Setting the Stage: Reviewing Current Knowledge on the Health of Canadian Immigrants

What Is the Evidence and Where Are the Gaps?

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ABSTRACT

The paper reviews current knowledge on the health of Canadian immigrants, examines evidence, and identifies research gaps. The information presented is derived from two recent literature reviews. Most literature suggests that Canadian immigrants, particularly recent arrivals, enjoy health advantages over long-term immigrants and the Canadian-born population in terms of overall health status and the prevalence of certain chronic diseases. Immigrants with infectious diseases may experience improvements in health over time. Patterns of immigrant mental health are less clear. More research is needed on specific health problems, how to address determinants of health, and the types of programs and services necessary to maintain immigrants in good health over time. Steps must be taken to strengthen existing databases and develop new ones.

The purpose of this paper is to review current knowledge on the health of Canadian immigrants, examine evidence, and identify research gaps. Specific attention is placed on reviewing evidence of the “healthy immigrant effect” – the observation that immigrants (male and female) are often in superior health to the Canadian-born population when they first arrive in Canada, but lose this health advantage over time. The healthy immigrant effect is believed to result from a self-selection process that basically includes people who are able and motivated to move and excludes those who are sick, disabled, and in institutions. It also is the result of immigration procedures that select the “best” immigrants on the basis of education, language ability, and job skills – characteristics that facilitate social and economic integration and go hand-in-hand with healthy lifestyles, and exclude immigrants with serious medical conditions. However, migration to new social and cultural environments may be stressful for some individuals, and stress coupled with inadequate social support may be, in turn, risk factors for ill health.¹⁻⁴

A sociodemographic overview of immigrants in Canada is presented, followed by a review of selected health findings – physical health status, infectious disease, mental health, partner abuse – and determinants of health. The paper concludes with a discussion of research priorities and future research directions.

AREA OF RESEARCH

Most of the information presented here is derived from two recently completed literature reviews. The first, prepared for Health Canada, looked at the health of Canadian immigrants in general.⁵ The second, prepared for the Ontario Women’s Health Council, examined the health of immigrant and visible minority women in Ontario.⁶ Although the emphasis of this paper was on reviewing evidence of the ‘healthy immigrant effect’, literature on refugee populations were included in both reviews.

Both reviews examined some of the major categories of chronic and infectious diseases for which data on immigrants/refugees were available – including self-reported health status, cancer, heart disease, tuberculosis, HIV/AIDS,

La traduction du résumé se trouve à la fin de l'article.

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TABLE I
Population Health Approach

Key Determinants of Health	
1.	Income and Social Status
2.	Social Support Networks
3.	Education
4.	Employment/Working Conditions
5.	Social Environments
6.	Physical Environments
7.	Personal Health Practices and Coping Skills
8.	Health Child Development
9.	Biology and Genetic Endowment
10.	Health Services
11.	Gender
12.	Culture

Source: Health Canada. Population Health. Ottawa, ON: Health Canada, 2002. Online at <http://www.hc-sc.gc.ca/hppb/phdd/>.

mental health, and perinatal health. Because violence is a major issue affecting the physical and mental well-being of immigrant women in Canada, it was included in the latter review.

For each outcome, Canadian literature was reviewed to document the extent of the healthy immigrant effect as well as to identify the main determinants (i.e., explanatory factors) of the health outcome. According to the Population Health model proposed by Health Canada, many broad determinants influence the health of all Canadians (Table I). Among the specific determinants of immigrant health examined in this paper are income, education and work, social support and stress, health practices, and health service utilization.

The literature review was conducted using MEDLINE, HEALTHSTAR, CANCERLIT, CINAHL, and PSYCHLIT. All published Canadian studies in English and French in Canada from 1990 to the present were identified. Major international studies were identified using the search engines and guided by previous research experience in this area. Additional information was obtained from Metropolis Centres of Excellence, the Centres of Excellence for Women's Health, government reports, and key informants. Whenever possible, information was reviewed for immigrant subgroups, for example, refugees, recent immigrants, visible minorities, women, children, and youth. Once the relevant literature was identified, quality of evidence was appraised using pre-established criteria.

In the case of epidemiological studies, 'acceptable' studies specified data source, study population, sampling frame and sample size (when appropriate), study measures (including reliability and validity

when appropriate), methods of analysis, and study limitations (e.g., sources of bias, loss to follow-up). Case histories, unpublished reports and personal communication were used if they included clear description of the research findings, programs and/or populations involved and their policy implications (For more information on Methods, see ref. 5).

KEY FINDINGS

Sociodemographics

Cultural diversity is a reality in Canada. Canada's commitment to humanitarian values, and the need to sustain social and economic bases in light of declining rates of population growth, will ensure that immigration will continue to play a major role in our nation's evolution. Since 1990, Canada has accepted approximately 230,000 immigrants per year, or about 0.7% of the Canadian population.⁷

Throughout much of this century, the majority of immigrants to Canada were from the United Kingdom, the United States, and Europe. By the 1980s, the majority of immigrants to Canada were from non-European and non-US countries. In 2001, of all immigrants to Canada, 53.0% were from Asian and Pacific countries, 19.2% were from Africa and the Middle East, 17.3% from the United Kingdom and Europe, 8.0% from South and Central America, and 2.4% from the US. Approximately 55% of immigrants reside in Canada's three largest urban centres - Toronto, Vancouver, and Montreal. The proportion of foreign-born residents in Toronto is 38%, in Vancouver 30%, and in Montreal 20%.⁷

Immigrants to Canada fall into several categories, depending on their reasons for

immigrating - economic class (56%), family class (29%), refugees (13%), and "other" (e.g., caregivers, retirees, etc.) (3%).⁸ Sometimes these categories are blurred - for example, when family members of refugees reunite. The five leading source countries for refugees to Canada in 2001 were Afghanistan (10.5%), Sri Lanka (9.0%), Pakistan (7.6%), Yugoslavia (6.3%), and Iran (5.3%).

Immigrants to Canada tend to be highly educated, in part reflecting the fact that the majority of immigrants who come to Canada do so through the economic class. In fact, the proportion of men and women holding a university degree is significantly higher among recent immigrants (24% and 19%, respectively) than among the Canadian-born population (13% and 12%, respectively).⁹

In summary, Canadian immigrants are extremely heterogeneous with respect to source country, length of stay, category of migration and socio-economic status. These factors are among the factors that may affect both life circumstances and health.

Health

Physical Health Status

The main source of data used to examine the health status of Canadian immigrants has been the National Population Health Survey (NPHS). Using this data source, recent Canadian immigrants, particularly from non-European countries, enjoy many health advantages over long-term immigrants and the Canadian-born population. These include their overall health status, the prevalence of certain chronic diseases (e.g., many cancers, heart disease), disability, and life expectancy.^{10,11} However, with time in Canada, physical health status begins to resemble that of the Canadian-born population. Similar results were obtained using data from the 2000/01 Canadian Community Health Survey (CCHS),¹² but the limitations to data from population health surveys to examine the healthy immigrant effect should be noted. These include limited information on immigrant subgroups, results that may reflect shifts in immigrant source countries rather than temporal differences, and cultural factors and the use of proxy respondents that may affect the reporting of

health problems. Indeed, linguistic and cultural factors may affect response rates.^{10,13-16}

It is also recognized that in Canada, as in other countries, there are ethnic differences in disease-specific mortality and morbidity rates.¹⁷ For example, in males, rates of heart disease are higher among South Asian immigrants and the Canadian-born population, and significantly lower among Chinese immigrants.¹⁸ Studies investigating whether these differences could be attributed to differences in risk factors among groups have speculated that genetic factors or as-yet-undiscovered risk factors may play a role.^{19,20}

Infectious Disease

The health advantage of immigrants with respect to chronic disease is not applicable to infectious disease.²¹ There has been a dramatic increase in foreign-born cases of tuberculosis in Canada over the past 20 years. Most Canadian experts assert that the majority of tuberculosis in immigrants and refugees results from previous infections becoming reactivated post-migration, and a smaller proportion from primary infection just prior to or post-migration.^{22,23} Preliminary data suggest that hepatitis and rubella are more common among pregnant refugee women compared to Canadian-born women, and these conditions often go undetected for up to 10 years following migration.²⁴ There is some evidence that HIV/AIDS is increasing among immigrants to Ontario who were born in HIV-endemic countries. In addition, the majority of infants born to HIV-infected mothers are born to immigrant women from HIV-endemic countries.²⁵ Although most immigrants with infectious diseases experience improvements in health status over time, given appropriate treatment and follow-up, reducing barriers to care remains a challenge.

Mental Health

The healthy immigrant effect with respect to mental health is less clear. The 1986 Task Force on Mental Health Issues Affecting Immigrants and Refugees reviewed evidence from more than 1,000 national and international research studies. They found that, in approximately half the studies reviewed, immigrants suffered higher rates of distress than Canadian-born resi-

TABLE II
Priority Research Questions

1. What is the health status/burden of disease among immigrant subgroups?
2. What determinants of health are associated with changes in immigrant health?
3. Are there other determinants of immigrant health that have not been addressed by the research literature?
4. Why are immigrant men and women at greater risk of developing tuberculosis during the early resettlement years, and what is the role of resettlement stress?
5. What personal and social resources allow immigrants to deal with adversity and successfully adapt to a new environment?
6. What models of health care delivery work best for a diverse society?
7. How can health promotion theory and practice be made more relevant for a diverse society?

dents.²⁶ Also in half the studies, immigrants had the same rates of mental disorder or lower rates.²⁶ Data from the 2000/01 CCHS found evidence of a healthy immigrant effect with respect to depression and alcohol dependence. Immigrants, particularly new arrivals, had lower rates of depression and alcohol dependence compared to the Canadian-born population.²⁷ However, other studies suggest that changes in mental health may not be linear. For example, among Southeast Asian refugees and Ethiopian immigrants to Canada, the risk of developing mental health problems was low during the first few years of resettlement, increased after a few years, then decreased, and remained low 10-15 years post-migration.^{28,29}

Partner Abuse

Although there has been an increase in Canadian research on partner abuse, little of it has addressed the needs of women from immigrant communities where social, economic, and migration-related factors all intersect. There has been little Canadian research on the prevalence of partner abuse in immigrant communities. Using data from the 1999 General Social Survey, rates of emotional, financial, physical and sexual abuse by a current or ex-partner in the past 5 years were found to be significantly lower among newcomer women (less than 10 yrs. in Canada) compared to both longer-term immigrant and Canadian-born women.³⁰ It is as yet unclear whether these differences in prevalence rates are 'real' or whether they reflect socio-cultural differences in perceptions and interpretations of intimate partner violence (IPV) shifting over time as newcomers learn of acts that constitute abuse in the Canadian context and develop the language to identify and speak of their experiences. If so, then previous cultural norms of what is considered abusive change over time to accommodate Canadian constructs, resulting in a renam-

ing of experience and higher reported rates of abuse paralleling acculturation.

Health Determinants

It has been suggested that the process of immigration and resettlement may influence immigrant health indirectly via determinants of health. Among those discussed in this paper are changes in income, health behaviours, social support, stress, and the use of health services.

It is well established that immigrants are disproportionately poorer than the general population. This makes poverty a confounder of any relationship between immigration and health.⁸ Previous data, using NPHS, CCHS, and other datasets, have shown that many immigrants' health-risk behaviours (e.g., smoking, obesity, drinking, diet) change over time to approximate the majority population.^{27,31,32}

Resettlement stress has been associated with the development of several health outcomes, notably tuberculosis in early years of resettlement, diabetes, and mental health problems; however, few studies have examined the relationship between stress, social support, and health in immigrant populations.³³⁻³⁹ For example, in my research on acculturation and birth outcome, pregnant Southeast Asian women who had been in Canada longer reported lower levels of social support and higher levels of stress than recent arrivals.⁴⁰

Several studies reported underutilization of health services, particularly for preventive (e.g., PAP, mammography) measures, and mental health and violence response services compared to acute medical care services.⁴¹⁻⁴⁴ More research is needed on exemplary health care delivery models, institutional reforms, and culturally sensitive health promotion strategies. More research is also needed to identify best mechanisms to reduce the access and equity barriers that Canadian immigrants continue to face.

TABLE III
Recommendations

1. Strengthen existing databases
 - Increase the amount of information available on ethnicity and migration in national and provincial surveys.
 - Use representative samples in health surveillance systems to reflect the diversity of the Canadian population.
 - Initiate discussions with the government and community stakeholders regarding the inclusion of information on country of birth, length of stay in Canada, ethnicity, and language fluency for health planning purposes.
 - Continue and expand record linkage between provincial health records for hospital discharges and physician claims and the Citizenship and Immigration Canada database.
2. Develop new databases
 - Initiate longitudinal studies to provide detailed information on the health status and health determinants of immigrants over time. Much of the evidence has come from cross-sectional studies that are limited.
 - Support health research within immigrant subgroups to document and address specific health problems and needs.
 - Support research on acculturation-related changes in health determinants (e.g., health behaviours, social support, stress).
 - Use participatory and multi-method studies to further the knowledge and understanding of health beliefs and behaviours within different immigrant groups.
 - Increase health systems research.

DIRECTIONS FOR RESEARCH

Based on the information and evidence reviewed, a number of priority research questions are presented in Table II. More Canadian research is needed on specific health problems, how to address determinants of immigrant health that contribute to the development of health problems, and the types of programs and services necessary to maintain immigrants in good health over time.

However, most existing databases in Canada cannot be used to address these research questions. Steps must be taken to strengthen existing databases, and develop new databases on immigration and health in Canada. Specific recommendations are provided in Table III.

The identified research gaps could be most readily addressed by an institute dedicated to the health of vulnerable populations, established by the Canadian Institutes of Health Research. Dedicated funding to federal and provincial agencies (e.g., Citizenship and Immigration Canada, Health Canada, Statistics Canada, provincial departments of health) is also needed to facilitate and improve data collection on immigration and health.

ACKNOWLEDGEMENTS

This paper was based on information collected in two literature reviews. Funding for the first review⁵ was provided by Health Canada and the author gratefully acknowledges the contribution of research

team members: Farah Ahmad, Catherine Chalin, Angela Cheung, Michael Gardam, Nazilla Khanlou, Heather Maclean, Joanna Rummens, Laurah Simich, and Kamlesh Minocha. The second review⁶ was completed for Ontario Women's Health Council as part of the *Ontario Women's Health Status Report*.

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RÉSUMÉ

L'article examine l'état actuel des connaissances sur la santé des immigrants au Canada, étudie les données probantes et dégage des pistes de recherche. L'information présentée découle de deux enquêtes bibliographiques récentes. La plupart des documents examinés semblent indiquer que les immigrants au Canada, tout particulièrement les nouveaux arrivants, jouissent d'une meilleure santé que les immigrants de longue date et la population née au Canada, tant du point de vue de l'état de santé global que de la prévalence de certaines maladies chroniques. Les immigrants atteints de maladies infectieuses peuvent voir leur état de santé s'améliorer avec le temps. Les tendances sont moins claires en ce qui a trait à la santé mentale des immigrants. Il faudrait pousser la recherche sur certains problèmes de santé, sur la façon d'aborder les déterminants de la santé et sur le genre de programmes et de services nécessaires pour maintenir les immigrants en bonne santé au fil du temps. Il faudrait aussi prendre des mesures pour renforcer les bases de données existantes et en créer de nouvelles.