Does the Healthy Immigrant Effect Disappear? Examining the Serbian Community in Toronto

by

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ABSTRACT

A large body of research has described the healthy immigrant effect – the phenomenon that immigrants are healthier than the native-born population in terms of chronic disease, self-assessed health, obesity, and mortality levels. However, much of this research has also pointed to the fact that with extended residence, immigrant health status declines and sometimes, converges to that of the Canadian-born population. Despite this growing body of work, qualitative studies examining this phenomenon in a specific ethnic community have yet to be presented. To fill this research gap, this paper reports on the results of 15 in-depth interviews with long-term Serbian immigrant women in Toronto, to explore their health status after extended residence in Canada. Of the women interviewed, 14 reported good health despite 11 to 22 years of residence in Canada. They also reported healthy lifestyle behaviours, access to a culturally appropriate physician, as well as close ties and social support from the Serbian community in Toronto. The results underscore the importance of qualitative research on specific immigrant ethnic groups in Canada to really drill deeply into individual perceptions of health and wellbeing.

CHAPTER 1

1.1 Introduction

Increased immigration has led to the highest proportion of foreign-born residents in 75 years, with 1 in 5 Canadians born outside of the country (Chui et al., 2007). With this growing population (Dean & Wilson, 2010; Newbold & Danforth, 2003), it is imperative to study immigrant wellbeing because this is increasingly a measure of population health in general (McDonald & Kennedy, 2004). On the topic of immigrant health, researchers have described the *healthy immigrant effect* (HIE), the phenomenon that recent newcomers are healthier than the native-born population in terms of better self-assessed health (Newbold, 2005; Newbold & Danforth, 2003), less chronic disease (Ali et al., 2004), lower rates of obesity (McDonald & Kennedy, 2005), and depression (Wu & Schimmele, 2005), a lower mortality rate (Wu & Schimmele, 2005), as well as a higher life expectancy (Ng, 2011).

It has been hypothesized that immigrants exhibit this health advantage for two main reasons. First, immigration entails moving to a new country, having to find a new source of employment, and procuring the kinds of resources that make life possible (Hattar-Pollara & Meleis, 1995). Because this can be a difficult life transition, someone willing to do this must be healthy enough to commit to such changes, leading many immigrants to self-select for immigration based on their health status (McDonald & Kennedy, 2004). But self-selection is not the only explanation for superior health, and the Canadian *Immigration Act* also plays a part in explaining this health disparity (Dean & Wilson, 2010). Immigrants are granted entry into the country only after they have undergone health screening by a Canadian-trained physician who ensures that they will not be exposing the general population to any communicable diseases, and they will not be a burden on the Canadian healthcare system (Laroche, 2001; Oxman-Martinez et al., 2000). Thus the HIE is built on two main hypotheses: self-selection and medical screening prior to arrival.

Though it has been shown that the health of recently arrived immigrants is generally better, some researchers have found that with extended residence in Canada, their health deteriorates, and sometimes converges to the health status of native-born

Canadians (Chen et al., 1996; McDonald & Kennedy, 2004). Specifically, researchers have demonstrated that after approximately 10 years of residence in Canada, immigrants report more chronic diseases (Chen et al., 1996), they become more obese (McDonald & Kennedy, 2005; Ng et al., 2006) and their self-assessed health status declines (Chen et al., 1996). However, consensus does not exist and others claim that this deterioration cannot be established (Dean & Wilson, 2010). Chapter 2 will explore the competing claims of the body of literature on the healthy immigrant effect in Canada.

Most of our knowledge on the healthy immigrant effect comes from large scale surveys conducted by Statistics Canada. Though some research has explored the effect by studying lived experience, examination of a particular ethnic community focusing on lived experience is rare. This is despite the fact that data from a specific immigrant subgroup holds important insights for understanding immigrant health more generally. Since immigrants are a heterogeneous group of individuals, their experiences and lifestyle behaviours cannot be aggregated and generalized as "birthplace is likely to be an important determinant of health" (McDonald & Kennedy, 2004, pg. 1616). If birthplace is not kept constant, the health risks involved in place of origin may be lost and the effects of life in Canada cannot be properly distinguished (Beiser, 2005; Ali et al., 2004; Vissandjee et al., 2001; McDonald & Kennedy, 2004). Immigrant birthplace has been proven to have an effect on health in research by Wu & Schimmele (2003), who found that ethnicity and place of origin affects depression levels. More generally, Dean and Wilson (2010) found that they could not establish that the HIE had diminished within their heterogeneous group of immigrants, and they suggested that perhaps "it is possible that immigrants from different countries of origin may have different experiences of health that could be captured by studying more homogenous groups of immigrants" (pg. 1225).

Building on this gap of immigrant health research, this study will try to understand whether the HIE disappears, and why or why not, by specifically looking at the Serbian community in Toronto. This research not only focuses on long-term Serbian immigrants in general, but on the health status of women in particular. The definition of women's health outlined by Phillips (1995) will be used. Phillips (1995) writes that women's health encompasses "emotional, social, cultural, spiritual and physical well-

being" and that it is holistically a factor of the "social, political and economic context of women's lives as well as biology" (Phillips quoted in Meadows et al., 2001, pg. 1452). This is fitting for a group of immigrants, who have experienced social, political and economic changes in their lives and are therefore at "risk for risk" (Link & Phelan, 1995).

In dealing with these changes, social determinants of health play a large role in the processes leading to health outcomes. Social determinants of health include economic and social resources, living and working conditions, access to medical care, and personal behaviour (Braveman, Egerter & Williams, 2011). Immigrants with a postsecondary education, who are married and employed are less likely to report poor health (Newbold, 2005; Ross & Wu, 1995; Waldron et al., 1996). While there is a "Healthy Worker Effect" at play here (those who report poor health do not work), Pottie et al. (2008) report that employment is also an important determinant of health because it is "a source of social networking, social support, and self-esteem" (pg. 509). Social resources also determine immigrant health outcomes because individuals who have a social network and more social support tend to be healthier because it "buffers stress and other health problems" (Graham and Thurston, 2005, pg. 75; Kawachi et al., 1999; House et al., 1988; Braveman, Egerter & Williams, 2011). Again, this is especially important in the immigrant context, because as Simich et al. (2005) point out, friendships and acquaintances are useful in times of high distress, while also acting as connections to valuable resources for someone that is new to a country (ibid). Research by Statistics Canada has also shown that immigrants rely on their social network to overcome settlement difficulties, rather than formal health and social service organizations (Statistics Canada, 2003).

1.2 Research Context

Before the 1990s, the area in Eastern Europe now composed of Croatia, Bosnia and Herzegovina, Serbia, and Montenegro was called The Federation of Yugoslavia (George & Tsang, 2000). In this country, Serbs, Croatians, and Bosnian Muslims lived together and self-identified as Yugoslavians. In the 1990s however, a civil war broke out, resulting in high emigration levels to various countries in Europe and North America. Despite the fact that these individuals were once from the same country, many no longer identify as

being of the same background, and tend to claim to be one of three ethnicities: Serbian (Orthodox Christian), Croatian (Catholic), and Bosniak (Muslim). In this study, all women interviewed are Serbian, and lived in Yugoslavia prior to immigration, or in Croatia, Bosnia or Serbia, according to today's political boundaries.

The World Health Organization reports that the female life expectancy in Serbia and Montenegro is 76 years, 78 years in Bosnia and Herzegovina and 79 years in Croatia (World Health Organization, 2011a). Though this is below the life expectancy of Canadian women (83 years), it is nevertheless above the world average female life expectancy of 71 years (ibid). In Serbia, 79% of deaths were caused by non-communicable diseases in 2002, a total of 54% of these caused by cardiovascular diseases (World Health Organization, 2011). In both Croatia and Bosnia, statistics are similar, with most deaths being caused by cardiovascular disease (ibid). Heart disease and all cancers are the main sources of health burden in Canada as well (World Health Organization, 2011b).

In order to explore whether the healthy immigrant effect disappears in the Serbian community, this study begins by systematically outlining past research. The review borrows from realist philosophy in that it attempts to go beyond counting how often findings are reported to understand *why* outcomes occur (DeBono, Ross, Berrang Ford, 2012). This is followed by a description of the data collection used in this study. Next, results of the fifteen in-depth interviews are reported using a synthesis of the interviews and direct quotes from the respondents. The study concludes by outlining the contribution that has been made, as well as future research avenues that might be taken to further understand the healthy immigrant effect.

CHAPTER 2

Does the Healthy Immigrant Effect Disappear in the Canadian Immigrant Population? A systematic review of the literature

This review attempts to answer two questions: does immigrant health deteriorate with extended residence in Canada, and does the healthy immigrant effect disappear? The review is systematic in that it answers a "clearly formulated question," and uses "systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyze data from studies that are included in the review" (Beahler et al., 2000, pg. 6). The review is realist in nature in that it analyzes the causal pathways leading to the health outcomes reported on in the studies under review (DeBono, Ross & Berrang Ford, 2012). If health does decline and HIE disappears, what in the Canadian landscape leads to a deterioration of health? If it does not, why do immigrants remain healthy? Though a similar systematic analysis has been conducted (see De Maio, 2011), this research is different in two fundamental ways. First, it does not include any qualitative studies, a potential limiting factor to the article, because direct-contact interviews allow a researcher to assess lifestyle or social changes in an immigrant's life that can often not be captured by a standardized questionnaire (Dean & Wilson, 2010). Second, the article does not use a realist methodology in order to assess the causal processes involved in keeping immigrants healthy. This systematic review will fill these gaps.

2.1 Methodology

Search Strategy

For the purposes of data collection, a database search was conducted on Web of Knowledge as well as PubMed in October of 2011 (See Figure 2.1). The search terms "health" and "immigrant" and "Canada" were entered into the "title" search option. The phrase "healthy immigrant effect" was not used because it was posited that it would decrease the number of search results and would eliminate articles that focus on an amelioration or decline in immigrant health status, but do not use this specific phrase. When search words were entered into Web of Knowledge and PubMed, there was an

output of 1326 articles, 1297 of which were excluded because the title corresponded to the exclusion criteria, were irrelevant, or there was repetition of articles between the two databases. This left 29 abstracts to be carefully examined. 17 of these were excluded due to the fact that they did not correspond to the exclusion criteria, leaving 12 articles, which were deemed appropriate for the systematic review. Next, the reference lists of these articles were snowballed (DeBono, Ross, & Berrang Ford, 2012), yielding an additional four articles, for a total of 16 articles (see Figure 2.1).

Inclusion and Exclusion Criteria

The main focus of this systematic review is on assessing the health status of long-term Canadian immigrants. Articles only on the health of the elderly or youth immigrants, as well as migrants were excluded. At the same time, studies of a particular illness or health condition were excluded, because genetic predisposition plays too large a role in such health outcomes. Articles focusing on mental health and not just health in general were part of the research because of the desire to view health holistically and the high prevalence of mental health conditions in the Canadian population (Tempier et al., 2008). More specifically, 4.6% of Canadians suffer from anxiety and 4.8% suffer from depressive disorder in 2000 (ibid). All studies included in this systematic review were peer-reviewed (Table 2.2).

Table 2.1: Search Inclusion and Exclusion Criteria

Inclusion Criteria	**Exclusion Criteria**
Immigrants in general	Only focuses on youth, female, male and elderly immigrant
Canada	Specific health conditions (i.e. Crohn's disease)
Adults	Specific ethnic groups (i.e. Chinese immigrants)
Published up to October, 2011	Recent immigrants
Peer-Reviewed	Migrants
English	Non-Peer Reviewed

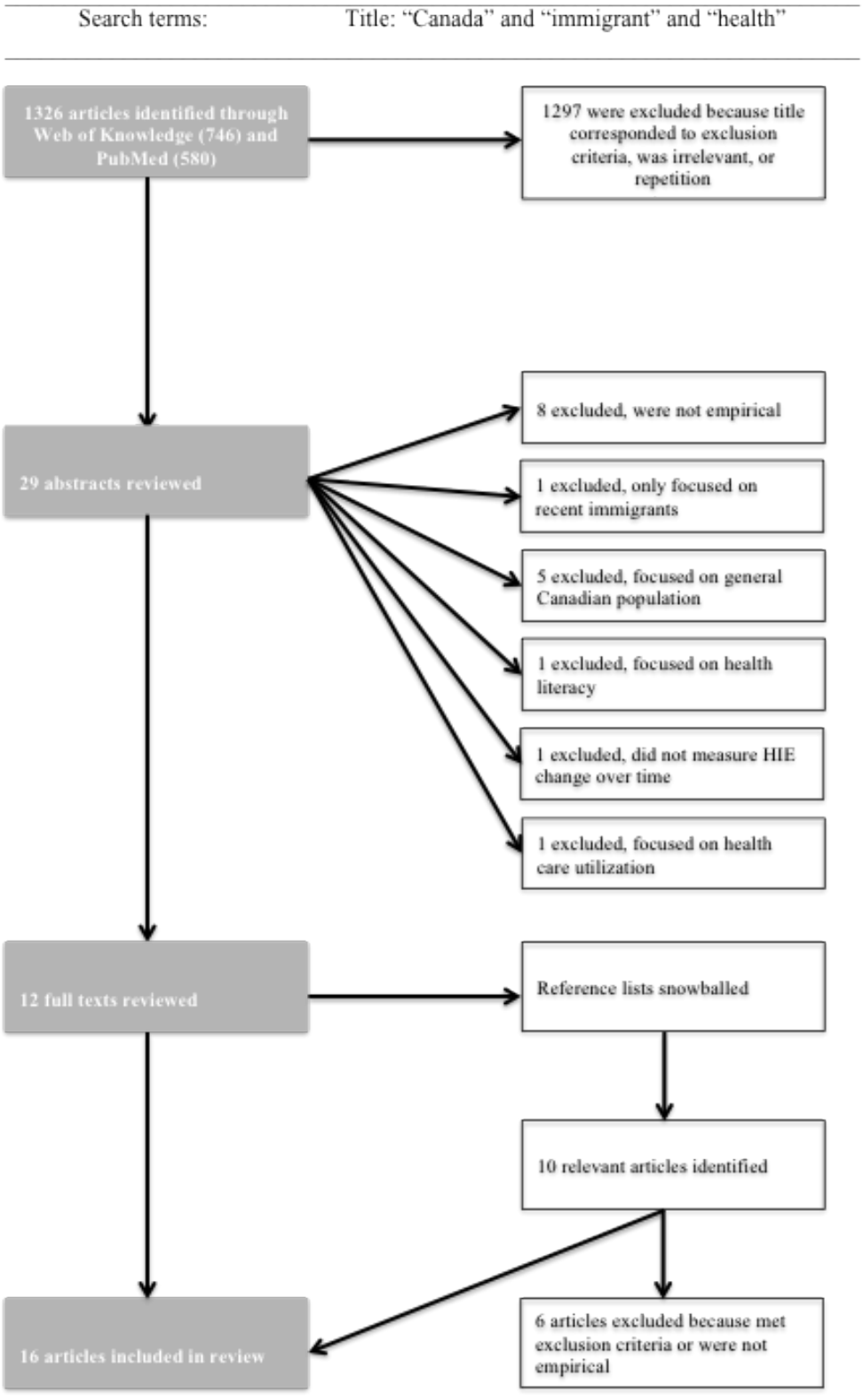

Figure 2.1: Systematic process for article selection

2.2 Results

The search yielded 16 studies, ten of which were longitudinal and six of which used a cross-sectional study design (Table 2.2). 15 studies were quantitative, and employed data from the National Population Health Survey (NPHS), the Canadian Community Health Survey (CCHS) or the Longitudinal Survey of Immigrants to Canada (LSIC), or the General Social Survey (GSS).

Most of the data studied were collected between 1994/95 and/or 2000/01, and the articles were published between 1996 and 2011. Eight articles assessed health status based on self-assessed health (SAH), four studied number of chronic conditions, and four studied both. Thirteen articles included social determinants of health in their models of health status, instead of simply viewing health as medical inputs and outputs. While all studies assessed the health outcome of long-term immigrants, only nine compared immigrant health status to that of the native born population.

2.3 Data extraction and analysis

After articles were collected systematically, checklists by Heller et al. (2008) and Ellwood (2002) were adapted and used to assess the data, statistical methods, confounders, analysis and the results in each study to evaluate the articles and answer the study question (Table 2.3). Studies that adjusted for age, sex, or arrival cohort were given more weight because they controlled for potential confounders. Furthermore, studies were deemed more valuable when they included wider determinants of health in their multivariate models (e.g. Dunn & Dyck, 2000).

Table 2.2: Summary of reviewed articles

Authors	Design	Data source (year sampled)	Measures	Inclusion of social determinants?	Controls	Does health deteriorate?	Does the HIE disappear?
Asamin Dean & Wilson (2010)	Cross-sectional	Interviews (2010)	SAH	N	/	No	No
McDonald & Kennedy (2004)	Cross-sectional	NPHS & CCHS (1951-2001)	Chronic, SAH	Y	Age, arrival period	Yes	Yes
De Maio & Kemp (2010)	Longitudinal	LSIC (2000-2001)	SAH	Y	Socioeconomic, demographic	Yes	No
Newbold(a) (2005)	Longitudinal	NPHS (1994/95-2000/01)	SAH	Y	Period of arrival, age	Yes	No
Fuller-Thompson et al. (2011)	Longitudinal	LSIC (2001-2005)	SAH	Y	Age	Yes	Yes
Dunn & Dyck (2000)	Cross-sectional	NPHS (1994/95)	SAH, chronic conditions, hospitalizations	Y	/	Yes	Yes
Newbold & Dunforth (2003)	Cross-sectional	NPHS (1998/99)	HUI3, SAH, diagnosed conditions	Y	/	Yes	Yes
Newbold (b) (2006)	Longitudinal	NPHS (1994/95 - 2000/01)	Chronic conditions	Y	Age, sex, origin effects, period of arrival	Yes	No
Gee, Kobayashi & Prus (2004)	Cross-sectional	CCHS (2000-2001)	SAH, HUI, AR	Y	Age, sex	Yes	Yes
Newbold (c) (2005)	Longitudinal	NPHS (1994/95 - 2000/01)	Chronic conditions, SAH	Y	Period of arrival, age	Yes: SAH and chronic conditions No: multivariate analysis	No
Chen, Ng, & Wilkins (1996)	Cross-sectional	NPHS (1994/95)	Chronic, disability, HRD	Some	Age	Yes	Yes
Ali (2002)	Cross-sectional	CCHS (2000/2001)	Depression, alcohol dependence	Y	Age, sex	Yes	No
Ng, Wilkins, Gendron, & Berthelot (2005)	Longitudinal	NPHS (1994/95-2002/03)	SAH	Y	Age, sex	Yes	Yes
Perez (2002)	Cross-sectional	CCHS (2000-2001)	Chronic conditions	N	Age, education, income	Yes for general chronic conditions, not for specific conditions	Yes
Halli & Anchan (2005)	Cross-sectional	CCHS (1998)	SAH, HUI3, chronic	Y	Age	Yes	Yes
Laroche (2000)	Cross-sectional	General Social Survey (1985, 1991)	SAH, AR, chronic conditions	Y	/	Yes	No

Table 2.3: Article appraisal criteria

	Appraisal Questions
Objectives	Are the objectives appropriate for the research question?
Study Design	Is the study type appropriate for the research question?
Study Design	Are the data and variables used appropriate and complete?
Study Design	Are social determinants of health included?
Sampling	Are the sampling frame and sampling method appropriate?
Sampling	Is the sample size appropriate?
Sampling	Is the sample representative of the population being studied?
Statistical Tests	Are statistical tests appropriate and correct?
Outcomes	Are health outcomes appropriately measured?
Outcomes	What are the results? Are they significant?
Outcomes	Will they help answer the research question?
Outcomes	Are the results likely to be affected by chance variation?
Confounders	What important confounders are considered? Are age and sex controlled?
Bias	Are there any potential biases in the study?
What are the main strengths and weaknesses of the study?	

Data from the National Population Health Survey

Cross-sectional studies

Chen et al. (1996) found that age-adjusted prevalence of chronic conditions increases with extended residence, as 51% of long-term (residence >10 years), non-European immigrants reported at least one chronic condition, relative to 37% of recent arrivals. This pattern was similar among European immigrants, as 47% of new arrivals (residence <10 years) did not report any chronic conditions, and 58% of long-term immigrants reported at least one. Though long-term European immigrants were more likely to report

a chronic condition, the number of conditions increased with residence for both European and non-European arrivals. When age-adjusted prevalence for sex, income, and education were included in a regression, the association between immigrant status and chronic conditions continued to hold. The study found that 56.8% of native-born individuals reported a chronic condition, while 57.7% of long-term, European immigrants and 51.2% of long-term, non-European immigrants reported one. Though the authors' conclusions were more robust due to the fact that they age-standardized the results, they should have considered including a greater number of social determinants of health in their analysis.

At the same time, the authors defined chronic conditions as falling into one of 12 categories: joint conditions (including arthritis, rheumatism, and back problems), allergies, high blood pressure (hypertension), heart disease or effects of stroke, asthma, diabetes, sinusitis, migraine headaches, ulcers, bronchitis (chronic bronchitis or emphysema), cancer, and urinary incontinence. This list is quite broad in terms of the severity of chronic condition, and some of the conditions listed are not as rare and life threatening as others (allergies versus cancer for example). As such, the authors should have taken the commonality and severity of chronic conditions into consideration when determining whether immigrants are burdened with chronic conditions after extended residence in Canada.

Dunn and Dyck (2000) found that long-term immigrants (residence >10 years) and those who originated in Europe were more likely to report poor health, and a chronic condition than recent immigrants. When they included social determinants of health (i.e. income adequacy, housing tenure, marital status) in their model, longer-term immigrants continued to report lower self-assessed health and more chronic conditions. Though the authors found that health deteriorates with extended residence, they did not specifically test whether HIE disappears.

For the deterioration in health that they established, the authors pointed out that this is explained by the fact that well-established immigrants in the survey were older than the more recent ones. Immigrants who had been residing in Canada for more than ten years, made up 25% of the 50-65 year category, and 30.4% of the 65 + year category, whereas recent immigrants made up 9.5% and 8.8% of these categories respectively. In this sense, age was a confounder in the study, because the reason the authors found that

long-term immigrants reported worse health is because they were older than recent arrivals.

Newbold & Danforth (2003) used data from the same survey, but the 1998/1999 Wave. The researchers found evidence of a deterioration of health status with extended residence, with a near continuous decline in health, whether health-related quality of life (HUI3), general health, or likelihood of reporting a chronic condition were studied. The researchers found that more immigrants from Europe reported a chronic condition than those from the Americas, or "other" immigrants. The researchers also found that the HIE disappears – 65.8% of long-term residents (residence > 10 years) reported a chronic condition, compared to 60.6% of non-immigrants, significant at the 95% confidence level. Amongst the immigrant group in general, the researchers found that women, those in the lower income adequacy group, and those with lower levels of education were more likely to rate their health as poor. Again, as with the study by Chen et al. (1996), the authors did not take the difference in the commonality and severity of chronic conditions into account when determining how many long term immigrants reported chronic conditions.

Longitudinal studies

In his study, Newbold (2005a) conducted a longitudinal analysis to evaluate self-rated health. Controlling for arrival cohort and age, he found that the proportion of immigrants rating their health as poor increased with every cycle between 1994/95 and 2000/01. However, in a logistic regression analysis, he found that the foreign-born were not more likely to transition to poor health relative to the native-born population. He concluded the same thing in a paper published that same year (Newbold, 2005b). When a survival analysis was conducted, Newbold (2005) found the opposite - the native-born were at a lower risk for transitioning to worse health (risk ratio 0.802 for native-born), and the hazard function diverged between the foreign- and native-born, with immigrants at an increasingly greater risk of rating their health as "poor". Although all cohorts experienced deterioration in health, new arrivals (1994/95 arrivals) faced a greater decline, as early as four years upon arrival. More specifically, immigrants with less than a high school education, the elderly, and non-drinkers were at a greater risk of transitioning to poor

health. Meanwhile, married individuals, those with higher incomes, and the employed were less likely to rate their health as "poor". In terms of race, Black individuals were most likely to move from healthy to unhealthy.

In a later study, Newbold (2006) found that with increased residence in Canada, immigrants started to report more chronic conditions. 56% of immigrants reported a chronic condition in 1994/1995, and 69% reported one in 2001/01. This was lower than the number of native-born individuals reporting a chronic condition in these periods, but the difference was not significant. Standardized health ratios showed the same pattern, with the likelihood of reporting a chronic condition increasing from 1994/95 to 2000/01 for each arrival cohort, and equalizing with that of the native-born population. It was also noted that recent arrival cohorts (1990/94, residents for 12-16 years) showed the highest increase in number of chronic conditions for this six-year period. These individuals came from non-European countries. When a logistic regression was conducted, and social determinants of health variables were included, it was also found that the odds of reporting the presence of any chronic condition increased between 1994/95 and 2000/01. As Newbold (2006) mentioned however, reasons for entry are important and should have been considered in his analysis.

After adjusting for age and sex, Ng et al. (2005) also found that from 1994/95-2002/03, immigrants were more likely to report a decline from "good", "very good", "excellent" health to "fair", "poor" health than the native-born population. In particular, they found that this decline only applied to non-European immigrants, especially those individuals who had arrived since the 1980s. The researchers found that the likelihood of transitioning to poor health was associated with low SES, low income and low educational attainment.

Data from the Canadian Community Health Survey

Gee et al. (2004) found that the HIE disappeared with extended residence in Canada in the 45-64 age group. New immigrants (those in Canada between 0-9 years) had better functional health (in terms of self-assessed health, HUI, and the Activity Restriction measure) than those who immigrated more than ten years ago, whose health status was similar to that of native-born Canadians. Longer-term immigrants were just as likely to

have a comparable level of overall functional health and were less likely to rate their health as "good" compared to the native-born Canadians. Even when the model controlled for social and demographic determinants of health and health behaviours, this relationship continued to hold. The article did not point out which specific immigrant groups were most likely to experience this deterioration.

Using data from the 1996 Wave of NPHS and the 2000/01 CCHS, McDonald and Kennedy (2004) found evidence that the HIE disappears. According to them, immigrant men and women had a lower incidence of what they labeled "Type A" conditions (asthma, back pain, high blood pressure, allergies, migraines, ulcers, bronchitis and arthritis) upon arrival, but this incidence increased with residence in Canada, at a decreasing rate. After around 20-25 years, immigrant health did not deteriorate with additional years spent in Canada, and was comparable to that of the native-born population. More specifically, they found this trend for the incidence of self-reported chronic conditions, and weak evidence for self-assessed health status, after they controlled for age differences and arrival period effects. They also found differences with region of origin, as new immigrants from English-speaking countries had similar incidence of "Type A" conditions as native-born individuals, with little change with years since immigration.

The article was strong in that it used synthetic cohorts in an attempt to disentangle "Years Since Migration" (YSM) from cohort effects (because earlier arrivals are European, and recent arrivals are from African or Caribbean countries). They also included the local unemployment rate in their analysis, in order to capture how local economic conditions affect an individual's health outcome. This is important because it can potentially capture whether an individual is living in a poor neighbourhood – a fact that has been proven to lead to worse health outcomes and could explain declining health status (see Diez-Roux & Mair, 2008).

Using data from 2000/01, Perez (2002) also found that despite the fact that immigrants reported fewer chronic conditions than native-born Canadians (59.6% relative to 65.2%), there was an increase in reported chronic conditions with extended residence in Canada. After adjustment for age, education, and income, the odds of reporting a chronic condition increased across immigrant residence groups (from 0 years to 30

years), with those that had lived in Canada for 30 years or more, reporting the same number of chronic conditions as the native-born population. This gradient was not distinguishable when specific chronic conditions were examined however. Immigrant and non-immigrant levels of diabetes, high blood pressure and cancer were the same, even when adjusting for socio-demographic factors.

Ali (2002) used the same data to look at levels of depression and alcohol dependence among immigrants. She found that recent immigrants had the lowest rates of depression and alcohol dependence, both within the immigrant pool and when compared to the native- born population. However, those who had arrived between 10-14 years or 20 years ago had depression and alcohol dependence levels similar to the Canadian population. When a multivariate logistic regression was performed, this relationship held, except for immigrants who arrived between 15-19 years ago. When looking at specific origins, Ali (2002) found that European immigrants had the highest levels of depression, whereas individuals from Asia and Africa had the lowest levels. This study was good in that it included a variable measuring sense of belonging to a community, a variable that is often not captured in quantitative research but that can nevertheless have an effect on health outcome (Kawachi et al., 1999). However, Ali (2002) did not find an association between this variable and health.

By examining data from 1998, Halli & Anchan (2005) found that recent immigrants (0-9 years of residence) were more likely to report good health and less chronic conditions than longer immigrant residents even when age was controlled for. A chi-squared test showed that the association between immigrant health and duration of residence was statistically significant at the 99% confidence level. Though the authors found deterioration in health with extended residence, they did not find that health converges to that of the Canadian-born population.

Data from the Longitudinal Survey of Immigrants to Canada

Using data from LSIC, De Maio & Kemp (2010) examined self-reported health status at six months (Wave 1), two years (Wave 2), and four years (Wave 3) of residence in Canada. Using logistic regression, the researchers found that the health of immigrants declines after arrival to the country. According to them, visible minority immigrants who

experienced discrimination were most likely to report a decline in self-assessed health status. Visible minority status was also a statistically significant variable in explaining health status decline even when experience of discrimination and socioeconomic and demographic factors were controlled. However, there was no mention that HIE disappears.

Fuller-Thomson et al. (2011) used the same survey and found that though 78.4% of new immigrants to Canada reported "excellent" or "very good" health six months after arrival, four years later, 60.2% reported "excellent" or "very good" health. The researchers found that this decline was associated with age, sex, marital status, language skills, income, region of birth and perceived discrimination, even after they controlled for baseline health status. More specifically, they found that women were more likely to report a decline than men, as were individuals who do not speak either English or French, married individuals, and those with low personal income. They also found that immigrants from India, and other South Asian countries, China and Eastern Europe were two times more likely to report a health decline. According to this study, HIE disappears. The study is good in that it did not categorize immigrant birthplace into continents, but instead used less aggregated places of origin. This is informative because the authors found that health outcome differs between places on the same continent. According to them, someone from Eastern Europe is 2.14 times more likely to experience a two-step decline in health four years after arrival, while someone from Western Europe is only 1.8 times more likely to experience this deterioration than someone from North America. If birthplace had simply been aggregated to the continent of Europe, we would not have been able to gauge these differences in health outcome.

Both studies by De Maio & Kemp (2010) and Fuller-Thompson et al. (2011) had one pitfall, namely that they only studied individuals who had come to Canada between 2000 and 2001 (four year residents) and attempted to gauge differences in health since arrival. This is problematic in comparison to other studies because all aforementioned studies classified individuals who had been in Canada for less than 5 years as "newcomers" (Chen et al., 1996; McDonald & Kennedy, 2004). However, Fuller-Thompson et al. (2011) showed that "duration in Canada is statistically significantly associated with a decline in health status" (pg. 278).

General Social Survey (GSS)

In studying the 1985 and 1991 waves of the GSS and examining self-assessed health status, activity restriction and chronic conditions, Laroche (2000) found that health status did not deteriorate with time. However, the author did not look at long-term and recent immigrants, but only examined health status change from 1985 to 1991 to arrive at this conclusion.

Data from Qualitative Research

In conducting in-depth interviews with 23 immigrants in Mississauga, Ontario, Dean & Wilson (2010) did not find an association between length of residence and self-reported health. They did however find that longer-term immigrants tended to report a deterioration of physical health, whereas more recent immigrants reported mental health problems – if they reported a health decline at all. Of those individuals who reported a decline in health, they largely attributed this to increased stress levels during the migration process.

Though the research was cross-sectional – a fact that the researchers acknowledged as a limitation to the study, it was not completely detrimental to the study. In-depth interviews can allow for a time-series perspective (Greenhalgh, 1997), because individuals are able to recall an event that occurred several months or even years ago that might have triggered an ailment or deterioration in health. However, the number of people interviewed was not equally divided between recent, mid-term and long-term immigrants as well as males and females in this study. Perhaps the reason that Dean & Wilson (2010) did not find support that the HIE disappears was because they interviewed many individuals who had been in Canada for a short time, and were therefore still being captured by the HIE.

2.4 Key Findings

Fourteen out of the sixteen studies reviewed found that immigrant health deteriorates with extended residence in Canada – long-term immigrants report more chronic conditions or worse self-assessed health than recent immigrants (Table 2). Twelve studies

found that this decline occurs after around ten years of residence. However, nine articles tested and proved that the healthy immigrant effect disappears. In other words, they concluded that immigrant health converges to the health status of native-born Canadians. Though results were mixed when it came to who specifically experienced a deterioration in health, there was consensus that women, those of low SES or low income adequacy, those with low educational attainment, and European immigrants were most likely to experience a deterioration in health as years since immigration increased.

2.5 Causal pathways

McDonald & Kennedy (2004) suggest that with extended residence in Canada, the potential language barriers immigrants faced at arrival are eliminated and they become more familiar with Canadian healthcare services and they use them more. At this point, immigrants are diagnosed with more conditions, thereby leading them to report worse health. In this sense, it is not that health deteriorates as a result of extended residence, but rather that there is a lack of detection early on. However, in testing this hypothesis, the authors found that immigrants' utilization of the healthcare system converges to native-born levels faster than health does. Chen et al. (1996) supported this finding in their study. According to McDonald & Kennedy (2004), this means that the decline in self-assessed health status and increase in chronic conditions is not due to a lack of access to the healthcare system, but because of cultural or language differences when accessing that care. As recent immigrants, individuals are unable to express themselves or they have differing conceptions of health, meaning that they cannot be diagnosed or treated. The longer immigrants live in Canada, the better they understand both the healthcare system and their physician, and the better they are able to express themselves, leading to more diagnoses, and theoretically, a decline in reported health. Fuller-Thompson et al. (2011) also found that language proficiency is correlated with deterioration in health, claiming that individuals who did not speak the language were more likely to have difficulties navigating the health care system, thereby leading to worse self-assessed health.

Relatedly, McDonald & Kennedy (2004) also propose that an immigrant's views of "good" or "poor" health might possibly evolve with extended residence. For example, an

individual might have thought that experiencing arthritic pain was normal in their country of origin because everyone suffered from it, but once they have lived in Canada for a longer period of time, they might realize that suffering from arthritis is a condition that signifies less than perfect health. As such, they may start to rate their health as "fair" or "poor" because in Canada, this condition is considered more serious. Newbold's research (2005) is in agreement with this proposed cause, with him writing that the decline in immigrant health is *perceived* and not *real*, as "health is reevaluated relative to peers within Canada as opposed to the origin," and simultaneously, "optimism declines and the reality of immigrant life in the host country sets in" (Newbold, 2005, p. 1368). In this sense, there is not a deterioration of real health, but a changed understanding of what good health is.

In Dean & Wilson's (2010) qualitative research, respondents claimed that aging and stress were factors that led to a decline in health. Immigrant interviewees stated that they had access to the healthcare system, healthy foods, and opportunities for physical activity in Canada, meaning that this was not a potential cause of health decline. This supports McDonald & Kennedy's (2004) finding that immigrants in fact had access to the healthcare system.

2.6 Conclusions

The aim of this systematic review was to gauge whether immigrant health deteriorates and HIE disappears with extended residence in Canada. Fourteen of the sixteen studies found that the health status of long-term immigrants deteriorates with extended residence, with these individuals reporting worse self-assessed health and more chronic conditions. However, only nine of the sixteen studies reviewed showed that the health of long-term immigrants converges to native-born levels, and the healthy immigrant effect disappears.

Some studies convincingly demonstrated that the decline in health occurs because recent immigrants face language and cultural barriers when accessing healthcare services and that with extended residence, language proficiency, cultural understanding and acculturation lead to more diagnoses. This points to the fact that actual immigrant health does not decline as a result of extended residence, but that instead, perceived health declines because of more culturally defined understandings of good health, and better

access to healthcare services. Despite the useful insights provided by this body of research, there is a lack of work on the lived experiences of immigrants and the nuances of health outcome as determined by varying birthplaces. Only one study attempted to understand lived experience instead of relying on a standardized Statistics Canada questionnaire, thereby allowing immigrants to express their wellbeing in their own words. Interestingly, the study that employed this research framework did not find either deterioration in immigrant health or a convergence to native-born health status. As previously outlined, studying a specific ethnic group and conducting work on lived experience is important, so this research will attempt to fill these gaps.

CHAPTER 3

Methodology

Fifteen in-depth interviews with Serbian women between the ages of 41 and 55 were conducted in Toronto, Ontario. Because qualitative research was conducted, individuals were able to provide "a holistic perspective [of health] which preserved the complexities of human behaviour" (Greenhalgh & Taylor, 1997, pg. 740) and their "beliefs, values and actions" (Elliot & Gatrell, 2009, p. 76) were taken into account in the analysis. Many feminist researchers argue that this method is best for studies in which women study women, as this method can be less exploitative and makes for a more egalitarian relationship between the researcher and the interviewee (McDowell, 1992; Gatrell & Elliott, 2009). At the same time, all interviews were conducted in the women's Serbian language in order to provide a sense of familiarity and an added comfort during the interview, while ensuring that feelings or facts would not be lost in translation.

As someone who conducted qualitative research, it is important to understand where I come from in this research process. I am a Serbian woman, who conducted face-to-face interviews over coffee in the women's homes, and as such my data are not objective. In conducting qualitative research, the kinds of questions I asked, how I collected data, and later interpreted it was influenced by my prior assumptions and experiences in the community (Mays & Pope, 2000). For example, I assumed that the women interviewed prepared most of the meals in their family, and my questions to do with their diet were influenced by this assumption. However, these biases do not flaw the findings of the study, because according to Greenhalgh and Taylor (1997), it is "inconceivable that the interviews could have been conducted by someone with no views at all and no ideological or cultural perspective" (pg. 742).

For the purposes of recruiting participants, a snowball method was employed. The snowball method entails a study participant referring other potential participants for the study (Dean & Wilson, 2010; Biernacki & Waldorf, 1981). In this method, referrals of other participants is based on a known characteristic that contributes to the research topic, a method that can be highly efficient (Biernacki & Waldorf, 1981). According to

Biernacki and Waldorf (1981) such a sampling method is particularly fitting if the topic under investigation is a sensitive one, as research on health status has the potential to be.

To start this snowball sampling method, a woman was randomly approached at the Serbian Cultural Centre Oplenac in the Greater Toronto Area, and asked if she could be interviewed. The interviews were conducted in Toronto because out of a total of 41,320 individuals who claim their mother tongue as Serbian or Serbo-Croatian in Canada, a total of 15,110, or 36% reside in the city (Statistics Canada, 2007). The cultural centre that was chosen as a starting point is a non-profit organization that aims to "further enhance Serbian culture and maintain multiculturalism in Canada through folkloric dance and music" (Oplenac Serbian Cultural Association, 2011). Apart from offering dance classes, various Serbian individuals attend for cultural events, to participate in the adult choir, or to take their children to classes. After the first woman was approached at this cultural centre, a set time was arranged at her home, and the interview was conducted several days later. Following this, she contacted an acquaintance and asked if she would want to be interviewed. If the answer was affirmative, the researcher's telephone number was given to her, and she contacted the researcher to set up an appropriate time for the interview. The fifteen interviews took place in August, 2011. Interviews were between fifteen minutes and one hour long, and were recorded on an audio device and later transcribed and translated into English by the researcher.

The interviews were semi-structured, so though women were given the opportunity to talk freely, all interviews had a basic format, and a set of common questions. Women were asked about their:

· **Socio-demographic profile**
  · How old are you? Are you married? What is your educational background?

· **Reasons for immigration**
  · Why did you immigrate to Canada, and when?

·**Past and current health status**
  · What was your health like in your country of birth, and what is it like now?

·**Smoking patterns and alcohol consumption**
  · Did you smoke and consume alcohol prior to immigration? Has this changed?

·**Dietary patterns**

· What was your diet like in former Yugoslavia? Have your dietary patterns changed since immigration?

·**Physical activity patterns**

· Were you physically active prior to immigration? Have your physical activity patterns changed since immigration?

·**Mode of Transportation**

· What was your chosen mode of transportation prior to immigration? Has this changed since immigration?

·**Social Network**

· What is your social network like in Canada, and how reliable would it be in the case of an illness or a problem?

·**Physician and access to healthcare services**

· Do you have a physician? How satisfied are you with access to health care in Canada?

The research process was iterative in that the initial research hypothesis changed as the research went on (Greenhalgh & Taylor, 1997). Though the questions remained the same, as more and more interviews were conducted, the research began to try and understand *why* health had not altered since arrival to Canada.

After all interviews had been transcribed in word processing software, the data were analyzed. To do this, a systematic approach in the form of content analysis was employed. A set of categories were created in a word processing document, and the responses from each interview were copied and pasted into the appropriate section, so as to be able to analyze and compare them. The entire research process followed the ethics guidelines set out by McGill University. Individuals signed a consent form at the beginning of the interview process that informed them that everything said was confidential, that their name would not be used in the research, and that they could decline to answer questions or stop the interview at any time.

CHAPTER 4

Results

4.1 Demographic profile

The women interviewed were between the ages of 41 and 55 years old, and women were between the ages of 28 and 43 upon arrival. The women had resided in Canada a minimum of eleven years and a maximum of 22 years. Of these women, most of them had resided in Canada for thirteen years, with six of them having arrived in 1998.

Twelve of the fifteen women were married, with the other three having divorced in Canada. All except two had children, with four women giving birth post-immigration.

4.2 Socioeconomic profile

Of all the women interviewed, fourteen out of fifteen had at least a postsecondary education. The one woman who had not attended university had completed a trade, and had her own business. While thirteen women came to Canada with a postsecondary degree, and one came with a Doctor of Dentistry degree, six continued their education in Canada, either doing a degree at a college, obtaining a Master's degree or a PhD, in the case of one woman. Of all the women interviewed, none were unemployed, though some expressed that they were not working in a field of their choosing. When compared to the average education levels of women of this age group, it is evident that this is a highly educated group of individuals. In Canada, 35% of women between the ages of 44-65 years have postsecondary certification, and only 22% have a university degree (HRSDC, 2012), compared to 93% of interviewees in this sample.

4.3 Reasons for immigration

The women reported coming to Canada either because of the economic situation in former Yugoslavia, or because of the civil war of the 1990s. Of the women who had come more than twenty years ago, their reasons for immigration were economic, whereas women who had immigrated in the last seventeen years were led to move because of the civil war.

A woman citing economic reasons for immigration said:

> *I wanted a better life, both financially and otherwise than I had in Bosnia. I wanted to be able to advance financially, and be in a nicer place, and improve my career prospects.*

Echoing the reasons for immigration of thirteen other women, a woman expressed having to leave her home country for Canada as a way of seeking refuge, saying:

> *We were imprisoned back home during the war because we were of the wrong religion in the area that we lived in.*

The majority of the women interviewed had immigrated to Canada because of their ethnic background, or because the war negatively influenced the economy in their native country. For women who had immigrated in the 1980s, they came to Canada for the purpose of better employment opportunities, and better financial prospects.

4. 4 Health status in home country and perceived determinants

Of all the women interviewed, fourteen said that they were of good health prior to immigration to Canada. When asked about her health in former Yugoslavia, one woman said:

> *My health was good. In general, I've been healthy my whole life. I have never had any health problems or illnesses.*

Despite classifying their health as good, some of the women expressed having early symptoms of health conditions in former Yugoslavia. Of these women, two said that they had a sensitive stomach, and one said she had joint pain.
A woman suffering from the early symptoms of Crohn's Disease prior to arrival, said:

> *I always had a sensitive stomach back home.*

Another, who was later diagnosed with Lupus, said:

> *When I thought about it clearly, I realized that many of the early signs of the disease were present even before we came to Canada. I had some problems even back home. I had joint pain.*

Of all the women interviewed, only one characterized her health as "bad" prior to immigration, claiming that she came to Canada sick. She said:

> *My health wasn't that good. I have been sick since my 22nd birthday. Since then I have been taking medication. I have always been sick.*

Of the women who said their health was good prior to their arrival to Canada, most cited access to 'healthy food' that was free of pesticides and was not genetically modified, as well as their young age as reasons for this. One woman said:

> *Food is healthy in our homeland; there are no pesticides. You should see how tomatoes taste in comparison to these here, for example.*

Overall, fourteen women cited good health in their country of origin, with four women reporting either being diagnosed with an illness or having the initial symptoms of an illness that would later be diagnosed in Canada. Generally, women asserted that the reasons for this good health were fresh food as well as young age.

4.5 Health status in Canada and perceived determinants

Of all the women interviewed, fourteen said that they are currently in good health, despite the fact that some noted chronic conditions since arrival. A common thread throughout the interviews is exemplified by the woman who said:

> *Thank God, I've been in good health when I think about it. I've never had problems with my health, I've always been healthy. For a long time, I didn't go see a doctor in Canada because I didn't have the need to.*

Several did however note that the initial stress of immigration took a toll on their health in their first years in the country, as was found by Meadows et al., 2001 and Halli & Anchan, 2005. One woman said that because of the stress she felt upon arrival, she started losing vast quantities of her hair. Another said that she became bed ridden for the first month. Another woman said:

> *One thing I can say changed a lot is that my life became extremely stressful. The way we began to live was extremely stressful…So I think that is one of the reasons, that even if I did feel healthy back home, that was the reason I did not feel as healthy when I started living in Canada.*

Similarly, a woman said:

> *My employment and the stress associated with finding a job definitely had an effect on my health. I was very stressed.*

Of the women who said that they experienced great emotional stress upon arrival, two claimed that they believe these were triggers for the chronic conditions they were later diagnosed with, and others expressed that they believe that this increase in stress decreased their immunity, and led to allergies. One woman claimed that her once sensitive stomach led to a diagnosis of Crohn's disease whereas another said that the great stress led to Lupus. She said:

> *In 1997 I was diagnosed with Lupus. It is possible that I had that disease, but in a very mild form. It probably became more pronounced and more extreme because of the stress that I went through when I came to Canada.*

Many women also expressed that since they have come to Canada, they have had to deal with allergies, whereas these things had not manifested themselves in their country of birth. One woman said:

> *I think that what has changed in my life is that I have gotten allergies since I have come to Canada. A lot of Serbians get allergies when they come. I know tons of people that have gotten them since they have come here.*

Other than having to deal with initial stress at the beginning of immigration, several women also complained of current osteoporosis joint pain, or arthritis, with one woman saying:

> *When my knees hurt, I can't move. I have to stay in a lying position until the pain stops.*

Of the women that expressed that they were having long-term health problems or that they were seeing deterioration in their health however, they were quick to justify those problems and claim they were not related to their lifestyle in Canada. The woman who claimed that the stress of immigration had led to her diagnosis of Lupus, added:

> *But maybe my pregnancy was also to blame. They say that pregnancy and childbirth place a great strain on an individual's body, so perhaps, that made my once mild condition more pronounced.*

Most common was an understanding that the women were aging, and that in fact, they were all middle aged women who were bound to experience some health related problems. The woman who initially complained of aching knees later said:

> *Well you know what; I'm in menopause so I obviously have the problems that are associated with that. I also have arthritis, so I have so issues with my knees. I think that is tied to my age and my genetics.*

Another woman who claimed to have arthritis said:

> *I think these issues having nothing to do with the fact that I am an immigrant. They sort of appeared with age.*

Though the women were not pushed to express health holistically, in terms of both mental and physical aspects, many understood this and mentioned their mental health when asked about health in general. One woman said that she has had some issues related to mental health, but stressed, like many other women in the interviews, that this was not associated with immigration to Canada:

> *My mental issues are not related to immigration, but are more part of my personality because they were present when I was younger too.*

Another said:

> *I am in menopause and women my age are probably more likely to suffer from osteoporosis, mental problems. They change both mentally and physically*.

Of all the women interviewed, only one expressed that she was unhealthy, but she did not attribute this to immigration, and instead said that she was diagnosed with an illness when she was twenty-two years old. Of all the women interviewed, fourteen classified their health as good, despite the fact that some reported chronic conditions or health problems. Of the women who were currently suffering from chronic conditions, none of them attributed them to life in Canada, but both acknowledged that the initial signs of the disease were present in their home country. However, they did consider the great stress of immigration as a trigger for the current conditions. Of the women with minor conditions such as arthritis pain, they claimed that the reasons for this deterioration in health were age, and not immigration.

4.6 Smoking and alcohol consumption

Ten women reported smoking in their country or birth, but only one continues to do so. Twelve women reported drinking infrequently, with three saying they did not drink prior to immigration and continue not to do so, while the rest said that they only drink moderately on the weekend. One such woman said:

> *I don't drink throughout the week. When we go out for dinner I will usually order a glass of red wine. I can't drink more than that, because I can't function the next day if I do.*

4.7 Dietary patterns and determinants of diet

Of all the women interviewed, they claimed that their dietary patterns had not changed drastically since arrival to Canada:

> *Here, we have continued to prepare our traditional food, even though we have gotten much, much busier.*

> *We cook the same meals that we are used to eating back home. We buy products in Serbian food stores. We also go to a lot of markets so as to buy the most fresh food, the most fresh vegetables and fruit. We make sure we cook Serbian food. We didn't change our diet at all.*

All fifteen women said that they continued to cook Serbian cuisine, and that they had not adopted a more "Western" or "Canadian" diet. Three women also stressed that they had never eaten fast food in their lives. Of the women interviewed, they claimed that the change they had adopted was the implementation of healthier foods that would enrich the diet, and had cut out Serbian foods that they consider unhealthy or fatty. One woman said:

> *We never ate anything frozen, and we continue not to do so. Our diet has changed in fact that we now eat healthier food than we did.*

Another said:

> *I buy food in health food stores, I buy organic. We do not eat products with lactose, or anything modified. I also buy sour dough bread, and we only buy meat from the butcher.*

Yet another said:

> *I might add certain things to my diet now to improve it. For example, I've done research and found out that lemon and ginger are good for my joints.*

Of all the women interviewed, twelve expressed that they only buy organic food, with one woman stating that she has started a vegetable patch in her backyard from which she eats vegetables in the summer. The women said they kept their diet the same because this was what they were simply used to cooking, and because they found Western food unhealthy. Many conveyed that they do not find foodstuffs as healthy in Canada and they expressed a desire for the healthy food sold in former Yugoslavia:

> *When I went to Serbia this summer, the food was definitely not the same. It was much better tasting back home. I think the food in general is healthier too. Here there are so many genetically engineered foods, all the vegetables and fruit are bigger than they should be.*

> *It tasted better back home. Even the cattle there were given healthier food, and it was cleaner. Nothing was added to fruit and vegetables…Here, you add pesticides, you eat food out of season. There, you knew what you were eating. When you were eating a cherry, you really knew you were eating a cherry.*

Of all the women interviewed, all continued to cook a traditional Serbian cuisine, only adding foods or employing methods of preparation for a healthier diet. None of the women adopted a Western diet, and thirteen started buying organic food. A lot of women did however lament the healthy nature of the food in former Yugoslavia, claiming that the food is modified and contains a lot of pesticides in Canada. The healthy diets of these women can also be attributed in part to their high educational attainments. Research by Barker et al. (2009) in the UK has shown a link between higher education and quality of diet. Similarly, Kushi et al. (1988) found that educational attainment is positively associated with nutrient consumption.

4.8 Physical activity patterns and modes of transportation

Of all the women interviewed, one reported doing physical activity in former Yugoslavia, and most classified themselves as not being the "athletic type."

I am not the athletic type; I never did physical activity back home. Now, I am trying to change that by walking more, but that is a bad habit I have, and it is hard to change.

I am not the athletic type, I have never done sports, and I still don't.

Most women claimed that they have continued to be mostly sedentary, with several reporting that since moving to Canada, they have started to do some physical activity.

I go to the gym a few times a week, which is rare in Serbia, because the first gyms have only started opening up, and I take hot yoga classes every Sunday at 12.

I got to Pilates class once a week…. In Serbia, I did not do any physical activity.

Most women who reported low levels of physical activity, blamed their methods of transportation, claiming that they used to walk to work in the past, giving them the ability to be less sedentary. Several claimed that they did not have a driver's license until they came to Canada.

I move less. We [Serbians] all do less physical activity than we did back home. People go for walks more often back home. Now I drive to work, and I didn't when I worked closer to home. I used to take the subway, which meant I moved more. Now I've been driving for the past five to six years, and so for these past years, I have done a lot less physical activity. I walk to the car and from the car, that's it. I really have to make a serious effort to walk. I really like walking. But I feel stupid walking when my car is right in front of my house.

I would go to work on foot. Public transportation and cars were unnecessary. We lived in a smaller town than we do now.

Overall, most women said that they did not do physical activity prior to immigration and that they continue to be sedentary. Four women said that because they are aging, they have started to take classes or go to the gym. When asked why they are not more active, most said that the distances in Toronto, and their busy lives have meant that a lot of them drive to their various destinations and take less walks.

4.9 Social networks and social support

Women expressed a lack of social networks and feelings of loneliness when they first arrived in Canada:

> *When I got sick [in the first year] I felt like I had no one to help me, especially with my small child. Even my brother wasn't very helpful during that time. I panicked and felt very alone. Sarah[1] was three years old, and when I had a fever, I felt like there was no one around to help me.*
>
> *At the very beginning, I was sad about my lack of friends.*

However, they claimed that as time went on, they started having a larger friend network of other Serbian individuals or couples:

> *We have a lot of friends here. I met my friends on the airplane to Canada, and others I met because they were the parents of the kids Julia played with. For that reason, we interacted a lot, and I had people I could rely on during difficult times. One of the beauties of living here is being able to make so many new friends.*
>
> *I don't feel lonely or that we are alone. Our friends are our family here; we are very close in Canada. I can call lots of people; I can talk to my friends. That's for sure. If I needed something, they would be there for me.*

Of all the women interviewed, fourteen said that they go back to Serbia annually or every other year to see their family or friends.

> *We go [to Serbia] every year, and sometimes we go every other year.*

Women did however express that their busy lives and the stress in Canada make it difficult to keep friendships:

> *It is much harder to have and keep friends in Canada because everyone experiences stress, so they do not have as much time to socialize. However, it is like that in Serbia now too.*
>
> *Because I work on weekends too, it is hard to keep friendships. I also don't drive, so it is hard to associate with people.*

[1] Names have been changed to respect privacy.

Overall, women expressed that they had a large social network in Canada, and that consequently, this meant that they had a lot of individuals to rely on. Though some expressed the difficulty of keeping friendships due to the stress of the life in a new country, they nevertheless did not complain of loneliness. At the same time, fourteen women said they traveled back to see family and friends as regularly as once a year.

4.10 Access to a physician and medical services

Of all the women interviewed, all had a physician and access to healthcare services. Ten had a Serbian doctor, with two women being treated at the Toronto Lupus Clinic, and three had a doctor from outside of Europe.

> *We have a Serbian doctor. As soon as we came, we were taken on by that doctor, and she will remain our doctor until she retires.*

Of the women who now had a doctor who was not Serbian, their first doctor was Serbian, and this individual was the second person they were seeing in Canada. Women expressed that they were more comfortable with a Serbian doctor because they trusted his or her treatment methods and judgment more than that of a Canadian trained doctor. At the same time, being able to express themselves in Serbian was also important to the women. When asked why she decided to get a Serbian doctor, one woman said:

> *Primarily because of the language barrier. We didn't speak English, so we needed a Serbian doctor. She also has all our records, and she best understands what we have gone through all these years.*

Another said:

> *It is easier to explain to a Serbian doctor what hurts or what our problems are because we are able to explain it in our language.*

Another woman explained:

> *When my first doctor retired, I said that I wanted a new one that was close to our culture who will understand me, and who I can confide in.*

A woman who was seeing a physiotherapist to help her recover from nerve damage in her arm, also chose a woman who had previously been a physician in Serbia, and was now qualified as physiotherapist because of the trust she placed in Serbian-trained doctors. Women also reported staying with the same doctor for a very long time. The woman who had been in Canada for twenty-one years said that she had only ever had two doctors in Canada, switching them because the previous one had retired. Another woman claimed that she had had the same doctor for sixteen years.

All of the women with a Serbian doctor said that they had gotten access to this doctor through the referrals of other Serbian individuals:

> *When we came here, we didn't know any doctors, but one of our family acquaintances who already lived in Toronto was going to this doctor, so we went too.*
>
> *In the area that we first moved to, everyone was seeing Dr. Smith, so we went there too.*

In general, most women had a Serbian doctor to whom they had been referred by someone in the Serbian community. They expressed having a doctor of this background because they could speak the same language and they tended to trust an individual who was trained in former Yugoslavia more than a Canadian-trained doctor. The women also tended to stay with the doctor for a long time, and were referred to him or her by someone in the Serbian community.

The results show that almost all the women interviewed reported good health, despite some indicating the presence of chronic conditions. Those who expressed health concerns claimed that the initial signs were present prior to immigration, or that they were caused by age. Most women reported feeling healthy in their country of birth, and continued to feel healthy in Canada.

CHAPTER 5

5.1 Discussion and Conclusions

Results from the interviews demonstrate that the health status of these particular Serbian immigrant women did not deteriorate with extended residence in Canada. Fourteen women reported that their health was good prior to immigration, and that it continues to be with extended residence despite some reported conditions. This is similar to the results by Dean and Wilson (2010), who found that the majority of the participants in their study reported stable or improved health status since arrival to Canada. This underscores the importance of qualitative research on diverse sets of immigrant groups to Canada to really drill deeply into individual perceptions of their health and wellbeing. In this research, women with health conditions still reported good health because they expected some deterioration of health due to aging or symptoms they showed in their country of origin.

One factor explaining the good health status of the women interviewed is their socio-demographic profile. Of the participants, twelve women were married, all had a postsecondary education, and were employed- factors have been proven to lead to better health status (Newbold, 2005; Pottie et al., 2008). According to Braveman, Egerter & Williams (2011), more educated individuals have greater health knowledge and practice more health behaviours because they are better informed in terms of health decisions. At the same time, they claim that educated individuals are more likely to be employed and therefore earn higher wages, meaning that they are able to afford "health-promoting living conditions" (pg. 386) such as the healthy food that these particular interviewees said they were consuming.

This lack of deterioration can also be explained by the reported retention of prior health behaviours and lifestyle patterns, as well as contact with the Serbian community despite extended residence in Canada. This specific ethnic group continues to practice the health behaviours that resulted in good health prior to immigration. For example, all individuals in the group reported continuing to cook a "Serbian cuisine" and only adding foods to their diet if it meant that they were making their meals healthier. Ristovski-Slijepcevic et al. (2008) claim that "when individuals have a stronger cultural identity,

they have a healthier diet, whereas people who become accultured to the Western diet exhibit decreased health" (pg. 175). McDonald and Kennedy (2004) also found that residence in Canada is associated with weight gain and obesity except for large, close-knit communities, because:

> If a large and close-knit ethnic community is present in a local area, then opportunities for recent immigrants to maintain their connections to home country language and culture are greater, and opportunities and/or pressures to acculturate are less.

Other than retaining health-promoting behaviours, the women also reported having mostly Serbian friends they could rely on, and who helped them find resources such as a Serbian physician upon arrival. Research by Statistics Canada has found that immigrants rely on their social network to find resources upon settlement instead of on formal health and social service organizations (Statistics Canada, 2003). In this case, having close contact with other Serbian individuals meant that these women did not face the distress of settlement, but were instead sheltered in their community, referred to resources and received support. Interacting with these culturally similar individuals again allowed the women to come in contact with the health behaviours that they once employed in former Yugoslavia. Not only did life in Canada allow for retention of behaviours however, but most of the women also continued to have ties to their home country in that fourteen women said that they all visit family and friends in Bosnia, Serbia or Croatia annually. This ability to immigrate but still retain one's identity and cultural practices appears to be beneficial for health.

Thirteen of the fifteen women also said that they immigrated to Canada because of the war that was occurring in their home country, and as can be imagined, the danger of living in such a place. In turn, their lack of acculturation and retention of past behaviours can also be explained by the involuntary nature of the women's migration. In speaking about Ghanian refugees in Toronto, Barimah & Teijlingen (2008) show that involuntary migration leads to "lower levels of acculturation" (pg. 4). In this particular ethnic group, the women did not leave former Yugoslavia because they were unhappy with their lives there, but because they had to, and as such, they continued to live as they did prior to immigration.

Researchers have pointed to the fact that many immigrants experience a decline in their health because of language barriers in accessing health care (McDonald & Kennedy, 2004). However, Vissandjee et al. (2001) have said that when a patient and physician are matched according to ethnicity or cultural values, the patients' needs are better understood, because according to Asanin and Wilson (2008), Canadian-trained physicians and immigrants have "culturally different understandings" when it comes to health status (pg. 1277). In this particular research, thirteen women reported having a Serbian-trained doctor with whom they could speak in their native language and who employs the practices they trust from home. Not only are they able to fully explain any concerns they may have, they are also better able to understand treatment options. Because of this, it is possible that these women did not experience deterioration in health because they have been able to see a physician who fully understands them both culturally and linguistically. Furthermore, women spoke of the fact that close ties to other members of their community in the area that they were living in meant that they were immediately recommended to a proper health care professional upon arrival, and that they did not face advertent barriers to access. For this reason, it is probable that the women did not complain of unmet needs, because they were able to frequent an individual that was almost ideally matched immediately upon immigration.

One potential limitation of this study is the fact that it did not study a larger age cohort. It would be interesting to see whether the children of these immigrant women have become more adapted to their host country than their parents. Considering that many immigrant children came to Canada at a young age, research should examine whether they have undergone complete acculturation, and whether this had led to any health problems. At the same time, future research should examine whether the health status of these women is in fact a result of their socio-demographic and socio-economic profile. Work should be done on a different cohort in the Serbian community to test the hypotheses laid out here. This research has also shown that this particular ethnic group did not experience deterioration in their health status partly because of the level of social support and the level of retention of both cultural practices and health promoting behaviours in their community. Future research should focus on a group of immigrants

that does not have the level of support mentioned here to gauge whether their health status is affected, and whether these are the factors that lead to lack of deterioration.

Understanding whether life in Canada leads to deterioration in health status of individuals, and if so, what can be done to change this fact is important. This is because a decrease in health status "prevents newcomers from fully participating in society" (Dean & Wilson, 2009, pg. 1272), in turn not allowing the country to benefit from the skills and education for which immigrants came to Canada in the first place. At the same time, Statistics Canada says that Canada is "an attractive home to international migrants" because, among other things, its universal health system (ibid). However, if there is evidence that health declines upon several years of residence in Canada because of such things as inaccessibility to the healthcare system, it is questionable whether Canada will remain as attractive as it is made out to be, and what this will do to our levels of immigration, currently the sole factor of population increase. However, this work on the Serbian community in Toronto has shown that life in Canada does not lead to worse health outcomes in this specific ethnic group, partly because of the tight-knit nature of the community, the accessibility to a Serbian-trained doctor, and the retention of past health promoting behaviours. This work shows that life in Canada allows individuals to immigrate to a new country with great opportunities and freedoms, but still preserve their cultural identity and in this case, their good health status.

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