

Mental Health and Service Issues Faced by Older Immigrants in Canada: A Scoping Review

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RÉSUMÉ

Une population vieillissante et la croissance de la population sur la base de l'immigration nécessitent que la recherche, la pratique et la politique doivent se concentrer sur la santé mentale des immigrants âgés, surtout parce que leur santé mentale semble se détériorer au fil du temps. Cette revue se concentre sur: Qu'est-ce que l'on sait sur les déterminants sociaux de la santé mentale chez les immigrants âgés, et quels sont les obstacles à l'accès aux services de santé mentale confrontés par les immigrants âgés? Les résultats révèlent que (1) les déterminants sociaux décisifs de la santé mentale sont la culture, le sexe et les services de santé; (2) que les immigrants plus âgés utilisent les services de santé mentale de moins que leurs homologues nés au Canada à cause des obstacles tels que, par exemple, les croyances et les valeurs culturelles, un manque de services culturellement et linguistiquement appropriées, des difficultés financières, et l'âgisme; et (3) quelles que soient les sous-catégories dans cette population, les immigrants âgés éprouvent des inégalités en matière de la santé mentale. La preuve des recherches disponibles indique que de combler les lacunes des service de santé mentale devrait devenir une priorité pour la politique et la pratique du système de soins de santé au Canada.

ABSTRACT

An aging population and immigration-based population growth necessitate research, practice, and policy focusing on the mental health of older immigrants in Canada, especially, because their mental health appears to deteriorate over time. This review focuses on: What is known about the social determinants of mental health for older immigrants in Canada and what are the barriers they face in accessing mental health services? Findings reveal that: (1) the key social determinants of mental health are culture, health services and gender; (2) older immigrants use fewer mental health services than their Canadian-born counterparts due to cultural beliefs, lack of culturally and linguistically-appropriate services, financial difficulties, and ageism; and (3) regardless of the subcategories within this population, older immigrants experience mental health inequities. The research evidence provides a clear message that addressing mental health service gaps for older immigrants should be a policy and practice priority for Canada's health care system.

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Keywords: aging, barriers to services, health inequity, mental health, older immigrants, social determinants of mental health

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Canada has been undergoing two intersecting demographic trends: an increasing aging population and population growth based on immigration. Together, these

trends point to the importance of research, practice, and policy focusing on the health of older immigrants in Canada. The first of the baby boomers reached the

age of 65 in 2011, and older adults now account for an increasingly large proportion of the Canadian population (an estimated 25% by 2036; see, e.g., Canadian Institute for Health Information, 2011; Statistics Canada, 2011). As the older adult population increases, so does the number of older people at risk for mental health problems and the need for mental health services (Mental Health Commission of Canada [MHCC], 2013). Previous research has demonstrated that the health of immigrants tends to deteriorate over time due to factors such as the acquisition of unhealthy lifestyles (National Advisory Council on Aging, 2005; Newbold & Filice, 2006); changes in familial, gender, and intergenerational relations; and problematic access to health, social, and settlement services (Guruge, Kanthasamy, & Santos, 2008). However, consolidated data on this topic are not available. To address this research gap, we conducted a scoping review of studies published over the past two decades related to the mental health of older immigrants, the barriers they face in accessing mental health care and services, and mental health inequity. This article presents the findings of the review, along with implications for research and practice.

Background

The Canadian population is aging: the median age has increased from 26 years in 1971 to 40 years in 2011, and is expected to increase to 47 years by 2056 (Statistics Canada, 2011), making older adults the fastest-growing age group (Statistics Canada). This trend is expected to continue over the next few decades, mainly due to a belowreplacement fertility rate, increased life expectancy, and the aging of the baby boomers (Employment and Social Development Canada, 2014). The total fertility rate in Canada was 1.63 children per woman in 2010 (compared with 1.98 in the United Kingdom, 1.99 in France, and 1.93 in the United States in 2010), continuing a decline over the past four years (Milan, 2013). In the absence of migration, the rate required to replace the population in Canada is 2.1 children per woman (Milan). The average life expectancy of Canadians has increased by more than 30 years since the early 1900s, to 78 years for men and 83 years for women in 2011 (Statistics Canada). The aging of the baby boomers will result in an estimated 10 million Canadians aged 65 or older in the next 25 years (Statistics Canada). By 2036, the population of people in Canada aged 65 or older will double, and about one in four of these will live with mental health problems (MHCC, 2013).

Most older adults (> 60%) live in metropolitan areas (such as Toronto, Vancouver, and Montreal), reflecting an overall trend towards urbanization in Canada (Turcotte & Schellenberg, 2006). Most older adults are women, with the gender discrepancy increasing with age. For example, in 2011, 52 per cent of adults aged

65–74 and 68 per cent of those aged 75 to 84 were women (Statistics Canada, 2011). However, older men are expected to catch up in terms of life expectancy over the next few decades (Turcotte & Schellenberg).

A large proportion of the growing population of older adults in Canada are immigrants: for example, from 2001–2006, approximately 30 per cent of the population aged 65–84 were immigrants. This proportion is even higher in major cities across Canada. For example, 63 per cent, 51 per cent, and 38 per cent of the populations in Toronto, Vancouver, and Montreal, respectively, were age 65 or older (Turcotte & Schellenberg, 2006). Approximately 82 per cent of older immigrants are sponsored by a family member, and of those who arrived in Canada after 1990, 75.6 per cent belong to a racialized community. Older immigrants to Canada come from a range of countries and cultural backgrounds: as of 2009, most came from Asia and the Pacific region (48.1%), followed by Africa and the Middle East (23.8%), Europe and the United Kingdom (14.7%), South and Central America (10.1%), and the United States (3.3%) (Citizenship and Immigration Canada, 2009). As a collective group, immigrants are older: in Ontario, one in five (19.7%) is aged 65 or older, a proportion that is significantly higher than among the overall population of older adults in the province (13.7%). In Ontario, 15.6 per cent of older immigrants cannot converse in English or French, and nearly one in three (31.2%) older adults in racialized groups cannot hold a conversation in English or French (Ontario Trillium Foundation, 2011).

Mental Health Issues and Challenges Facing Older Immigrants

The country of immigration has a stronger effect on the health and health care of immigrants than the country of emigration (Koehn, Neysmith, Kobayashi, & Khamisa, 2013). While immigration and (re)settlement can create new and exciting opportunities, for most immigrants this is a major life event accompanied by a number of stressors and challenges. Challenges often involve language differences, economic integration, systemic discrimination, and accessing basic health and social services (Simich, Hamilton, & Baya, 2006). For many, these challenges are compounded by disruptions in social networks and the resulting loss of social support (Sluzki, 1992). Motivations and patterns of migration differ among immigrants, as do levels of education and socioeconomic status. Consequently, outcomes in psychological well-being differ across subgroups (Kuo, Chong, & Joseph, 2008; Sue & Sue, 2008). These postmigration challenges can have more drastic effects on immigrants who arrive in Canada in later life. Multiple burdens within the family setting can become an additional challenge for older immigrants who are expected to take on a large role in household work (Beiser & Hou, 2006). These burdens and the associated stresses faced by older adults in such situations are often not discussed within families, nor have they received much attention from researchers or service providers (Guruge et al., 2008).

Older adults experience unique physical, psychological, and social changes that individually and/or together may challenge their mental health, sometimes resulting in mental illness (MacCourt, Wilson, Kortes-Miller, Gibson, & Fitch, 2008; MHCC, 2013). For example, many chronic diseases typically appear later in life, with known correlations with mental illnesses, such as anxiety and depression, and approximately 40 per cent of older adults who have experienced an acute stroke also experience major depression (MHCC). People with mental illness often encounter stigma and discrimination when attempting to access services and supports (MHCC). Older immigrants with mental health problems face overlapping stigma: the stigma of mental illness, the stigma of being older, and the stigma of being an immigrant. Unequal gender-based differences in access to health care (McDonald, 2011; O'Mahony & Donnelly, 2007) place women at a disadvantage compared with their male counterparts, so older immigrant women may be even more vulnerable to mental health problems.

Streiner, Cairney, and Veldhuizen (2006) assessed data from the 2006 Canadian Community Health Survey (of 12,792 Canadians) and found that the prevalence of mood, anxiety, and other disorders in Canadians aged 55 or older decreased linearly among those born in Canada and among men and women who had immigrated to Canada after the age of 18. Overall, immigrants reported fewer mental health problems than non-immigrants, but the differences decreased with age. According to the 2009 Canadian Community Healthy Aging Survey, fewer older immigrants reported positive mental health compared with non-immigrant older adults (Rudner, 2011). Older immigrants were also more likely to report a mental illness than nonimmigrant older adults, and the emotional functioning of older immigrants declined with age but remained stable for non-immigrant counterparts (Rudner).

Purpose of the Scoping Review

The above findings highlight the importance of focusing on mental health and illness among older immigrants, and of clarifying their access to, use of, and barriers to care and services, as well as of identifying the key social determinants and health inequity factors that affect their mental health. This information can inform directions for future research as well as changes to care and services.

Therefore, we conducted a scoping review of refereed journal articles based on Canadian health sciences research. Scoping reviews are intended to identify gaps in the literature: they "can be viewed as a method in their own right rather than a preliminary step in an ongoing process aimed at producing a systematic review [and] a topography of the literature and research on health and health care" (Koehn et al., 2013, p. 440).

Methods

The work presented here was guided by Arksey and O'Malley's (2005) framework and steps for conducting scoping reviews: (a) identifying the research question; (b) searching and identifying relevant studies; (c) selecting studies; (d) charting the data; and (e) collating, summarizing, and reporting the results.

The broad research question that guided our initial review was: What is known from existing literature about immigrant and refugee health in Canada? From there, we narrowed our focus to the following research questions: (1) What is known about the social determinants of mental health for older immigrants in Canada? (2) What barriers to accessing mental health services are faced by immigrants in Canada? (3) What are the key mental health inequity factors that affect older immigrants' mental health?

We searched the electronic databases of Medline, Embase, PsycInfo, Healthstar, ERIC, and CINAHL using combinations of the following keywords: culture/ cultural/multicultural; race/racial/racism; diversity/ diverse; ethnic/ethno/minority/ethnocultural; religious/religion; and immigrant/emigrant/migrant/ immigration/refugee/newcomer/non-status/ precarious. Inclusion criteria for articles were as follows: (1) peer-reviewed research articles; (2) focused on the Canadian context; (3) focused on immigrants; (4) written in English; and (5) published between January 1990 and December 2011. Relevant abstracts of articles were exported electronically to RefWorks-COS (ProQuest, LLC), a repository platform, to organize and store the references. The flowchart in Figure 1 illustrates the process used for the final selection of articles.

We excluded 8,772 articles that focused on physical health, and 330 articles that did not focus on barriers and challenges to accessing mental health services or mental health inequity. This resulted in a set of 149 articles that focused on barriers to services or mental health inequity among all age groups. Of these, 20 articles were selected for the scoping review because they focused on barriers to accessing mental health services and mental health inequity for older immigrants in Canada. These were charted in a table (see Table 1) to capture their study characteristics.

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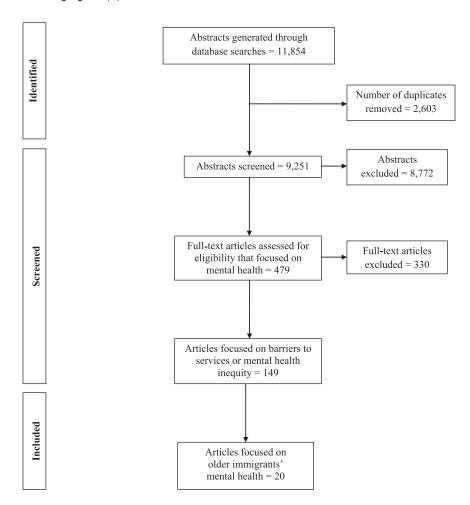


Figure 1: Flow chart: Literature search and selection

Study Characteristics

Most of the studies were conducted in Alberta (n = 10; 50%), followed by Ontario (n = 3; 15%), Quebec (n = 1; 5%), Manitoba (n = 1; 5%), and British Columbia (n = 1; 5%): four (25%) studies were conducted in more than one province. Overall, 80 per cent (n = 16) of the studies used quantitative methods, and 20 per cent (n = 4) used qualitative methods. Only one study used a longitudinal design: all of the other studies were cross-sectional. Sample sizes varied from 21 to 3,473 participants (mode = 98). Small sample sizes of less than 100 were used in 25 per cent (n = 5) of the studies and narrow recruitment strategies were used in 30 per cent (n = 6). No studies focused on only men; one study (5%) focused on only women, and the remaining 19 studies (95%) included older immigrant women and older immigrant men.

With regard to ethnicity, 50 per cent (n = 10) of the studies listed study participants as Chinese, followed by 5 per cent (n = 1) as Indian, 5 per cent (n = 1) as Tamil, and 5 per cent (n = 1) as Taiwanese; 30 per cent (n = 6) of the studies included participants from several immigrant

communities. One study (5%) listed participants simply as immigrants without identifying the ethnic backgrounds of participants. In terms of immigration category, 14 articles (70%) focused on immigrants, 4 (20%) focused on immigrants and refugees, 1 (5%) focused only on refugees, and 1 (5%) was unclear as to whether both immigrants and refugees were included. In total, 70 per cent (n = 14) of the studies involved participants aged 65 and older, and 30 per cent (n = 6) involved participants aged 55 and older. Because the definitions of "older immigrants" varied between studies and countries of origin, the findings included in this article may be applicable to immigrants aged 55 and older.

Common Shortcomings of the Studies

Studies involved some common shortcomings that should be considered. Most used single sites, small sample sizes, and limited recruitment strategies (e.g., telephone surveys). Others reported challenges due to a lack of experienced data collectors fluent in the languages of potential participants. Most focused on one ethnic group (which might reflect the interest of the researchers) and did not include comparison groups

Table 1: A summary of the studies included in the review

The study	Study characteristics: Study setting; Ethnicity of the study participants; Sample size; Gender; Age	
	Study design; Method; Data collection method	
Acharya & Northcott (2007)	Edmonton; Indian; $n = 21$; female; age = $60-74$	
Beiser & Hou (2006)	Cross-sectional; qualitative; face-to-face interviews Toronto; Chinese, n = 281; Vietnamese, n = 366; n = 647; male & female; age = 26–88 Cross-sectional; quantitative; questionnaire/survey	
Beiser et al. (2003)	Toronto; Tamil; n = 154/1110; male & female; age=18–60 and older Longitudinal; cross-cultural; quantitative; face-to-face interviews and survey	
Chow (2010)	Calgary; Chinese, $n = 147$; male & female; age: 65 and older (mean = 78.14 years, $SD = 7.22$ years)	
Lai (2000a)	Cross-sectional; quantitative; face-to-face interviews Calgary; Chinese; n = 96; male & female; age = 65 and older	
Lai (2000b)	Cross-sectional; quantitative; telephone interviews Calgary; Chinese; n = 3,473; male & female; age: 65 and older (mean = 71.7 years)	
Lai (2003)	Cross-sectional; mixed method; telephone interviews Vancouver, Victoria; Chinese; n = 96; male & female; age: 65–80 (mean = 71.7 years) Cross-sectional; quantitative; telephone interviews	
Lai (2004a)	Multisite (Victoria, Greater Vancouver, Calgary, Edmonton, Winnipeg, Greater Toronto Area and Greater Montreal); Chinese; n = 1,537; male & female; age: 55 and older (mean = 74.1 years) Cross-sectional; quantitative; face-to-face interviews, retrospective data	
Lai (2004b)	Multisite (Victoria, Greater Vancouver, Calgary, Edmonton, Winnipeg, Greater Toronto Area and Greater Montreal); Chinese; n = 444; male & female; age: 55 and older (mean = 73.82 years)	
Lai (2005)	Cross-sectional; quantitative; face-to-face interviews Calgary; Taiwanese; n = 98; male & female; age: 55 and older (mean = 67.9 years: SD = 8.4) Cross-sectional; quantitative; face-to-face interviews	
Lai & Chau (2007)	Multisite (Victoria, Greater Vancouver, Calgary, Edmonton, Winnipeg, Greater Toronto Area and Greater Montreal); Chinese; $n = 2,214$; male & female; age: 55 and older (mean = 69.7 years, $SD = 8.7$)	
Lai & Surood (2008)	Cross-sectional; cross-cultural; quantitative; face-to-face interviews/survey Calgary; South Asians (Bangladeshi, Indian, Pakistani), n = 220; male & female; age: 55 and older (mean = 65.8 years, SD = 7.6)	
Lai & Surood (2010)	Cross-sectional; cross-cultural; quantitative, telephone surveys Calgary; South Asians (Bangladeshi, Indian, Pakistani); n = 220; male & female; age: 55 and older (mean = 65.8 years, SD = 7.6)	
Lai, Tsang et al. (2007)	Cross-sectional; quantitative; telephone surveys Multisite (Victoria, Greater Vancouver, Calgary, Edmonton, Winnipeg, Greater Toronto Area and Greater Montreal); Chinese; n = 2,272; male & female; age: 55–101 (mean = 69.8 years)	
Lai & Yuen (2003)	Cross-sectional; quantitative; face-to-face interviews/survey Calgary; Chinese; n = 96; male & female; age: 55 and older (mean = 71.4 years)	
Sadavoy et al. (2004)	Cross-sectional; qualitative; face-to-face interviews, retrospective data Toronto; Chinese & Tamil; n = 17 focus groups; male & female; age: 55 and older	
Stewart et al. (2011)	Cross-sectional; cross-cultural; qualitative, face-to-face interviews Alberta; Older refugees & immigrants (Chinese, Afro-Caribbean, former Yugoslavian, Spanish); n = 48; male & female; age: 55 and older	
Taylor et al. (2005)	Cross-sectional; cross-cultural; qualitative; face-to-face interviews Winnipeg; Older refugees & immigrants (Vietnamese, Ukrainian, Spanish, Chinese, Hindi, Polish, Iranian); n = 139; male & female; age: 55 and older	
Tieu et al. (2010)	Cross-sectional; cross-cultural; qualitative; face-to-face interviews Calgary; Chinese; $n = 53$; male & female; age: $55-87$ (mean = 69.8 years, $SD = 10.2$) Cross-sectional; quantitative; telephone interviews, comparison with Canadian-born participants who	
Zunzunegui et al. (2006)	were part of the population-based survey Montreal; Immigrants (not specified); $n = 110/1,037$; male & female; age = $15-75$ Cross-sectional; quantitative; questionnaire/survey	

SD = standard deviation

(i.e., other immigrant groups and/or individuals born in Canada). Additionally, the studies defined "older adult" differently, making comparisons across studies difficult.

Other limitations included potential loss of cultural nuances during translation and interpretation of data, lack of culturally and linguistically relevant data collection instruments, and lack of data about premigration health statuses of the participants. One study focused explicitly on women, but the others did not take into account gender, personal preferences, diversity within communities, or cohort effects related to different waves and categories of migration among immigrants.

Social Determinants of Mental Health

Table 2 presents the social determinants of mental health identified in each of the articles reviewed, and Figure 2 presents the most common of these using "word clouds" (giving prominence to those that appeared more frequently as the key social determinants across the studies).

Culture was the most frequently identified key social determinant of mental health, affecting health care use and health outcomes among older immigrants (Lai, 2004a; 2004b; 2005; Lai & Chau, 2007; Lai & Surood, 2008; Sadavoy, Meier, & Ong, 2004). However, the diversity of cultures and subcultures in Canada makes it difficult to generalize the effects of culture on mental health. Additionally, some studies (e.g., Acharya & Northcott, 2007) focused on culture as both a root cause and a way to address mental health problems. For example, participants from some South Asian communities believed that mental distress was caused by the cultural accommodations they had to make in Canada; they also believed that they could lower the risk of mental distress by maximizing control over their inner self (in other words, using "cultural prescriptions" as a kind of "moral medicine").

Health services are another key social determinant of mental health: they can promote and maintain health, prevent disease, restore health and functional abilities, and/or disrupt mental health and contribute to mental illness (Beiser, Simich, & Pandalangat, 2003; Lai, 2000b; 2004a; Lai & Chau, 2007; Lai & Surood, 2010; Sadavoy et al., 2004). Limited use of health services due to lack of awareness, inaccessibility, or inadequate numbers of trained and acceptable mental health workers were noted as affecting the mental health of older immigrants.

Gender was highlighted as a key social determinant of mental health among older immigrants. Mental health issues were seen to occur as a result of function of gender-based status, attitudes, behaviours, relative power, and roles. Being female and single can contribute to mental health problems (Acharya & Northcott, 2007; Lai, 2000b; Lai & Surood, 2008; Lai & Yuen, 2003; Sadavoy et al., 2004; Zunzunegui, Forster, Gauvin, Raynault, & Williams, 2006). Forced financial and emotional dependency can lead to mental distress in older immigrants, especially women, who often provide household services such as unpaid housekeeping and childcare and/or hand over their assets to family members who are struggling financially in Canada.

Another key social determinant of mental health is personal health practices and coping skills (Chow, 2010; Lai, 2000a; 2003; 2005; Lai, Tsang et al., 2007). Some articles, for example, reported that traditional personal health practices or lifestyles may prevent older adults from overcoming challenges such as accepting Western medications or adopting new dietary habits, and others reported that some immigrants believe that mental health problems can be solved through faith or religious practices.

Lack of and/or limited fluency in English and/or French, lower levels of education, and limited mental health literacy, all serve as barriers to accessing mental health services among older immigrants, consequently decreasing their quality of mental health (Beiser et al., 2003; Lai, 2000a; 2000b; Taylor, Taylor-Henley, & Doan, 2005; Tieu, Konnert, & Wang, 2010).

Barriers to Accessing Services

Our review revealed that older immigrants experience multiple barriers in accessing mental health care and services (see Table 3).

In general, the barriers identified across the studies can be summarized as follows: (a) limited information and knowledge about mental health and mental illness; (b) limited knowledge about existing services; (c) being single; (d) social isolation; (e) increased dependence; (f) personal attitudes; (g) mistrust of mental health professionals; (h) reluctance to seek help from psychiatrists and/or take psychotropic medications; (i) language differences and barriers; (j) limited information about navigating the health system; (k) financial insecurity; (l) circumstantial challenges; (m) inadequate numbers of mental health workers with cultural safety training, especially psychiatrists; (n) lack of languagespecific services and/or translation and interpretation; (o) stigma related to mental illness and accessing mental health services; (p) administrative and organizational barriers that make services inaccessible (e.g., long waiting lists, inconvenient office hours, complicated procedures for accessing services); (q) limited services available specifically for older adults; (r) lack of services that combine ethno-racial, geriatric, and psychiatric care; (s) lack of age- and gender-specific services for older women; (t) devaluation of culture and language, and service providers' lack of cultural understanding or failure to understand the meaning of symptoms; (u) racism; (v) ageism; and (w) social exclusion.

Of these, the most frequently occurring key barriers are cultural beliefs and values, language barriers, lack of culturally and linguistically appropriate services, financial difficulties, and ageism (See Figure 3).

Table 2: List of social determinants of health identified in the studies included in the review

The study	Social determinants of health identified • Key determinants	
	Additional determinants	
Acharya &	• Gender; culture	
Northcott (2007)	 Personal health practices and coping skills; income and social status; social support; education and literacy; social environment; physical environment 	
Beiser & Hou (2006)	Employment and working conditions; social environment; physical environment	
Beiser et al. (2003)	 Income and social status; social support networks; culture; education and literacy; health services; gender Income and social status; social support networks; education and literacy; employment and working conditions; social environment; physical environment; health services Personal health practices and coping skills; gender; culture; healthy child development; biology and genetics 	
	endowment	
Chow (2010)	 Personal health practices and coping skills Gender; income and social status; social support networks; education and literacy; culture; social environment; physical environment; health services 	
Lai (2000a)	 Personal health practices and coping skills; education and literacy; culture 	
Lai (2000b)	 Income and social status; social support; social environment; physical environment; health services; gender Culture; education and literacy; health services; gender 	
La: 120031	Social environment; physical environment; personal health practices and coping skills Health environment; physical environment; personal health practices and coping skills	
Lai (2003)	 Health services; culture; income and social status; personal health practices and coping skills Gender; social support; education and literacy; employment and working conditions; social environment; physical environment 	
Lai (2004a)	 Culture; health services Gender; income and social status; social support networks; social environment; physical environment; 	
1 : 1000 (1)	education and literacy; personal health practices and coping skills	
Lai (2004b)	 Culture; social environment; physical environment Gender; income and social status; health services; social support networks; education and literacy; personal health practices and coping skills 	
Lai (2005)	 Personal health practices and coping skills; culture Income and social status; social support networks; gender; social environment; physical environment; health services 	
Lai & Chau	Health services	
(2007)	 Culture; social support networks; education and literacy; social environment; physical environment; personal health practices and coping skills; gender; income and social status 	
Lai & Surood (2008)	 Culture; gender Health services; personal health practices and coping skills; income and social status; social support; education and literacy; social environment; physical environment 	
Lai & Surood (2010)	 Health services; culture Personal health practices and coping skills; income and social status; social support networks; education and 	
Lai, Tsang et al.	literacy; social environment; physical environment • Culture; personal health practices and coping skills	
(2007)	 Income and social status; social support; education and literacy; employment and working conditions; social environment; physical environment; healthy child development; biology and genetics endowment; health services; gender 	
Lai & Yuen (2003)	 Gender; social environment; physical environment; culture Income and social status; social support; education and literacy; employment and working conditions; personal health practices and coping skills; health services 	
Sadavoy et al. (2004)	 Health services; gender; culture Personal health practices and coping skills; social support; education and literacy; social environment; 	
Stewart et al. (2011)	 physical environment; income and social status; employment and working conditions Health services; culture; education and literacy; income and social status Social support; employment and working conditions; social environment; physical environment; healthy child 	
Taylor et al. (2005)	development; biology and genetics endowment; gender; personal health practices and coping skills • Education and literacy • Social property plusical equipments sulture	
Tieu et al. (2010)	 Social support; physical environment; culture Education and literacy Health services; personal health practices and coping skills 	
Zunzunegui et al.	Employment and working conditions; gender	
(2006)	 Income and social status; social support; education and literacy; social environment; physical environment; culture; health services 	



Health Services

Education and Literacy

Personal Health Practices and Coping Skills Gender

Physical Environment Income and Social Status

Figure 2: Most frequently occurring key social determinants of mental health

Mental Health Inequity

Several studies (e.g., Beiser & Hou, 2006; Beiser et al., 2003; Zunzunegui et al., 2006) have demonstrated that older immigrants experience health inequities regardless of gender, education, subpopulation, or region. Currently, many services are inadequate in terms of providing timely medical assistance, transportation, outreach programs, health education, system navigation assistance, translation and interpretation services, and supportive housing (Beiser & Hou; Beiser et al.; Zunzunegui et al.). Zunzunegui et al. (2006) reported that the mental health of first-generation immigrants may be compromised due to local unemployment related to discrimination, which can be aggravated by language barriers and social isolation. Language can be an important barrier to equitable health care (Beiser & Hou; Koehn, 2006; Zunzunegui et al.). Beiser et al. reported that older immigrants (and women, in particular) are more likely to encounter linguistic barriers.

Most older immigrants in Canada are not familiar with the range of health and social benefits or the various available programs because limited information is available to them about the Canadian health care system (Beiser & Hou, 2006). Additionally, mental health education programs for older immigrants are lacking, which prevents recognition of early symptoms of mental illness and utilizing mental health services in a timely manner (Tieu et al., 2010). Chow (2010) assessed retrospective data about older Chinese immigrants, and found that culturally appropriate health services and health promotion programs can help reduce mental health disparities. Lai (2004b) reported similar findings.

High levels of unemployment tend to generate economic insecurity and have more negative effects on the mental health of older immigrants compared with non-immigrant older adults (Beiser & Hou, 2006; Zunzunegui et al., 2006). Further, Beiser et al. (2003) reported that older immigrants who did not experience loss of status and social isolation in their home countries experienced comparatively more needs and

stresses after migration, leading to declines in mental health after migration that worsened with time spent in Canada. One significant risk factor for older immigrants' well-being is immigration status (Chow, 2010).

Limitations

Our scoping review involved a number of limitations: we did not undertake a grey literature search nor did we search reference lists or contact authors for additional literature. In line with Arksey and O'Malley (2005), we did not assess the quality of the published research. We included only articles published in English. Additionally, we included multiple articles published from the same study, because the articles addressed different aspects of mental health and illness concerns of the participants. For example, Lai (2004a) and Lai (2004b) used the same multi-site dataset that was collected between 2001 and 2002. However, these articles examined (a) predictors of barriers to health services, and (b) relationships between culture and health status, respectively. Another limitation is that this scoping review included articles based on immigrants as well as refugees. Although we know that their pre- and post-migration experiences and mental health well-being can be different, given the limited number of studies available on the topic, there was no possibility for us to undertake two different scoping reviews for the two groups at this time.

Discussion

Canadian research about mental health and illness among immigrants is limited, and our review of the existing primary-research-based literature revealed a number of limitations in the studies. Despite these limitations, the findings help clarify the social determinants of mental health, barriers to accessing and using mental health services, and mental health inequity among older immigrants. These findings have a number of implications for research and practice. The physical and mental health status of older immigrants is influenced by interactions between various social determinants of mental health; addressing these can reduce the risk of mental illness, facilitate access to related services, and thereby promote mental health. Table 4 lists the key implications identified in each of the studies included in our review.

Implications for Research

Future research should focus on mental health literacy among older immigrants, specifically its relationship to help-seeking behavior and use of mental health services. Large studies involving cross-cultural groups could help clarify the degree to which previous findings are unique to specific ethnocultural groups or common across groups. Researchers could also investigate the

Table 3: List of key barriers to services identified in studies included in the review

The study	Key barriers to services identified: • Key barriers	
	Additional barriers	
Acharya & Northcott	Lack of awareness; gender; cultural beliefs and values	
(2007)	 Self-help coping strategies; strong spirituality and religious identity; acculturation 	
Beiser & Hou (2006)	 Unemployment and financial difficulties; marginalization; discrimination/racism/social exclusion; 	
	language barriers	
	• Lack of sufficient appropriate services; barriers in access to health care; ethnic identity; cultural beliefs,	
	traditions, and values; acculturation; immigrant status; economic barriers; family and social support networks; gender	
Beiser et al. (2003)	 Financial difficulties; language barriers; lack of culturally and linguistically appropriate mental health services; 	
Deiser er dr. (2005)	transportation problems; lack of social network; lack of family support; immigrant status; enforced	
	dependency on children	
	• Fears of mistreatment and beliefs about illness; loneliness; witnessing combat; physical assault;	
	overburdened by childcare responsibilities	
Chow (2010)	Cultural beliefs and values	
	 Limited information and knowledge on mental health and mental illness (mental health literacy); financial 	
	situation; gender; marital status; education; country of origin; culture; length of residence; use of	
	Western medications; physical mobility	
Lai (2000a)	Ageism; cultural beliefs and values; language barriers	
	Service barriers; poor physical health; length of stay in Canada; less financial inadequacy; chronic	
Lai (2000b)	illnesses • Cultural beliefs and values; language barriers; limited knowledge about existing services; limited access	
Lai (2000b)	to mental health services; gender	
	• Length of residence	
Lai (2003)	 Limited knowledge about existing services; financial difficulties; ageism; cultural beliefs and values; 	
	lack of culturally and linguistically appropriate services	
	• Ethnic identity; marital status; cultural incompatibility between older Chinese Canadians and mainstream	
	society; education; country of origin	
Lai (2004a)	Cultural beliefs and values	
	• Living alone; older age; single status; gender; religious belief; level of education; level of social support;	
1 : (000 (1)	financial situation	
Lai (2004b)	 Cultural beliefs and values; chronic illnesses; ageism; physical health problems Level of identification with cultural groups; living alone; level of life satisfaction; financial situation; 	
	length of residency in Canada	
Lai (2005)	 Adjustment issues; culture beliefs and values; culture shock; ageism 	
Lai (2000)	 Physical health problems; marital status; gender; level of social support; poor financial situation; 	
	discrimination on the basis of ethnicity and older age	
Lai & Chau (2007)	Culturally insensitive or unresponsive health care professionals	
	• Language incompatibility; personal attitude (fear, stigma, misconceptions about using formal health	
	services); level of identification with cultural health beliefs; discrimination	
Lai & Surood (2008)	Gender; cultural beliefs and values	
	• Lack of culturally sensitive and compatibility in service delivery; feeling of shame; stigma and religious	
	beliefs; lack of social support networks; physical health problems	
Lai & Surood (2010)	• Cultural compatibility; personal attitude regarding seeking help or using services; administrative barriers	
	related to long waiting lists; inconvenient office hours and complicated procedures for accessing services • Circumstantial challenges related to social and material resources	
Lai, Tsang et al. (2007)	Cultural beliefs and values; religion	
Lai, 13aily 61 al. (2007)	 Country of origin; length of residence in Canada; marital status; ageism; gender; education; low income 	
Lai & Yuen (2003)	Gender; ageism; physical limitation; country of origin; length of residency	
	 Social isolation; low self-esteem; family support; low educational level 	
Sadavoy et al. (2004)	 Mental disorders; social stressors; interpersonal stressors; awareness of services; service availability; 	
	service accessibility	
	 Lack of cultural understanding or service providers' failure to understand the meaning of symptoms; 	
	inadequate numbers of mental health workers with cultural safety training; especially psychiatrists; stigma	
	 Personal attitudes; administrative barriers; organizational barriers; limited services specifically for older 	
	adults; lack of services that combine ethnoracial; geriatric; and psychiatric care	

Continued

The study	Key barriers to services identified: • Key barriers	
	Additional barriers	
Stewart et al. (2011)	Language barriers; financial difficulties; lack of cultural and linguistically appropriate programs and services	
	 Physical and mental health problems; racism; discrimination; family conflicts; social isolation; transportation problems; lack of information about services; ageism; cultural barriers 	
Taylor et al. (2005)	Literacy levels; language barriers	
	 Loss of familiar surroundings; homesickness; abuse; isolation through weather and language; loss of independence through lack of language and cultural competencies; loss of social network; familial ties; loss of country and culture 	
Tieu et al. (2010)	Mental health illiteracy	
	 Personal practices and beliefs (e.g., use of Chinese medicines) 	
Zunzunegui et al. (2006)	 Unemployment and financial difficulties; stress of immigration; gender Being single; family type; financial situation; education; social support; food insecurity 	

relationships between various immigrant categories (e.g., permanent residents vs. refugees); cultural values and mental health and well-being; and ethnicity, ethnic identity, mental health, and use of services. They should consider using a multi-site design and large sample sizes; longitudinal design would be useful to delineate and/or track health changes, the aging process, changes in the sociocultural situation of older immigrants in Canada, and access to services over time. Information about pre-migration health statuses, post-migration health statuses upon arrival to Canada, and changes in post-migration health over time would also be useful.

Additionally, more studies using quantitative approaches are needed to determine which types of barriers have the strongest effects on older immigrants' access to and use of mental health services, as well as how various factors (e.g., length of stay in Canada) relate to the social determinants of mental health and the types of services accessed and used. Systematic inquiry into how government policy affects social and psychological stressors and the mental health of older immigrants is also needed. Future research should also focus on regional differences in mental health outcomes, and access to mental health care, and services within and between ethnocultural groups. (including race, language,

Language barriers



Figure 3: Most frequently occurring key barriers to accessing mental health services

and ethnicity, along with regions and neighborhoods inhabited by immigrants and refugees). Data collection should be consistent and meaningful to allow effective analysis of the relationships between various social determinants of mental health.

Key methodological issues will include the following: (a) ensuring more emphasis on comparative research; (b) using culturally validated instruments to assess mental illnesses; (c) paying attention to participant recruitment strategies (e.g., phone surveys may exclude individuals without a telephone, with an unlisted number, or without a "typical ethnic surname"); (d) being aware that participants might under-report mental health issues (during self-reports) due to stigma; and (e) focusing on issues pertaining to the generalizability of findings resulting from inclusion and exclusion criteria (e.g., those who are institutionalized or too frail to participate).

Implications for Practice

The Canadian health care system does not address the mental health and illness needs of older immigrants through holistic and supportive programs that could help these individuals maintain mental health and well-being while coping with post-migration and (re)settlement challenges. Timely, culturally safe, coordinated, and accessible services are needed to improve the provision of mental health care for older immigrants. Additionally, services should incorporate community values and strengths, recognize social inequities, and implement new models of collaborative and integrated care. More mental health workers need to be trained in cultural safety and language competency to provide effective mental health care to older immigrants. Finally, to better meet the gaps in health care services for older immigrants, health promotion

Table 4: List of studies and their key implications

The study	Key implications
Acharya & Northcott (2007), p. 632	Incorporate an understanding of the phenomenon of moral medicine into the mental health literature
Beiser & Hou (2006), p. 147	Establish client-friendly, community-based mental health services for older immigrants Strengthen and support ethnic communities; address racism; provide access to the development of required skills for newcomer older adults; provide opportunity for new immigrants to participate in all areas of social life
Beiser et al. (2003), p. 243	Create culturally and linguistically appropriate services Advocate for holistic and supportive policies and programs to help older immigrants cope with (re)settlement challenges
Chow (2010), p. 61	Make a more concerted effort towards mental health promotion of older immigrants Create culturally and linguistically appropriate health, social, and medical services for older immigrants to meet their needs Pressing need to develop more educational programs that will empower these minority ethnic seniors to learn more about their health especially mental health, health promoting behavior,
Lai (2000a), p. 409	and coping strategies Need for culturally appropriate health services, including health promotion programs that will
Lai (2000b), p. 65	meet the mental health needs and reduce mental health disparities for the older immigrants Need service providers to attend to the unique individual needs of older immigrants such as
	inability to speak in English Make services more accessible to older immigrants by removing access barriers Similar research should be conducted to consider the mental health of older members of other ethnic groups present in Canada
Lai (2003), p. 389	Restructure the service delivery system to enhance the compatibility between service providers and older immigrants of different cultural backgrounds, minimize service barriers, and foste positive attitude towards aging
Lai (2004a), p. 820	Enhancing the physical mobility of elderly Chinese Enhancing the health delivery system through sensitivity training to improve cultural and age-appropriateness in service provision During health assessments, extend medical/clinical attention beyond symptoms to address potential cultural values and barriers to using the available care, treatment, and services
Lai (2004b), p. 682	Analysis of current depressive symptoms should be used to portray the success of care and treatmen Institute policies to help older immigrants maintain a reasonable level of financial stability to prevent social and financial costs of depression Implement culturally appropriate health services including health promotion programs to reduce mental health disparities
	Ensure that older immigrants living alone will have the encouragement and support necessary for a healthy life: both mentally and physically
Lai (2005), p. 124	Reduce service barriers Implement programs and policies to allow for financial stability Understand how health and health practices are maintained among older adults from the specific cultural group and implement strategies to enhance the mental well-being of older immigrants
Lai & Chau (2007), pp. 261 & 267	Identify and address barriers in service delivery Develop and enhance health care providers' cross-cultural communication and counseling skills Equip graduates with required cross-cultural communication skills to work with culturally diverse older immigrants by modifying the university curricula
Lai & Surood (2008), p. 70	Ensure information about available services, and their accessibility, is directed to culturally diverse aging population Institute mental health promotion and disease prevention programs that address mental health needs of older immigrants of diverse cultural backgrounds Train health care providers to build confidence and trust in older adults in their access and use of care and services Build stronger social support network among older adults to overcome gender discrepancy and loneliness and have better access to community and services
Lai & Surood (2010), p. 256	Need to implement culture-, gender-, and age-appropriate care Use specific barriers such as incompatibility, personal attitude, and circumstantial barriers as basis for measuring access barriers faced by older immigrants

Continued

Table 4. Continued

The study	Key implications
Lai, Tsang et al. (2007), p. 171	Focus on strategies to enhance cultural compatibility between users and the health care delivery system
Lai & Yuen (2003), p. 1	Implement programs and activities that address the physical limitations and mobility problems of older immigrants
Sadavoy et al. (2004), p. 192	Redesign service delivery in mainstream institutions
	Train psychiatrists and frontline agency workers
	Promote community mental health education programs for ethnic communities and service providers
	Ensure comprehensive care in mental health service provision to older immigrants
Stewart et al. (2011), p. 16	Develop culturally appropriate services for older immigrants
· · ·	Focus on intersectoral coordination
	Expand service providers' mandates and provide them cultural sensitivity training
Taylor et al. (2005), p. 32	Consider the importance of multiple functions of ESL classes for older immigrants and expand such programs to make other services more available and accessible. Advocate for more ESL classes for older immigrants as a means of increasing social well-being and health, fostering resettlement, promoting social justice, and increasing resiliency
Tieu et al. (2010), p. 1325	Provide mental health education to older immigrants and integrate more information about mental health into supports and services to address the underutilization of mental health services
	Need to provide behavioural, cognitive, and self-help interventions to older immigrants to address stigma of mental illness and cultural beliefs about mental health interventions and prognosis about mental illnesses
Zunzunegui et al. (2006), p. 498	Work with social and settlement agencies to address unemployment and financial insecurities of older immigrants

and mental illness prevention strategies should build on the cultural health beliefs and practices of different immigrant populations.

Limited awareness of mental health and illness and how to navigate the health system can be improved through education, literacy, and other related activities. Some risk factors involving social support (e.g., social isolation) could be addressed by improving social networks. Policy and systematic changes are needed to overcome practice-based challenges such as inadequate numbers of mental health workers with cultural safety training and lack of age- and gender-specific services for older women from immigrant communities. It is also very important to advocate for and work to address marginalization, stigmatization, and devaluation of language and culture. Mental health services need to be flexible to meet the needs of older immigrants by providing comprehensive care and focusing on specific ethnic groups as well as addressing the post-migration issues that are common across groups.

References

- Acharya, M. P., & Northcott, H. C. (2007). Mental distress and the coping strategies of elderly Indian immigrant women. *Transcultural Psychiatry*, 44(4), 614–636.
- Arksey, H, & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*, 19–32.

- Beiser, M. N., & Hou, F. (2006). Ethnic identity, resettlement stress and depressive affect among Southeast Asian refugees in Canada. *Social Science & Medicine*, 63, 137–150.
- Beiser, M. N., Simich, L., & Pandalangat, N. (2003). Community in distress; mental health needs and help seeking in Tamil community in Toronto. *International Migration*, 41(5), 233–245.
- Canadian Institute for Health Information. (2011). Seniors and the health care system: What is the impact of multiple chronic conditions? Ottawa, ON: CIHI, 2011. Retrieved from https://secure.cihi.ca/estore/productFamily.htm? locale=en&pf=PFC1677
- Chow, H. P. (2010). Growing old in Canada: physical and psychological well-being among elderly Chinese immigrants. *Ethnicity & Health*, 15(1), 61–72.
- Citizenship and Immigration, Canada (2009). Facts and figures 2009 Immigration overview: Permanent and temporary residents. Retrieved from http://www.cic.gc.ca/ENGLISH/resources/statistics/facts2009/index.asp.
- Employment and Social Development Canada. (2014). Canadians in context – Aging population. Retrieved from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=33
- Guruge, S., Kanthasamy, P., & Santos, E. J. (2008). Addressing older women's health: A pressing need. In S. Guruge & E. Collins (Eds.), Working with immigrant women: Issues and strategies for mental health professionals. Toronto, ON: CAMH.

- Koehn, S. (2006). Ethnic minority seniors face a "double whammy" in health care access. *The Newsletter of the Gerontology Research Centre*, 25(2), 1–2.
- Koehn, S., Neysmith, S., Kobayashi, K., & Khamisa, H. (2013). Revealing the shape of knowledge using an intersectionality lens: Results of a scoping review on the health and health care of ethnocultural minority older adults. Ageing and Society, 33(3), 437–464.
- Kuo, B. C., Chong, V., & Joseph, J. (2008). Depression and its psychosocial correlates among older Asian immigrants in North America: A critical review of two decades' research. *Journal of Aging and Health*, 20(6), 615–652.
- Lai, D. W. L. (2000a). Depression among the elderly Chinese in Canada. Canadian Journal on Aging, 19(3), 409–429.
- Lai, D. W. L. (2000b). Prevalence of depression among the elderly Chinese in Canada. *Canadian Journal of Public Health*, 91(1), 64.
- Lai, D. W. L. (2003). Health and predictors of health among older Chinese-Canadians in British Columbia. *BC Medical Journal*, 45(8), 382–390.
- Lai, D. W. L. (2004a). Impact of culture on depressive symptoms of elderly Chinese immigrants. *Canadian Journal of Psychiatry*, 49, 820–827.
- Lai, D. W. L. (2004b). Depression among elderly Chinese-Canadian immigrants from Mainland China. *Chinese Medical Journal*, 117(5), 677–683.
- Lai, D. W. L. (2005). Prevalence and correlates of depressive symptoms in older Taiwanese immigrants in Canada. *Journal of the Chinese Medical Association*, 68(3), 118–125.
- Lai, D. W. L., & Chau, S. B. (2007). Effects of service barriers on health status of older Chinese immigrants in Canada. *Social work*, 52(3), 261–269.
- Lai, D. W. L., & Tsang, K. T. (2007). Relationships between culture and health status: A multisite study of the older Chinese in Canada. *Canadian Journal on Aging*, 26(3), 171–183.
- Lai, D. W., & Surood, S. (2008). Predictors of depression in aging South Asian Canadians. *Journal of Cross-Cultural Gerontology*, 23, 57–75.
- Lai, D. W. L, & Surood, S. (2010). Types and factor structure of barriers to utilization of health services among aging South Asians in Calgary, Canada. *Canadian Journal on Aging*, 29(2), 249–258.
- Lai, D. W. L., & Yuen, C. T. Y. (2003). Gender, physical limitation, and depression among elderly Chinese. *International Journal of Mental Health & Addiction*, 1(1), 1–16.
- MacCourt, P., Wilson, K. J., Kortes-Miller, K., Gibson, M., & Fitch, M. I. (Eds.). (2008). *Promoting seniors mental health in cancer care: A guide for front-line care providers for the BC psychogeriatric association* (5–118). Victoria, BC: British Columbia Psychogeriatric Association.

- McDonald, S. (2011). Ontario's aging population: Challenges and opportunities (Report). Toronto, ON: Ontario Trillium Foundation.
- Mental Health Commission of Canada. (2013). Mental Health Commission of Canada issue: Seniors. Retrieved from http://www.mentalhealthcommission.ca/English/ issues/seniors?terminitial
- Milan, A. (2013). Fertility: Overview 2009 to 2011. Component of Statistics Canada (Catalogue no. 91-209-X). Report on the Demographic Situation in Canada. Retrieved from http://www.statcan.gc.ca/pub/91-209-x/2013001/article/11784-eng.htm.
- Mui, A. C. (1996). Depression among elderly Chinese immigrants: An exploratory study. *Social Work*, 41, 633–645.
- National Advisory Council on Aging. (2005). Seniors on the Margins: Seniors from Ethno cultural Minorities, Ottawa, ON: Minister of Public Works and Government Services Canada.
- Newbold, K. B., & Filice, K. J. (2006). Health status of older immigrants to Canada. *Canadian Journal on Aging*, 25(3), 305–319.
- O'Mahony, J. M., & Donnelly, T. T. (2007). Health care providers' perspective of the gender influences on immigrant women's mental health care experiences. *Issues in Mental Health Nursing*, 28(10), 1171–1188.
- Ontario Trillium Foundation (2011). *Demographic change and implications of an aging population for the not-for-profit sector in Ontario* (prepared for The Ontario Trillium Foundation). Retrieved from http://books1.scholarsportal.info/viewdoc.html?id=665457
- Rudner, A. (2011). What are the data telling us about immigrant seniors' health? Paper presented at the 2011 National Metropolis Conference "Immigration: Bringing the World to Canada," Vancouver, BC.
- Sadavoy, J., Meier, R., & Ong, A. Y. M. (2004). Barriers to access to mental health services for ethnic seniors: The Toronto study. *Canadian Journal of Psychiatry*, 49(3), 192–199.
- Simich, L., Hamilton, H., & Baya, B. K. (2006). Mental distress, economic hardship and expectations of life in Canada among Sudanese newcomers. *Transcultural Psychiatry*, 43(3), 418–444.
- Sluzki, C. E. (1992). Disruption and reconstruction of networks following migration/relocation. *Family Systems Medicine*, 10(4), 359–363.
- Canada, Statistics. (2011). Canadian Community Health Survey 2009 Annual Component. Ottawa, ON: Author. Retrieved from http://www12.statcan.gc.ca/census-recensement/ index-eng.cfm
- Stewart, M., Shizha, E., & Makwarimba, E., Spitzer, D., Khalema, E. N., & Nsaliwa, C. D. (2011). Challenges and barriers to services for immigrant seniors in

- Canada: "You are among others but you feel alone." *International journal of migration health & social care*, 7(1), 16–32.
- Streiner, D., Cairney, J., & Veldhuizen, S. (2006). The epidemiology of psychological problems in the elderly. *Canadian Journal of Psychiatry*, *51*(3), 185–191.
- Sue, D. W., & Sue, D. (2008). *Counseling the culturally diverse: Theory and practice* (5th ed.). New York: Wiley.
- Taylor, L. E., Taylor-Henley, S., & Doan, L. (2005). Older immigrants: Language competencies and mental health. *Canadian Journal of Community Mental Health*, 24(2), 23–34.
- Tieu, Y., Konnert, C., & Wang, J. (2010). Depression literacy among older Chinese immigrants in Canada: a comparison with a population-based survey. *International Psychogeriatrics*, 22(8), 1318–1326.
- Turcotte, M., & Schellenberg, G. A. (2006). Portrait of seniors in Canada. Retrieved from http://www.statcan.gc.ca/pub/89-519-x/89-519-x2006001-eng.pdf
- Zunzunegui, M. V., Forster, M., Gauvin, L., Raynault, M. F., & Williams, J. D. (2006). Community unemployment and immigrants health in Montreal. *Social Science & Medicine*, 63, 485–500.