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(IN)VISIBLE MINORITIES IN CANADIAN HEALTH DATA AND RESEARCH

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**A Report Prepared for the Population Change and Lifecourse
Strategic Knowledge Cluster**

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KEY MESSAGES

Apparent Lack of Data and Research on Visible Minority Health

There appears to be a lack of data and research on the role of race or visible minority status on health in Canada. Consequently, researchers and policy makers cannot easily answer questions about visible minorities and health, such as: Are visible minority Canadians healthier or less healthy than their white counterparts? Do risk factors for health conditions differ for visible minority and white Canadians? And, how do different visible minority groups compare with one another on health outcomes and measures?

Project's Research Question: Are Visible Minorities *Invisible* in Canadian Health Data and Research?

Methodology and Research Questions

We conducted a scoping review of 99 studies or publications published between 1978 and 2014 (abstracts of 72 and full articles of 27) to summarize data and research findings on visible minority health to answer four specific questions:

1. What do we know about the morbidity and mortality patterns of visible minorities relative to white Canadians?
2. What do we know about the determinants of visible minority health?
3. What do we know about the health status of visible minority older adults (VMOA), a growing segment of Canada's aging population, and how does this compare with white older adults?
4. What data sources have been used to study visible minority health?

Five Key Findings

1. There is indeed a *major* gap in health data and research on visible minorities in Canada. We found just *five* studies that examined nationally representative data to compare visible minorities with whites on specific health conditions or behaviour.
2. Many studies failed to distinguish between immigrants and Canadian-born visible minorities, thus conflating effects of racial status with those of immigrant status on health. In these studies, the healthy immigrant effect may mask racial health inequities. There were just two studies that compared the health of Canadian-born and foreign-born visible minorities.
3. Visible minorities are often treated as a monolithic category, ignoring the diversity within this growing population, for example, differences by nativity, ethnic origin, and other characteristics.
4. The visible minority older adult population is even more invisible in health data and research.
5. The most promising dataset appears to be the Canadian Community Health Survey (CCHS).

Two Recommendations

Data Needs: There is a need for basic health data for visible minorities. Many current health surveys are severely limited by small sample sizes of visible minorities. We recommend oversampling visible minorities in standard health surveys such as the CCHS, or conducting targeted health surveys of visible minorities. Surveys should collect information on key socio-demographic characteristics such as nativity, ethnic origin, socioeconomic status, and age-at-arrival for immigrants.

Research Needs: The main obstacle for research on the health of visible minorities is the lack of data. If data were available, we recommend that researchers consider an intersectionality approach in their analyses. Intersectionality is a flexible holistic approach that takes into account the multiple factors that may affect a visible minority person's health, including the role of discrimination based on racial status, immigrant characteristics for foreign-born visible minorities, age and the role of ageism for older adults, socioeconomic status, gender (for visible minority women), and geographic place or residence.

EXECUTIVE SUMMARY

Introduction

Racial health disparities have been extensively documented in societies with racially diverse populations, such as the United States (Krieger et al., 2013; Nazroo, 2003; Williams and Collins, 1995; Williams and Sternthal, 2010). Such disparities may result from direct effects of discrimination or unequal treatment by healthcare providers, or indirectly through effects of race-related socioeconomic inequalities (including differences in health literacy, knowledge, lifestyles, and healthcare access). In Canada, there is extensive documentation of health disparities between First Nations or Aboriginal populations and other Canadians (see for example, publications from Health Canada, including the four-report series on *A Statistical Portrait on the Health of First Nations in Canada*, and *First Nations Comparable Health Indicators*). In contrast, there seems to be a lack of data and research on the role of race or visible minority status on health in Canada. Visible minorities include groups such as South Asians, Chinese, Latin Americans, and other groups other than Aboriginal peoples who are non-Caucasian in race or non-white in colour (Employment Equity Act).

Consequently, researchers and policy makers cannot easily answer questions about visible minorities and health, including:

- Are visible minority Canadians healthier or less healthy than their white counterparts?
- Do visible minority Canadians experience any differences accessing and receiving healthcare, compared with white Canadians?
- Do risk factors for poor health conditions differ for visible minority and white Canadians?
- How do different visible minority groups compare with one another on different health outcomes and measures?

The apparent lack of health information and research on Canada's visible minorities is surprising given the dramatic growth of this population in recent years. According to the 2011 National Household Survey (NHS), approximately 19%, or close to one-fifth, of the Canadian population are members of visible minority groups (Statistics Canada, 2013). This represents an increase from 16% in 2006 (Statistics Canada, 2010) and an estimated less than 2% in 1971 (Lee, 2011). Older visible minorities are also a growing part of Canada's aging population (persons aged 65 and older), increasing from about 2% in 1981 to over 7% in 2006 (Turcotte and Schellenberg, 2007).

Much of what we do know about visible minority health comes from research on immigrants, many of whom are members of visible minority groups (Edge and Newbold, 2013; Hyman and Jackson, 2010; Ng et al., 2005). However, not all visible minorities are immigrants. The 2011 NHS reports that 30% of visible minority persons are Canadian-born. Therefore, drawing conclusions about visible minority health from research on immigrants conflates the role of race with immigration-related factors on health. Visible minority immigrants differ from Canadian-born visible minorities in important ways, including official language proficiency, cultural backgrounds, and familiarity with Canadian society and institutions. In addition, apparent health advantages for visible minorities, such as lower mortality rates reported in some studies (Wilkins et al., 2008), are strongly affected by the high foreign-born composition of the visible minority population. As such, the well-known "healthy immigrant effect" may obscure health differences between visible minority and white Canadians.

Questions and Objectives

Given what appears to be an important gap in data and research on visible minorities and health in

Canada, the main question for this study is: Are visible minorities *invisible* in Canadian health data and research? Specifically, we want to know what data and research exist on visible minorities' health. Such information would be necessary to provide an accurate and comprehensive profile of the health of Canadians, and to assist health policy makers and healthcare providers to ensure that all Canadians are as healthy as possible.

To answer the main question, we address four specific sub-questions:

1. What do we know about the morbidity and mortality patterns of visible minorities, generally and in comparison with white Canadians?
2. What do we know about the determinants of visible minority health?
3. What do we know about the health status of visible minority older adults (VMOA), that is, those aged 65 and older? How does this compare with white older adults?
4. What data sources have been used to study visible minority health?

Based on answers to the above questions, we propose recommendations related to data and research on visible minority health in Canada.

Methodology

We chose the scoping review approach (Arksey et al., 2005; Armstrong et al., 2011) as the most appropriate and feasible method to achieve our objectives. The Canadian Institutes of Health Research (CIHR) defines scoping reviews as, "exploratory projects that systematically map the literature available on a topic" (CIHR, 2010). The time frame for the scoping review was from 1978 to 2014. We reviewed publications from four main health-related databases (Web of Science; PubMed; Science Direct; and CINAHL), and reports, press releases, and other documents from service, community, and research organizations, and government agencies (including Statistics Canada and Health Canada). A total of 99 studies or publications were identified for review. Of these, we reviewed abstracts for 72 and full articles for 27. Information from the scoping review was collated and charted to address the four specific sub-questions listed above.

Synthesis of Main Findings

While we reviewed a large number of publications, we note that only five examined nationally representative data to specifically compare visible minorities with white Canadians and just two distinguished between Canadian-born visible minorities and foreign-born visible minorities. In addition, because of data and methodological limitations, and differences in topics examined, findings are not easily comparable to provide a clear picture of visible minorities' health.

Mortality. As a group, visible minorities have a survival advantage over their white Canadian counterparts (Wilkins et al., 2008). Analysis of cause-specific mortality by ethnicity reveal, however, that South Asians are more susceptible to death from heart disease while Chinese have a moderate risk of death from cancer (Sheth et al., 1999). Visible minorities' lower mortality risk has been documented more extensively in studies where country/region of origin for the foreign-born is used to proxy ethnicity or visible minority status (Payne et al., 2002; DesMeules, et al., 2004). However, racial/ethnic differences in mortality in these studies may be suppressed owing to the "healthy immigrant effect".

Morbidity. Mental health appears to be better among visible minorities than white Canadians or the general Canadian population (Pahwa et al., 2012; Stafford et al., 2011; Wu et al., 2003). However, older visible minorities appear to have higher rates of depression (Lai, 2000) and are less likely to receive proper diagnosis for their mental health problems (McCleary et al., 2013). In terms of chronic diseases, national-level estimates indicate that visible minorities have a lower prevalence of diabetes,

hypertension, smoking, and obesity than whites. But provincial-level analyses reveal that visible minorities are at greater risk for diabetes than white Canadians (Alangh et al., 2013; Chiu et al., 2010; Nijar et al., 2010; Shah, 2013; Zdravkovic et al., 2004). Moreover, blacks and South Asians are more susceptible to hypertension (Leenan et al., 2008) and stroke (Chui et al., 2010) than whites.

Determinants of Visible Minority Health. The determinants of visible minority health include many well-known factors, such as socioeconomic status, culture (health-related norms, values, and beliefs), social support, immigrant status, health literacy, etc. The role of racialized identity and perceived discrimination has not been well examined, however, despite the fact that discrimination is a widely accepted social determinant of health (WHO, 2007). The few studies that have examined the role of discrimination in visible minority and/or immigrant health in some form suggest that discrimination is an importance mechanism that warrants further investigation (Veenstra, 2009; Oxman-Martinez et al., 2012).

Visible Minority Older Adults. Research on the health of VMOA was scarce. Where data were available, it was generally shown that VMOA have worse mental and self-rated health than either their white age counterparts or the general older adult population (Lai, 2004). Additionally, there are several barriers to accessing health and social care among VMOA, most notably language, cultural beliefs and practices, and immigrant status (Saldov and Chow, 1994; Ahmad et al., 2008; Weerasinghe and Numer, 2010).

Promising Datasets. Most of the data sources used in the studies we reviewed are cross-sectional surveys, some at the national level and others at the provincial or sub-provincial level. Among the datasets used by researchers to examine visible minority health, the Canadian Community Health Survey (CCHS) stands out as being the most promising.

Conclusions

There are four main conclusions.

- First, there is indeed a major gap in health data and research on visible minorities in Canada. We found just five studies (Fuller-Thomson & Brennenstuhl, 2000; Liu et al., 2010; Quan et al. 2006; Veenstra, 2009; Wu et al., 2004) that examined nationally representative data to compare visible minorities with whites on specific health conditions or behaviour.
- Second, many studies that reference visible minorities often failed to distinguish between immigrants and Canadian-born visible minorities, thus conflating effects of racial status with those of immigrants on health outcomes. There were only two studies that distinguished between Canadian-born visible minorities and visible minority immigrants (Islam, 2014; Sheth, 1999).
- Third, visible minorities are often treated as a monolithic category, ignoring the diversity within this growing population.
- Fourth, the particularly vulnerable visible minority older adult population is even more invisible in health data and research.

Recommendations

We propose two key recommendations:

1. ***Data Needs:*** There is a need for basic data on the health status of visible minorities. Such data should include important sociodemographic characteristics such as age, gender, ethnic origin, marital status, nativity, age at immigration for the foreign-born, education, income, and geographic place of residence. Information on health status includes general health, mental health, specific health conditions, risk behaviours (e.g., smoking, alcohol and other drug use), diet, exercise, and other health-related behaviours. Such data could be obtained by

oversampling visible minorities in standard health surveys such as the CCHS, or conducting targeted health surveys of visible minorities.

2. **Research Needs:** The main obstacle to research on the health of visible minorities is the lack of data. If data were available, we recommend that researchers consider an intersectionality approach in their analyses. Intersectionality is a flexible holistic approach that takes into account the multiple factors that may affect a visible minority individual's health, including the role of minority racial status, immigrant characteristics for foreign-born visible minorities, age and the role of ageism for older adults, gender (for visible minority women), and geographic place of residence.

INTRODUCTION

Canada has experienced a significant increase in its visible minority¹ population in the past decade. According to the 2011 National Household Survey (NHS), approximately 19% of the Canadian population is a member of a visible minority group (Statistics Canada, 2013), an increase from 13% in 2001 (Statistics Canada, 2008) and an estimated less than 2% in 1971 (Lee, 2011). Despite the demographic significance of this population, there is a surprising dearth of nationally representative health data on visible minorities. The lack of health data for the visible minority population is a major obstacle to research on visible minorities' health. Related to this is the paucity of health research on visible minority older adults (VMOA), a population that has increased from 2.3% of Canada's older population in 1981 to 7.2% in 2006 (Turcotte and Schellenberg, 2007). VMOA as a group may be especially vulnerable to health inequities due to the complex ways in which their lived experiences may reflect the intersection of multiple forms of discrimination, including ageism and racism.

This synthesis project is motivated by the apparent neglect of visible minorities in Canadian health data and research. The main question is: Are visible minorities *invisible* in Canadian health data and research? To address this question, we assess the nature, extent, and range of data and research available on the health and health care access of visible minorities in Canada. Specifically, we summarize: (1) mortality and morbidity patterns for visible minorities; (2) determinants of visible minority health; (3) health status and determinants of VMOA health; and (4) promising data sources that may be used to examine visible minority health in future research.

BACKGROUND AND CONTEXT

Visible Minority Health in Canada

Racial/ethnic health disparities are well documented in societies with relatively large and diverse ethno-cultural populations such as in the United States and the United Kingdom (Nazroo, 2003; Williams and Collins, 1995). In comparison, there is little research on such health disparities in Canada. With the exception of a few studies (e.g., Kopec et al., 2001; Veenstra, 2009; Wu & Schimmele, 2005; Wu et al., 2003), research on visible minority health has been based on small, often regional and ethno-specific convenience samples (Etowa et al., 2007; Noh and Kasper, 2003; Noh, Kasper and Wickrama, 2007). Consequently, national-level estimates of morbidity and mortality among visible minorities, alone or in comparison to the majority population of white Canadians, are limited.

Much of what is known about visible minority health comes from research on immigrants, many of whom are members of visible minority groups (Edge and Newbold, 2013; Hyman and Jackson, 2010; Ng et al., 2005). However, not all visible minorities are immigrants. The 2011 NHS reports that 30% of visible minority persons are Canadian-born (Statistics Canada, 2013). Therefore, drawing conclusions about visible minority health from research on immigrants conflates the role of race with immigration-related factors on health. Visible minority immigrants differ from Canadian-born visible minorities in important ways, including charter language proficiency, cultural backgrounds, and familiarity with Canadian society and institutions. Thus, conclusions about visible minority health—and racial/ethnic health disparities more generally—in Canada are often conflated with patterns and dynamics that pertain to immigrants.

¹ The Employment Equity Act defines visible minorities as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour". The visible minority population consists mainly of the following groups: Chinese, South Asian, Black, Arab, West Asian, Filipino, Southeast Asian, Latin American, Japanese and Korean (Statistics Canada, 2011).

More importantly, however, observed health advantages for visible minorities, such as lower mortality rates compared to whites (Wilkins et al., 2008), are affected by the high foreign-born composition of the visible minority population. As such, the well-known “healthy immigrant effect” may actually obscure health disadvantages that are rooted in racialization, the process by which markers such as skin colour and physical features are used to construct or define “races” as real, different, and unequal in socially, politically, and economically significant ways. This means that research is likely to underestimate any racial and ethnic health gaps in Canada.

Additionally, the relationship between discrimination, that is, the unequal treatment on the basis of social markers such as race, ethnicity, class, sexual orientation, age, etc. (Pettigrew and Taylor, 2000) and health among visible minorities in Canada is a neglected research area. This is not surprising given the lack of research on visible minority health in general. Such a knowledge gap needs to be addressed if researchers, health practitioners, and policy makers want to ensure that all Canadians have equal access to healthcare and high standard quality of care.

Discrimination is an internationally recognized social determinant of health (Williams and Sternthal, 2010; World Health Organization, 2007). It is believed that discrimination affects poor health through both direct and indirect pathways (Hyman, 2009). Stress stemming from experiences of interpersonal and/or institutional discrimination can weaken metabolic and immune systems over time, thereby making racialized persons more vulnerable to infection and disease (Williams et al., 2003). Likewise, discrimination-related stress can cause individuals to resort to negative coping strategies and health behaviours, which may, in turn, be harmful to their health (Geronimus, 1992). Indirectly, discrimination can influence health through other social determinants such as socioeconomic status (SES) by limiting educational and/or job opportunities (Krieger, 2003).

Research from the U.S. has documented links between racial discrimination and poor health for Asian Americans (Chae et al, 2008; Gee et al., 2009), African Americans (Clark et al., 1999; Kreiger et al., 2013), and Hispanics (Ryan et al., 2006; Viruell-Fuentes, Miranda and Abdulrahim, 2012). Canadian research, however, has yet to demonstrate such links between interpersonal and/or institutional discrimination and health among visible minority groups using population-based data. This is the case despite the fact that findings from small-scale studies of immigrants suggest that discrimination is an important social determinant of visible minority health in Canada. For example, a study of Korean immigrants in Toronto showed an association between perceived racial discrimination and depressive symptoms (Noh and Kasper, 2003; Noh et al., 2007).

Similarly, an emerging body of literature suggests that the health-related needs of visible minority older adults (VMOA) are diverse and experienced along multiple axes of inequity, including those related to race and ethnicity (Koehn, 2009; Zanchetta and Pourselami, 2006). Despite the rapid growth of the VMOA population in Canada, there is relatively little research on the health status of this population, let alone in comparison with white Canadians. Indeed, a National Advisory Council on Aging report (2005) has pointed out that aging-related policies and programs oftentimes treat the older adult population in Canada as a single, homogenous group, thus failing to account for the unique needs of VMOA and the challenges they may face with regard to income, health, and access to health and social care.

An increasing number of studies, for example, indicate that recent immigrant older adults, primarily from Asian source countries, are more likely to experience multiple barriers (some related to language and cultural differences) in accessing health and/or social services and challenges to mental and physical well-being (Gee, Kobayashi, and Prus, 2004; Kuo, Chong, and Joseph, 2008; Newbold and Filice, 2006; Northcott and Northcott, 2010). Some of these barriers stem from immigrants’ status as members of visible minority groups. Further, visible minority older adults who have aged in Canada are disadvantaged by the effects of lifelong intersecting experiences of economic and social discrimination rooted in racialization (Brotman, 2003; Forbat, 2004; Mullings, 2006).

METHODOLOGY

We conduct a scoping review to achieve the paper's objectives. The Canadian Institutes of Health Research (CIHR) defines such reviews as, "exploratory projects that systematically map the literature available on a topic" (Grimshaw, 2010, p. 34). Since scoping reviews aim to identify gaps in the literature and publish on those findings, researchers are increasingly viewing them as "a method in their own right" (Arksey et al. 2005, as cited in Koehn et al., 2013, p. 440). They are rapidly gaining credence as an effective way to collect and organize vital background information and to develop a picture of the existing evidence base (Armstrong et al., 2011). As a testimony to their increasing popularity, a total of 344 scoping studies were published from 1999 to October 2012 (Pham et al., 2014). A key distinction between scoping and systematic reviews is that for the former, information is generally culled from abstracts as opposed to full articles (Arksey and O'Malley, 2005). Also, since scoping reviews are primarily undertaken to 'map' or gauge the range of literature on a topic of interest, the quality of individual studies is typically not addressed (Levac et al., 2010).

We acknowledge that this strategy has its limitations since abstracts often only report main or salient findings and can leave out other results that were examined in the study. However, given the exploratory nature of our synthesis and limited budget, a scoping review was the best strategy. Also, in cases where abstracts were unavailable or where abstracts did not provide sufficient information, we examined the full article to determine the study's eligibility. Of the 99 eligible studies, we reviewed abstracts of 72 and full articles of 27 publications (further details are provided in the following sections).

We followed the following 5-step framework proposed by Arksey and O'Malley (2005) in our review:

1. Identify the research question
2. Identify relevant studies
3. Select and retrieve studies
4. Chart the data
5. Collate, summarize, and report results

Identifying the Research Question

The main question for this synthesis report is: Are visible minorities *invisible* in Canadian health data and research? We developed four sub-questions to guide the review process and answer the main question:

1. What do we know about the morbidity and mortality patterns of visible minorities, generally and in comparison with white Canadians?
2. What do we know about the distinct determinants of visible minority health?
3. What do we know about the health status of visible minority older adults (VMOA), that is, those aged 65 and older? How does this compare with white older adults?
4. What data sources have been used to study visible minority health?

Identification of Eligible Studies

Four health-related databases were used to identify abstracts from relevant publications on visible minority health in Canada. These were: Web of Science; PubMed; Science Direct; and CINAHL. We also drew on the 'grey literature' such as published reports from service and research organizations (e.g., the Multilingual Orientation Service Association for Immigrant Communities (MOSAIC), the South Asian Network Supporting Awareness and Research (SANSAR), and METROPOLIS, policy briefs and documents from government websites (e.g., Statistics Canada, the Conference Board of Canada, Health Canada, the Public Health Agency of Canada), and relevant refereed and non-refereed works referenced

in selected publications. Finally, Google Scholar was used to identify any relevant publications that we may have missed in our main searches.

Key search terms for the scoping review included: “Canad” (so as to include variations such as Canada, Canadians, Canadian, etc.); visible minorities; health; determinants; ethnicity; comparison; discrimination; whites; morbidity; mortality; heart disease; diabetes; cancer; and hypertension.

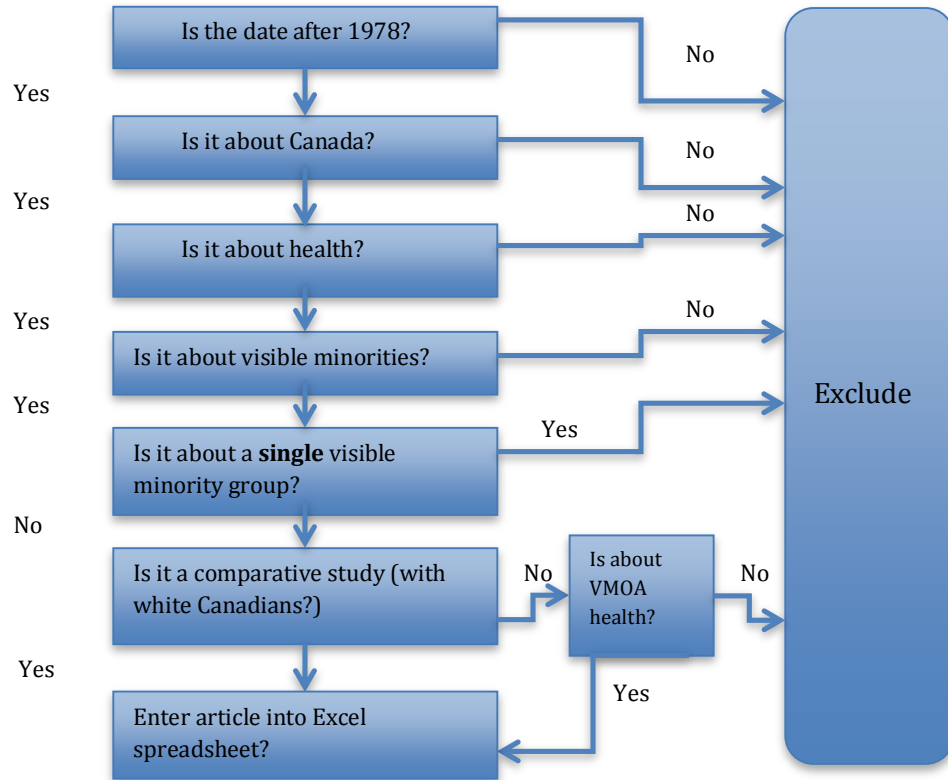
Studies that were not based in Canada were excluded, as were those studies that only examined the health of a single ethnic or immigrant group without an explicit comparison with white Canadians. However, given the limited availability of similar comparative studies on the health status of visible minority older adults (VMOA), we chose to include studies that examined VMOA health in general, and not necessarily in comparison with white Canadians. Also, the search was limited to studies published in English because the three largest visible minority groups, South Asians, Chinese, and Blacks tend to reside in Toronto and Vancouver, cities that are primarily English-speaking.²

We restricted the scoping review to studies published between 1978 and 2014. The late 1970’s are an important starting point for the review as it represents the period in which there were significant changes in the source countries of immigrants to Canada (Knowles, 2007). For example, the proportion of immigrants from Asia increased from approximately 12% in the 1960s to 39% in the late 1970s (representing an increase of approximately 27%). By the late 1980s, one half (51%) of all immigrants to Canada originated from Asia (Statistics Canada, 2009). This shift in the source of immigrants to Canada since the 1970s can be attributed to a number of factors, e.g., changes to Canada’s immigration policy to “build on social, humanitarian and economic goals”, and international events affecting the movements of migrants and refugees (*ibid.*). Despite the increased racial/ethnic diversity of Canada’s population, it was not until 1996 that the Canadian census included, for the first time, a question on visible minority status. Prior to this, statistics on the visible minority population were derived from responses to ethnic origin, place of birth, language, and religion. Using these characteristics, the ‘visible minority’ population was estimated at less than two percent at the time of the 1971 census (Lee, 2011).

In addition, a scoping review, according to Arksey and O’Malley (2005), is an iterative process that seeks to identify all relevant literature regardless of study design. Since the aim of our study was to create a typology of the available literature on the health and health status of visible minorities in Canada in order to “invite critical reflection” and to inform future research directions (Koehn et al., 2013, p. 441), we included both quantitative as well as qualitative studies in our search. Figure 1 shows the steps in the study retrieval process.

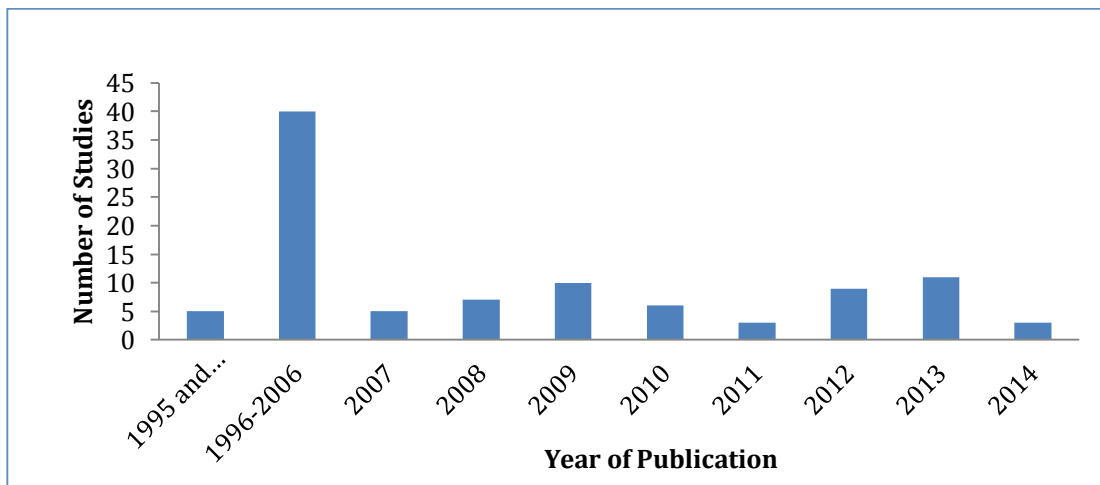
² There were two French-language studies that looked at visible minority health (see Nubicier and Charpentier, 2013; Bergeron et al., 2009); however, these were excluded for various reasons, including lack of French proficiency by the research team and the fact that the majority (84%) of visible minorities are Anglophone or Allophone (authors’ examination of 2011 NHS public use data). We recognize, however, that excluding French-language publications is a limitation of this study.

Figure 1. Preliminary Literature Search Process (Chart of Study Selection)



Our search resulted in a total of 99 eligible studies (scientific peer-reviewed and grey literature). Of these, five studies were published between 1978 and 1995 and 40 studies in the decade spanning 1996 and 2006. Fifty-four studies were published over the last seven years (2007 to 2014) (see Figure 2).

Figure 2. Results of Scoping Review (Timeline)



Charting, Collating and Summarizing Data

The characteristics of the 99 eligible studies—ascertained from the abstracts or full reports/articles where abstracts were unavailable—were entered into an Excel spreadsheet. Study characteristics identified for data entry and analysis included:

- a. Author (s)
- b. Year of publication
- c. Journal name
- d. Aims of study
- e. Methodology/Study design
- f. Findings
- g. Discussion and/or Recommendations

In keeping with the objectives of the scoping review, the selected studies were further classified by the data source used for analysis (e.g., nationally representative data; provincial data) and the target population (e.g., immigrant; Canadian-born visible minority; VMOA). In addition, the key findings from this review were categorized and summarized according to four topics: (1) visible minority mortality and morbidity; (2) determinants of visible minority health; (3) VMOA health status and determinants; and (4) datasets used (for quantitative studies).

FINDINGS

The literature search revealed that there is indeed a major gap in health data and research on visible minorities in Canada (see Table 1). We found just *five* studies (Fuller-Thomson and Brennenstuhl, 2000; Liu et al., 2010; Quan et al. 2006; Wu et al., 2003; Veenstra, 2009) that examined nationally representative data to compare visible minorities with whites on specific health conditions or behaviour. There were only *two* studies that distinguished between immigrant visible minorities from Canadian-born visible minorities (Islam, 2014; Sheth, 1999). In stark comparison, 40 studies focused only on the health of immigrant visible minorities. Thirty-five studies focused on some aspect of visible minority health using provincial data (e.g., data from the Ontario-based Institute for Clinical Evaluative Studies) or local, region-specific surveys (e.g., telephone surveys; face-to-face interviews).

The available literature on visible minority older adults (VMOA) is even more limited. Only *two* studies (Lai, 2004; Tjam and Hirdes, 2002) examined some aspect of VMOA (specifically, Chinese Canadian older adults) health in comparison with whites. Nine studies focused on some aspect of immigrant VMOA health. Most of these studies were qualitative, based on data collected via in-depth interviews and focus groups.

Table 1. Distribution of Studies

Description of Studies	Number of Studies (N)
Studies that focus on some aspect of health of visible minorities compared with whites, using national data	5
Studies that focus on some aspect of health of visible minorities, using provincial/local data	35
Studies that focus only on health of immigrant visible minorities	40
Studies with separate analysis of immigrant visible minorities and Canadian-born visible minorities	2
Studies that focus on some aspect of health of visible minority older adults compared with white older adults	2
Studies that focus only on health of immigrant visible minority older adults	9
Other publications	6

1) Mortality and Morbidity Patterns for Visible Minorities in Canada

Approximately 30% (N=30) of the eligible studies (both quantitative and qualitative) focus on mortality and morbidity patterns for visible minorities in Canada. Visible minority populations in these studies, however, are primarily foreign-born. As such, the authors treated the visible minority and immigrant populations as interchangeable samples and often used the terms ‘visible minority’ and ‘immigrant’ synonymously. This is an unfortunate and major limitation of the literature since processes and determinants related to immigrant health may not necessarily be applicable to visible minority health. Indeed, it is important to identify patterns *specific* to the visible minority population (both foreign and native-born) as a whole in order to: 1) address determinants of visible minority health; and 2) identify health service barriers that may be related to systemic racial/ethnic discrimination as opposed to migration-related dynamics, i.e., issues related to charter language ability and cultural differences.

Table 2 presents a summary of the studies that examined visible minority mortality and morbidity patterns. To briefly summarize, 14 studies examined mortality and morbidity in the visible minority population as a whole. With regard to separate visible minority groups, a total of 10 studies examined the health of South Asians, followed by Chinese (N=7) and blacks (N=5).

A finding that stood out in our search is that the health of South Asians is generally worse than white Canadians with regard to two specific diseases - diabetes and heart disease. This is particularly significant as South Asians are the fastest growing visible minority group in Canada, accounting for one-quarter (25%) of the total visible minority population and approximately 5% of Canada's total population in 2011 (Statistics Canada, 2013).

Table 2 summarizes studies that approximated the visible minority population by country/region of birth in the investigation of morbidity and mortality. Fifteen studies focused on the non-European population as a whole. Six studies were on those born in China, five on those originating from South Asia, one from East Asia, and one from Africa.

Table 2. Summary of the literature on visible minority morbidity and mortality relative to the white Canadian population*

	Total number of studies	Diabetes	Hypertension and Heart Disease	Mental health	Mortality
All Visible Minorities	14	- +	++	++ -	+++ - +
Select visible minority populations:					
Chinese	7	--	+++	+ -	
Black	5	-	-- +	+	
South Asian	12	--	--- =	++ -	
Select visible minority populations, as approximated by country/region of birth for foreign-born persons.					
(all) Non-European	15				
China	6				
South Asia	5				
East Asia	1				
Africa	1				

Notes.

- + indicates that visible minorities have better health than white Canadians.
- indicates that visible minorities have worse health than white Canadians.
- = indicates that visible minority and white Canadian populations are similar on health outcome.
- *numbers in the table do not add up because some studies examined more than one visible minority group and/or more than one health condition.

We present a more detailed overview of our findings below.

Mortality

The lack of information on race/ethnicity in Canadian vital statistics data (e.g., birth/death records) severely limits the ability of researchers to investigate the relationship between racialized status and mortality (Hyman and Wray, 2013). The current state of knowledge on mortality among visible minorities is primarily drawn from the Canadian Census Mortality Follow-up Study, 1991-2001, (CMFS), which tracked mortality among a 15% sample of the Canadian adult population who completed the 1991 census long-form questionnaire, a sample of about 2.7 million adults, with 260,000 reported deaths (Wilkins et al., 2008). Wilkins and colleagues’ (2008) analysis of the CMFS showed that visible minorities had lower age-standardized mortality rates (ASMRs) than whites. Further, compared with the Canadian-born population, mortality rates were substantially lower among immigrants, particularly recent immigrants. However, immigrants’ mortality advantage lessened as the number of years since immigration increased.

Three studies used the Canadian Mortality Database (CMDDB) to examine mortality among immigrants from different countries/regions of origin (Payne et al., 2002; DesMeules et al., 2004; Sheth et al., 1999). These studies are typical of a general trend in the literature wherein immigrants’ country/region of origin is often used (whether implicitly or explicitly) as a proxy for ethnicity and visible minority status. These studies generally show significantly lower mortality for immigrants than the Canadian-born population. For example, DesMeules and colleagues (2004) found that both European and non-European origin migrants had lower age standardized mortality than Canadian-born adults, suggesting that the “healthy immigrant effect” exists for both visible minority and white immigrants.

Similarly, Payne et al. (2002) compared mortality between groups of female immigrants and the female Canadian-born population and also concluded that female immigrants in general have a lower

mortality risk compared to Canadian-born women, particularly upon arrival.³ This advantage, however, diminished over time, rendering certain sub-groups such as refugee women more vulnerable; subgroup differences in sociodemographic characteristics account for some of the greater vulnerability of refugees. Compared with non-refugees, refugees had less formal education (31% non-refugee vs. 25% refugee with more than high school education) and were more likely to speak neither English nor French (45% vs. 86%). This study underscores the ways in which education and charter language proficiency may reflect socioeconomic status and therefore, its relationship to mortality in disadvantaged groups such as immigrant and refugee women.

Unlike the previous two studies that relied solely on immigrants' country/region of origin to proxy ethnicity, Sheth and colleagues (1999) used information on both last name and country of birth in the CMDDB to identify three distinct ethnic groups: European, South Asian, and Chinese Canadians. In addition, the ethnic groups analyzed in this study consisted of both immigrants and Canadian-born co-ethnics but without separate analyses by nativity. The authors determined that the rates of death from ischemic heart disease were highest among Canadians of South Asian and European origins, but were significantly lower among Canadians of Chinese origin. Rates of death from cancer were highest among Canadians of European origin, intermediate among those of Chinese origin, and lowest among those of South Asian origin. Death from cerebrovascular disease was relatively rare and did not vary much by ethnicity.

This study provided useful information on ethnic variation in cause-specific mortality. However, the reliance on last name and country of birth to identify ethnic group membership may have resulted in misclassification of individuals who have intermarried (and thus, last names may not necessarily correspond to ethnicity) as well as individuals for whom ethnicity is not tied to country of birth (e.g., whites born in African countries). The lack of separate analyses by nativity for each ethnic group is another shortcoming of the study, limiting our ability to distinguish between migration-related and ethnicity-specific effects. Further, what remains unknown is whether visible minority immigrants have a survival advantage relative to Canadian-born whites. The existing literature does not shed much light on this since there are only a handful of studies that distinguish the Canadian-born population by race/ethnicity or visible minority status.

One study (Khan and colleagues, 2008) attempted to depart from the conventional 'self-report' option to identify ethnicity. The authors used data from a prospective cohort study of patients admitted to three intensive care units (ICUs) in British Columbia between January 1999 and January 2006 to determine whether ethnicity influences survival for acute critical illnesses. The authors point out that although self-reporting is generally the optimal method for determining race/ethnicity, this is often not a feasible option in the ICU. The three patient race/ethnic categories (Asian, Aboriginal, European descent) in this study were, therefore, determined by prospective reviews of medical records by trained ICU nurses. The authors found that after adjusting for confounding factors, patients of Asian descent had significantly higher risks of mortality than patients of European descent. These findings, however, are not generalizable to the larger Asian or visible minority population given the small sample size.

Morbidity

Mental Health. There is limited information on rates of mental health issues and mental illness for different racial or ethnic groups in Canada. Estimates of visible minorities' mental health are primarily drawn from population-based surveys (e.g., CCHS), or smaller, non-representative quantitative

³ Although beyond the scope of this report, it is interesting to note that Payne et al. (2002) determined that mortality risk increased for certain subgroups of females such as refugees vs. non-refugees, those in Canada <5 years vs. 10+ years and refugee tax filers vs. non tax filers (suggesting that tax filing status may be a good proxy for socioeconomic status in some groups).

and qualitative studies. For example, Fuller-Thomson and Brennenstuhl (2000), using CCHS data, found significantly higher odds of depression for visible minorities than white respondents among individuals with epilepsy.

Stafford and colleagues (2011) also used the 2000-2001 CCHS to estimate variation in depression within and between health regions by immigrant and visible minority status. The authors found that immigrant and visible minority residents were less likely to experience depression compared with the general population. Immigrant concentration at the health region level was also protective against depression for visible minorities but not whites. Although the findings are useful and merit further investigation into neighborhood contextual effects, this study is, again, indicative of a general trend in the literature to conflate (unknowingly or intentionally) immigrant status with visible minority status, thereby limiting our ability to: 1) identify patterns that specifically pertain to the visible minority population (both foreign- and native-born) as a whole; and 2) to determine how diverse visible minority groups compare with one another on different health outcomes and measures.

A few studies attempted to disaggregate within group differences in mental health status by ethnicity. These studies provided some insights into the mental health status of South Asians, Chinese and black Canadians. South Asian women, but not men, appear to have lower rates of depression compared to women of British ancestry (Pahwa et al., 2012). Similarly, Wu et al. (2003) investigated the differences in mental distress of 12 ethnic groups using data from the 1996/97 NPHS. The authors found that Canadians belonging to East and Southeast Asian, South Asian, Chinese and black ethnic groups had a lower risk of depression compared to British Canadians. South Asian older adults with dementia were less likely than 'mainstream' (that is, white) Canadians to receive proper diagnosis for their mental illness due to lack of information/misinformation and stigma (McCleary et al., 2013). Among Chinese Canadians, depressive symptoms for Chinese seniors are almost twice that of the estimated prevalence among the older adult population in general (Lai, 2000).

Hypertension and Heart Disease. In their study on the prevalence of heart disease among adults in Ontario, Leenan et al. (2008) reported that hypertension was more common among black Canadians and those of South Asian descent than among white Canadians. Further, hypertension was also associated with higher body mass index in these two groups.

Chui et al. (2010) used pooled data from the CCHS and NPHS, to analyze cardiovascular risk among whites, South Asians, Chinese and blacks in Ontario. Compared to whites, rates of heart disease were low for Chinese and blacks (3.1% and 3.4% respectively) but high for South Asians (approximately 5%). The prevalence of stroke was lower for Chinese than whites (0.6% vs. 1.1%). In contrast, blacks and South Asians had higher rates of stroke relative to whites (1.3% and 1.7% vs. 1.1%, respectively).

Cunningham and colleagues (2014) attribute the high prevalence of heart disease among certain ethnic groups to low levels of health literacy and lack of knowledge about heart disease. In their telephone survey of hypertension knowledge among Chinese, South Asians of Indian origin and white Canadians in Calgary, the authors concluded that, compared to whites, Chinese and Asian Indians displayed limited knowledge about hypertension risk factors, long-term consequences of hypertension and anti-hypertensive medication adherence. For example, Chinese respondents were less likely than whites to know that high blood pressure can cause heart attacks. Likewise, Asian Indian respondents were less likely than whites to know that losing weight can cause decreases in blood pressure.

The findings from the above studies are specific to the visible minority population at the provincial level. At the national level, Liu et al. (2010) examined the prevalence of cardiovascular risk factors in the visible minority population using three cycles of the CCHS. The authors found that visible minorities had a lower prevalence of diabetes, hypertension, smoking, and obesity than whites. However, rates of physical inactivity were much higher among visible minorities than whites.

Diabetes. Based on five studies that examined diabetes in select provinces, it appears that visible minorities are at greater risk for diabetes than white Canadians. Shah's (2013) analysis of several

data sources including the CCHS; last names from telephone directories; and patients' charts from offices of physicians, revealed that the incidence of diabetes has increased among many visible minority groups, including Chinese Canadians. Likewise, Alangh et al. (2013) determined that diabetes increased much more rapidly between 1996 and 2005 in the Chinese population in Ontario than in the European population. In 1996, the incidence of diabetes was approximately 8 cases per 1,000 person-years for whites and a little over 1 per 1,000 person-years for the Chinese. By 2005, the rate for whites had increased to approximately 10 (about 25 times higher than it had been in 1996) while the rate for the Chinese was around 20, about 15 times higher than the 1996 estimate. Self-reported diabetes in Ontario is also higher for South Asians and blacks than white Canadians (Chiu et al., 2010). Children of South and Southeast Asian descent in Toronto also appear to be at an increased risk for Type 2 diabetes (Zdravkovic et al., 2004).

Finally, research based on hospital administrative data from British Columbia and Alberta (Calgary) showed significantly worse prognosis following hospitalization for acute myocardial infarction (AMI) among South Asian than white patients with diabetes (Nijar et al., 2010). Nonetheless, South Asian patients with diabetes did not have a significantly higher long-term *risk* of developing cardiovascular disease than white patients with diabetes.

2) Determinants of Visible Minority Health

Findings from the scoping review indicate that the determinants of visible minority health include many well-known factors, such as socioeconomic status (Dunn and Dyke, 2000; Lofters et al., 2011, Auger et al., 2008), culture (Baker, 2007; Preyde, 2007), social support (Reitmanova and Gustafson, 2009), immigrant status (Koehn, 2009; Frisby, 2009; Koehn et al., 2011), health literacy (Choi and Smith, 2008; Omariba, 2011), education (Wilson and Dean, 2009; Shankar et al., 2013), linguistic proficiency (Fryer et al., 2012; Ng et al., 2014), neighborhood contextual effects (Omariba, 2010; Stafford et al., 2011), gender (Reuben et al., 2002; Ahmad et al., 2008; Grewal, 2004; Weerasinghe and Numer, 2008; Weerasinghe, 2012), and age (Lai 2004; Kinch and Jakubec, 2005). In addition to these well-known sociodemographic and sociocultural factors, the role of racialized identity and perceived discrimination and their relationship to health status is particularly important for visible minorities, as discussed below.

Discrimination as a Determinant of Health

Discrimination is a widely accepted social determinant of health (WHO, 2007). In Canada, there is evidence that visible minorities experience both interpersonal and systematic discrimination. According to the 2009 General Social Survey (GSS) one-quarter of visible minorities and 13% of non-visible minorities in Canada reported discrimination or unfair treatment during the five years preceding the survey (Chui and Meheux, 2011). This represents a slight increase in perceived discrimination from the levels observed in the 2002 Ethnic Diversity Survey (Statistics Canada, 2003) where one in five visible minorities reported discrimination or unfair treatment. In both the GSS and Ethnic Diversity Survey, "ethnicity or culture" and "race or colour" were the most common reasons underlying visible minorities' perceived discrimination.

Discrimination and Health. The link between discrimination and poor health outcomes for visible minorities has not been well examined in Canada. Among the eligible studies we reviewed, only 9% (N=9) examined the role of discrimination in visible minority and/or immigrant health in some form. De Maio and Kemp's (2010, as cited in de Maio, 2010) analysis of perceived discrimination and self-reported health, based on data from the Longitudinal Survey of Immigrants to Canada (LSIC), revealed that that visible minorities who experienced discrimination or unfair treatment were more likely to experience a decline in self-reported health status than whites. These experiences of discrimination, they go on to argue, were most likely to result in worsening self-reported mental health for visible

minorities.

Using information collected through semi-structured interviews with visible minority taxi drivers in Toronto, Facey (2003) concluded that factors such as racism and/or discrimination, immigrant status, language barriers, and lack of 'Canadian work experience' resulted in fatigue, economic exploitation, and engagement in risky behaviors on the job for participants in the study.

In addition, Oxman-Martinez and colleagues (2012), using data from the New Canadian Children and Youth Study, found that among children aged 11-13 who immigrated from the People's Republic of China (PRC), the Philippines, and Hong Kong, and who lived in Montreal and Toronto, perceived that ethnic discrimination and social exclusion adversely affected psychosocial functioning for some ethnic groups. The authors found, for example, that compared to immigrant children from the PRC, children from Hong Kong were more likely to report perceived discrimination by teachers and display psychological isolation. This sense of isolation, the authors maintained, may increase the likelihood of poor psychosocial functioning and academic performance in immigrant children.

Similarly, Veenstra (2009), in his analysis of 2003 CCHS data, provided valuable insights into the notion of 'racialized identity' by highlighting how even after controlling for gender, immigrant status and age, "no racial/cultural identifications corresponded with significantly better health outcomes than those reported by survey respondents identifying as White" (p. 538). He suggests that experiences of racism and discrimination may explain part of the health disparities by racial/cultural identification.

Discrimination and access to health services. Experiences of discrimination may also extend to the provision of, and access to, health services and institutional settings. In a qualitative study on health care consumers, Spitzer (2004) discovered that visible minority women who had given birth in institutions undergoing healthcare reform were subjected to discrimination as "their bodies were read by nurses as potentially problematic and time consuming" (p. 490). Relatedly, Bierman et al. (2012, as cited in Hyman and Wray, 2013), in an Ontario women's health equity report discuss how certain racialized groups may face longer waiting times in order to receive primary care for urgent, non-emergency conditions. The authors also found that adults who did not speak English or French at home were less likely to be satisfied with their experience of getting an appointment for a regular check-up than those who spoke only English or French. South Asian and Arab women, in particular, reported difficulties accessing care to monitor health problems as compared to less than one in five white women.

These studies suggest that racial discrimination affects the health of visible minorities in Canada. And yet, there is limited nationally representative data that would enable researchers to effectively establish stronger empirical links between discrimination and health. In addition, researchers using the available data often end up conflating immigrant status and visible minority status. But as De Maio (2010) has argued, ethnicity should be conceptualized as an important component of immigrant health that may have independent effects on health above and beyond immigration-related factors. Research that does not take race or ethnicity into account may underestimate health disparities between vulnerable populations and white Canadians. Indeed, Rodney and Copeland's (2009) study on the health status of black Canadians underscores the importance of collecting and reporting data on race and ethnicity in public health and biomedical research in Canada. The authors noted that whenever data on race and ethnic categories are reported, disparities are observed, and therefore, the lack of racial and ethnic data misses vital information on racial health inequities.

In another example, results from Quan et al.'s study indicated that visible minorities were less likely to use cancer-screening services than whites. Amankwah and colleagues (2009) investigated the participation of visible minority women in cervical cancer screening and found that visible minority women were more likely to have never had a Pap test. This was particularly true for recent immigrants to Canada who did not have a regular physician, and therefore, had the highest risk of not having a Pap

test. The findings from these studies suggest that the prevalence and incidence of chronic diseases such as cancer in visible minorities may be underestimated, and that there is an urgent need to further investigate the socio-demographic factors that might intersect to produce health inequities in the visible minority population.

Veenstra (2009) has also pointed out that “some of the unexplained health disparities by racial/cultural identification...reflect the wear and tear of experiences of racism and discrimination in regular encounters with societal institutions and in everyday life, a premise that demands further investigation in the Canadian context” (p. 542).

3) Health of the VMOA Population

Of the 99 studies reviewed, only 16% (N=16) discussed the health status and/or determinants of health for VMOA in general.

Mental Health

There is very limited information on the mental health status of VMOA in Canada. Three decades ago, Havens and Chappell (1983), using data from the 1971 Aging in Manitoba study noted that ‘triple jeopardy’ (in the context of age, sex, and ethnicity) was evident in the mental health functioning of visible minority women aged 65 years and older. More recently, Spence and Koehn (2010), in community consultations with Punjabi seniors in the province of British Columbia added racism, poverty, immigrant status, language barriers, and economic and physical dependence on sponsors to the list of potential determinants of visible minority older adults’ mental health. The authors found that depression was a “substantial but hidden problem” among immigrant Punjabi seniors. Using data from the Canadian Multicentre Osteoporosis Study which published the Medical Outcomes Study 36-Item Short form (SF-36) scores, Lai (2004) found that although Chinese Canadian older adults reported better overall physical health than all other older adults in the population, interventions are still needed to address the poor mental health status in this vulnerable group.

Self-rated Health

The available literature on self-rated health of VMOA is primarily limited to immigrant older adults. Turcotte and Schellenberg (2007) found that contrary to their younger counterparts, recently immigrated older adults report less positive health than non-immigrant older adults. Only 28% of immigrant older adults who settled in Canada between 1981 and 2003 rated their health as either excellent or very good in 2003, whereas 38% of Canadian-born older adults and 36% of long-term immigrant older adults who had landed in Canada before 1981 reported positive health.

In his analysis of neighbourhood effects on self-rated health among older adults, Omariba (2010), using three cycles from the CCHS and the 2001 Census, concluded that individual-level characteristics such as involvement in physical activity, income, education, sense of belonging to the community, alcohol consumption, etc., had a stronger effect on self-rated health than neighborhood-level characteristics. Forbes (2001), using data from the 1994/1995 National Population Health Survey (NPHS), underscored the importance of enhancing individual-level characteristics such as ‘mastery’ and ‘Sense of Coherence’ among older adults in order to better meet their health-related needs. Indeed, Collins and Benedict (2006) have suggested that the idea of ‘mastery’, or an individual’s belief that his/her choices and actions influence outcomes in his/her later life (p. 45), is positively related to self-efficacy and self-evaluations of health in vulnerable populations such as VMOA.

Access to Health Care Services.

Our search of the literature revealed that there are several barriers to accessing health and social care among VMOA, most notably language, cultural beliefs and practices, and immigrant status.

Language Barriers. Language is a significant barrier that constrains access to services. Saldov and Chow (1994) in their study on language and other communication issues that older ethnic adults face in Toronto hospitals and long-term care facilities determined that ethnic older adults experience 'double jeopardy' when they enter a health care setting given their poor health status and limited linguistic proficiency in a charter language. In a comparative study on provision of social services to older adults in Montreal, MacLean and colleagues (1987) found that while older adults belonging to the French-Canadian, English-Canadian, and Portuguese communities appeared to benefit from complete access to services, older Chinese Canadians were deprived of several services due to limited availability of native/first language resources. In addition, Poureslami et al. (2012) and Fryer and colleagues (2012) have noted that limited health literacy on chronic conditions such as asthma in VMOA or on health and safety issues such as falls risks and falls prevention can be largely attributed to language barriers and difficulty in understanding the available information.

Role of Cultural Beliefs and Practices. Language barriers are often exacerbated by the influences of cultural beliefs and practices. Several qualitative studies have examined the role of culture in shaping perceptions around health and illness in VMOA, and their access to health services. Grewal et al. (2004) for example, have pointed out that the comparatively lower rates of participation in cervical cancer screening among older South Asian immigrant women in Canada can be largely attributed to the women's holistic views on health.

Ahmad and her colleagues (2008) concluded that given the 'collectivistic' orientation of certain ethnocultural groups, an ambiguity of boundaries exists between one's own health and the health of close family members, resulting in a situation where older visible minority women place their own health needs last.

In their comprehensive review of the existing literature on the barriers and facilitators to exercise and physical activity uptake among VMOA, Horne and Tierney (2012) reported that becoming less active is often depicted as a normal part of aging in some visible minority communities, an attitude which is often compounded by a fatalistic approach towards health and illness. In addition, psychosocial factors such as the stigma attached to cancer as an 'untreatable' disease may act as an additional barrier to access among VMOA (Choudhury et al., 1998). As Lai and Surood (2013) have also noted, VMOA patients are more likely to deny health problems because of the stigma related to disease and illness, particularly mental health issues.

This ambivalence around disease and illness extends to dementia. McCleary (2013) and colleagues, in their qualitative study on pathways to dementia diagnosis among South Asian older adults, found that even after a diagnosis, some participants continued to believe that the dementia symptoms were 'normal'. Help seeking was delayed up to four years, even with significant dementia symptoms.

Several studies underscore the importance of cultural competence and cultural sensitivity in order to fully appreciate the complexities around the health of VMOA populations, and the barriers to access to available support services. Fong (1985) pointed out that health care practitioners need to be culturally sensitive when dealing with VMOA clients, as many 'mainstream' care providers often believe their own professional healthcare models are superior. A lack of culturally sensitive health care policies and programs and limited care provider training on appropriate care practices may result in culturally incongruent referrals by health practitioners.

In their comparative study, Tjam and Hirdes (2002) found that stereotypical assumptions on the part of health care practitioners, e.g., 'whites' are higher users of Western medicine as opposed to 'non-whites' who tend to rely on Complementary and Alternative Medicine, are a "gross aggregation" (p. 31) that fails to take into consideration the complexities inherent in such behaviours.

Immigrant Status and Related Other Markers of Identity. The literature suggests that immigrant status is an important determinant of VMOA health. In their qualitative study, Weerasinghe and Numer

(2010) found that lifestyle events such as gender segregation and patriarchal protection in the early years in a country of origin may prevent VMOA women from effectively engaging with available health and social care services that do not align well with internalized traditional and cultural norms.

Koehn (2009) pointed out that for those VMOA who immigrated in mid- to later-life, and who co-reside with their sponsors (usually adult children), social isolation and a sense of indebtedness may encourage them to downplay their symptoms in an effort to remain inconspicuous and to not be a burden to their children.

In addition to language, cultural beliefs and practices, and immigrant status, Kinch and Jakubec (2004) in their qualitative study on immigrant, First Nations, Japanese-Canadian women and those involved in community and social clubs, identified several other factors that may prevent the optimal uptake of available services. The authors pointed out, for example, that the health care experiences of their participants were shaped to a large extent by income and poverty, a phenomenon the authors refer to as the “multiple margins” that constrain access to formal health care services.

Experiences of discrimination may also be more pronounced among visible minority older adults (VMOA). Research indicates that compared to their younger counterparts, VMOA face significantly more challenges and barriers to accessing health care services and are generally considered more vulnerable (Koehn, 2009).

As is the case with visible minority Canadians as a whole, the issue of access and uptake of available health care services among VMOA is, once again, compounded by the relative absence of data on service use. Majumdar and colleagues (1995) have strongly recommended that a system of ethno-cultural data collection be constructed in order to accurately gauge the level of service use among VMOA. Such a system is required to better meet the needs of this vulnerable group.

4) Promising Datasets

Figure 3 presents a distribution of the data sources used in the studies we reviewed. Most of the data sources are cross-sectional surveys, including the Canadian Community Health Survey (CCHS). One-quarter of the studies used data from the various cycles of the CCHS (N=26); 12% used Canadian Census data (N=12); 11% used data from provincial surveys (N=11);⁴ 9% used data from small, cross-sectional surveys (N=9); 8% utilized the various cycles of the National Population Health Survey (NPHS: N=8); and approximately 6% used data from the Longitudinal Survey of Immigrants to Canada (LSIC: N=6). Eleven studies used other nationally representative surveys or administrative databases.⁵ Thirteen percent (N=13) of the studies were qualitative and relied on non-probability samples and data collected through in-depth interviews and focus groups.

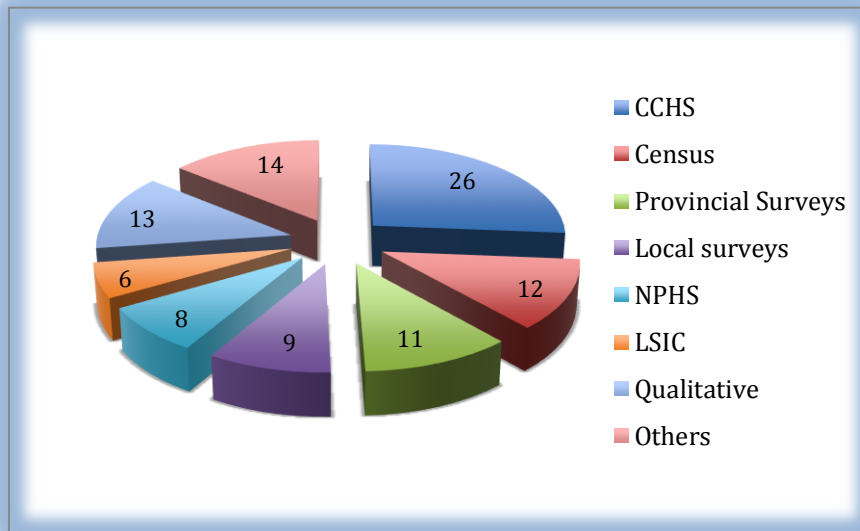
An important limitation of almost all the datasets is the problem of small sample sizes of visible minorities. Researchers are unable to compare different visible minority groups by nativity, ethnic

⁴ Provincial sources included: the Institute for Clinical Evaluative Sciences Survey in Ontario; Ontario Familial Breast Cancer Registry; Ontario’s Reportable Disease Surveillance Database; Quebec’s Worker Compensation Board; Fee and Lab Code Claims in Ontario; survey of CEO’s and consumer board members of Ontario hospitals and community health centres; Ontario Health Survey; Provincial Live Birth Registration data; and the Aging in Manitoba study.

⁵ These included: The National Survey of Children and Youth (N=1); the New Canadian Children and Youth Study (N=1); the 2009 General Social Survey (N=1); the Canadian Vital Statistics Database (N=1); the 2003 International Adult Literacy and Skills Survey (N=1); SF-36 (N=1); the Permanent Resident Database (N=1); the Health and Activity Limitation Survey (N=1); the Canadian Mortality Database (N=2); and the National Pollutant Disease Inventory (N=1).

origin, and other important characteristics such as marital status, education, and income, and with the majority population of white Canadians.

Figure 3. Data Sources



Of the datasets used by researchers to examine visible minority health to date, the CCHS stands out as one of the most promising. The CCHS is a cross-sectional national survey that contains health-related data (e.g., health status, healthcare utilization) at the sub-provincial level for individuals aged 12 and older (Statistics Canada, 2014a). The extensive set of variables pertaining to lifestyle and social conditions in the CCHS also make it ideal for exploring the social factors underlying racial/ethnic health disparities. Data are available since 2001, with biannual samples for 2001, 2003 and 2005 and yearly samples since 2007. It is possible to increase the sample size of the visible minority population by pooling across multiple years of CCHS data. Pooled CCHS data may be especially useful for analyzing the health of select, and relatively large, visible minority subgroups such as Chinese, blacks, Filipinos, and South Asians.

However, annual cross-sectional surveys such as the CCHS are not designed to be pooled to produce an apparent single-year survey. Exercising caution is particularly necessary for interpreting age and period related effects when using pooled data.

A limitation of cross-sectional data is that changes in health cannot be assessed. Longitudinal data, such as the Canadian Mortality Follow-up Study (1991-2001), therefore, are particularly useful for examining changes in health over time. Indeed, Hyman and Wray (2013) have recently pointed out that longitudinal data more appropriately capture the “rates of transition to poor health” (p. 7) in racialized groups in comparison to whites. A key limitation of this database is that it only contains information on mortality and not health status or morbidity.

There are only two national-level longitudinal surveys that could be utilized to assess visible minority health status and morbidity: the Longitudinal Survey of Immigrants to Canada (LSIC) and the National Population Health Survey (NPHS). Both have their limitations. The LSIC is limited to recent immigrants to Canada and therefore cannot provide information on Canadian-born visible minority health. The NPHS has a longitudinal core sample that could be used to assess changes in health over

time. However, the NPHS does not have large enough sample sizes of visible minorities to perform meaningful subgroup analyses. Another unfortunate development is that the NPHS has been decommissioned and therefore cannot provide updated information about visible minority health.

One promising strategy for increasing health data on the visible minority population is to link existing administrative databases and surveys. This strategy is being pursued by government agencies already (e.g., Statistics Canada). It is also being implemented by independent research organizations, such as the Institute for Clinical Evaluative Studies (ICES) in Toronto. For example, through federal and provincial government agreements, ICES has been able to link the CCHS, which collects information on self-reported ethnicity to Ontario health administration data. However, administrative data linkages are costly and provinces may differ in terms of the nature and extent of data sharing and linkage allowed, and the level of access to data provided to researchers. While these data are invaluable for provincial-level analyses, they cannot address national-level research questions.

DISCUSSION AND CONCLUSIONS

This report presents findings from a scoping review of the literature on whether visible minorities are invisible in health data and research in Canada. The exploratory approach of a scoping review allows us to achieve four objectives: (1) identify the morbidity and mortality patterns of visible minorities in Canada; (2) identify and discuss the determinants of visible minority health; (3) discuss the status of health data and research on visible minority older adults (VMOA); and (4) identify promising datasets that researchers can use to examine the health of visible minorities in future research.

Limitations

While a scoping review allows us to achieve our objectives, we note several limitations of this report. First, as was stated previously, a potential limitation is that primarily abstracts of the selected studies were analyzed. This may have imposed limits on the conclusions drawn about the study. However, as Koehn et al. (2013) have pointed out, abstracts are an important unit to consider in scoping reviews as their “content often determines whether the reader goes on to retrieve the full article” (p. 441).

In addition, unlike systematic reviews, scoping reviews do not address issues of study quality (Levac et al. 2010). With regard to this review, it could be argued that a scoping review was chosen since the primary purpose of the literature search was to document or ‘map’ the available research on the health status of visible minorities in Canada in comparison to white Canadians. Given time and budget constraints, a scoping review was suitable for producing a snapshot of the existing literature without time-consuming quality assessments or extensive data synthesis (Armstrong et al., 2011). The structured approach of this review can, in fact, be used as a resource by researchers, policy-makers and practitioners to inform a future systematic review on the health status of visible minorities in Canada (ibid.).

We conclude by highlighting four main findings from the scoping review and proposing two recommendations.

Finding #1: Lack of Data for Visible Minority Health Research

A key finding of this synthesis report is the lack of data for research on visible minorities’ health. Insufficient numbers of visible minorities in nationally representative surveys and lack of information on both nativity and visible minority status are some of the main data problems identified in the review.

Finding #2: Conflation of Visible Minority and Immigrant Health Data and Research

Mainly because of the lack of data and research targeting the visible minority population, this review underscores the need to separate out patterns of visible minority health from those of immigrants to Canada in order to acquire a better understanding of the health status of the visible

minority population in Canada. Indeed, our findings suggest that the “healthy immigrant effect” may obscure health inequities that are rooted in racialization. We also found that data on the mortality and morbidity patterns of visible minorities in Canada are extremely limited, and that what is available, are once again conflated with the health status of immigrants.

Finding #3: Neglect of VMOA Population in Health Data and Research on Canada’s Aging Population

A similar pattern emerges with the limited availability of literature on the health status of the vulnerable and often marginalized visible minority older adult population in Canada. Our review suggests that there are few Canadian data sources that allow for the examination of health disparities in the VMOA population that are based on diverse and intersecting markers of inequality, such as ethnicity, gender, age, immigrant status, income, and language in general, let alone in comparison with white Canadians.

Finding #4: Limited Recognition of Heterogeneity in Visible Minority Population

The visible minority category represents a highly heterogeneous population with distinct migration and social histories (Pendakur and Pendakur, 1998). Our review revealed a tendency to aggregate visible minority status into a ‘homogenous whole’ in health research, and the heterogeneity within this population group is largely unaccounted for. ‘South Asian’, for example, is a broad category encompassing people originating from a geographical region in Asia, comprising nine countries from the Indian subcontinent: Afghanistan; Bangladesh; Bhutan; India; Iran; Maldives; Nepal; Pakistan; and Sri Lanka. What the literature often tends to overlook, however, is that there are significant social, cultural, political, and economic differences both between and within these countries.

Shakir (1995) makes an important point in this regard: “‘South Asian-ness’, is a political expression that should be used not to homogenize the diversity and heterogeneity of South Asians but rather to construct an identity that should be meaningful within the Canadian context” (p. 6). Similarly, Patel (2006) has highlighted the fact that broad labels, such as “South Asian”, “East Indian”, or “Indo-Canadian” mask the reality of the diverse ethno-cultural, socioeconomic, and other differences both within and between the countries of South Asia as well as the people who live within their borders.

Not only is there a need, therefore, to disentangle immigrant status from visible minority status, Canadian health research and data should also attempt to disaggregate data within visible minority groups. While we recognize that the relatively small numbers within visible minority groups may make it difficult to perform generalizable analyses, this disaggregation is important in order to acquire in-depth insight into the health status of different ethnic groups in Canada.

Recommendations

1. Address Key Data Needs

Our first recommendation is to expand data collection efforts on health-related issues for the visible minority population. The findings from this synthesis report indicate that there is a major gap in data and research on the health of visible minorities in Canada, particularly in comparison with white Canadians. The little that is known about visible minorities’ health is often conflated with immigrant status, highlighting the need to disentangle health patterns and determinants that stem from racialization versus those that are rooted in immigration processes. Additionally, in order to reduce health inequities, policy-makers need to delve deeper into the links between discrimination and visible minority health. Recent data developments, such as the 2013 rapid response module on Everyday Discrimination (Statistics Canada, 2014b), may facilitate investigation of the relationship between interpersonal discrimination and health for visible minorities in Canada. However, we understand that this is a one-time data collection endeavor. As such, analysis may be limited by insufficient sample sizes to explore subgroup differences within the visible minority population. Additional cycles of this rapid

release module may enable researchers to more thoroughly examine the association between discrimination and health.

The rapidly growing visible minority population and the shift in Canada's population from a predominantly European-origin population to a more ethno-culturally diverse one underscores the need for federal and provincial governments and other organizations that collect data and information on the population to take these changes into account in order to better address and serve the needs of an increasingly diverse population.

In order to optimize healthcare services uptake via the construction of targeted policies and programs, researchers need national-level data that accurately capture the changing composition of the Canadian population. This can be achieved by over-sampling visible minorities in general surveys such as the CCHS, and collecting information on specific ethnic and religious background, nativity, year of immigration for the foreign-born, etc. This first step is essential to redress the lack of research on visible minority health in Canada.

2. Intersectionality as a Promising Approach for Research on Visible Minorities' Health

We also recommend that researchers incorporate an intersectional approach to the identification and examination of the multiple axes of inequality that intersect and shape the health of vulnerable and racialized groups in Canada. Such an approach incorporates both a social determinants of health perspective as well as a life course approach. It investigates, for example, the simultaneous intersections between aspects of social difference and identity, such as ethnicity, gender, social class, age, life course events, migration status, and nationality (Dhamoon and Hanskivsky, 2011). An intersectionality approach is particularly useful in examining how discrimination and racialization may interact with other markers of inequality to produce conditions of 'multiple jeopardy' for visible minority Canadians. We also support De Maio's (2010) suggestion that multilevel analysis of available quantitative data may be useful in separating out the micro-, meso-, and macro-level factors that impact visible minority health.

The main research question guiding this report was: 'Are visible minorities invisible in Canadian health data and research?' Sadly, the results from this synthesis project confirm what we have observed as health and inequality researchers: visible minorities are indeed quite "invisible" in Canadian health data and research.

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