Reviewer's report

Title: Undocumented migrants lack access to pregnancy care and prevention

Version: 5 Date: 17 December 2007

Reviewer: Brian Gushulak

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Major Compulsory Revisions

1. I only have a single significant suggestion in what is otherwise a well prepared and reported study. The methodology and discussion should provide more context as to what is actually being compared between the study and "control group".

In describing the health implications of migration there are traditionally three comparator groups; a). similar cohorts who never migrated (i.e. do the outcomes of the study group differ from pregnancy outcomes from control populations at their origin? In this case that would be primarily Latin America). b). other migrants now living at the destination (i.e. documented and undocumented migrants, migrants from particular regions contrasted with those from other regions), and c). similar cohorts of the host or recipient population. The selection of the comparison group affects not only the observations but also the conclusions.

The intent of the paper is to compare outcomes between foreign born women with and without legal residence permits. However, aside from age, the demography and characteristics of the control group differ much more than in simply documented right of residence.

84% of the study group are from Latin America, 80% of the control group are European. 70% of the study group are single mothers, only 20 % of the control group are single. These differences continue in terms of duration of residence and housing.

Several of these factors, independent of residency status, can have health outcome influence. As a consequence it is difficult to separate the impact of the residency permit per se, from the influences of social and cultural approaches to health care (regional differences exist in the use of pre-natal services), duration of residence or isolation and lack of family support. While many of those socio-cultural influences are migration-related they may not be demarcated by residency permits and extend across migrant populations both legal and irregular.

Balancing these differences (region of origin, duration of residence, family status) between control and study groups would better indicate the impact of the
residency permit.

Additionally, the outcomes may not be limited to migrants. The major observed outcomes, more unintended pregnancies, less use of preventive measures, more delayed prenatal care and more violence exposure during pregnancy, may be related to social and family issues that extend beyond the immigration dynamic into similar cohorts of the host population. How do these outcomes in undocumented migrants differ from similar cohorts of host nation single mothers living outside family relationships in Geneva?

The context is important because it is the context of how the observations are interpreted that influence the development of programs and policies designed to produce the greatest health benefits. If the major influences of outcome are socio-economic as opposed to immigration status, it is how nations and societies deal with the socio-economic issues related to poverty and isolation, rather than immigration, which will have the greatest benefit on outcome.

If in this study, for example the adverse pregnancy outcomes in irregular migrants are simply surrogates for outcomes related to living as a single parent from a different region of the world, in a new country (mean duration of residence was 2.2 years for the study group vs. 11.8 for "controls" and acculturalization has been shown to influence the use of health care services, for example), rather than simply having a residence permit, effective programmatic solutions may be different. Those solutions will be broader and encompass all of those at risk rather than just the undocumented.

Differences in study and control group selection in the context of migration also helps to explain some of the observed national differences in health outcomes for illegal migrants between countries as well as some aspects of the "healthy migrant effect". In many cases we are simply not comparing similar populations across the same variables.

In summary, while the outcomes are clearly and concisely reported, I think the paper would benefit from revision to clarify what exactly is being compared between study and control groups, in both the methodology and discussion.

Minor Essential Revisions
None noted.

Discretionary Revisions
None noted.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'

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