psychiatric disorder than a somatic one. Moreover, it has been shown that people from the FSU are inclined to hide their private feelings [32], to be ashamed of their physical and psychological problems, and tend not to share them with others [33]. Furthermore, it is very difficult to compare rates of self-reported mental health since the self-administered screening instrument in psychiatry show different cut-off in different cultures. It is known that relation to psychiatric illness varies across the cultures and, therefore, the fear of being stigmatized is stronger in some cultures than in others, which is possibly reflected in the poorer reporting of psychiatric disorders. ‘Psychosomatic complaints’ is another culturally sensitive variable as representatives of every nation have their specific way of somatizing or expressing their ill-health. Inhabitants in or immigrants from different countries communicate their health, particularly, mental health differently [20, 33-35]. Moreover, medical treatment of psychiatric conditions is also different in different countries, which adds to whether person will or will not be willing to report (e.g. in fear of being hospitalized). All the above significantly affects the reporting of mental health problems.”

Also on page 14, the last line (finished on page 15, the first two lines):

“Additionally, it was not possible to perform a clinical evaluation to test the reliability of the instruments because the design of the national survey does not include a clinical examination or a clinical instrument.”
Yet, we hypothesize on page 14, 2nd paragraph:

“However, self-reported mental health is associated with mortality as self-reported health is [34-35], and we therefore believe that self-reported mental health is a valuable indicator in population health monitoring.”

To test this we performed an additional analysis which showed that the self-reported mental health may be a good indicator of mental health. This adds strength to the present study. The description of the added analysis is presented on page 14, 3rd paragraph:

“To test this, we performed an additional analysis of immigrants from the former Soviet Union using the Swedish population register that had been previously linked to the Swedish hospital discharge register. The Swedish hospital discharge register covers all hospitals in all regions in Sweden and is held by the Swedish National Board of Health and Welfare. We calculated the age- and sex-adjusted hazard ratios for hospital admission due to mental disorders among immigrants from the former Soviet Union that lived in Sweden during the same time period (1994-2001). We found that they had no increased risk of hospital admission for mental disorders compared to the Swedish-born reference group – a result in agreement with one of the findings of the present study. This implies that self-reported mental health, on which this study was based, may be a good indicator of mental health.”
#1 The main methodological problem concerns the use of a self-administered questionnaire
The survey questions were not self-administered but collected in face-to-face interviews lasting
about one hour and performed by well-trained interviewers. To make that more clear we have
rewritten the first paragraph of the Method section on page 5 as follows:

“The information was collected by trained interviewers in face-to-face interviews as part of the
Swedish Annual Level of Living Survey (SALLS) between 1994 and 2001.”

#2 Use of a self-administered questionnaire as a diagnostic tool for psychiatric disorders or
psychosomatic complains without any preliminary study of accuracy against a Gold Standard
(e.g. a semi-structured interview as SCAN carried out by a clinician). The main self-
administered screening instruments in Psychiatry (as GHQ or SRQ) show different cut-off in
different cultures thus it is very difficult to compare prevalence rates without having
determined the specific cut-off in each group.[PB1]

We thank Dr. Carta for a valuable comment. We agree that it is very difficult to compare rates of
self-reported mental health since the self-administered screening instrument in psychiatry show
different cut-off in different cultures. We agree that it would be desirable to perform a sub-analysis
using a structured clinical instrument in the four population groups. Therefore we included the
following statement in the last sentence of the 2nd paragraph on page 5:

“Though ideally it would have been desirable to test the reliability of the questions in the
immigrants from the former Soviet Bloc, this was not possible, as the current study was undertaken
4 to 12 years after the original surveys (1994 to 2001) were performed.”

Moreover, the following text was included on page 13, last paragraph (finished on page 14):

“Furthermore, it is very difficult to compare rates of self-reported mental health since the self-
administered screening instruments in psychiatry show different cut-off points in different cultures.
It is known that relation to psychiatric illness varies across the cultures and, therefore, the fear of
being stigmatized is stronger in some cultures than in others, which is possibly reflected in the
poorer reporting of psychiatric disorders. ‘Psychosomatic complaints’ is another culturally
sensitive variable as representatives of every nation have their specific way of somatizing or
expressing their ill-health. Inhabitants in or immigrants from different countries communicate their
health, particularly mental health, differently [20, 33-35]. Moreover, medical treatment of
psychiatric conditions is also different in different countries, which adds to whether a person will or
will not be willing to report (e.g. in fear of being hospitalized). All the above significantly affects the
reporting of mental health problems.”

#3. Another issue is represented by the lack of homogeneity between groups (only in part
highlighted in the discussion): for example the ”other” eastern European group presented a
higher frequency of people migrated more than 20 years later, in contrast, in the Poland
group seems to be under represented the people migrated in the last 10 years. This variable is
hard to intend as a numerical one (more time more risk or vice versa) because the motivation
for migration has changed in the time (for example: economical problems in respect to the
condition of refugee) and has changed in different times in the different countries (in the 80s it
was more easily to migrate from Poland than Russia or Cecenia). Due to the different
condition of migration concerning variables as: motivation to migrations (e.g. settler, refugees, gastarbeaters); distance for the host culture; ability to develop mediating structures; legal residential status it is impossible to consider "migrants" as a homogeneous group concerning the risk for mental illness (see Migration and mental health in Europe (the state of the mental health in Europe working group: appendix 1) Mauro Giovanni Carta, Mariola Bernal, Maria Carolina Hardoy and Josep Maria Haro-Abad for the "Report on the Mental Health in Europe" working group, Clinical Practice and Epidemiology in Mental Health 2005, 1:13). In these three samples those factors were very different between groups and probably within groups and the interaction between factors is not easy to report in a statistical model.

Dr. Carta makes an excellent point, noting that there possibly was a lack of homogeneity between the groups in terms of the year and the reason for migration to Sweden. Although presumably the majority of the foreign-born persons in the sample were refugees and arrived after revolts in the Eastern Europe between 1956 and 1989, as well as after the fall of the former Soviet Union, some arrived in Sweden as labor immigrants before 1967 or for family reasons. Therefore, immigrants included in the present sample (within and between groups) possibly had different reasons for migrating as well as different experience before, during or after migration. This in turn would have had different effects on their mental and physical health.

However, in the present study the reason for migration and the type of migration could in general be associated with the year of migration to Sweden. Therefore, adjusting for the variable ‘years in Sweden’ accounted for these differences. As shown in Table 2, after adjustment for both migration-related variables (‘language at home’ and ‘years in Sweden’) and all the other explanatory variables the risk of reporting longstanding psychiatric illness among persons born in Poland and other East European countries remained high.

However, we have included in the discussion on page 12, 3rd and 4rth paragraphs (continuing to page 13), the following new text:

“Furthermore, the reason for emigration from these countries is different and has changed over the decades; distance to the host culture, level of acculturation, ability to develop mediating structures are also different. Therefore, it is not straightforward to consider immigrants from the former Soviet Bloc (and immigrants in general) as a homogeneous group with regard to the risk of mental illness [25].

The immigrant groups in the focus of the present study probably lacked homogeneity not only between each other, but also within themselves. For example, the three Baltic FSU republics have joined the European Union and differ from the other FSU republics in many respects. Therefore, it is difficult to say whether the results of the present study are fully applicable to immigrants from these now independent countries when considered separately from the whole FSU; this applies to the East European countries accordingly. Nevertheless, immigrants of differing backgrounds had to be combined in larger categories (“other East European countries” and “the former Soviet Union”) to achieve sufficient statistical power and to conduct the analyses in the present study. The grouping was based on geographical and political considerations. Poland was categorized separately due to a large number of Polish immigrants in Sweden. This crude grouping and the lack of homogeneity between and within the grouped countries was one of the limitations of the study.”