



PCERII Funded Research

Progress Report

Migration and Survival: Differential Mortality Across Immigrant Communities in Canada

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1. Brief Statement of the research problem and specification of the key research questions

The study is a detailed examination of mortality differentials among immigrants in Canada for the period 1990-92. A large number of causes of death are examined. The underlying premise of the research is that the mortality experience of immigrants in a host society reflects in part, their degree of success in adjusting to their new world. For instance, suicide differentials may indicate a differential level of distress among migrant groups, possibly as a function of variations in degree of adaptation and adjustment to the new society. Similarly, homicide variations would tend to reflect differential exposure to conflict and violence. Mortality differences with respect to chronic conditions may reflect in part, the influences of both home country and host country experiences.

The theoretical framework for the analysis of mortality differentials is framed in terms of four sets of factors: (1) premigration factors; (2) post migration factors; (3) demographic compositional effects; and (4) selection factors.

Migrant death rates in the host nation are partly determined by what the immigrants bring with them into the new society. For instance, immigrants have been socialized in their home countries with respect to diet, lifestyle, health behaviours and attitudes, and so forth; they may also have been exposed to certain diets, lifestyles and environments which may either enhance or erode good health. Once in the new society, immigrants must undergo some degree of adjustment and adaptation: typically, this means having to gradually adopt new behaviours and possibly abandon others, brought from the old country. For the most part, this process of acculturation is relatively unproblematic; however, for some individuals it may be extremely stressful. An important factor which may modulate the negative effects of acculturation on immigrants is the ethnic community. The greater the extent of ethnic community integration, the greater the adjustment of immigrants, and therefore, the lower the chances of certain types of mortality. A clear example of this type of relationship is suicide. If suicide is a function of extreme distress, then immigrants that belong to well-established ethnic communities will have lower suicide probabilities than those that do not have a highly integrated ethnic community. Another important factor which conditions mortality risk is socioeconomic status. The better off the immigrant in terms of education, income and occupation, the lower the mortality risk, all other things being equal.

Demographic compositional effects such as age, sex and marital status compositions are taken into account to avoid erroneous conclusions about mortality differences across migrant groups.

Finally, immigrants are thought to be a fairly healthy subset of the population because of self-selection on the one hand, and health screening on the other. It is believed that persons who leave a given population are different in psychological and socioeconomic characteristics than those who remain. It may be therefore, that healthy individuals tend to self select themselves out of their populations of origin. Once approved for possible entry into a receiving country, the immigrant must undergo health screening. Clearly, demonstrably unhealthy individuals would be denied entry. These selective processes may explain in part the lower death rates of immigrants in relation to the native born population.

The study pays attention to regional differentials in immigrant mortality in Canada. The Prairie region is compared to the other Canadian regions. It may be that mortality differences are conditioned by geographic location.

2. Brief Statement on the Research Methodology

The data for this study are from vital statistics and the census of Canada for the period 1990-92. Thus, the death rates by cause of death are averaged, using the census population as the base. Multivariate methods are applied in order to better specify competing hypotheses about the observed differentials. Part of the work deals with the computation of group specific life tables for overall mortality and also for major causes of death.

3. Research Progress to Date

Due to the intricate nature of the data file, there have been a few setbacks in completing the study. For example, I have had to return the complete mortality data file to Statistics Canada on two separate occasions as a result of errors in programming when constructing my special tabulation. Unfortunately, the errors were of such a subtle nature that I had to be into the analysis in great depth before they could be discovered.

I have recently produced a long paper on suicide differentials. This paper has been presented at four different venues and has received a great deal of interest. My next objective is to make final revisions and send it out for publication.

I anticipate completion of the project by the end of summer, 1999.

4. Preliminary expected findings and expected applications

In my paper on suicide I discovered that suicide is significantly more frequent in the Prairies region than in other parts of Canada. However, the immigrants have lower suicide rates than the Canadian born. Multivariate analysis indicated that what explains variations in group suicide rates are the effects of culture of origin, demographic compositional differences, and discrepancies in ethnic community integration (i.e., ethnic maintenance and cohesiveness). There is also indirect evidence in support of the migration selection hypothesis, as the most recent immigrant groups in the analysis displayed net negative effects on the risk of suicide even after controlling for a large number of relevant factors.

It will be interesting to see whether these results are replicated for all the other causes of death which I intend to analyze. For instance, will I reach the same conclusions with respect to homicide and accidents? Moreover, how will the results differ in connection with chronic/degenerative diseases such as lung cancer, heart disease, diabetes, liver cirrhosis, etc.?

5. Policy implications of the research work

Given the high degree of interest in Canada on the health status of the population and of immigrants in particular, the findings of this study can be of value to policy analysts, particularly in the areas of immigrant health. If certain migrant groups appear to show above average levels of certain ailments or conditions, then they can be targeted for appropriate intervention. Furthermore, the research can be of value in assessing the effectiveness of our immigration

health screening policies. If immigrants as a whole have significantly lower death rates from the major types of diseases, this gives indirect evidence that the screening procedures are working.

6. Staffing for the conduct of research

In the initial stages of the project I had one Ph.D. research assistant to help me with the preparation of the data file (a very complex file). The rest of the work has been conducted by myself.

7. Dissemination activities:

I have presented my work to the following audiences:

- (a) The Third National Metropolis Conference, January 13-16, 1999 in Vancouver, British Columbia;
- (b) The Mennonite Centre for Newcomers, January 28, 1999 in Edmonton, Alberta;
- (c) The Centre for Addiction and Mental Health (formerly the Clarke Institute of Psychiatry), February 25, 1999 in Toronto, Ontario;
- (d) The Annual Kalbach Conference, The University of Alberta, Edmonton, Alberta, March 5, 1999.
- (e) I have a paper accepted for presentation to the Canadian Population Society Meetings in June, 1999 (Sherbrooke, Quebec).
- (f) I will also present some of my work at a special research event to be held at the University of Western Ontario, London, Ontario; in June, 1999.

8. Actual projected dates of completion

I anticipate completion of the project by end of summer, 1999.

Listing of Papers presented at Conferences

1. "Immigrant Suicide in Canada, 1990-92." Third Annual Metropolis Conference. Vancouver, British Columbia, January 13-16, 1999.
2. "Immigrant Mortality in Canada: Theory and Analysis." Presentation at the Centre for Addiction and Mental Health (formerly the Clarke Institute of Psychiatry). Toronto, Ontario, February 25, 1999.
3. "Immigrant suicide in Canada," Presentation at the Mennonite Centre for Newcomers. Edmonton, Alberta, January 28, 1999.
4. "Immigration and Self Destruction in the Prairies." Paper presentation at the Annual Kalbach Conference. University of Alberta, Edmonton, Alberta, March 5, 1999.

Other

1. Travel Grant from Prairie Centre of Excellence for the Study of Immigration and Integration (\$500); Travel to Vancouver for the third Annual Metropolis Conference.

2. Travel Grant from Prairie Centre of Excellence for the Study of Immigration and Integration (\$250); travel to Regina, Saskatchewan for the Regional Prairie Centre Conference.

3. Travel Grant from Prairie Centre of Excellence for the Study of Immigration and Integration (\$400); travel to Toronto in connection with a meeting with CERIS to initiate a joint project on the health of immigrant children in Canada.

I am a member of the newly created Health Domain, Prairie Centre of Excellence for the Study of Immigration and Integration.

I am the Prairie Centre representative on the Metropolis Web Committee.