




# Access to Long-Term Care for Minority Populations: A Systematic Review

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## Article

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## Résumé

Il a été démontré que des disparités dans l'accès aux soins de longue durée et aux autres services affectent les populations minoritaires. Cette étude a évalué l'accès aux soins de longue durée chez les personnes âgées appartenant à des populations minoritaires, notamment les minorités visibles, ethnoculturelles, linguistiques et sexuelles. Les obstacles et les facilitateurs ayant un impact sur l'admission ont été identifiés et évalués. Une recherche d'articles publiés entre janvier 2000 et janvier 2021 a été réalisée dans dix bases de données. Les études incluses dans la recension devaient considérer des facteurs influençant l'admission en soins de longue durée de populations minoritaires, et la perception des non-résidents quant à une admission future. Cette recension a été enregistrée sur PROSPERO (CRD42018038662). Soixante études (quantitatives, qualitatives) de qualité moyenne à excellente ont été retenues. Les résultats indiquent que l'appartenance à une minorité est associée à une réduction de l'admission dans les soins de longue durée, après un contrôle des variables confondantes. Les obstacles identifiés comprennent le langage discordant, la peur de la discrimination, le manque d'information et les obligations familiales. Les résultats suggèrent que les populations minoritaires ont rencontré des obstacles en matière d'accès aux soins de longue durée et que certains de leurs besoins culturels ou linguistiques n'ont pas été satisfaits alors qu'elles recevaient des soins dans ce type de milieu.

## Abstract

It has been shown that there is disparity in access to long-term care and other services for minority populations. This study assessed long-term care access among older individuals belonging to minority populations including visible, ethnocultural, linguistic, and sexual minorities. Barriers and facilitators influencing admission were identified and evaluated.

A search for articles from 10 databases published between January 2000 and January 2021 was conducted. Included studies evaluated factors affecting minority populations' admission to long-term care, and non-residents' perceptions of future admission. This review was registered with PROSPERO: CRD42018038662. Sixty included quantitative and qualitative studies, ranging in quality from fair to excellent. Findings suggest minority status is associated with reduced admission to long-term care, controlling for confounding variables. Barriers identified include discordant language, fear of discrimination, lack of information, and family obligations. Findings suggest that minority populations experienced barriers accessing long-term care and had unmet cultural and language needs while receiving care in this setting.

## Background and Objectives

The number of older adults belonging to minority populations who require residential care is increasing. However, individuals belonging to minority populations often experience unmet health care needs (i.e., prescription medications, dental care, and higher incidence of unmanaged pain) and underutilization of health services (Shi & Stevens, 2005; Wu, Penning, & Schimmele, 2005). In Canada, it has been observed that recent older immigrants use health services less than do long-standing residents, which is associated with social determinants of health such as discordant cultural expectations, financial restrictions, and linguistic diversity (Chaze, Thomson, George, & Guruge, 2015; Guruge, Thomson, & Seifi, 2015; Wang, Guruge, & Montana, 2019). In the context of a growing older adult immigrant population (Statistics Canada, 2021), it is unclear if the increasing demand for appropriate long-term care for our aging population is being met, particularly for a number of minority populations.

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This review inspects health inequities experienced by individuals who identify with a minority population – recognizing there are complex geographic, political, and social factors that contribute to minority status, racial and socio-economic discrimination, and health care access. We also recognize that minority populations are not mutually exclusive. Individuals may identify with more than one group (Balsam, Molina, Beadnell, Simoni, & Walters, 2011) and experience intersectionality: a cumulative marginalization effect imposed on individuals through the intersection of minority identities (Chan & Henesy, 2018; Viruell-Fuentes, Miranda, & Abdulrahim, 2012). Compiling international literature on minority populations without content experts from each geographic and cultural setting is challenging, and may result in further discrepancies; therefore, we used existing definitions while recognizing their limitations. Because the definition of minority is specific to time and place, we used both the United Nations' (UN) terminology (United Nations, 1992) – outlined in the Methods Section – and a literal interpretation of “minority” as meaning those identifying with characteristics not exemplified in the majority population.

There are a number of definitions for minorities depending on the use of the term. According to the Employment Equity Act in Canada, visible minorities are defined as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour” (Statistics Canada, 2015), and an immigrant is a “person has been granted the right to live in Canada permanently” (Statistics Canada, 2019). The terminology “sexual and gender minority” is used in literature (Mastroianni, Kahn, & Kass, 2019; Wilson, Kortess-Miller, & Stinchcombe, 2018) to characterize those who identify as lesbian, gay, bisexual, transgender, queer, and Two-Spirit (LGBTQ2+). However, a notable paucity of literature remains on the health challenges specific to LGBTQ2+ populations (Wilson, Stinchcombe, Ismail, & Kortess-Miller, 2019). Our review aims to outline research on minority populations' access to long-term residential care while acknowledging the complex historical, political, and geographic factors that are intrinsically tied to minority status.

Studying health inequalities among minority populations involves both accurate measures of health inequality and developing interventions that appropriately eliminate disparities (Jackson, 2005). Although evidence of health disparities within minority populations exist, a theoretical framework that addresses the complexity of minority status without reproducing patterns of “Othering” remains undefined (Torres, 2019). In some jurisdictions, minority populations are shown to have longer wait times for ethno-specific care homes (Um, 2016). Negative outcomes such as lower satisfaction with quality of care, higher rates of pressure ulcers, and lower rates of diagnosis and treatment of depression have also been observed among minority groups in long-term care settings (Li *et al.*, 2015). There is consolidation on the literature on health disparities for many minority populations (Ayhan *et al.*, 2019; Mukadam, Cooper, & Livingston, 2011; Rosenkrantz, Black, Abreu, Aleshire, & Fallin-Bennett, 2017; Wilson *et al.*, 2012). However, literature assessing long-term care access among older minority populations has not been consolidated. The objectives of this systematic review were to examine access to long-term care for minority populations and identify barriers or facilitators that influence their admission.

## Research Design and Methods

We developed an a priori protocol and analysis plan registered with PROSPERO (removed for blinded review), and followed the

Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Appendix 1).

## Study Population

Our population of interest was older adults, (65 years of age and older), belonging to minority populations who may need or are considering entry into long-term care. For the purpose of this review, we defined “long-term care” as a residence providing 24-hour nursing care. In many jurisdictions and countries, these type of care settings may be known as “nursing home facilities”, “nursing homes or residences”, “skilled nursing facilities”, or “personal care homes”.

We recognize that the definition of “minority” is dependent on geographic location and cultural setting. For the purposes of this review, we followed the terminology of the UNs' Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, which defines minority groups “based on national or ethnic, cultural, religious and linguistic identity” for whom minority status is dependent on the cultural, geographic, and linguistic area within which each group lives (United Nations, 1992). We strove to be as inclusive as possible, selecting studies that looked at any minority group within the UN definition and included research on sexual and gender minorities, given that there is a lack of research on these individuals and communities (Wilson *et al.*, 2019). We are aware that some terminology used in original manuscripts is no longer acceptable, so we added the term “[sic]” to indicate that the choice of wording was from the original publication and not necessarily the terminology that the authors of this article would choose. We also used “[sic]” when we felt that there was lack of clarity or variety in the definition of the term (e.g. “others”).

## Eligibility Criteria

Studies published between 2000 and 2021 in English or French were considered. We included quantitative and qualitative studies that: (1) examined admission to long-term residential care or the influence of minority status on admission, or (2) explored barriers to and facilitators of admission for minority populations. An age restriction of 65 or older was applied to the first group; we did not apply an age restriction for studies on preferences, including studies that assessed perceptions of participants who would be using homes in the future. We included studies of both caregiver and patient perspectives. We also reported factors influencing residence or prevalence data only from those studies evaluating factors for admission.

## Search Strategy

We consulted with a health literature search specialist and conducted a search for relevant articles published between January 2000 and January 2021 from 10 databases. The full search strategy is available in Appendix 2. Articles selected for full-text screening were reviewed to hand search all references, and any relevant non-duplicate articles were individually searched, downloaded, and screened for eligibility.

## Study Screening and Data Extraction

Retrieved articles were managed in a Zotero library (version X6). Team members screened a sample of 30 articles to ensure inter-rater

reliability. Titles and abstracts were independently screened by at least two researchers for relevance. After reaching consensus, full-text articles were obtained and uploaded to Mendeley. Two members of the team independently reviewed each article. Disagreements were resolved through discussion and input of a third team member when necessary. Subsequently, one team member extracted data from all relevant articles using a form specifically developed and pre-tested for the study (Appendices 3 and 4). Another team member validated the data extraction.

### Methodological Quality

Quantitative cohort studies, qualitative studies, and the systematic review were all assessed for methodological quality using the Critical Appraisal Skills Programme (CASP) checklists according to study design. Cross-sectional studies were evaluated using the National Heart, Lung, and Blood Institute's quality assessment tool for observational cohort and cross-sectional studies. Consistent with previous literature (Maass, Roorda, Berendsen, Verhaak, & De Bock, 2015), all quality assessment results were calculated into a percentage-based score and categorised as poor (0–25%), fair (25–50%), good (50–75%), or excellent (75–100%) to demonstrate study quality. Quality assessment scales and questions are listed in Appendix 5.

### Data Synthesis and Analysis

Because of substantial heterogeneity both in the populations and study design, we were unable to combine effect estimates using a statistical approach. Instead, we used narrative synthesis and described the results according to outcomes. We intended to find information on access and included articles discussing access based on admissions. Because we were interested in disparities between minority and majority populations (not just number of individuals from a minority population in long-term care) we calculated percentages when possible. These calculations were based on information presented in the articles, without adjustment for any potential covariates. We used a previously developed framework for minority access to health care for synthesis of qualitative studies (Kenning, Daker-White, Blakemore, Panagioti, & Waheed, 2017).

### Results

A total of 15,746 articles were captured by the initial database search and 175 additional articles were found through hand-searching (Figure 1). We removed 6,111 duplicates, leaving 9,635 studies for title and abstract screening. We screened 191 studies at the full-text stage and selected 59 studies for inclusion. Of the 60 studies, 42 were conducted in the United States (Ahmed, Ali, Lefante, Mullick, & Kinney, 2006; Ahmed, Allman, & DeLong, 2003; Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Andel, Hyer, & Slack, 2007; Angel, Angel, Aranda, & Miles, 2004; Angel, Douglas, & Angel, 2003; Angelelli, Grabowski, & Mor, 2006; Aykan, 2002; Baxter, Bryant, Scarbro, & Shetterly, 2001; Berridge & Mor, 2017; Cai, Salmon, & Rodgers, 2009; Duffy, Jackson, Schim, Ronis, & Fowler, 2006; Feng, Fennell, Tyler, Clark, & Mor, 2011; Friedman, Steinwachs, Rathouz, Burton, & Mukamel, 2005; Gandhi, Lim, Davis, & Chen, 2017; Gaugler, Kane, Kane, & Newcomer, 2006; Gaugler, Leach, Clay, & Newcomer, 2004; Goodwin, Howrey, Zhang, & Kuo, 2011; Harris, 2007; Harris & Cooper, 2006; Iwasaki, Pierson, Madison, & McCurry, 2016; Jackson, Johnson, & Roberts,

2008; Jang, Kim, Chiriboga, & Cho, 2008; Kersting, 2001a,b; Liu, Wissoker, & Swett, 2007; McCormick et al., 2002; McLaughlin, Elahi, Ciesielski, & Pomerantz, 2016; Miller, Schneider, & Rosenheck, 2011; Min, 2005; Putney, Keary, Hebert, Krinsky, & Halmo, 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Sharma, 2017; Spillman & Long, 2009; Stein, Beckerman, & Sherman, 2010; Stevens et al., 2004; Temple, Andel, & Dobbs, 2010; Yaffe et al., 2002), seven in Canada (Brotman, Ryan, & Cormier, 2003; Forgues, Doucet, & Noël, 2011; Gui & Koropecjy-Cox, 2016; Kortess-Miller, Boulé, Wilson, & Stinchcombe, 2018; Lai, 2004; Metz, 2007; Qureshi et al., 2021), three in Norway (Arora, Rechel, Bergland, Straiton, & Debesay, 2020; Czapka & Sagbakken, 2020; Hanssen & Traut, 2018), two in Australia (Basic, Shanley, & Gonzales, 2017; Waling et al., 2019), two in Sweden (Heikkilä & Ekman, 2003; Innes, 2020), and one each in Belgium (Ahaddour, van den Branden, & Broeckaert, 2016), Hong Kong (Chui, Arat, Chan, & Wong, 2019), The Netherlands (Tenand, Bakx, & van Doorslaer, 2020), Taiwan (Chung et al., 2008) and the United Kingdom (Herat-Gunaratne et al., 2020).

### Quality Assessments

Of the 60 studies, 33 studies were rated as being of excellent quality (Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Arora et al., 2020; Basic et al., 2017; Berridge & Mor, 2017; Brotman et al., 2003; Cai et al., 2009; Chui et al., 2019; Chung et al., 2008; Czapka & Sagbakken, 2020; Friedman et al., 2005; Gandhi et al., 2017; Gaugler et al., 2006; Gui & Koropecjy-Cox, 2016; Harris, 2007; Harris & Cooper, 2006; Heikkilä & Ekman, 2003; Liu et al., 2007; McCormick et al., 2002; Metz, 2007; Miller et al., 2011; Min, 2005; Putney et al., 2018; Quigley, 2017; Qureshi et al., 2021; Riley, 2019; Rodriguez, 2004; Sharma, 2017; Spillman & Long, 2009; Stein et al., 2010; Stevens et al., 2004; Yaffe et al., 2002), 22 were rated good quality (Ahmed et al., 2003, 2006; Andel et al., 2007; Angel et al., 2003, 2004; Aykan, 2002; Forgues et al., 2011; Gaugler et al., 2004; Goodwin et al., 2011; Hanssen & Tran, 2018; Herat-Gunaratne et al., 2020; Iwasaki et al., 2016; Jackson et al., 2008; Jenkins Morales & Robert, 2020; Kersting, 2001a,b; Kortess-Miller et al., 2018; Lai, 2004; McLaughlin et al., 2016; Tenand et al., 2020; Travers, Hirschman, & Naylor, 2020; Waling et al., 2019), and 5 were rated fair quality (Appendix 6) (Ahaddour et al., 2016; Innes, 2020; Jang et al., 2008; Lehnert, Heuchert, Hussain, & König, 2019; Mahieu, Cavolo, & Gastmans, 2019).

### Minority Populations in Long-Term care and Influence of Minority Status on Admission

#### Influence of minority status on long-term care admission

Twenty-eight studies reported the influence of minority status on long-term care admission (Ahmed et al., 2003, 2006; Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Andel et al., 2007; Angel et al., 2003, 2004; Aykan, 2002; Berridge & Mor, 2017; Cai et al., 2009; Friedman et al., 2005; Gandhi et al., 2017; Gaugler et al., 2004, 2006; Goodwin et al., 2011; Harris, 2007; Harris & Cooper, 2006; Jenkins Morales & Robert, 2020; Kersting, 2001a,b; Liu et al., 2007; Miller et al., 2011; Qureshi et al., 2021; Sharma, 2017; Spillman & Long, 2009; Stevens et al., 2004; Yaffe et al., 2002). All studies were conducted in the United States. Metrics evaluating outcomes were odds ratios, hazard ratios, and risk ratios.

Four studies evaluated factors associated with admission to long-term care within minority populations (Table 1). Among one minority group, these studies evaluated differences between

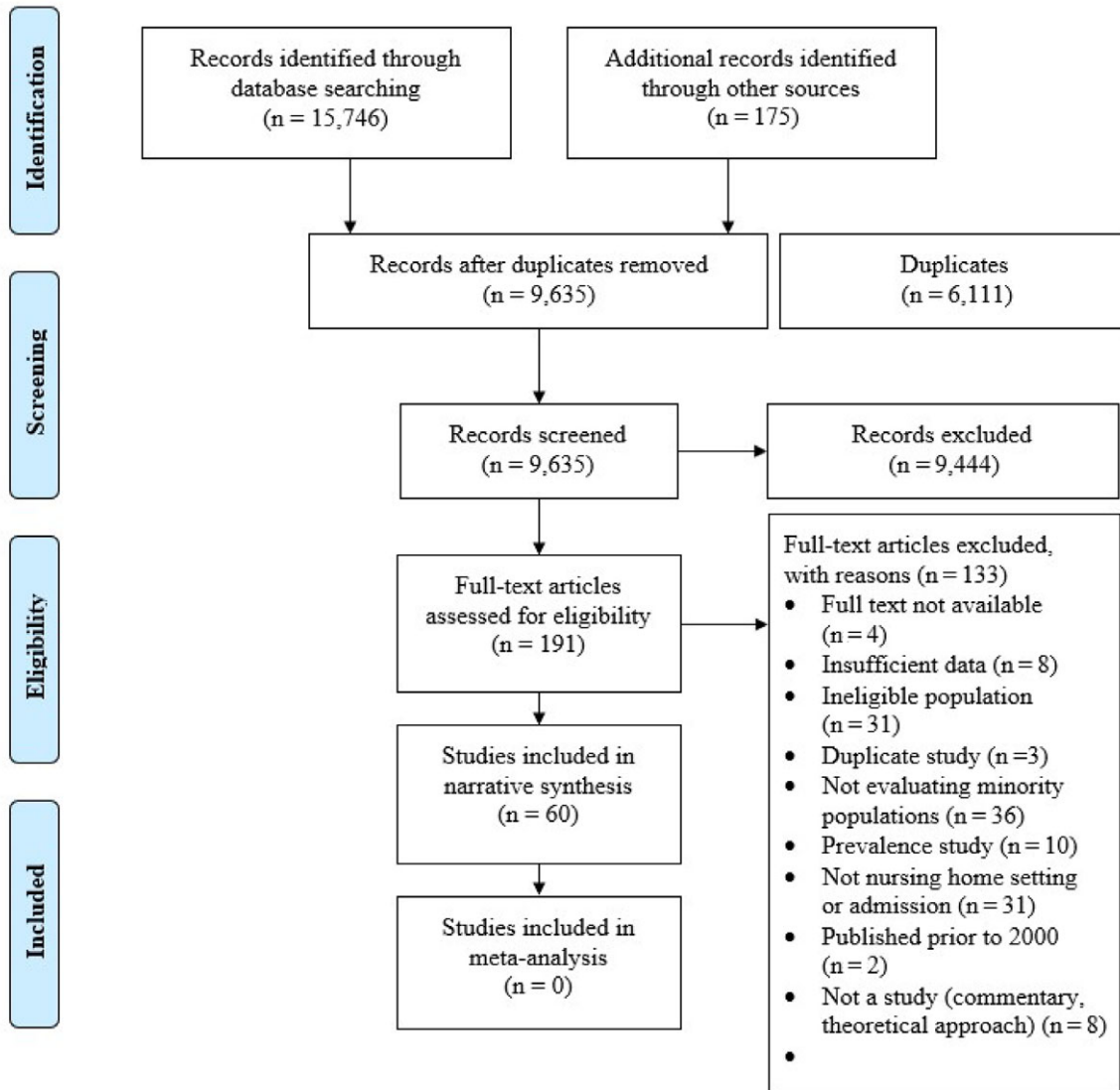


Figure 1: PRISMA flow diagram

those who were admitted to long-term care and those who were not, without a comparison with a “majority” population (Angel et al., 2003, 2004; Gaugler et al., 2004). Studies examined admissions among Mexican-Americans (Angel et al., 2003, 2004), Older migrants to Sweden (Innes, 2020), and African Americans (Gaugler et al., 2004). In three of these studies, long-term care admission increased with older age, eligibility for public health insurance, male gender, being widowed, limitations in performing activities of daily living, cognitive impairment, and family inability to manage care at home (Angel et al., 2003, 2004, Gaugler et al., 2004). Innes found that age, living alone, and country of origin are all important factors, and concluded that caution is needed when making generalizations about formal care in migrant populations (Innes, 2020).

There were 21 studies comparing two or more ethnocultural groups (Table 2) (Ahmed et al., 2003, 2006; Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Andel et al., 2007; Aykan, 2002; Friedman et al., 2005; Gaugler et al., 2006; Goodwin et al., 2011; Harris, 2007; Harris & Cooper, 2006; Kersting, 2001a,b; Liu et al., 2007; Miller et al., 2011; Sharma, 2017; Spillman & Long, 2009; Stevens et al., 2004; Temple et al., 2010; Yaffe et al., 2002).

Two studies only reported crude outcome measures or estimates based on bivariate analyses (Ahmed et al., 2003; Stevens et al., 2004). Stevens et al. adjusted for one covariate (e.g., family socioeconomic status, care recipient age, or memory and behavior problems) at a time and demonstrated a lower likelihood of admission to long-term care for blacks than for whites (Stevens et al., 2004).

Twenty-one studies used multivariable regressions, adjusting for a variety of covariates (Appendix 6). Outcomes examined in these studies included incident admissions to long-term care ( $n = 12$ ) (Ahmed et al., 2006; Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Friedman et al., 2005; Goodwin et al., 2011; Harris & Cooper, 2006; Kersting, 2001a,b; Liu et al., 2007; Sharma, 2017; Spillman & Long, 2009) and time to admission ( $n = 6$ ) (Akamigbo & Wolinsky, 2007; Andel et al., 2007; Aykan, 2002; Gaugler et al., 2006; Temple et al., 2010; Yaffe et al., 2002), as well as both time to and odds of an incident admission ( $n = 1$ ) (Cai et al., 2009). Length of follow-up ranged from immediate admission post hospital discharge to 12 years following baseline measurement (e.g., from a survey).



**Table 1:** Factors influencing long-term care admission for minority populations: Single group studies ( $n = 4$ )

Author, Year, Country	Population	Sample Size	Study Design	Key Findings
Angel et al. 2003; USA	Mexican Americans	956	Secondary longitudinal cohort study	Widowers (male) are more likely to use nursing facility than widows (female) amongst welfare recipients in the older Mexican American widowed population.
Angel et al. 2004; USA	Mexican Americans	3,050	Secondary longitudinal cohort study	Advanced age, male gender, ADL limitations, and cognitive impairment are strong predictors of institutionalization and death. Living with family, arriving in the USA in late life, and access to social support decreased the probability of dying in a nursing home.
Gaugler et al. 2004; USA	Alzheimer disease, Black population	667	Retrospective secondary data	Care recipient age, sex, Medicaid eligibility, and cognitive impairment, and caregiving burden were significant predictors of time to placement for African Americans with dementia.
Innes 2020; Sweden	Migrants arriving at older age Migrants arriving at younger age	Entire Swedish population over 65 years old (total not reported)	Cross-sectional	There is substantial variation in use of long-term care services depending on age when the migrant entered Sweden and depending on the country of origin.

Note: ADL = activities of daily living.

Ten of 23 studies compared the likelihood of blacks being admitted to or admitted sooner to long-term care compared with whites (Akamigbo, 2007; Akamigbo & Wolinsky, 2006, 2007; Aykan, 2002; Cai et al., 2009; Friedman et al., 2005; Goodwin et al., 2011; Harris, 2007; Liu et al., 2007; Yaffe et al., 2002). Seven comparisons across four studies showed that blacks had lower odds of admission, with a median odds ratio of 0.64 (range 0.48–0.99) (Akamigbo & Wolinsky, 2006, 2007; Cai et al., 2009; Liu et al., 2007). One study found that blacks discharged from hospital had greater odds of being admitted or admitted sooner to long-term care than whites, with a significant odds ratio of 1.04 (95% confidence interval [CI] 1.01–1.07) (Goodwin et al., 2011). Similarly, Ahmed and colleagues observed that blacks had lower odds of admission than others [sic] (Ahmed et al., 2003); however, blacks had higher odds of re-admission to long-term care after hospitalization than others [sic].

In 12 studies, whites were compared with Hispanics [sic], Latinos [sic], non-Whites [sic] or other [sic] groups (Aykan, 2002; Cai et al., 2009; Friedman et al., 2005; Gaugler et al., 2006; Goodwin et al., 2011; Harris, 2007; Harris & Cooper, 2006; Liu et al., 2007; Miller et al., 2011; Spillman & Long, 2009; Temple et al., 2010; Yaffe et al., 2002). All but one study (Spillman & Long, 2009) demonstrated that the minority group had a lower risk of being admitted or admitted sooner to long-term care than whites. One study of individuals with disabilities did not show a lower risk of admission for racial minority populations (Spillman & Long, 2009).

Three studies compared blacks with non-blacks [sic] or Hispanics with non-Hispanic whites [sic] (Ahmed et al., 2006; Kersting, 2001a,b); they found that non-blacks and non-Hispanic whites were at greater risk of being admitted or admitted sooner to long-term care than their counterparts. Gaugler et al. found that African-Americans had a shorter time to long-term care admission than Latino populations (Gaugler et al., 2006).

One study compared recent immigrants to long-standing residents and found that being a recent immigrant or waiting for a

cultural or an ethnic-specific home increases wait-time for long-term care placement (Qureshi et al., 2021).

#### Proportion of minority groups in long-term care

Nine studies of the 21 comparing two or more ethnocultural groups reported the proportions of older adults of minority populations who were residents of long-term care (Akamigbo & Wolinsky, 2006, 2007; Andel et al., 2007; Goodwin et al., 2011; Jenkins Morales & Robert, 2020; Liu et al., 2007; Sharma, 2017; Stevens et al., 2004). All of these studies were conducted in the United States.

The studies compared ethnocultural minority groups with white or non-minority populations (Akamigbo & Wolinsky, 2006, 2007; Andel et al., 2007; Gandhi et al., 2017; Goodwin et al., 2011; Jenkins Morales & Robert, 2020; Liu et al., 2007; Sharma, 2017; Stevens et al., 2004). Three studies compared multiple minority groups with the majority population (Gandhi et al., 2017; Goodwin et al., 2011; Liu et al., 2007). Eight studies compared the proportion of blacks with the proportion of whites (Akamigbo & Wolinsky, 2006, 2007; Berridge & Mor, 2017; Goodwin et al., 2011; Jenkins Morales & Robert, 2020; Liu et al., 2007; Sharma, 2017; Stevens et al., 2004), and four of these observed a higher proportion of blacks in long-term care (Berridge & Mor, 2017; Goodwin et al., 2011; Jenkins Morales & Robert, 2020; Sharma, 2017). Four studies compared non-whites [sic] (Andel et al., 2007), and others [sic] with whites (Gandhi et al., 2017; Goodwin et al., 2011; Liu et al., 2007). Three studies found that the proportion of whites was higher than that of individuals belonging to minority populations in long-term care (Andel et al., 2007; Goodwin et al., 2011; Liu et al., 2007). The most recent results from Gandhi et al. found the same for all minority groups except Pacific Islanders, who had a higher prevalence than whites (Gandhi et al., 2017).

Three studies explored residential facility use by eligible older migrants compared with those in their country of birth. Innes and Basic et al. did not report statistically significant results; however, they concluded that foreign-born individuals were less likely to use residential care than those living in their country of origin

**Table 2:** Influence of minority status on long-term care admission: Multiple group studies ( $n = 23$ )

Author, Year, Country	Populations Compared	Time of Follow-up	Outcome – Admission, Time to Admission, or Prevalence	Statistic Reported	Adjusted or Not Adjusted for Covariates	Value
Ahmed 2003; USA	Black non-Black [sic]	Cross-sectional	Admissions	Odds ratio	Not adjusted	1.07
			New Admissions	Odds ratio	Not adjusted	0.26
Ahmed 2006; USA	Black, non-Black[sic]	Cross-sectional	Admission	Odds ratio	Adjusted	0.95
Akamigbo 2007; USA	Black, White [sic] (alive at end of study, placed once)	11 years	Admission	Odds ratio	Adjusted	0.48
	Black, White [sic] (deceased at end of study, placed once)	11 years	Admission	Odds ratio	Adjusted	0.78
	Black, White [sic] (alive, multiple placements)	11 years	Admission	Odds ratio	Adjusted	0.99
	Black, White [sic] (deceased, multiple placements)	11 years	Admission	Odds ratio	Adjusted	0.54
Akamigbo & Wolinsky 2006; USA	Black, White [sic]	5 years	Admission	Odds ratio	Adjusted	0.66
Akamigbo & Wolinsky 2007; USA	Black, White [sic]	11 years	Admission	Hazard ratio	Adjusted	0.74
Andel et al. 2007; USA	Other, White [sic]	Up to 4 years	Time to admission	Hazard ratio	Adjusted	0.6
Aykan et al 2002; USA	Black, White [sic]	2 years after baseline	Time to admission	Hazard ratio	Adjusted	Women 0.67
			Time to admission	Hazard ratio	Adjusted	Men 0.87
	Hispanic, White [sic]	2 years after baseline	Time to admission	Hazard ratio	Adjusted	Women 0.21
			Time to Admission	Hazard ratio	Adjusted	Men 0.74
	Other, White [sic]	2 years after baseline	Time to Admission	Hazard ratio	Adjusted	Women 0.47
			Time to Admission	Hazard ratio	Adjusted	Men 0.63
Cai et al. 2009; USA	Black, White [sic]	7 years	Time to admission	Hazard ratio	Adjusted	0.61
			Admission	Odds ratio	Adjusted	0.64
	Hispanic, White [sic]	7 years	Time to admission	Hazard ratio	Adjusted	0.35
			Admission	Odds ratio	Adjusted	0.50
	Other, White [sic]	7 years	Time to admission	Hazard ratio	Adjusted	0.52
			Admission	Odds ratio	Adjusted	0.42
Friedman et al. 2005; USA <sup>a</sup>	Asian, White [sic]	6 years	Admission	Hazard ratio	Adjusted	0.43
	Black, White [sic]	6 years	Admission	Hazard ratio	Adjusted	0.64
Gaugler et al. 2006; USA	White, Latino [sic]	3 years	Time to admission	Hazard ratio	Adjusted	0.70
	Black, Latino [sic]	3 years	Time to admission	Hazard ratio	Adjusted	2.22
Goodwin et al. 2011; USA	Other White [sic]	12 years	Admission	Odds ratio	Adjusted	0.96
	Black, White[sic]	12 years	Admission	Odds ratio	Adjusted	1.04
Harris 2007; USA	Asian, White [sic]	3 years	Admission	Risk ratio	Adjusted	0.60
	Black, White [sic]	3 years	Admission	Risk ratio	Adjusted	0.93
	Latino, White [sic]	3 years	Admission	Risk ratio	Adjusted	0.77
Harris & Cooper 2006; USA	White, Non-White [sic]	3.5 years	Admission	Hazard ratio	Adjusted	0.69

(Continued)

Table 2: Continued

Author, Year, Country	Populations Compared	Time of Follow-up	Outcome – Admission, Time to Admission, or Prevalence	Statistic Reported	Adjusted or Not Adjusted for Covariates	Value
Jenkins Morales & Robert 2020; USA	Black, White [sic]	2 years	Admission	Odds ratio	Unadjusted Adjusted	1.43–0.51
Kersting 2001a; USA	Black, Non-Black [sic]	6 years	Admission	Hazard ratio	Adjusted	0.49
	Hispanic, Non-Hispanic [sic]	6 years	Admission	Hazard ratio	Adjusted	0.79
Kersting 2001b; USA	Black, Non-Black [sic]	Model testing 6 years	Admission	Hazard ratio	Adjusted	0.48
Liu et al. 2007; USA	Black, White [sic]	12 months prior to death	Admission	Odds ratio	Adjusted	0.63
	Other, White [sic]	12 months prior to death	Admission	Odds ratio	Adjusted	0.49
Miller et al. 2011; USA	Non-Hispanic White, White [sic]	9 months	Admission	Hazard ratio	Adjusted	0.45
Qureshi et al. 2021; Canada	Recent immigrants, Long-standing residents [sic]	3 years	Time to admission	Arithmetic mean ratio	Adjusted	1.22
Sharma 2017; USA	Black, Non-Black [sic]	1 year	Admission	Odds ratio	Adjusted	0.83 <sup>b</sup> (beta-0.19)
Spillman & Long 2009; USA	Non-White, White [sic]	2 years	Admission	Odds ratio	Adjusted	0.99 <sup>b</sup>
Stevens et al. 2004; USA	Black, White [sic]	More than 5 years	Time to admission	Hazard ratio	Not adjusted	0.341 to 0.520
Temple et al. 2010; USA	Non-White, White [sic]	5 years	Time to admission	Hazard Ratio	Adjusted	0.81
Yaffe et al. 2002; USA	Black, White [sic]	3 years	Time to admission	Hazard Ratio	Adjusted	0.60
	Hispanic, White [sic]	3 years	Time to admission	Hazard Ratio	Adjusted	0.40

Note. <sup>a</sup>Study reported non-significant differences between Hispanic and American Indian population compared with white population, but no values reported.

<sup>b</sup>Study reported multiple values for hazard ratio; each value was adjusted by one covariate at a time, so we have reported the range of hazard ratios.

(Basic et al., 2017; Innes, 2020). Tenand et al. found no significant inequities using the horizontal inequity index (Tenand et al., 2020),

### Expectations and Preferences

Twenty-seven studies evaluated expectations and preferences of different populations with regards to future long-term care placement (Table 3) (Ahaddour et al., 2016; Akamigbo & Wolinsky, 2006; Arora et al., 2020; Chui et al., 2019; Chung et al., 2008; Czapka & Sagbakken, 2020; Duffy et al., 2006; Forgues et al., 2011; Gui & Koropecykj-Cox, 2016; Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Herat-Gunaratne et al., 2020; Iwasaki et al., 2016; Jackson et al., 2008; Jang et al., 2008; Kortess-Miller et al., 2018; Lai, 2004; McCormick et al., 2002; McLaughlin et al., 2016; Metz, 2007; Min, 2005; Putney et al., 2018; Quigley, 2017; Rodriguez, 2004; Stein et al., 2010; Travers et al., 2020; Waling et al., 2019). Fourteen studies were conducted in the United States (Akamigbo & Wolinsky, 2006; Duffy et al., 2006; Iwasaki et al., 2016; Jackson et al., 2008; Jang et al., 2008; McCormick et al., 2002; McLaughlin et al., 2016; Min, 2005; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Stein et al., 2010; Travers et al., 2020), six in Canada (Brotman et al.,

2003; Forgues et al., 2011; Gui & Koropecykj-Cox, 2016; Kortess-Miller et al., 2018; Lai, 2004; Metz, 2007), three in Norway (Arora et al., 2020; Czapka & Sagbakken, 2020; Hanssen & Tran, 2018) and one each in Australia (Waling et al., 2019), Belgium (Ahaddour et al., 2016), Hong Kong (Chui et al., 2019), Sweden (Heikkilä & Ekman, 2003), Taiwan (Chung et al., 2008), and the United Kingdom, England (Herat-Gunaratne et al., 2020). Eleven studies used quantitative analyses (i.e., surveys or questionnaires) (Akamigbo & Wolinsky, 2006; Chung et al., 2008; Iwasaki et al., 2016; Jackson et al., 2008; Jang et al., 2008; Kortess-Miller et al., 2018; Lai, 2004; McCormick et al., 2002; McLaughlin et al., 2016; Min, 2005; Travers et al., 2020), 17 were qualitative studies involving focus groups or interviews (Arora et al., 2020; Brotman et al., 2003; Chui et al., 2019; Czapka & Sagbakken, 2020; Duffy et al., 2006; Forgues et al., 2011; Gui & Koropecykj-Cox, 2016; Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Herat-Gunaratne et al., 2020; Metz, 2007; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Stein et al., 2010; Waling et al., 2019), and three were qualitative reviews (Ahaddour et al., 2016; Lehnert et al., 2019; Mahieu et al., 2019). None of the studies assessed the impact of preferences and expectations on actual long-term care placement.

**Table 3:** Expectations and preferences of potential future long-term care residents (*n* = 27)

Author, Year, Country	Study Design	Sample Size; Minority Population	Key Findings
Ahaddour et al 2016; Belgium	Review	<i>n</i> =21; 11 studies 10 articles/reports	A lack of access to health care was reported as a serious problem for Turkish and Moroccan migrants in Belgium. Specific barriers included language, food culture, privacy, religion, and dealing with sensitive issues. Policies have been recommended but no data are available on the outcomes of the new approaches.
Akamigbo & Wolinsky 2006, USA	Cross-sectional study	<i>n</i> =6,242; 879 Black, 5,363 White [sic]	There were no additive differences in expectations of nursing home placement between whites and blacks (Beta= - 0.02), and the level of expectations has the same effect on nursing home placement regardless of race.
Arora et al. 2020, Norway	Qualitative interviews	<i>n</i> =10; Female Pakistani family carers	There was a number of reasons why female caregivers were hesitant to allow their parents to be cared for in formal institutional settings, including concerns about care from strangers and adhering to cultural expectations.
Brotman et al. 2003; Canada	Qualitative interviews	<i>n</i> =32 LGBTQ+ older adults	Older gays and lesbians, their families, and allies identified the incredible fear experienced by gay and lesbian elders when confronted with these services and systems.
Chiu et al 2019; Hong Kong	Qualitative interviews	<i>n</i> =30; Nepalese older adults	There were a number of structural, knowledge, and attitudinal barriers faced by Nepalese older adults in order to access relevant health and social care services.
Chung et al. 2008; Taiwan	Cross-sectional study	<i>n</i> = 562 Taiwanese Hakka and Holo	For the Taiwanese Holo, the preference for institutional care was at a rate of 12.9%, whereas Mainlanders preferred institutional care at a rate of 29.9% and the Taiwanese Hakka preferred institutional care at a rate of 7.9%.
Czapka & Sagbakken 2020; Norway	Focus groups	<i>n</i> =45; Somalian, Polish, Croatian, Pakistani, Indian, Turkish, and Atlantic Ocean islanders	Participants were interviewed about barriers to and facilitators of accessing appropriate services. Key factors included lack of knowledge of dementia, lack of awareness of dementia care services, lack of language skills, culturally based differences, the organization of Norwegian dementia care services, and immigrants' socio-economic status.
Duffy et al. 2006; USA	Qualitative interviews	<i>n</i> =73 Arab Muslim, Arab Christian, Hispanic, Black [sic]	Avoiding a nursing home was crucial for Arabs and Hispanics [sic]. The respondents also noted reasons such as discrimination related to diagnostic categories (such as AIDS) and avoidance of dying people.
Gui & Koropecjy-Cox 2016); Canada	Qualitative interviews	<i>n</i> =20 Chinese	All of the respondents emphasized that their first choice was to take care of their aging parents by themselves. This was attributed to filial piety and close intergenerational relationships.
Hanssen & Tran. 2019; Norway	Qualitative interviews	<i>n</i> = 55; Chinese, Filipino, Ethiopian, Indian, Iranian, Iraqi, Pakistani, Sri Lankan, Vietnamese, Montenegro, and Serbian	The authors conclude that the collectivist obligation felt by those from the ethnic minorities is the principal reason that immigrant groups may not seek the care that is offered in their country of residence.
Heikkilä & Ekman 2003; Sweden	Qualitative interviews	<i>n</i> =39 Finnish immigrants	The elderly Finns believed that culturally appropriate care would allow them to feel well established and settled in their changed life situation, and would help them to adjust to a new life situation.
Herat- Gunaratne et al. 2020; United Kingdom	Qualitative interviews	<i>n</i> =10; Bangladeshi and Indian family carers of people living with dementia at home	There were four themes identified in the care of people living with dementia: (1) an expectation and duty to care, (2) expectation and duty as a barrier to accessing formal care (with subthemes describing how family carer reluctance, care recipient reluctance, and organization of service provision might contribute to this), (3) culturally (in)sensitive care, and (4) the importance of support from informal care networks.
Iwasaki et al. 2016; USA	Cross-sectional study	<i>n</i> =499; 264 Japanese Americans, 235 non-Japanese Americans	No group differences were found with regard to caregiving experiences, exposure to nursing homes, expectation of requiring future nursing homes, or physical proximity to their adult children. Young Japanese Americans showed more knowledge about nursing homes, stronger preference to avoid becoming dependent on their families, and a higher rate of insurance purchases. Japanese Americans ranked higher preferences on culturally universal elements

(Continued)



Table 3: Continued

Author, Year, Country	Study Design	Sample Size; Minority Population	Key Findings
			(e.g., transportation services, Internet access) for their retirement and long-term care facilities over Japanese cultural-specific elements. Young Japanese Americans also preferred to reside with a mixture of racial/ethnic residents.
Jackson et al. 2008; USA	Cross-sectional study	n=319; 132 LGBTQ individuals, 187 heterosexual individuals	LGBTQ+ individuals and heterosexual individuals were not in agreement about the usefulness of a sensitivity training program designed to build tolerance of GLBT individuals among care facility residents. GLBT individuals believed more strongly that such a program would help build tolerance. The majority of LGBTQ+ respondents in our study reported suspicions of discrimination (66%).
Jang et al. 2008; USA	Cross-sectional study	n=427 Korean Americans	Almost half of Korean Americans reported willingness to use a nursing home. Those with worse perceived health and those with a significant other living in a nursing home were more likely to report willingness to use a nursing home.
Kortes-Miller et al. 2018; Canada	Focus groups	n=3 groups with 6-9 participants each; LGBTQ+ adults	This research highlights the hopes and fears of LGBTQ+ individuals as they consider formal care settings. Many were concerned about a decrease in their quality of life and fear of discrimination for their identity.
Lai 2004; Canada	Cross-sectional study	n=2,272 Chinese	Almost half of Chinese participants reported positive intention of using nursing homes, with the majority preferring to live in nursing homes with Chinese staff. Living alone, having chronic illnesses, and dependency on other people for daily activities were significant predictors of intention to use long-term care.
McCormick et al. 2002; USA	Cross-sectional study	n=2,598; 1,244 Japanese Americans, 1,354 Caucasian Americans	Japanese were more likely to intend to use the nursing home based on logistic regression in both the scenario of hip fracture (odds ratio [OR]=0.80) and that of dementia (OR=0.54).
McLaughlin et al. 2016; USA	Cross-sectional study	n=167 Muslims	Muslims preferred to receive long-term care at home from family members. Preferences for nursing homes placements were low, but 78% of participants were willing to consider facilities designed specifically for Muslims.
Metz 2007; Canada	Qualitative interviews	n=12 Japanese Canadians	Many participants indicated their preferred type of long-term care to be a community-based care and were hesitant to ask their children to provide them care. A service gap for nursing homes included limited support services for both caregivers and care recipients, lack of a centralized information system, and the absence of a culturally sensitive palliative care facility for the Japanese-Canadian community.
Min 2005; USA	Cross-sectional study	n=144 Korean Americans	Half of older Korean Americans intended to use all formal care arrangements in the scenario of stroke.
Putney et al. 2018; USA	Focus groups	n=50; LGBTQ+ adults	Many of the fears that participants expressed may be experienced in the general population; however, unique stressors identified in these results are: fear of encountering prejudice and receiving poor care based on sexual orientation, gender identity, and gender expression; anticipatory stress related to concealing their identities; and associated suicide ideation.
Quigley 2017; USA	Qualitative interviews	n=15; assisted living staff at LGBTQ+-specific and non-specific homes	LGBTQ+-specific community staff demonstrated an understanding of the LGBTQ+ aging population including historical and cultural context. None of the homes provided LGBTQ+-specific training for the staff or had knowledge of policies that may safeguard vulnerability, including the LGBTQ+-specific residence.
Rodriguez 2004; USA	Qualitative interviews	n=30 Hispanic [sic] family members	The findings of this study concluded that both black and Hispanic [sic] caregivers continue to express strong feelings of familial obligation. The study showed that supportive informal networks diminish caregivers' feelings of burden.
Stein et al. 2010; USA	Qualitative interviews	n=16; LGBTQ older adults	Participants did not feel safe sharing their sexual orientation with roommates and other residents. Not only did they have the usual worries about their declining health, but they had the additional anxiety that people would discover that they were gay.

(Continued)

Table 3: *Continued*

Author, Year, Country	Study Design	Sample Size; Minority Population	Key Findings
Travers et al. 2020; USA	Secondary analysis – qualitative interviews	$n=464$ ; nearly 50% African American or Hispanic [sic]	This study used Andersen's expanded behavioral model to understand a number of important factors faced by minority populations considering long-term care: losses and changes (psychosocial) and tangible support, capability to provide informal support, and accessibility of informal support (enabling)
Waling et al. 2019; Australia	Qualitative interviews	$n=33$ ; 14 cisgender gay men and 19 cisgender women	Many participants were seeking ways to avoid discrimination, lack of inclusivity, and loss of autonomy that they were concerned would be present in aged-care services.

### Studies using quantitative methods

Six studies assessed a single minority group: Korean Americans (Jang et al., 2008; Min, 2005), Muslims living in the United States (McLaughlin et al., 2016), Francophones as a linguistic minority in New Brunswick (Forgues et al., 2011), sexual and gender minority older adults living in Canada (Kortes-Miller et al., 2018), and Chinese Canadians (Lai, 2004). In three studies, almost half of respondents indicated they would use a long-term care facility (Jang et al., 2008; Lai, 2004; Min, 2005). A sample of Muslims in the United States reported a preference to receive care at home from family members or, if necessary, at a facility designed for Muslims (McLaughlin et al., 2016).

Seven studies compared two groups: Japanese Americans with non-Japanese Americans (Iwasaki et al., 2016; McCormick et al., 2002), LGBTQ+ with heterosexuals (Jackson et al., 2008), blacks with whites (Akamigbo & Wolinsky, 2006), African American, Hispanic, and other undefined individuals from minority populations with whites[sic] (Travers et al., 2020), and regional populations within one country (Chung et al., 2008; Forgues et al., 2011). The studies comparing Japanese Americans with all other Americans reported slightly different results, with one reporting that Japanese Americans were more likely to use residential care homes (McCormick et al., 2002) and the other demonstrating no difference between groups (Iwasaki et al., 2016). Jackson et al. found more LGBTQ+ respondents felt that there was unequal access to social and health services, and that diversity and sensitivity training programmes, as well as gay retirement facilities, were needed (Jackson et al., 2008). Akamigbo and Wolinsky did not find a difference in expectations regarding long-term care use between blacks and whites (Akamigbo & Wolinsky, 2006). Travers et al. reported that African American adults discussed having no or minimal control over the decision to be placed in institutional care, which differed from the white participants who reported total or some participation in their placement decision (Travers et al., 2020). The study on ethnic groups in Taiwan from different regions (Mainlanders, Taiwanese Holo, and Taiwanese Hakka) found that Mainlanders had a greater preference for long-term care placement compared with those from other regions, possibly because of differences in family influences (Chung et al., 2008). Forgues et al. conducted a geographic survey of the availability of long-term care in the Canadian province of New Brunswick and concluded that there was limited access to long-term care for Francophones in some areas with higher population density (2011).

### Studies using qualitative methods

Sixteen studies included interviews of various populations – including LGBTQ+ populations and their caregivers (Brotman et al., 2003; Putney et al., 2018; Quigley, 2017; Stein et al., 2010; Waling

et al., 2019); Arab Muslims, Arab Christians, Hispanics, blacks, and whites (Duffy et al., 2006); Hispanics (Rodriguez, 2004); Japanese Canadians (Metz, 2007); Chinese Canadians with elderly parents in China (Gui & Koropecjy-Cox, 2016); Finnish individuals living in Sweden (Heikkilä & Ekman, 2003); African American women (Riley, 2019); African American, Hispanic and other individuals from minority populations (Travers et al., 2020); female Bangladeshi and Indian caregivers living in England (Herat-Gunaratne et al., 2020); Nepalese living in Hong Kong (Chui et al., 2019); and older adults who are migrants living in Norway (Czapka & Sagbakken, 2020; Hanssen & Tran, 2018) – providing patients' and caregivers' perspectives with possible explanations for the difference in admission among groups. These studies described personal and logistical barriers to long-term care entry and some facilitators. We identified five main themes: language barriers, culture, family support, mistrust, and facilitators.

### Language barriers

Individuals from different linguistic backgrounds reported language as a barrier to accessing and understanding information about long-term care (Czapka & Sagbakken, 2020; Gui & Koropecjy-Cox, 2016; Heikkilä & Ekman, 2003; Herat-Gunaratne et al., 2020; Metz, 2007; Rodriguez, 2004), receipt of care (Czapka & Sagbakken, 2020; Duffy et al., 2006; Gui & Koropecjy-Cox, 2016; Heikkilä & Ekman, 2003; Herat-Gunaratne et al., 2020), and social involvement (Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Metz, 2007). Language barriers could reportedly cause discomfort for those trying to understand the admission process in long-term care procedures (Czapka & Sagbakken, 2020; Duffy et al., 2006; Gui & Koropecjy-Cox, 2016; Herat-Gunaratne et al., 2020; Metz, 2007; Rodriguez, 2004). Family members of potential residents also reported concerns about the resident's inability to communicate in a different language and the subsequent impact on care, as well as the need for family member involvement (Czapka & Sagbakken, 2020; Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Metz, 2007).

### Culture

Thirteen studies found that respondents desired a care setting that met their cultural needs (Arora et al., 2020; Brotman et al., 2003; Chui et al., 2019; Czapka & Sagbakken, 2020; Duffy et al., 2006; Gui & Koropecjy-Cox, 2016; Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Metz, 2007; Quigley, 2017; Riley, 2019; Travers et al., 2020; Waling et al., 2019). Some respondents expressed the desire to avoid long-term care in favour of their private home, despite the availability of culture-specific services (Duffy et al., 2006; Gui & Koropecjy-Cox, 2016). However, availability of ethno-specific or cultural food was a factor influencing many

respondents' choice of long-term care (Metz, 2007; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004). Some members of the LGBTQ+ populations worried that they might not be accepted by staff and other residents in the facilities (Brotman et al., 2003; Kortés-Miller et al., 2018; Putney et al., 2018; Quigley, 2017; Waling et al., 2019).

### Family support

Ten studies described familial obligation as a cultural expectation and expression of love or dedication to their family member, but also many noted guilt around the inability to care for their loved one at home (Arora et al., 2020; Chui et al., 2019; Czapka & Sagbakken, 2020; Duffy et al., 2006; Gui & Koropecj-Cox, 2016; Hanssen & Tran, 2018; Herat-Gunaratne et al., 2020; Metz, 2007; Riley, 2019; Rodriguez, 2004).

### Fear and mistrust

All qualitative studies acknowledged that participants had anxiety, discomfort, or reluctance about others providing care (Arora et al., 2020; Brotman et al., 2003; Chui et al., 2019; Czapka & Sagbakken, 2020; Duffy et al., 2006; Gui & Koropecj-Cox, 2016; Hanssen & Tran, 2018; Heikkilä & Ekman, 2003; Herat-Gunaratne et al., 2020; Kortés-Miller et al., 2018; Metz, 2007; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Stein et al., 2010; Travers et al., 2020; Waling et al., 2019), particularly worries about a lack of cultural sensitivity or familial obligations (Duffy et al., 2006; Gui & Koropecj-Cox, 2016; Metz, 2007), and fear of bias or discrimination (Brotman et al., 2003; Stein et al., 2010). Fear was also documented in those who were not yet residents in long-term care (Brotman et al., 2003; Gui & Koropecj-Cox, 2016; Heikkilä & Ekman, 2003; Metz, 2007). Common fears included fear of victimization and fear of isolation (Metz, 2007; Stein et al., 2010).

### LGBTQ+ populations

There were five studies on LGBTQ+ populations' expectations and preferences for long-term care (Brotman et al., 2003; Putney et al., 2018; Quigley, 2017; Stein et al., 2010; Waling et al., 2019). These studies were included in the qualitative synthesis and the above-mentioned themes. This section is included to highlight some of the unique perspectives highlighted in literature on LGBTQ+ populations. For example, some participants reported considering concealing their sexual identity to avoid discrimination (Jackson et al., 2008; Stein et al., 2010). Particularly, research reported strong fears that identifying as LGBTQ+ would result in an unsafe environment (Brotman et al., 2003; Jackson et al., 2008; Stein et al., 2010; Waling et al., 2019), a lack of inclusivity (Waling et al., 2019), neglect or insufficient care (Brotman et al., 2003; Putney et al., 2018; Stein et al., 2010; Waling et al., 2019), and social isolation (Brotman et al., 2003; Stein et al., 2010; Waling et al., 2019). One study surveyed staff of LGBTQ+-specific care homes and compared them with staff at non-specific homes, and found that staff working in LGBTQ+-specific homes were more aware of the challenges faced by the residents (Quigley, 2017).

### Facilitators

Facilitation themes were presented in nine studies (Brotman et al., 2003; Chui et al., 2019; Czapka & Sagbakken, 2020; Heikkilä & Ekman, 2003; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Stein et al., 2010), such as availability of care providers who speak the same primary language as ethnic residents (Czapka & Sagbakken, 2020; Heikkilä & Ekman, 2003). Professional and ongoing education was suggested as a means to promote

cultural awareness of LGBTQ+ and ethnic minority groups in long-term care (Brotman et al., 2003; Heikkilä & Ekman, 2003; Putney et al., 2018; Quigley, 2017; Riley, 2019; Rodriguez, 2004; Stein et al., 2010).

### Review studies

There were three review articles on the topic of preferences, attitudes, and perceptions of residential care of older adults (Ahaddour et al., 2016; Lehnert et al., 2019; Mahieu et al., 2019). The review article by Ahaddour et al. focused on elderly Turkish and Moroccan migrants in Belgium (Ahaddour et al., 2016). They included 11 empirical studies and 10 articles or reports found in grey literature. There was a limited number of migrants using long-term care, attributed to five independent factors: language (e.g., brochures and other material only available in Dutch), lack of education among migrants, financial barriers, lack of awareness of home features, and a tendency to depend on family support for care, because of cultural expectations. Mahieu et al. conducted a review with 18 included studies on the perceptions of community-dwelling LGBT individuals on residential care for the elderly. The themes identified in this review were: discrimination on the basis of sexual orientation, loss of sexual identity, failing to acknowledge same-sex partners, and lack of privacy (Mahieu et al., 2019). Lehnert et al. reviewed literature on preferences for long-term care, not specific to minority populations, in a systematic review with 59 included studies. The authors concluded that because most respondents desired to preserve their lifestyle, preferences depended on the perceived ability and independence of the patient within a particular long-term care arrangement to satisfy expectations (Lehnert et al., 2019).

### Discussion and Implications

Results suggest that ethnocultural factors influence admission to long-term care for minority populations. The concerns raised by certain minority groups; notably, ethnocultural and immigrant populations, highlight the need for awareness of language concerns and cultural differences, and the consequent impact on minority populations' quality of care.

The likelihood of admission of certain minority populations to long-term care appears to have high variability, yet is consistently lower among minority groups than among the majority population. Focus group and survey findings suggest that language is a barrier both prior to admission and within long-term care homes. Linguistic barriers in health care have been previously described as impacting satisfaction and trust in care (Barr & Wanat, 2005).

Although some studies demonstrated a higher proportion of blacks than whites living in long-term care, these findings were based on crude or unadjusted data. The observed higher prevalence may be the result of other factors, such as differences in Medicaid status, functional and cognitive impairment, and family support. Indeed, studies that used adjusted models to predict admission or time to admission to a long-term care overwhelmingly found that blacks had a lower probability than whites of entering long-term care. Along with the research from Ontario, Canada reporting that those who are recent immigrants and those waiting for a cultural or an ethnic-specific home experienced increased wait times for long-term care placement than long-standing residents (Qureshi et al., 2021). These results suggest that language is not the only barrier to long-term care entry among all minority populations, given that a high proportion of blacks and other ethnic minorities are English

speakers. Other social factors, including family support, socio-economic status, and eligibility for or enrolment in health insurance plans may pose systemic barriers to many visible minority groups, particularly in the United States where the majority of the literature on this topic has been conducted. Racialization and the social juxtaposition of blacks and whites was accentuated in the included studies published in the United States. There is literature outlining significant health disparities in racialized groups, particularly in the United States (Carlson & Chamberlain, 2004). In places where the majority of care is publicly funded, such as in Canada, there are different considerations than in countries with predominately private funding for long-term care, although racialization and discrimination continue to permeate health outcomes (Veenstra, 2009).

Providing culturally specific or diverse residential care options is particularly important for countries encouraging migration, in order to ensure that all residents have access to adequate care (Kalich, Heinemann, & Ghahari, 2016). The language and theoretical frameworks used to describe minority populations are important factors for the development of literature and solutions for health care inequalities. Many studies conducted in the United States used race to compare populations, whereas other studies tended to focus on migration status or ethnicity and country of origin for defining the minority population. Torres explored health within old age and ethnicity by using a social justice lens that highlights the need for representation and redistribution to enable a diversity-friendly world (Torres, 2019). When minority populations are “othered”, or when race and ethnicity are confused, the minority populations’ realities are under-represented and over-simplified, and can only be understood through the lens of the majority. Torres suggests that research should move beyond stating that injustice exists for minority populations to exploring how inequalities are created and maintained despite our knowledge of these disparities (Torres, 2019).

There is context-specific variation in health care delivery that often affects minority populations differently because of their socio-economic disadvantages or discrimination (Viruell-Fuentes *et al.*, 2012). This review has identified research on specific minority populations, with most results finding differences between minority and majority populations. There are a number of common barriers that influence the admission of minority populations into long-term care facilities. Linguistic barriers, lack of cultural sensitivity, familial obligations, and fear and mistrust of institutional care are all dependent on the sociocultural context, yet are common themes across the international English literature in this review.

Fear of discrimination appears to be a concern for residents from different ethnocultural groups and LGBTQ+ populations. Discrimination against the elderly has already been documented (Rogers, Thrasher, Miao, Boscardin, & Smith, 2015), and is likely magnified when those elderly are members of a second minority group (Jackson *et al.*, 2008).

Long-term care should ensure that the needs of all residents are met. There may be an imperative to incorporate standards of care which include facilitators to meet real or perceived barriers for minority populations. Providing consistent, yet individualized care can be challenging; however, with an increasing demand for long-term care, policies that address unique ethnic identities and facilitate the delivery of quality care for individuals in their homes is important.

There is some evidence indicating that ethno-specific long-term care homes offering care specifically catering to the cultural needs

of minority residents could improve access and quality of life for minority populations (Um, 2016). For example, two studies of ethno-specific care demonstrated increased communication among residents and improved family satisfaction when people were placed in an ethno-specific long-term care, but found no significant effect on overall psychiatric medication use (Runci, Eppingstall, & O’Connor, 2012; Runci, Eppingstall, van der Ploeg, & O’Connor, 2014). However, these facilities may be limited in supply and older adults seeking entry into ethno-specific long-term care often experience longer wait times than those waiting for admission to mainstream long-term care (Um, 2016).

Future research evaluating the care of minority populations in long-term care and their access to long-term care should be undertaken. There are some difficulties with minority research. For example, minorities are defined depending on their context, making it challenging to summarize across different cultural contexts, especially as attitudes, beliefs, and discrimination laws have changed over time (Mack *et al.*, 2020). More qualitative research examining whether the perspectives of staff and long-term care residents belonging to minority groups have changed over time would support evaluation of long-term trends and capacity planning in this sector. This has been done for LGBTQ populations, which has found that negative beliefs and attitudes of health care providers can limit access to care (Stewart & O’Reilly, 2017), which aligns with our findings, most especially in the fear and mistrust of health care and residential care.

Finally, further research on interventions that improve access to long-term care for minority populations could facilitate improved equity in care. Interventions should consider linguistic challenges for minority populations, as well as multi-language education sessions and printed materials for potential residents and their families. Cultural competency training and tool kits for staff could increase awareness of barriers to entry and support education about possible facilitators. For example, some Canadian long-term care homes have adopted LGBTQ+ inclusivity training programs to improve the care of LGBTQ+ elders in LTC homes (Sussman *et al.*, 2018), and Ontario’s Centre for Learning, Research, and Innovation in Long Term Care released an interactive tool kit to give homes a practical guide to welcoming and building a diverse community environment (Center for Learning Research and Innovation in Long-term Care, 2020).

### *Strengths and Limitations*

The literature identified in this review was predominantly (68.3%) conducted in the United States. Findings may therefore have limited applicability to countries and health systems with different funding structures, particularly for long-term care. Although it is not a limitation of this review, we observed that some minority populations were not well represented in the literature; this limits the generalizability of our inferences regarding minority populations’ access to long-term care, particularly to groups who were not examined in the studies that were reviewed. For example, there were no eligible studies on religious minority, Indigenous, and Two-Spirited populations. Additionally, we only found studies on Arab and LGBTQ+ populations in the category of studies measuring preferences and expectations but not in studies investigating access. Another limitation is that classification of whether studies included minority populations depends on the setting and the information provided about the setting by the studies.

Although we did not have the resources to search grey literature (e.g., contact prominent authors, hand search), we did identify



60 studies using very broad inclusion criteria that considered minority populations based on ethnicity, language, religion, and sexual orientation and gender identity. This decision led to substantial heterogeneity. Nonetheless, the strength in having a comprehensive approach and an encompassing definition of “minority” is that it enabled us to establish a broad overview of the current landscape of long-term care access for minority populations. We included both quantitative and qualitative research, which allowed us to evaluate the statistical findings from large studies as well as the perspectives represented in surveys and qualitative focus groups.

## Conclusions and Implications

This review demonstrates that there are several barriers to access to long-term care for minority populations. The lack of knowledge of and satisfaction with long-term care services may explain the lower rates and odds of admission to long-term care among minority groups. Further research, including assessment of interventions that could mitigate access barriers, both actual and perceived, is necessary to minimize current differences in rates of admission impacting minority populations.

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