

The Impact of Settlement on the Health of Indian Women in Ontario:

A Narrative Study

by

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Abstract

Background. Women who immigrate from India experience health decline during settlement. Yet little is known about how their settlement experience impacts their health. This study aims to contribute to understanding this experience.

Method: Eight Indian women aged 25-45 were recruited through purposive and snowball sampling. Guided by narrative inquiry, data collection included individual interviews and a demographic survey. Data analysis followed Clandinin and Connelly's method.

Results. Narratives described three phases of settlement: discovering and seeking, compromising and surviving, and transitioning and accepting. Throughout these phases, systemic barriers and a lack of support contributed to health decline. Participants recommended employment, healthcare, and navigation support improvements.

Discussion. Continued health decline is associated with functional impairment, increased healthcare costs, chronic disease, and mortality risk. This situation threatens Canada's reliance on immigration to sustain our industry, economy, and care for our elders. Alternatively, improved support and removal of barriers could promote Indian women's health during settlement.

Dedication

Dear Emily and Chloe,

My mother taught me to work hard and always do my best. I share her words of wisdom with you while also encouraging you to enjoy the journey and feel pride in your accomplishments. Investing in yourself pays off and the impact may be more than you can imagine. UNICEF (n.d.) said:

Investing in girls' education transforms communities, countries, and the entire world. Girls who receive an education earn higher incomes, participate in the decisions that most affect them, and build better futures for themselves and their families... Girls' education strengthens economies and reduces inequality. It contributes to more stable, resilient societies that give all individuals... the opportunity to fulfill their potential (paras. 1-3).

Mom

Acknowledgements

I feel enormous pride and accomplishment to have arrived at this stage of my journey. I recognize that I did not get here on my own.

To begin, I want to thank the brave women who took a chance to meet with me and trust me with their stories. While I recognize that there is much more to know, you improved my understanding of your experience. I share your hope of improving the settlement journey of future newcomers.

I would like to thank my family for being there for me on this journey. Ryan, Chloe, and Emily provided enduring patience, understanding, and support to achieve this goal. Uncle Walter always asked about my progress and told me he was proud of me. My dear cousin Sharlene took an interest in my work and offered to review my drafts.

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Definitions

Acculturation is an adaptive process that causes behavioural and psychological change in response to contact between two or more cultures (Berry, 2015).

Culture is “an ensemble, formalized in varying degrees, of ways of thinking, feeling and behaving which once learned, give people a particular and distinct collectivity” (Rocher, 2015, para. 7).

Cultural safety is “an outcome based on respectful engagement that recognizes and strives to address power imbalances inherent in the healthcare system. It results in an environment free of racism and discrimination, where people feel safe when receiving health care” (Public Health Agency of Canada, 2023, p. 9).

The *human development index* “measures key dimensions of human development: life expectancy at birth, being knowledgeable (mean of years of schooling for adults and expected years of schooling for children) and having a decent standard of living (gross national income per capita)” (United Nations Development Program, n.d.).

An *immigrant* is an "individual who willingly leaves their country of origin and legally enters another country where they are granted permission to resettle permanently" (World Health Organization [WHO], 2022a, p. 2).

A *newcomer* is an immigrant or refugee who has lived in Canada for six years or less (Cambridge English Dictionary, 2022; Government of Canada, 2024).

Privilege describes the benefit/preference society confers to individuals who appear to be part of the dominant social group solely based on “birthright membership in prescribed identities” (Black & Stone, 2005, p. 245).

A *refugee* is a "person outside their country of origin who needs international protection because they fear persecution or a serious threat to their life, physical integrity or freedom in their country of origin as a result of persecution, armed conflict, violence or serious public disorder" (WHO, 2022a, p.2).

Chapter One: The Impact of Settlement on the Health of Indian Women in Ontario

This study set out to understand the impact of settlement on the health of newcomers to Canada. Over the past thirty years, I have cared for foreign-born persons in various healthcare settings. As a privileged Canadian-born individual, I often wondered why people would choose to leave their home country and family to come to Canada. Over time, as I cared for newcomers, I learned that people immigrate to Canada because they anticipate a better life filled with opportunity and prosperity. I have seen the optimism and hope they feel upon arrival, followed by disappointment and struggle. As their ongoing healthcare provider (HCP), it has been difficult to repeatedly bear witness to this experience and feel helpless to ease their suffering.

Even though I work in a community health center that provides health care and social determinants of health support (e.g., support to find employment, housing, social support) for newcomers who traditionally experience barriers to accessing health care, I can see that it is not enough, as these individuals experience ongoing struggles during settlement. Life in Canada does not meet their expectations. I have learned about the barriers newcomers experience as they try to secure employment, housing, education, and navigate the healthcare system, and wondered how we can better support them. I will share how I began my inquiry by exploring literature regarding the impact of settlement on newcomer health, and how this process led me to focus my study on South Asian women.

While examining this issue, I learned there is a substantial body of evidence that newcomer health is adversely impacted during settlement. Newcomers arrive in Canada in equal or better health than Canadian-born persons; then, over a short period, their

health precipitously declines becoming the same or worse than Canadians (Bousmah et al., 2019; Dean & Wilson, 2010; De Maio & Kemp, 2010; Dunn & Dyck, 2000; McDonald & Kennedy, 2004; Newbold & Danforth, 2003; Newbold, 2005a, 2005b, 2006). South Asian women are one of the newcomer groups most impacted by this decline in health (Kim et al., 2013). Four theories seek to explain the factors contributing to newcomer health decline, including the immigration selection process, health care access barriers, the process of acculturation, and social determinants of health barriers (SDOH)(Kobayashi & Prus, 2012; Newbold, 2005a, 2005b; Newbold & Danforth, 2003; McDonald & Kennedy, 2004; Sethi, 2013; Subedi & Rosenberg, 2014). I will present these theories and the evidence supporting them in my literature review. Then, I will share what is known about newcomer health as well as the gaps in understanding this phenomenon from the perspective of newcomers. Before I discuss the review of the literature, I will present evidence that understanding newcomer health decline and identifying strategies to prevent this decline is critical.

This situation is of imminent importance for all Canadians. I will share why Canada needs newcomers and why it is in our best interest that newcomers maintain stable health. Beyond the gains I will present, we have a compelling moral obligation as a society to uphold the objectives of the Canada Health Act to find ways to “promote and protect... the physical health and well-being of residents of Canada” (Government of Canada, 2023a, para 2). To understand this issue further, I share an overview of Canada's immigration program, including the immigration pathways, countries of origin, newcomers' baseline health, how their health changes while living in Canada, and why this issue is significant for all Canadians. I make clear that this issue is more important

than ever before and that inaction will further marginalize this group, while adversely impacting our healthcare costs, economy, and overall population health (McDonald & Kennedy, 2004).

Immigration Pathways

Given that newcomers are persons who immigrate through one of three main immigration pathways, I will describe the aims and process for each pathway. In addition to bolstering the economy, Canada's immigration system aims to reunite families and fulfill our humanitarian obligations (Government of Canada, 2021). Aligning with these objectives, Canada's immigration pathways include the economic, family, and refugee classes. In 2016, 60% of our immigrants migrated through the economic class, 30% as family class, and 10% as refugees (Government of Canada, 2017). The economic class invites skilled workers who have acquired work experience and relevant education or training to apply. Canada's immigration system reviews permanent residency applications by assigning points to applicants for specific attributes such as age, language proficiency, education, and work experience (Government of Canada, 2022a). Then applicants who attain an adequate score complete a medical assessment to demonstrate that their health is stable and that they are free from certain communicable diseases (Beiser, 2005; Vang et al., 2017). The family class pathway is different as it enables close relatives of adult Canadian citizens or permanent residents to apply for permanent residence with the aim of family reunification. Whereas the refugee class accepts applications from individuals (within and outside Canada), who can provide substantive evidence that they need protection from persecution or danger in their country of origin. After applying, the refugee claimant must attend an eligibility interview with the Immigration Review Board

and complete a medical examination (Government of Canada, 2022a). If eligible, they are provided a Refugee Protection Claimant document, Interim Federal Health Coverage, and an invitation to apply for a work permit (Government of Canada, 2022a). The processing time for each immigration class varies widely, with economic and government-assisted refugee application decisions determined within a few years or less and asylum seekers (refugees applying from within Canada) often waiting up to a decade.

Just as the application process varies, the support provided to newcomers according to their admission class also varies. Those who come to Canada under the refugee resettlement program receive income and other support from the government during their first year of residence (Government of Canada, 2019). In contrast, sponsored refugees and family-class immigrants receive support from their sponsor for basic needs for the duration of the sponsorship period or until they are self-sufficient (Government of Canada, 2019). Whereas economic-class immigrants and asylum seekers must be self-sufficient, they do not receive financial support during settlement.

Settlement

The sources (country and pathway) of Canada's immigrants and refugees changes over time, and where they settle depends on political priorities (e.g., immigration policies, economic stimulus initiatives, and humanitarian efforts) (Statistics Canada, 2016). Before 1970, most immigrants came to Canada from the United Kingdom or Europe (as immigration policies preferred these sources), but this shifted dramatically by the early 2000s when Canada's immigration policies were revised to allow persons with financial resources and skills to migrate, resulting in Asia and the Pacific becoming the primary sources of immigrants (Beiser, 2005; Statistics Canada, 2016). In 2016, almost

50% of Canada's newcomers immigrated from the continent of Asia, followed by Africa (13%), and more than 50% of these newcomers took up residence in Ontario (Government of Canada, 2017; Statistics Canada, 2017a). A substantial proportion of Ontario's newcomers settle in large urban areas, such as the Region of Peel, where immigrants comprise 52% of the population (Region of Peel, 2016). A similar trend is seen nationally, as 70% of recent immigrants take up residence in Toronto, Montreal, and Vancouver (Government of Canada, 2005). The government of Canada is implementing initiatives to draw newcomers to rural areas and regions with more elderly persons to support economic growth and the aging workforce (Government of Canada, 2022a). However, the current data demonstrates that racialized populations make up a sizable proportion of Canada's immigrants and newcomers tend to settle in areas where other immigrants live (Sethi, 2013; Statistics Canada, 2017a). These are essential factors to consider as we examine the process of settlement and acculturation.

Once individuals immigrate, they move on to settle into their new homes. Within the literature, the classification of 'newcomer' and 'recent arrival' period varies between three to ten years (Ottawa Public Health, 2022). During this time, newcomers work to acquire housing, employment, and transportation. It can be challenging to find adequate and affordable housing, as well as meaningful employment (e.g., adequate income, enabling the use of newcomer skills and training) (Janzen et al., 2022). At the same time, newcomers often work to develop social and cultural connections and access health care (Janzen et al., 2022). Some individuals also take classes to improve their English or French language competency or further their education. Although there are numerous government and community-based agencies available to support newcomers

during this transition, many newcomers rely on informal channels such as friends and family members to meet their settlement needs (Janzen et al., 2022).

Health

Prior to examining the impact of settlement on newcomer health, it is important to understand the concept of health. The WHO defines health as "a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity" (WHO, 2022b, p.1). Similarly, several nursing theorists, such as Rosemarie Rizzo Parse describe health as a dynamic state (Polit & Beck, 2007) that is shaped by bio-psycho-social-spiritual factors (Petiprin, 2020). This holistic perspective reminds us to consider a broad range of factors that contribute to health and acknowledge the interconnected nature of physical, social, and mental health. The importance of these pillars has been brought into focus over the past couple of years during the COVID-19 pandemic. Although many individuals continued to experience good physical health, mandatory social distancing, remote working, and learning, drastically changed social supports, and led to a decline in self-reported mental health (Statistics Canada, 2022).

While I accept the WHO's definition of health, there is broad variation in how health is defined by individuals across the lifespan and cultures. For example, when I was a young child, I thought someone was healthy if they were not sick and they did not have "bad habits" like smoking. Many years later, during my nursing degree, I completed an assignment about health which included talking to people about what health meant to them and what they valued most about their health. As I engaged my friends and family in these conversations, I was struck by how differently they defined health compared to me and each other. Similarly, in my clinical practice, I routinely meet with clients to

discuss their diagnoses, treatment options, or advance care planning and I am reminded that individuals construct unique definitions of health based on the context of their lives, their priorities, and perceptions. My experiences have shaped my ontology about health, aligning with Parse's Human Becoming Theory which says health and quality of life are defined individually, so health is what people say it is (Petiprin, 2020). Given the broad spectrum of perspectives about health, it is easy to see how objective measures of health may only tell us part of the story about newcomer health. For example, Sethi (2013) found incongruence between how newcomers described their health when they reported it on a scale as compared to how they orally described how they were feeling. Another study by Dean and Wilson (2010) found that immigrants made determinations of their health based on a HCP telling them that they were healthy, or they determined they were healthy because they did not feel sick. It is important to draw out the voices of newcomers to learn what health means to them as I examine how newcomers evaluate their health during the settlement period. This gap in understanding fits with my ontological stance, so I applied this lens to inform my approach to this study, as presented in the methods chapter (presented in theoretical framing).

The Healthy Immigrant Effect

I examined the health of newcomers early in their settlement journey. As stated earlier, adult newcomers arrive in Canada with health that is superior to Canadian-born persons (Blair & Schneeberg, 2014; Bousmah et al., 2019; Dunn & Dyck, 2000; Markides & Rote, 2019; McDonald & Kennedy, 2004; Morassaei et al., 2022; Newbold, 2006; Omariba, 2015). Evidence of newcomers' superior health has been established by comparing morbidity, mortality, and self-reported health (based on a five-point scale

ranging from poor to excellent) of immigrant and Canadian-born persons (Newbold & Danforth, 2003; Newbold, 2005a; Vang et al., 2017). This phenomenon has been named the "healthy immigrant effect" (HIE) (Dean & Wilson, 2010; McDonald & Kennedy, 2004; Newbold, 2005a), and it is most prominent for recent mid-life non-European adult immigrants (Kobayashi & Prus, 2012; Markides & Rote, 2019; Vang et al., 2017), and less robust for adolescents (Kwak, 2016; Vang et al., 2017), children, and older adults (Vang et al., 2017). This phenomenon is also seen in Western Europe, the United States, and Australia (Kobayashi & Prus, 2012; Vang et al., 2017).

In Canada, the HIE is substantiated by secondary data from national health surveys such as the Canadian Community Health Survey (Blair & Schneeberg, 2014; Chadwick & Collins, 2015; Kobayashi & Prus, 2012; Kwak, 2016; McDonald & Kennedy, 2004; Subedi & Rosenberg, 2014), the National Population Health Survey (McDonald & Kennedy, 2004; Newbold & Danforth, 2003; Newbold, 2005b, 2006; Wu & Schimmele, 2005), the Canadian Population Census (Omariba, 2015), and the Longitudinal Survey of Immigrants in Canada (De Maio & Kemp, 2010; Kim et al., 2013). Most of the data were collected between 1994-2010, comparing the self-rated health of immigrants and Canadian-born adults (Vang et al., 2017). A few longitudinal studies assessed immigrant health by measuring self-reported health and the incidence of chronic health conditions over time. Some researchers also included measures of morbidity, standardized health indexes, self-reported mental health, and either self-reported or diagnosed chronic health conditions. It is important to note that self-reported health is a validated measure of overall health, mortality, disability, health care utilization, and health behaviors, achieving similar results to objective health measures,

even across cultures (Hoeymans et al., 1997; Idler et al., 1990; Kaplan & Comacho, 1993; Kobayashi & Prus, 2012; Miilunpalo et al., 1997; Newbold, 2005a; Saravanabhavan & Marshall, 1994).

The health advantage of immigrants is robust for mortality and morbidity (Omariba, 2015; Vang et al., 2017), except for some ethnic groups. Immigrants have a lower overall mortality risk for premature, unavoidable, and avoidable mortality (Gushlak et al., 2011; Markides & Rote, 2019; Omariba, 2015; Vang et al., 2017). The mortality advantage is strongest for newcomers who are non-European immigrants and for men (Vang et al., 2017). The avoidable mortality risk remains low throughout residence in Canada, except for South Asian women, who experience a higher mortality risk from ischemic heart disease and stroke (Gushlak et al., 2011; Omariba, 2015). The leading causes of death (ischemic heart disease, smoking-related diseases, and cancers) are consistent for both native-born and immigrant men and women (Omariba, 2015). When examining morbidity, the mental health of newcomers is superior (Wu & Schimmelle, 2005), and the incidence of chronic disease (heart disease, asthma, arthritis, hypertension, diabetes) (McDonald & Kennedy, 2004; Newbold & Danforth, 2003; Newbold, 2006), disability/functional limitations (Kim et al., 2013), and risk behaviours are better or similar to Canadian-born persons (Vang et al., 2017). Non-European immigrants were found to be far less likely to develop asthma, cancer, and cardiovascular disease (Vang et al., 2017). The morbidity risk is different for South Asian adults, as they experience a higher prevalence of diabetes and hypertension, and an equal/greater prevalence of cardiovascular disease, as compared to Canadian-born adults (Chaturvedi, 2003; Chiu et al., 2010; Liu et al., 2010; Tennakoon et al., 2010).

There is variation in the expression of the HIE when measured according to self-reported health (Vang et al., 2017). For example, in 1998/1999, 33.8% of recent immigrants (<5 years of residence) rated their health as excellent, whereas only 25.5% of the Canadian-born population selected this rating (Newbold & Danforth, 2003). A decade later, Blair & Schneeberg (2014) re-examined newcomer health and found that newcomer health continued to be rated higher relative to the Canadian-born. Kobayashi and Prus (2012) also found that the odds of recent (<10 years of residence) racialized immigrants reporting poor/fair health was 85% lower than Canadian-born persons. Similarly, Kim et al. (2013) found that newcomers' baseline prevalence of poor health was 3.5%, which was much lower than the general population (11%). In contrast, Newbold (2005a; 2006) and McDonald and Kennedy (2004) found no evidence of a HIE when health was measured according to self-reported health. Numerous factors could contribute to these conflicting findings, such as culture, perception of health, and cohort (time and immigration source) (Newbold, 2005; Vang et al., 2017). Although data regarding newcomers' self-reported health upon arrival is conflicting, a clear and worrisome pattern of decline is seen over time.

Health Decline

Although non-European adult newcomers arrive with health that is superior to Canadian-born persons (Blair & Schneeberg, 2014; Bousmah et al., 2019; Dunn & Dyck, 2000; Kobayashi & Prus, 2012; Markides & Rote, 2019; McDonald & Kennedy, 2004; Morassaei et al., 2022; Newbold, 2006; Omariba, 2015; Vang et al., 2017), their health declines over time to a level that is equivalent or lower than Canadian-born individuals (Bousmah et al., 2019; Dean & Wilson, 2010; De Maio & Kemp, 2010; Dunn & Dyck,

2000; McDonald & Kennedy, 2004; Newbold and Danforth, 2003; Newbold, 2005a, 2005b, 2006), and the longer an immigrant resides in Canada, the more their health declines (Bousmah, 2019; Dunn & Dyck, 2000; Kim et al., 2013; Markides & Rote, 2019; Newbold, 2005a). This decline disproportionately impacts South Asian women who experience a rate of health decline three to five times higher than European immigrants within their first four years of residence (Kim et al., 2013). A decline in health is also experienced by immigrants and refugees settling in other high-immigrant-receiving countries such as Europe, the United States, and Australia (Bousmah et al., 2019; Dean & Wilson, 2010; Markides & Rote, 2019).

Evidence demonstrates that newcomer physical and mental health declines in the short and long term. A decline in newcomer health is evident as a 20% decline in excellent self-reported health ratings within four years of residence (Ng et al., 2005; Vang et al., 2017). Pérez (2002) also found that the prevalence of chronic health conditions for new immigrants (1-4 years of residence) increased incrementally every five years (from 37%), culminating in a 78% incidence after 30 years of residence in Canada. McDonald and Kennedy (2004) supported this pattern, as they similarly found the prevalence of most chronic health conditions (allergies, asthma, back pain, ulcers, arthritis, bronchitis, heart disease, cancer, diabetes, Crohn's disease, and thyroid disease) was lower for newcomers but rose to native-born levels within 20 years. However, evidence demonstrates that immigrants from low human development index (HDI) countries (Bousmah, 2019) and women experience a markedly higher prevalence of chronic health conditions (McDonald & Kennedy, 2004; Newbold, 2006; Vang et al., 2017). There is also an increased prevalence of disability in older adults (Markides &

Rote, 2019; Vang et al., 2017), alcohol dependency (Ali, 2004), and depression (Ali et al., 2002; De Maio & Kemp, 2010). Depression is most prevalent for women (Bousmah, 2019) and recent immigrants (<10 years) during the postpartum period (Vang et al., 2017). Wu and Schimmele (2005) found that newcomers arrive with a 25% lower incidence of depression. Yet this advantage fades immediately and continuously declines over the first 35 years of residence (Wu and Schimmele, 2005).

Significance of the Issue

Immigrating to Canada can impact newcomers' health, yet more than ever, Canada needs foreign-born persons to immigrate. By 2035, an astounding five million Canadians will retire from the workforce (Government of Canada, 2021). The mass exodus, coupled with our aging population and low birth rate, threatens our economy, industry, and ability to care for our elders (El-Assal, 2020). To sustain our workforce and economy at the current state many immigrants are needed to replenish our massive human resource deficit. To accomplish this, Canada aims to welcome almost 400,000 newcomers annually over the next three years (El-Assal & Thevenot, 2020; Government of Canada, 2021; Singer, 2022). This immigration target is the highest in Canadian history (IRCC, 2021; Singer, 2022) and it is projected that by 2036, 30% of Canada's population will be immigrants, making up 100% of Canada's labor force growth (Government of Canada, 2021). If we grant admittance to this large number of immigrants without addressing the impact of settlement on their health, they are likely to suffer, experience declining health, and limited participation in society, over time causing health care utilization and costs to increase, and population health to decline (McDonald & Kennedy, 2004). We have a moral obligation to ensure newcomers have the support

and resources required to maintain their health and function. Furthermore, this situation requires urgent attention as it inhibits Canada's strategic plan, threatening our ability to sustain our industry, economy, and care for our elders.

Chapter Two: Literature Review

To delve deeper into understanding newcomer health decline during settlement, I completed a literature review to determine who is impacted, how they are affected, when the descent begins, and the influencing factors. I will share my literature review, starting with how I conducted my search, an overview of the research methods and populations of interest, what is known about newcomer health decline, and how this phenomenon varies according to the duration of residence, age, and sex to make clear why South Asian women are the focus of this study. I examined factors contributing to newcomer health decline including changes in health behaviors during acculturation, healthcare access barriers, immigration selection practices, and SDOH barriers. After exploring these factors, I examined evidence regarding the SDOH to see how education, employment, ethnicity, and social inclusion impact newcomer health. I present the gaps in understanding newcomer health and why I proposed to study the health of South Asian women during settlement.

Literature Search

I conducted my literature search within several electronic databases, including Embase (which contains Medline and PubMed), JSTOR, CINAHL (including PsychInfo and SocIndex with Full Text), Google Scholar, and ProQuest (Nursing and Allied Database). These databases cover a broad range of psychological, medical, nursing, and sociological research. I selected English articles published in 2000 or later that focused-on newcomers' health using the following keywords: newcomer or immigrant or refugee, settl' OR "new arriv" OR recent OR "post-migration," and health or "migrant health" or "health status" or "healthy immigrant effect" with "AND" within

titles, abstracts, and subjects. Articles solely focusing on oral health, health care access, preventative health screening, or non-permanent residents (temporary visitors, migrant workers, international students, and persons residing in Canada without official status) were excluded. Articles regarding preventative health screening were also excluded to enable a broad exploration of health according to a SDOH lens, rather than focusing on healthcare access or engagement. Then I identified additional sources by reviewing the reference lists of the articles aligning with my search criteria.

Thirty-two articles met the inclusion criteria, including literature reviews, primary, and secondary research. After examining these articles, I created synthesis tables to identify the characteristics of each study, then I reviewed them to establish research gaps regarding newcomer health during settlement. I used Statistics Canada's (2017b) age classification parameters to guide my presentation of the studies across the lifespan. Accordingly, a child was defined as age 0-14, youth as 15-24 years old, adult as 25-64 years old, and older adult as age 65 and above. I found that most of the literature examined the health of newcomer adults, whereas children were the least frequently studied age group as seen in Table 1.

Exploring the 25 studies and seven reviews according to migration pathway, country of origin, and sex revealed that most researchers focused on combined immigration groups (64%) (Table 2), countries of origin (83%) (Table 4), and sex (92%) (Table 5). None of the selected studies focused exclusively on men or economic or family-class immigrants; these groups were included in aggregated studies. Only a few studies selected migrants according to country/region of origin including Africa, Southeast Asia, Syria, and Haiti as seen in Table 4, limiting insight into the experiences

of immigrants migrating from Asia, Canada's largest source of immigrants (50% immigrate from Asia). Most of the studies were cross-sectional (86%) and utilized quantitative methodology (72%), focusing on correlational analyses of national survey data between 1994-2010 as displayed in Table 3. In contrast, five studies used qualitative methodology (not including mixed methods), including three examining the health of newcomer adults in Canada and two focusing on the health of refugees in Australia. Although my review includes data sources that span almost three decades, 75% of the articles were published in 2010 or later, providing a picture of newcomer health over time, as well as the current pattern.

The Pattern of Health Decline

The trajectory for newcomer health decline varied across the lifespan (Blair & Schneeberg, 2014) and duration of residence (Bousmah et al., 2019), revealing specific health impacts and the vulnerability of certain subsets of this population (Gushulak et al., 2011; Khanlou et al., 2017; Kim et al., 2013; Morassaei et al., 2022; Newbold, 2005a, 2006). The health of migrants is influenced by many factors, such as genetics, environment, socioeconomics, health behaviors, culture, and the migration process (Gushlak et al., 2011; Newbold, 2006). Aware of these variations, I examined the evidence to see how newcomer health was impacted over time, according to age and gender. This review confirmed that settlement negatively impacts newcomer health, especially for South Asian women.

Duration of Residence

The psychological and physical health of newcomers declines continuously over their duration of residence in Canada (Beiser, 2005; Bousmah et al., 2019; Dean &

Wilson, 2010; De Maio & Kemp, 2010; Dunn & Dyck, 2000; Kim et al., 2013; Markides & Rote, 2019; Maximova & Krahn, 2010; McDonald & Kennedy, 2004; Newbold, 2005a, 2006; Subedi & Rosenberg, 2014; Wu & Schimmele, 2005). The marked decline in health impacted recent non-European immigrants (Gushlak et al., 2011) as early as six months post-migration, with a further decline seen within four years (De Maio & Kemp, 2010; Kim et al., 2013), as evidenced by a 20% reduction in self-reported 'excellent' health ratings (De Maio & Kemp, 2010). Over time, adult immigrants were more likely to experience an increase in body mass index (greater risk if medium/high HDI country) (Vang et al., 2017), chronic health conditions (Vang et al., 2017), a decline in mental health (Ali, 2002; Wu & Schimmele, 2005), and a higher probability of transitioning to poor health (compared with those born in the host country) (Bousmah, 2019).

Of all the immigrant groups, refugees experienced the earliest and most dramatic decline in health (Gushlak et al., 2011), followed by family-class immigrants, with both groups transitioning to poor health within six years (Dowling et al., 2019; Maximova & Krahn, 2010; Morassaei et al., 2022). Bousmah et al. (2019) also found that the health of immigrants over age 50 was negatively associated with the length of stay in the host country. The evidence clearly demonstrated that newcomers' health declined quickly and progressively during the first six years of settlement and continued to decline over time.

Age

I examined the data further to explore how newcomer health changed across the lifespan. Although migrant youth acculturated more easily (Shishengar et al., 2017), their physical health was vulnerable as many developed hyperlipidemia, elevated blood pressure, and became overweight (Lane et al., 2018; Vang et al., 2017). The long-term impact of these significant risk factors is unknown due to a lack of longitudinal research

regarding immigrant youth. In comparison, health was superior for early and mid-life adult migrants upon arrival (Gushlak et al., 2011; Kwak, 2016; Markides & Rote, 2019; Vang et al., 2017), but it began to converge with Canadian-born persons by age 45, with newcomers of advanced age experiencing progressive health decline (Bousmah et al., 2019; Markides & Rote, 2019; Shishengar et al., 2017) exceeding that of Canadian-born persons over time (De Maio & Kemp, 2010; Shishengar et al., 2017). The decline was seen as increased physical disability (e.g., activity restrictions, functional limitations, and cognitive impairment as measured by the Health Utility Index), as well as lower self-rated physical and mental health (Blair & Schneeberg, 2014; Kuo et al., 2020; Markides & Rote, 2019; Vang et al., 2017). This evidence contradicts Globerman's finding that a HIE does not exist, and that health only declines due to aging, as seen in Canadian-born persons (Kobayashi & Prus, 2012). Reviewing the evidence, it became clear there was variation in newcomer health across the lifespan during settlement (Subedi & Rosenberg, 2014), with a pattern of decline evident by middle age. This is significant given that 64% of immigrants arrive as adults (age 25-54) (Statistics Canada, 2022).

Gender

Newcomer health also varied according to gender, with females being disproportionately impacted. Women were more likely to experience a significant and progressive decline in self-reported health during settlement (Blair & Schneeberg, 2014; Kim et al., 2013; Kobayashi & Prus, 2012; Subedi & Rosenberg, 2014), especially those with low income (Newbold, 2005b), resulting in an increased propensity to develop chronic disease and mental health conditions (Bousmah, 2019; Kwak, 2016; Kuo, 2020). McDonald and Kennedy (2004) found that the incidence of chronic health conditions

increased with the duration of residence and the impact was greatest for women. Similarly, Newbold (2006) found that women had a significantly higher risk of developing at least one chronic health condition compared with men (hazard risk: 133%) (Newbold, 2006). Blair and Schneeberg (2014) found that women were 32% less likely to report better health than men and the odds of reporting good health decreased every five years.

Compared to Canadian-born women, newcomers were at higher risk for prenatal health issues and worse obstetrical outcomes including an equal or higher risk of preterm delivery, pre-eclampsia (Khanlou et al., 2017), postpartum health complications (Gagnon et al., 2013), as well as perinatal (Gagnon et al., 2013) and postpartum depression (Khanlou et al., 2017). Consistent with these findings, mothers born in South Asia were found to deliver the highest proportion of small for gestational age infants in both the Region of Peel and the province of Ontario in 2015 (Peel Public Health, 2019). Many of these maternal risks had the potential to impact the health of these women over time, as these conditions could increase the risk of chronic disease (e.g., pre-eclampsia is a risk factor for cardiovascular disease) (Wu et al., 2017) and impact how they cared for and interacted with their children over time (e.g., maternal depression can impact attachment) (Śliwerski et al., 2020).

The evidence regarding the health of men who immigrate to Canada is scant and not as clear. All the studies included in my literature review included men and women, none focused on men alone. Subedi and Rosenberg (2014) reported that immigrant men were more likely to report poor health after ten years of residency, whereas Dean and Wilson (2010) found that immigrant men were likelier to report improved health over

time. Subedi and Rosenberg (2014) did not report the ethnicity of participants, but Dean and Wilson (2010) did, and their study included participants from seven countries with 65% of the participants representing racialized persons. Kobayashi and Prus (2012) examined the impact of gender and ethnicity on health and their findings aligned with Dean and Wilson's (2010) findings that men's health improved and the pattern for men and women was influenced by belonging to a racialized population in the short and long term. They determined that non-white middle-aged men were 85% less likely to report poor/fair health within ten years of immigrating, compared with Canadian-born men. In contrast, middle-aged immigrant women were much more likely to report poor health, and this pattern persisted regardless of color, age, health behaviors, and socioeconomic status (Kobayashi & Prus, 2012).

However, this changed over time as immigrant men over age 65 became more likely to report poor health (Kobayashi & Prus, 2012). This study employed binomial coded response options for skin colour (white or non-white) and ethnicity (Canadian-born or foreign-born) limiting further dissection of the data according to specific ethnic groups (Kobayashi & Prus, 2012). Although men's health remained stable during the settlement period, racialized immigrant women's physical, mental, and self-rated health during the reproductive years was more likely to be poor and continuously deteriorate during settlement and beyond, especially for those with low income. Given that women are traditionally the primary caregivers for their immediate and extended family, one can imagine how the poor health of women also impacts the health, well-being, and support extended to those they care for.

Reasons for Health Decline

Next, I examine the theories that seek to explain the factors contributing to newcomer health decline, including the acculturation process, healthcare access barriers, immigration selection practices, and SDOH barriers (Newbold, 2005b, 2006). I provide an overview and discuss the evidence related to each contributing factor. Then, I share how the SDOH impact health, focusing on how the determinants of education, employment, ethnicity, and social inclusion affect newcomer health while making clear that acculturation, healthcare access, and immigration selection practices did not explain newcomer health decline during settlement.

Acculturation

I present an overview of acculturation theory, then share the evidence regarding its impact on newcomer health. Acculturation is a reciprocal process that occurs in response to ongoing contact between persons from distinct cultures and leads to change in one or both groups (Sam & Berry, 2010). The degree to which an individual adopts the new culture and maintains their original cultural identity determines their acculturation pattern (Sam, 2006).

Most individuals assume one of four acculturation patterns, including assimilation, integration, separation, or marginalization (Sam, 2006). The integration pattern is a process whereby identity and connection to the culture of origin are maintained while the host country's culture is also assumed (Sam, 2006). Other patterns involve neglecting one culture or rejecting both cultural identities (Sam & Berry, 2010). For example, assimilation occurs when a newcomer adopts the new culture and detaches from their culture of origin, whereas separation occurs when the individual rejects the new culture and retains connections and cultural practices of their original culture, and

marginalization involves rejecting both the new and old cultural identities (Sam & Berry, 2010; Schmitz & Schmitz, 2022). Integration is the most favorable acculturation method, as it is associated with positive outcomes, including life satisfaction, self-esteem, and positive emotions (Sam & Berry, 2010; Schmitz & Schmitz, 2022). In comparison, the remaining acculturation patterns often lead to maladaptive outcomes (e.g., psychological distress and negative affect) (Schmitz & Schmitz, 2022).

Many factors impact the acculturation process; some are within the newcomer's control, and some are not. The more similar the cultural norms and beliefs (of the source and host countries), the easier it is to complete the acculturation process, whereas when they are dissimilar, the process takes longer and requires more effort (Sam, 2006).

Newcomer language proficiency, social support, mutual respect, and sensitivity enable acculturation (Schmitz & Schmitz, 2022). Similarly, residents of the host country foster integration by valuing diversity, demonstrating impartiality and mutual respect, and promoting a sense of belonging to the greater community (Sam, 2006). In contrast, discrimination negatively impacts integration, adaptation, psychological, and physical health (Flores & Brotanek, 2005; Sam & Berry, 2010). The more different a newcomer's appearance and culture is, the more difficulty they will have integrating into society (Sam, 2006). This factor seems true for racialized persons who migrate to Canada. For instance, De Maio and Kemp (2010) found that racialized population status strongly predicted mental health decline and the effect was compounded when prejudice and discrimination were experienced. Blair and Schneeberg (2014) found that stress had the most significant impact on self-perceived health, as evidenced by each unit of stress being associated with the odds of reporting declining health by 68%. The results of these

factors are far-reaching as they impact integration (Ziersch et al., 2020), access to desirable housing (Dowling et al., 2020; Shishengar et al., 2017), self-reported health (Chadwick & Collins, 2015; De Maio & Kemp, 2010; Dowling et al., 2020; Gautier et al., 2020), and health outcomes (De Maio & Kemp, 2010). The significance of this risk manifests over time, with racialized persons experiencing significant physical and mental health impacts that adversely affect their quality of life. It will be important to consider acculturation patterns, as well as the protective and limiting factors presented while diving deeper into the evidence.

Adopting the unhealthy habits of native-born persons has been proposed as a reason for the deterioration in newcomer health (McDonald & Kennedy, 2004; Newbold, 2005a). Evidence demonstrates that newcomers' physical activity, diet, and use of substances change as they acculturate. For example, researchers found that many immigrants gained weight and increased their consumption of alcohol (Ali, 2002) and cigarettes over time (Blair & Schneeberg, 2014; Newbold, 2005b; Omariba, 2015; Subedi & Rosenberg, 2014). Many factors related to decreased accessibility, high cost of living, and cultural norms (e.g., social acceptance of eating fast food, drinking alcohol, and smoking) influenced these lifestyle changes, such as the selection of food available (e.g., different variety, higher cost, more imported foods than in country of origin) and decreased proximity of work and grocery stores (Bieser, 2005). Despite the acquisition of these unhealthy habits, the effects of these habits were not evident until many years after settlement, so they were not causing newcomer health decline (Blair & Schneeberg, 2014; Newbold, 2005b, 2006; Subedi & Rosenberg, 2014).

Health Care Access Barriers

Another proposed explanation for newcomer health decline is healthcare access barriers which make accessing screening and treatment difficult and result in undiagnosed and untreated health conditions (McDonald & Kennedy, 2004; Newbold, 2005b). Newcomers face significant challenges in accessing health care due to health insurance gaps, cultural and linguistic barriers, appointment availability, and the complexity of the Canadian healthcare system (Sethi, 2013; Subedi & Rosenberg, 2014). For example, in Ontario, new permanent residents are not covered by the provincial health insurance plan (Ontario Health Insurance Plan [OHIP]) until they have lived in Canada for 90 days. During this period, new residents must pay out of pocket for their health care at rates much higher than the OHIP schedule or defer seeking care until they obtain coverage.

The design of the Canadian healthcare system is quite different from other countries, such as India, where it is customary to seek care only when sick, and routinely receive treatment with medication (Gushlak et al., 2011; Hossain, 2021), so these changes make accessing the healthcare system confusing and impact access as expectations are not always met. However, newcomers adapt, and healthcare utilization converges by six years, reinforcing that healthcare access barriers are most common during early settlement (McDonald & Kennedy, 2004; Subedi and Rosenberg, 2014). Although there was a pattern of increased healthcare utilization throughout settlement, physical health measures were comparable to Canadian-born persons and increased healthcare utilization did not align with the pattern of health decline (McDonald & Kennedy, 2004). Healthcare access was a challenge for newcomers during early settlement, yet many overcame these

barriers within a few years and the impact of these barriers on their health was not well established (McDonald & Kennedy, 2004; Subedi and Rosenberg, 2014).

Immigrant Selection Practices

Other researchers have proposed that the HIE results from Canada's immigration policies which select young, educated adults who are in good health (De Maio & Kemp, 2010; Vang et al., 2017). Although not all immigrants are selected based on their application score, most Canadian immigrants are persons from a higher economic class who have demonstrated desirable attributes such as skills, work experience, youthful age, and good health (Government of Canada, 2022a; Newbold, 2005b). This process inherently leads to the selection of more youthful and healthier persons, making it easy to see why newcomers arrive in better health than Canadians, but it does not explain why their health declines during settlement.

Social Determinants of Health Barriers

A substantial body of evidence is culminating, which reveals the contribution of the SDOH on newcomer health decline (Gautier et al., 2020; Kobayashi & Prus, 2012; Lane et al., 2018; Newbold, 2005a, 2005b; Newbold & Danforth, 2003; Sethi, 2013; Subedi & Rosenberg, 2014; WHO, 2022a). The SDOH represent the personal, social, economic, and environmental factors that determine health (Government of Canada, 2022a; WHO, 2017). Some SDOH that have been found to impact immigrant health are income, education, employment, sex, race, and social support (Government of Canada, 2022a; WHO, 2017). When these determinants are available, they support health, whereas adverse health effects are experienced when they are reduced. For example, individuals with lower socioeconomic status experience worse health, and those with

higher socioeconomic status have better health (WHO, 2017). This is due to the interrelated nature of SDOH. When one determinant is impacted, other determinants are also affected, compounding the impact on an individual's health. For instance, when an individual experiences unemployment, housing, and food security may also be impacted. Researchers have demonstrated that the SDOH are responsible for 30-55% of health outcomes, contributing far more to health than health behaviors or health care (WHO, 2017). As we focus on newcomers, I will explore the unique challenges experienced by newcomers and the evidence linking the SDOH to health decline.

Many researchers have demonstrated that the SDOH have a profound impact on the health of newcomers during settlement (De Maio & Kemp, 2010; Gautier et al., 2020; Gushlak et al., 2011; Khanlou et al., 2017; Kobayashi & Prus, 2012; Newbold, 2005b; Sethi, 2013; Shishengar et al., 2017; Subedi & Rosenberg, 2014; WHO, 2022a; Woodgate & Busolo, 2018; Ziersch et al., 2020). Although Dunn and Dyck's (2000) earlier research contradicts this association, several more recent studies demonstrate a positive relationship. Recent migration status impacts many SDOH causing an additive vulnerability for newcomers' overall health (WHO, 2022a). For example, immigrants with lower education and income, unemployment, or advanced age are more likely to rate their health as "unhealthy" (Newbold, 2005a; Newbold & Danforth, 2003). Similarly, De Maio and Kemp (2010) established that newcomers with low income, female sex, or racialized status were strongly predicted to experience mental health decline. The experience of financial stress and low socioeconomic status causes newcomers to struggle to attain their desired living conditions (Lane et al., 2018) and is associated with psychological distress (Shishengar et al., 2017; Simich et al., 2006), increased

hospitalization rates (Newbold, 2005b), feeling unsupported (Hawkins et al., 2021), and overall poor health (De Maio & Kemp, 2010; Dowling et al., 2019; Gushlak et al., 2011; Maximova & Krahn, 2010; Newbold, 2005b; Shishengar et al., 2017; Simich et al., 2006). Although all SDOH are important resources for health, I examined the evidence regarding a few SDOH that have been found to markedly impact newcomer health, beginning with education.

Education. Higher education is strongly associated with having a longer, healthier life, and it is a crucial resource for health (Zajacova & Lawrence, 2018). Education facilitates the attainment of other SDOH such as employment, financial security, and social status (The Lancet Public Health, 2020; Zajacova & Lawrence, 2018). Newbold (2006) examined the relationship between health and education and found that persons with less than a high school education had a much higher risk of transitioning to poor health than persons with higher education. Lower education is also associated with worse general health (WHO, 2017), more chronic health conditions, functional limitations, and disability (Zajacova & Lawrence, 2018).

Although Canada's immigration system values and selects persons with professional education, their educational attainment rarely benefits them in Canada. Newcomer's foreign credentials are often unrecognized by Canadian regulating bodies, negating their opportunity to work as a professional and forcing skilled individuals to work in lower-paying jobs that do not utilize their knowledge and skills (Government of Canada, 2020b; Houle & Yssaad, 2010; Maximova & Krahn, 2010; Ziersch et al., 2020). A recent report confirmed this, revealing that only 29% of foreign university-educated newcomers were working in their professional field, and 71% were employed in jobs not

requiring a degree (Government of Canada, 2020b). For those who want to work in their profession, the process of meeting practice standards in Canada is often long, expensive, and cumbersome (Government of Canada, 2020b). This situation impacts the health of foreign-trained immigrants, as evidenced by a decline in their physical (Maximova & Krahn, 2010) and mental health (Ziersch et al., 2020) and an increase in chronic disease (Newbold, 2006). The consequent low income they acquire impacts the resources available to the immigrant and their family, which in turn influences their educational opportunities and health (Zajacova & Lawrence, 2018). If Canadian licensing and credentialing processes were easy to understand, efficient, and less expensive, a larger proportion of newcomers would be able to apply their education and skills which would positively influence their resources for health and potentially reduce the impact on health.

Employment. Like education, employment has a profound impact on health, impacting access to numerous SDOH (WHO, 2017). Newcomers experience challenges attaining employment and are more likely to experience unemployment than established immigrants and Canadian-born persons (Government of Canada, 2020b). The ethnicity of newcomers has been seen to compound this struggle further, with racialized persons experiencing more barriers entering the job market (Houle & Yssaad, 2010). Recent African-born migrants are the most impacted group, as they experience the lowest employment and highest unemployment rates (Government of Canada, 2020b). Reflecting on the sources of current immigrants, most newcomers are racialized persons, making employment more challenging to attain. When newcomers face precarious employment and low income, it contributes to psychological distress, leading to a decline in their self-reported health (Dean & Wilson, 2010, De Maio & Kemp, 2010; Dowling et

al., 2019, 2020), doubling their risk of transitioning to poor health (Newbold, 2005a), and significantly increasing the risk of hospitalization (hazard ratio: 3.76) (Newbold, 2005b). Men tend to internalize their struggle to provide for their families with their socially prescribed role as the breadwinner and this experience impacts their self-esteem (Dowling et al., 2020). On the contrary, when newcomers can achieve stable employment, they are more likely to experience good mental health (Maximova & Krahn, 2010), and the risk of developing chronic health conditions is lower (Newbold, 2006). It is evident that secure employment is an asset to health but newcomers, especially racialized persons, face significant challenges in obtaining it.

Ethnicity. Initially, racialized newcomers have a health advantage not explained by age, socioeconomic status, or health behaviors (Kobayashi & Prus, 2012) but this changes soon after migration. Recent immigrants are at higher risk for transitioning to poor health (Gushlak et al., 2011), with West Asian and Chinese men and South Asian and Chinese women experiencing health decline at a rate three to five times higher than European immigrants within four years of residence (Kim et al., 2013) and Black migrants are 61% more likely to transition to poor health (Newbold, 2005b). Similarly, newcomer youth from Latin America, the Caribbean, South Asia, and sub-Saharan Africa have an increased vulnerability for Type 2 Diabetes, experiencing a two to three-fold increased risk and earlier onset than the general population (Lane et al., 2018). Looking beyond the health of youth, adult migrants from the Caribbean are more likely to have diabetes (OR 1.67) and AIDS (OR 4.23) (Gushlak et al., 2011), whereas South Asian women experience a higher prevalence of hypertension, diabetes, and cardiovascular disease (Omariba, 2015). These compounding risk factors may contribute to the higher

mortality risk from diabetes and AIDS experienced by Caribbean migrants (Gushlak et al., 2011), ischemic heart disease for South Asian migrant women (Omariba, 2015), and stroke (OR 1.46) for Southeast Asian migrants (Gushlak et al., 2011). The health of newcomers appears to vary according to ethnicity with specific groups experiencing early decline, and a higher burden of conditions that increase the risk of cardiovascular disease and mortality over time. The effects of resettlement extend beyond the physical health of newcomers making apparent the intersections of race, discrimination, and migration status.

Social Inclusion. Social support and spirituality are essential contributors to newcomer health (Dowling et al., 2020; Gautier et al., 2020). Research demonstrates that social support is positively associated with self-rated mental health (Chadwick & Collins, 2015; Gautier et al., 2020), mental health outcomes (Hawkins et al., 2021), and integration (Hawkins et al., 2021; Woodgate & Busolo, 2018; Ziersch et al., 2020). For instance, newcomers are at a higher risk for depression when separated from family members (Shishengar et al., 2017) and when they reside in small urban (Chadwick & Collins, 2015) or rural areas (Ziersch et al., 2020), as this often reduces the support they receive, impacting their integration and health. In contrast, Maximova and Krahn (2010) established that more settlement services received during the first year of residence corresponded with significant improvements in mental and physical health. When government agencies provided this support, newcomers felt secure and welcome (Dowling et al., 2020).

Living in an area with people of similar ethnicity and culture may be protective. For example, Hispanic migrants in the USA living in areas with a high proportion of

Hispanic persons were found to have lower overall mortality and better health, even though they had low incomes (Markides & Rote, 2019). However, a diverse community may support and protect newcomers best as migrants living in neighborhoods with high ethnic concentrations experience more discrimination and less integration (Markides & Rote, 2019). The evidence demonstrates that social inclusion has the potential to support health and integration, aligning with the findings of acculturation theory which demonstrates that ongoing contact with a newcomer's cultural connections as well as the native-born population promotes successful integration, while less contact (or social exclusion from the new culture or culture of origin) inhibits integration and can lead to maladaptive acculturation patterns such as marginalization and separation (Sam & Berry, 2010; Schmitz & Schmitz, 2022).

Power and Privilege

The evidence has shown that newcomers experience more barriers in accessing many of the SDOH, as compared to Canadian-born persons. This may be due to the reduced social power and privilege that society allocates to newcomers. Privilege refers to the benefit/preference society gives to individuals who appear to be part of the dominant social group (National Collaborating Centre for Determinants of Health, 2022). This system of preference is unspoken and accepted as the norm. Membership is not earned. For example, I am a white woman who is Canadian born. I speak English and I have a name that is commonly given to white persons. There are many occasions where I am automatically “accepted” based on these characteristics. Most of the time I am not aware that my journey is easier than people who may look or sound different than me. I will share an experience from my life to illustrate this.

A few years ago, I went to a conference with a colleague who I will call Rubina. She is a Muslim woman and a family physician. When we arrived at the airport, she told me she was very scared to go through the security checkpoint for fear that she would be searched or interrogated. I told her not to worry, everything would be fine, and we would be through in a couple of minutes. I went up to the conveyor belt and placed my belongings in the bin, then walked through the metal detector. I was cleared to gather my belongings and proceed. Rubina's experience was different. I watched as two security officers took her aside, asked her questions, opened her belongings, thoroughly searched each item, and then patted her down before she was allowed to pass through the metal detector. Rubina has had similar experiences in the past and this is how she expected to be treated. Until this experience, I did not realize my "privilege" to pass through this checkpoint.

If we accept that health is a resource for life and that the SDOH provide the foundation for health, newcomers must have an equal opportunity to access these resources. I have demonstrated that this is not the case for newcomers to Canada. Newcomers arrive in good physical health, but their health erodes over time as they experience substantial barriers to having their education validated and accepted, which markedly reduces their employment opportunities, thus limiting their ability to attain an adequate income, while they simultaneously experience social exclusion impeding their health and integration. Being young and healthy is not enough. Health includes physical, mental, and social well-being and it is determined by key resources. When these components are lacking, health is not attainable. This calls for a novel approach to supporting and addressing the health needs of newcomers. There is much more to learn

about newcomer health and how newcomers can be best supported. To determine the focus of my inquiry, I delved deeply into the literature to examine for congruence and gaps.

Comparison of Data Sources

Next, I compared the data gathered through positivist and constructivist methods. The paradigm of positivism stresses empiricism, quantifiable results, and a single truth (Teherani et al., 2015). In contrast, constructivists believe reality is subjective and that there are multiple truths (Teherani et al., 2015). Our knowledge about newcomer health decline was generated mostly through positivist research, as it includes national survey data analyzed by numerous researchers to identify trends over time and explore variables potentially impacting newcomer health. This inquiry demonstrated that newcomers struggle during settlement and the trajectory of their health is altered alarmingly. The greatest health impact was seen for racialized immigrants, women, older men, refugees, and family-class immigrants.

Although self-reported health was a reliable measure (Dean & Wilson, 2010; De Maio & Kemp, 2010), it did not consider the cultural and individual perceptions of health. For example, Sethi (2013) found incongruence between how newcomers rated health quantitatively and the narratives shared to describe their mental health since settling in Canada. There were also significant discrepancies between newcomer and service provider perceptions of health (Sethi, 2013). These incongruities lead one to question what is underlying the mismatch, whether other factors influence the self-reporting of health; and does the perception of health change over time. Perhaps there are multiple subjective truths.

For example, Dean and Wilson (2010) studied how 23 adult immigrants perceived their health and whether their health changed since immigrating to Canada. They found that most participants reported their health as stable or better, with only 30% reporting a decline in health (Dean & Wilson, 2010). Interestingly, persons who reported that their health was unchanged said this was because they did not feel ill or because they had been told by a Canadian doctor that they were healthy (Dean & Wilson, 2010). These evaluations of health are narrowly defined and do not align with the holistic definitions of health presented earlier. Dean and Wilson (2010) also explored patterns according to sex and duration of residency, finding that men were more likely to report improved health. Given that men typically describe high levels of health within the first ten years of residence, these findings seem congruent with the positivist data. However, there was only a slight change in health according to the duration of residence, which is quite different than the findings from our national surveys.

Gaps in Literature

Although several studies included in my review aim to understand the experience of newcomers, they did not provide adequate insight into how the settlement journey impacts the health of newcomers to Canada. As I examined the studies, I identified limitations regarding the study populations and variables. I will present the limitations of each qualitative study, share gaps in understanding the health of specific newcomer groups, and then make clear why further research from a constructivist lens is required.

Seven of the studies from my review employ a qualitative design to examine newcomer health, yet the study populations selected limited understanding of newcomers' health experience during settlement. For example, Dean and Wilson's (2010)

research did not limit the inclusion of participants to newcomers, including people who arrived in Canada within one month and those living in Canada for more than ten years, so some of the participants may not have had adequate experience as a newcomer, whereas others were established immigrants. Additionally, Dean and Wilson (2010) included 26% of participants from Eastern and Western Europe, but only non-European immigrants experienced health decline, so the inclusion of these participants skewed the picture of immigrants who are most vulnerable to health decline during settlement. Similarly, Lane (2018) completed a large (n: 300) mixed-methods study examining the health status of newcomer children and youth from all immigration classes. Despite this robust study aligning with the phenomenon of interest, the HIE and health decline are experienced by newcomer adults, so this study of children and youth does not aid in understanding how settlement impacts the health of newcomer adults.

Although Gautier et al. (2020) studied the perceived health of adult and senior Haitian migrants, contributing insight into newcomer health, the transferability of the findings was limited as these newcomers immigrated through a special family reunification program for persons who survived the 2011 earthquake in Haiti, making the study population unique (participants were trauma survivors and sponsored by family members). Chadwick and Collins (2015) completed a mixed methods study of newcomers within their first nine years of residence in Canada examining self-reported mental health from national survey data and interviews with managers of settlement service organizations, rather than newcomers, limiting insight into the perspectives of newcomers. The remaining studies examined the health of migrants in countries other than Canada. Specifically, Dowling (2020) studied the health of adult refugees who

migrated to Australia, and Ziersch (2020) explored the settlement experience of Southeast Asian and African refugees in rural Australia. Therefore, there is a dearth of Canadian research exploring adult non-European newcomers' health experiences.

Although the remaining qualitative studies focused on newcomers' settlement experiences, the variables explored in each study limited understanding of how this experience impacted their health. For instance, Woodgate and Busolo (2018) laid out the stages of settlement experienced by African adolescent newcomers and demonstrated the impact of the SDOH during each stage, but participants' health was not directly explored. Similarly, Simich (2006) explored the impact of financial hardship and expectations on newcomers' health. While these variables are important, understanding of the settlement experience was limited by this narrow focus and the considerable proportion of refugee participants may limit transferability. Sethi (2013) also completed a mixed methods study examining the health experiences of immigrants settling in small urban and rural areas, as well as the perspectives of service providers working with newcomers. The findings provided insight into newcomer health perceptions, the impact of the SDOH, and healthcare access barriers but the findings may not align with the experience of newcomers who immigrate to large urban areas, which is the norm. Additionally, the perspectives of newcomers and service providers were elicited through surveys and community meetings (with settlement staff and immigrant elders), limiting newcomers' opportunity to share their experiences in their own words. This overview makes clear that further exploration of adult newcomers' health experiences during settlement is needed.

There may be other factors contributing to newcomer health decline that have not yet been revealed, as most of the data regarding sex, ethnicity, and country of origin was

empirical, aggregated, and outdated. For example, there were no studies from the constructivist paradigm that isolated how the settlement journey impacted the health of Canadian newcomers who were men, women, family-class immigrants, youth, or seniors, as existing studies aggregated sex, immigration class, and life stage, limiting insight into the unique experience of these newcomers. Similarly, there were no Canadian studies specifically focusing on how adult immigrants from our primary source countries (Asia and Africa) perceived settlement to impact their health, despite Black and South Asian migrants bearing overt health erosion during settlement. Therefore, little is known about the health experience of Canada's newcomers of color.

Conclusion

Non-European persons who immigrate to Canada arrive in health that is equal to or better than Canadians (Blair & Schneeberg, 2014; Bousmah et al., 2019; Dunn & Dyck, 2000; Kobayashi & Prus, 2012; Markides & Rote, 2019; McDonald & Kennedy, 2004; Morassaei et al., 2022; Newbold, 2006; Omariba, 2015; Vang et al., 2017). However, over the first six years of residence, many experience a dramatic and ongoing decline in their health (Bousmah et al., 2019; Dean & Wilson, 2010; DeMaio & Kemp, 2010; Dunn & Dyck, 2000; McDonald & Kennedy, 2004; Newbold & Danforth, 2003; Newbold, 2005a, 2005b, 2006). Canada has built a plan to sustain our economy and workforce by inviting persons from abroad to immigrate, yet we have three decades of evidence showing that newcomers lack adequate support and face barriers to utilizing their knowledge and skills. We must take corrective action as the current state could lead to poor population health, higher healthcare costs, inadequate health care, and a strained economy (McDonald & Kennedy, 2004).

Our healthcare system is not meeting the needs of newcomers. Newcomers experience significant barriers to accessing resources for health (e.g., employment and education) and face discrimination and social exclusion. I have demonstrated that racialized immigrant women diffuse health effects, which start soon after migration and escalate over time. South Asian women are disproportionately impacted as they experience up to five times the risk of health decline within four years (Kim et al., 2013), an increased risk of developing chronic health conditions, prenatal risks, and increased mortality risk from ischemic heart disease and stroke over time. (Gushlak et al., 2011; Omariba, 2015; Peel Public Health, 2019; Vang et al., 2017). Although there is a plethora of aggregated positivist data that includes immigrant women's health, research focusing on the health experience of South Asian women during settlement and how they interpret their experience is lacking.

Chapter 3: Research Design

I carefully reflected on the population I wanted to study while considering the research gaps, my research aims, and the most appropriate research method to answer my research questions to select narrative inquiry as my methodology. I will share my position as a researcher, and my epistemological and ontological perspectives, then provide an overview of narrative inquiry, making clear my rationale for selecting this method, and how my research aims and assumptions aligned with this methodology. I will explain my research plan, starting with how I determined the population, selected the sample, recruited participants, collected, and analyzed the data. Lastly, I will demonstrate how my research design ensured rigor and upheld ethical standards.

Researcher Positioning

As a nurse caring for newcomers, I was keen to learn from South Asian women about their experiences during settlement and how their experiences impacted their health. As I provide healthcare to South Asian women, I often hear about their struggles, physical and psychological symptoms, but I rarely learn about their settlement experiences, how they make meaning of their experiences, and how their health has been impacted. My encounters with my patients are restricted to brief appointments and my role is often focused on identifying health issues, determining diagnoses, and offering treatment and support. While I brought limited knowledge and experience witnessing newcomers' experiences during settlement, I had no experience as a newcomer. Therefore, I had much to learn. As a researcher, I assumed an inductive approach and positioned myself as a knowledge seeker. I created space for my participants to teach me about their lived experiences and the meaning they generated from their experiences.

Philosophical Underpinnings

Before embarking on my study, I explored my assumptions about reality and my beliefs about how knowledge is generated to inform the selection of a research paradigm. To promote rigor, a researcher's worldview underpinning the research approach must align with their research aim and methodology, as the researcher's philosophy impacts the results and how they are interpreted (Brown & Dueñas, 2019; Teherani et al., 2015). A research paradigm is a framework that is developed when a research philosophy (research assumptions, knowledge, and nature) is merged with a research methodology (the process of collecting and analyzing data) (Brown & Dueñas, 2019). This framework guides the research process while making clear to others the nature of the research, relevant sources of data, as well as how the data will be analyzed and interpreted (Brown & Dueñas, 2019; Kuhn, 1962; Teherani et al., 2015). There are four main research philosophies including positivist, post-positivist, constructivist, and critical theory. Research paradigms following positivist and post-positivist approaches steer away from a researcher's biases and values and seek to discover universal objectively measurable truths, whereas constructivism seeks to understand and describe human nature, and the critical theory approach seeks to uncover power imbalances and empower marginalized groups to make social change (Brown & Dueñas, 2019; Teherani et al., 2015).

To establish a research paradigm, a researcher begins by assessing their research motivation, axiology (values and ethics), ontology, and epistemology (Teherani et al., 2015). I demonstrate how I completed this process, beginning with my rationale and axiology. As a caregiver of newcomers, who are mostly South Asian women, I wanted to understand what happens during the settlement period and how this experience impacted

their health, as I felt helpless seeing newcomers struggle, and I wanted to find effective ways to support them. Now with greater insight into the magnitude of this issue, I felt increasingly frustrated that this situation has persisted for decades, and I worried about the newcomers who would arrive over the next couple of years. I felt a moral obligation to understand the unique health needs of this population and learn how we can better care for them. Everyone has a right to health and health care needs to be tailored to meet the needs of the population, as some groups do not have equal access to resources for health. My experience and values influenced my perspective and sensitivity to recognize the factors influencing the experience of newcomers.

Continuing to determine my research paradigm, I moved on to consider my epistemology and ontology. Ontology is the study of being or existence (the nature of reality), whereas epistemology pertains to the philosophical perspectives guiding the construction of reality (the nature of knowledge within reality or how knowledge is created) (Teherani et al., 2015). I believe reality is constructed socially, and it is shaped by the experiences and context of an individual's life. I also recognize that numerous variables shape an individual's reality, such as social, political, cultural, and gender values (Teherani et al., 2015). Accordingly, I believe a multitude of socially constructed realities exist aligning with the ontology of relativism, primarily shaped by the assumptions of constructivism while also incorporating the lens of critical theory. Lastly, I considered my beliefs about knowledge and how it is acquired. My lived experience has shaped my perspective that knowledge is socially constructed and that meaning is generated through lived experience (Moss, 2018). This aligns with the epistemology of

constructivism, rather than critical theory which endorses the perspective that knowledge is formed and negotiated between individuals and within groups (Teherani et al., 2015).

In summary, my beliefs align with the axiology, ontology, and epistemology of the constructivist paradigm. As such, my research paradigm needed to be inductive and utilize qualitative methods to elicit multiple perspectives and gain insight into the lived experiences and the constructed interpretations of those experiences. I accomplished this by conducting unstructured interviews with individuals who have experience with the phenomenon of interest.

Methodology Selection

I have demonstrated that there is a paucity of data about newcomers' lived experiences during settlement and how this experience impacts their health. The existing data was primarily gathered through objective methods that endorsed one reality, the findings were conflicting at times, and they did not tell us why newcomer health declines. These factors supported the need for research that gathers information through a multitude of experiences and perspectives while incorporating meaning and context. Accordingly, I searched for a research methodology that would align with my worldview and promote a deep exploration of newcomers' experiences and the meaning they derive from their experiences (Dyar, 2022). Bringing forth the lived experiences of newcomers through their own words brought to light the socially constructed factors impacting their experiences as well as emic-derived solutions. From my perspective, the contrast between the relativist and realist paradigms is akin to taking a photo in the dark versus the light. Rather than obtaining a snapshot limited to a dominant image, a well-lit image exposes the textures, expressions, and context in rich detail. This was what I was seeking.

After careful consideration of the research methodologies aligning with the constructivist paradigm, I selected narrative inquiry, as it surmises that humans create meaning from their lived experiences, enabling understanding of the complex factors that impact the newcomer's experience and shape their reality (Andrews, 2008; Nasheeda et al., 2019; Samah, 2013; Webster & Mertova, 2007). Narrative inquiry generates an in-depth holistic and person-centered understanding of the lived experience (Connelly & Clandinin, 2006; Holloway & Galvin, 2016; Kim, 2016; Webster & Mertova, 2007) from both paradigmatic and narrative ways of knowing (Kim, 2016) while incorporating factors such as culture, values, and beliefs (Andrews, 2008; Samah, 2013). When narratives are shared with others, they can experience, feel, and sense the story through the lens of the narrator (Connelly & Clandinin, 1990). This deep insight has led to the adoption of narrative inquiry by a broad range of disciplines such as psychology, law, and medicine (Kim, 2016). Some of the unique outcomes of this methodology are the generation of insight, empathy, and moral persuasion for social change (Barone, 2000).

Narrative Inquiry

I will provide insight into the origins of narrative inquiry, the three-dimensional conceptual space, phenomenological assumptions, and the framework I selected to guide my study. Russian structuralist and French post-structuralist approaches within humanities contributed to the development of narrative inquiry, over time taking root in anthropology, psychology, psychotherapy, and organizational theory (Andrews, 2008). Early influencers included philosophers, John Dewey, and William Labov (Clandinin & Connelly, 2000). Dewey explained that experience is shaped by continuity and interaction. Continuity refers to the phenomenon whereby every experience is shaped by

previous experiences, and they in turn influence future experiences, constantly incorporating the dimensions of past, present, and future (Clandinin & Connelly, 2000). Similarly, interaction speaks to the unique and intersecting personal and social factors that contribute to individual experience (Clandinin & Connelly, 2000). Delving deeper than story construction, Labov developed an analysis method to guide the retelling of events while also bringing forth the voice and perspective of the narrator (Clandinin & Connelly, 2000). Varying methods of acquiring and analyzing narratives were developed, some focused on events, some on experiences over time, some presented a narrative, and others deeply explored meaning and context. Experience-centered narratives became defined as 1) “sequential and meaningful, 2) human, 3) representing and expressing experience, and 4) displaying transformation or change” (Andrews, 2008, p. 42).

Stories shared through narrative inquiry are about the active process of people, places, and things becoming, rather than a static recollection of events (Clandinin & Connelly, 2000). Clandinin and Connelly (2000) developed these approaches further by guiding researchers to conceptualize a three-dimensional narrative space focusing on the interaction of personal and social context, continuity (past, present, future), and place (where the experience or interview was completed). The phenomenological assumption of narrative inquiry is that sharing experiences through stories brings meaning and influence into the consciousness enabling understanding (Andrews, 2008; Clandinin & Connelly, 2000) and the possibility of transformation. Clandinin and Connelly’s framework guided my study as it led to an understanding of the South Asian women’s experiences during the settlement period as well as the factors influencing this experience

and the constructed meaning. I will share this framework and how I applied it as I present this study's method.

Narrative inquiry was an ideal qualitative methodology to learn about the lived experience of equity-denied populations (Andrews, 2008) expressed through the perspectives of telling and knowing (Connelly & Clandinin, 2006), as it provided insight into a vast range of meanings (Andrews, 2008; Polkinghorne, 1995) and worked to neutralize my power and privilege. Narrative inquiry encourages the researcher to relinquish control and create a safe space to facilitate sharing by fostering trust, demonstrating empathy, and giving a voice to the participants (Kim, 2016; Roseberg, 2018). When this is present, the participant is apt to share a fulsome account of their lived experience and describe how the experience made them feel, how they internalized the meaning of the experience, and how the experience shaped their perspective.

The researcher approaches the narratives as a philosopher, open to accepting the narrative shared as the truth for the individual (Andrews, 2008; Samah, 2013) while also challenging their individual beliefs (Denzin & Lincoln, 2011), through this relational co-constructed approach. The researcher guides the narrator to uncover how experiences were shaped and then explores contradictions, conscious and unconscious meanings, and power relations (Andrews, 2008). The researcher moves beyond observer, becoming part of the experience, feeling, and hearing the narrator's story, while also revealing and concealing their emotions and experiences. This active role enables the researcher to capture the full story so that they can share it in a way that others can experience how the story was told and felt (Clandinin & Rosiek, 2007). As the researcher, I gathered stories from participants and then weaved them together to reconstruct a shared narrative

(Clandinin & Connelly, 2000). Afterward, I provided participants with a report describing the shared narrative supported by their quotes and invited them to share their reflections. None of the participants sought clarification or suggested revisions. This methodological approach gave voice and authority to these women throughout the research process and was reliant on an empathetic and caring researcher-narrator relationship.

Theoretical Framing

Participant stories cannot be interpreted in isolation as multiple factors influence the experience. In this study, I reflected upon the theoretical frameworks of acculturation and the SDOH as I examined the data (Kim, 2016). As I examined select SDOH in chapter two, it became apparent that health inequities exist in Canada, especially for immigrant women. Some groups are more impacted due to stacked inequities, such as race, gender, and immigration status which is called intersectionality and is defined as the “interaction between gender, race, and other categories of difference in individual lives, social practices, institutional arrangements, and cultural ideologies and the outcomes of these interactions in terms of power” (Davis, 2008, p. 68). Clandinin and Connelly (2000) encourage narrative inquirers to draw these contextual factors into the three-dimensional narrative and examine their influence. Dewey (1997) postulates that “every experience builds up from previous experiences and modifies in some way the quality of the experiences that come after” (p. 28). Knowing South Asian immigrant women experience a higher burden of health decline, one must consider the impact of these intersecting differences over time. I kept these theories in mind as I reflected and analyzed the factors contributing to participants’ narratives, as evident in this study’s discussion.

Method

Taking a closer look at how I carried out this research study, I describe how I collected and analyzed the data. I share the population I studied and my rationale for selecting this group, followed by my recruitment strategy. Then I describe how I approached data collection including the factors considered in selecting the interview setting, as well as the interview delivery, and the multiple ways narratives were captured. Lastly, I explain how I analyzed the data following Clandinin and Connelly's (2000) four-step thematic and holistic narrative inquiry method.

Study Population

Given the many possible areas of study, I gathered information regarding the city of Brampton, where I live and work, to help narrow my focus. Brampton is home to a large immigrant population (52%), with 13% of the residents identified as recent immigrants (Region of Peel, 2017). Peel's recent immigrants' top country of origin is India, followed by Pakistan, and most of the individuals immigrate between 25-65 years of age (68.8%) (Region of Peel, 2017). South Asian women represent a considerable proportion (34%) of the newcomers migrating to Brampton (Region of Peel, 2017). The main immigration category is the economic class at 48%, followed by the family sponsorship class at 39%, and refugees at 12% (Region of Peel, 2017). Reflecting on the newcomer groups most impacted and understudied, as well as my experience witnessing South Asian women struggling during settlement without having adequate opportunity to explore their struggles and learn their stories, I determined that my study would focus on adult South Asian women.

Purpose of Study

I proposed a study guided by a constructivist lens to broadly explore the lived experience of South Asian women during their first six years of settlement in Canada and how this experience impacted their health. My research questions were:

- 1) How do South Asian women's settlement experiences impact their health?
- 2) What challenges do South Asian women perceive to have the biggest impact on their health during settlement?
- 3) What supports do South Asian women perceive to be the most helpful to overcome challenges?
- 4) Informed by participant recommendations and findings, how can HCPs better support South Asian women during settlement?

Answering these questions enabled an understanding of how settlement impacted the health of the participants and the resources they needed to maintain their health during settlement. The findings from this study may inform future policies and programs to improve the health trajectory of South Asian women. When women's health is improved, the health of those they care for can also be enhanced, magnifying the impact (Davidson et al., 2011).

Sampling

My study included persons living in Brampton Ontario, who identified as females, who were born in a South Asian country (e.g., Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka, Afghanistan, and the Maldives), 25 to 45 years of age, and within one to six years of residency in Canada. This population was selected due to the increased risk of decline for racialized adult immigrant women during the reproductive years, causing convergence in health by age 45, and disproportionately impacting South Asian

women during settlement Blair & Schneeberg, 2014; Bousmah et al., 2019; Kim et al., 2013; Kobayashi & Prus, 2012; Markides & Rote, 2019; Shishengar et al., 2017; Subedi & Rosenberg, 2014). Concordant with the timeline of newcomer decline identified in my literature review, the first six years of the settlement made it likely that participants had adequate experience settling in Canada to shed light on how this process affected their health and why the HIE starts as early as two years post-migration (Kim et al., 2013). Persons living outside of Brampton, Ontario, those born outside of a South Asian country, those who were less than 25 or over 45 years of age, and those who did not immigrate to Canada within one to six years were excluded from this study.

Recruitment

Participant recruitment utilized purposive and snowball sampling methods to acquire eight participants. Purposive sampling involves selecting participants who have knowledge and experience within the area of interest (Campbell et al., 2020). I employed this strategy by recruiting participants who met my study's inclusion and exclusion criteria, thereby selecting a non-random, purposive sample (Campbell et. al, 2020). Since newcomers often experience stigmatization and discrimination, it is essential to partner with trusted community organizations to reach potential study participants (WHO, 2021). I did this by establishing connections with local settlement and health service providers, such as Punjabi Community Health Services, Achēv, Indus Community Services, Costi, Immigrant Services, Newcomer Centre of Peel, and Brampton Multicultural Community Centre, and local places of worship (e.g., Gurdwaras, Hindu Temples, Mosques).

Once I shared the purpose of my study and desired participants, I asked permission to post flyers in the welcome areas and social media sites of these

organizations to reach potential participants. To extend my reach to as many participants as possible, and those most in need, recruitment flyers were prepared at a grade six literacy level and translated into Punjabi as this is the language most spoken by Brampton residents who do not speak English (Region of Peel [ROP], 2017) (see flyers in Appendix A and B).

Although I sought to study South Asian women living in Brampton, I learned that Brampton has become a mecca for Indian immigrants. Staff at newcomer agencies explained to me that it is rare for other South Asian women to settle or attend newcomer services in Brampton. I followed up with contacts at newcomer agencies and reached out to additional newcomer agencies in an attempt to reach other South Asian women. Unfortunately, no South Asian women originating outside of India who met the inclusion criteria volunteered to participate. Therefore, this study uniquely focused on women who immigrated from India within the last six years.

After interviewing the first four participants, I asked each participant if they knew anyone else who may be interested in sharing their settlement experience with me. These original participants shared my recruitment flyer with their contacts, and those who were interested in participating contacted me. This sampling technique is called snowball sampling as connecting to one participant enables connection to more people, therefore growing or “snowballing” the sample (Naderifar et al., 2017). The method is effective for reaching individuals who may be less likely to respond to a flyer invitation and those who may not attend settlement service agencies, therefore helping me reach a broader range of participants (Naderifar et al., 2017). These combined recruitment strategies yielded 12 voluntary participants and eight of the respondents met the inclusion criteria.

Setting

When considering the setting for the participant interviews, I considered factors that may have promoted or inhibited participation. For example, to encourage the sharing of the whole story, the researcher must be seen as a routine part of the setting, rather than an outsider (Kim et al., 2013). This can be established through spending time at the location before the interviews or investing a significant amount of time during the interview. Therefore, I conducted individual interviews in quiet and private locations familiar to the participants such as local libraries. I also arranged and delivered interviews through Microsoft Teams for participants who preferred to participate in virtual interviews. I asked the participants if they were in a comfortable and private space before we began, and I ensured that only the participant and I joined the session. I asked participants to meet with me for 60 minutes to ensure adequate time was available for them to fully share their stories. Professionally trained interpreters were offered, and all participants declined. Before in-person interviews, I screened all parties for symptoms and contacts of COVID-19. If symptoms or contacts were identified, I would have offered to defer or adjust the interview to a virtual meeting.

Data Collection

In alignment with the narrative inquiry methodology, I carried out unstructured interviews to elicit stories of participants' experiences settling in Canada (Clandinin, 2013). All of the documents created to support carrying out the research (e.g., consent, interview guide, field text guide) are explained in the respective sections of this document and displayed in the appendices. Kim (2016) recommends preparing an interview guide starting with an introduction, followed by setting the stage, encouraging

the participant to share their lived experiences, and then probing to uncover context and meaning. Accordingly, I prepared an interview guide which is presented in Appendix D. When I met with participants, I set the stage by sharing my experience working with newcomers and why I was interested in learning about the impact of settlement on their health (Anderson & Kirkpatrick, 2015). I shared my position as the knowledge seeker and the participant as the source of knowledge, then contextualized the interview by outlining my desire to learn about their settlement experience and how this impacted their health. I used open-ended questions, such as “Can you take me through your experience of starting a life in Canada? Tell me how your experience as a newcomer made you feel.” I asked a few follow-up questions to gain a deeper understanding of the perceptions and the meanings they formed about their experiences. Specifically, I asked participants to share with me what health meant to them, their perception of the influence of settlement on their health, and how newcomers could be better supported by HCPs after I noted a discrepancy between how they rated their health objectively and described the impact of settlement on their health.

To maximize the accuracy of the data captured, the interviews (in-person and virtual) were audio-recorded. As I began the interviews, I collected descriptive data by asking participants to complete a survey, as displayed in Appendix E, which gathered basic sociodemographic information (e.g., age), immigration history, and several SDOH measures. This survey also asked participants to rate their health upon arrival and their current health on a scale from poor to excellent. Then, participants shared narratives of their settlement experiences while I actively listened, using non-verbal cuing to demonstrate attention and understanding, and occasionally posing probing questions to

generate contextual information (Kim, 2016). To gather a rich narrative, minimal interruption of the participant's storytelling occurred (Holloway & Galvin, 2016) and I remained reflective and open to seeing the world through their eyes (Andrews, 2008). Hydén (2021) stresses the importance of this, warning that the responses of the researcher can alter the narrative shared. At the same time, I drew upon my nursing assessment skills, taking note of how the story was told and the changes I observed as the stories were told (Connelly & Clandinin, 2006). At the end of each interview, I validated the data by restating key components of the narrator's story and asking them to verify and clarify their words (Andrews, 2008; Nasheeda et al., 2019).

After each interview was completed, I documented my observations and reflections in a field text guide. I created this guide before the interviews to guide me in capturing my observations regarding the interview setting, the participant's interactions, and my initial reflections about the interview, as seen in Appendix F. Similarly, I adapted a reflexivity journal framework as seen in Appendix G, which I used to guide me in reflecting on personal, interpersonal, and contextual factors that may have influenced the research, as well as my ability to carry out the study in alignment with narrative inquiry. These field texts helped me reconstruct my participants' stories by providing me with cues to recall nuances such as contradictions, silences, and strong or unexpected emotions (Andrews, 2008). This process enabled me to enrich my participants' spoken words with my observations to reveal meaning and social significance as I retold their stories (Clandinin & Connelly, 2000). I followed an iterative process as I reflected on the narratives gathered and literature reviewed regarding newcomer health to consider if further exploration was warranted. Upon completion of data collection, all interview

recordings were transcribed verbatim and uploaded on NVivo12 (QSR, released in 2021) for data management.

Data Analysis

Data analysis followed Clandinin and Connelly's (2000) Thematic and Holistic narrative inquiry method. Although the process of developing research texts from field texts appears to have a stepwise process, the reality is that the process is fluid, moving forward and backward, repeatedly revising the plot lines as the highlights, and turning points emerge (Clandinin & Connelly, 2000). This relational researcher-participant analysis is designed to generate a three-dimensional story (Clandinin, 2013) following four steps: becoming familiar with the transcripts, plotting the story chronologically, validating the narratives and themes, and generating a story through structural analysis (Nasheeda et al., 2019). I will describe each of these steps and how I carried them out.

Becoming Familiar with the Transcripts

The initial stage of analysis began with transcription of the data, followed by immersion in the data. At the end of each interview, I transcribed the data verbatim to capture all information shared. Then, I read the transcripts while listening to the audio recordings to ensure transcript accuracy. Next, I read the transcripts a few times. The first time I read the transcripts, I became familiar with the interviews, and the second and third readings provided me with a deeper understanding of the participants' stories, perceptions, and connections. This enabled me to recognize how the participants constructed the events of their stories within the context of the three-dimensional narrative space (Clandinin, 2013). I made brief notes (e.g., keywords or themes) as I became familiar with the data.

Plotting the Story Chronologically

Next, I began to transform the field texts into research texts by organizing the main ideas and narratives according to chronology and theme (Clandinin & Connelly, 2000; Haydon & van der Riet, 2017; Mishler, 1995). I thoroughly and repeatedly reviewed the data, noting the timing and order of events, story contexts, the characters involved, plots, and themes to narratively code the data (Clandinin & Connelly, 2000). I composed a profile for each participant, building on the steps in their journey, noting their emotions, challenges, resources, and contextual factors, as seen in Table 8. These profiles equipped me to compare participant journeys and uncover similarities and differences. Then, I explored how frequently certain words were mentioned in individual and collective narratives, enabling me to compare the study's findings with the themes selected. This process helped me ensure I was true to participants' stories while identifying their dominant emotions (see Table 8). At the same time, I noted the pattern of acculturation and how the SDOH (WHO, 2017) explored earlier (income, education, employment, sex, race, and social inclusion) emerged for participants over time.

Validating the Narratives and Themes

I used the analytical tools of broadening and burrowing (Clandinin & Connelly, 2000) to analyze the narratives. Broadening involved looking beyond the story told to incorporate contextual details shared by the participants, observed, and gathered by me to describe contextual and influencing factors (Clandinin & Connelly, 2000; Kim, 2016) to expose how meaning was constructed and the social significance of the events (Clandinin & Connelly, 2000). I also described the three-dimensional space encompassing

temporality, sociality, and place that shaped the narratives (Clandinin & Connelly, 2000; Dewey, 1997).

The Three-Dimensional Space. Participant stories ebbed and flowed from past, present, and future, sharing a broad range of experiences from other countries, provinces, workplaces, and homes. However, most of the narratives were generated from experiences within Brampton. Participants arrived in Canada during a unique time in Canadian history; a time of a global pandemic, economic instability, and record immigration levels, which may have influenced the trajectory of their journey. On March 11, 2020, the WHO declared a global pandemic due to the COVID-19 virus. Soon afterward, the province implemented a lockdown, restricting travel, education, business, services, and social interactions. Consequently, Canada entered an economic recession; the GDP (gross domestic product) declined by 18%, and the unemployment rate reached a record high of 13.7% by the second quarter of 2021 (Statistics Canada, 2023). The price of food and shelter climbed, and inflation reached a 30-year high by January 2022 (Statistics Canada, 2023). At the same time, Canada welcomed a record number of new immigrants in 2021 (405,000) and 2022 (437,000) with almost half of these newcomers settling in Ontario (198,000 in 2021; 185,000 in 2022) (Statistics Canada, 2023). These intersecting factors may have contributed to participants' experiences during settlement with employment, income, cost of living, socialization, access to services, and travel.

In contrast, just as the term burrowing implies, I dug down into the story to gather more information about the events by asking how and why questions to elucidate how the participant's feelings, experiences, and events impacted their past, present, and future perspectives of themselves as characters within their narrative to uncover their social

realities (Clandinin & Connelly, 2000; Nasheeda et al., 2019) while also revealing the underlying context and meaning (Tomaszewski et al., 2020).

After listening and repeatedly reading the field texts, I noted inconsistencies and critically reflected to discover hidden meanings (Riessman, 2008). Another strategy commonly used in this process involves having others read the texts and reflexivity journals to see what they discover (Clandinin & Connelly, 2000). My supervisor further burrowed into my data, by analyzing and validating the narrative and themes. Given that each researcher's lived experience shapes their interpretive lens, my supervisor's perspectives shaped through his knowledge and experience brought forth new insights and understanding (Clandinin & Connelly, 2000). My supervisor and I met on numerous occasions to discuss the analyses, and then I reflected upon his feedback and refined my analysis.

Generating a Story

Lastly, story construction occurs as chronological narratives, meanings, context, and participant observations are woven together to portray the shared experiences of participants' narratives framed by the researcher's interpretation (Clandinin, 2013; Haydon & van der Riet, 2017). I expanded upon my narrative sketch of my participants' stories, pulling in the analysis, and then continuously drafting, and refining the texts until a narrative was created. As I became familiar with the data, the voice, form, audience, and purpose became clear (Webster & Mertova, 2007). The goal of my final narrative was to substantiate the impact of settlement on Indian women's health in a persuasive manner, while establishing practical and social relevance and generating empathetic understanding (Riessman, 2008).

Trustworthiness

The rigor of qualitative research is established by Guba and Lincoln's (1994) trustworthiness criteria of credibility, dependability, confirmability, and transferability. I will briefly describe these terms and share how these criteria can be substantiated. Credibility refers to the accuracy and completeness of the data and it is commonly established through prolonged engagement with the study participants, peer debriefing, and by asking participants to verify the data captured (member checking) (Nowell et al., 2017). Dependability assesses whether different researchers presented with the same data would make the same conclusions (Nowell et al., 2017). This is achieved when all the research documents are retained, making it possible for others to review the documents and see how decisions/conclusions were made. Confirmability occurs when data is verified by others and when other researchers review the data and come to the same conclusion about the findings (Nowell et al., 2017). The process of gathering data from a variety of sources and identifying similar themes/experiences is known as triangulation. Triangulation supports dependability, credibility, and confirmability of the data (Cypress, 2017). Transferability is demonstrated when the findings can be applied to other contexts (Nowell et al., 2017). Providing descriptions and themes supported by quotes from the participants enables others who consider applying the findings to other contexts to determine transferability.

I will share how this study ensured that Guba and Lincoln's (1994) trustworthiness criteria were satisfied. I explicitly defined participant inclusion and exclusion criteria to ensure those who read my study understand who the study represents, thereby establishing transferability and dependability. I also included excerpts

of participant narratives to substantiate the shared narrative and data analysis, demonstrating transferability. Similarly, I promoted confirmability by providing the rationale for my inclusion and exclusion criteria. Throughout the research process, I retained my field notes, reflexivity journal entries, transcripts, and recordings making it possible for others to see how I made decisions throughout the data collection and analysis to create a shared narrative. The retention of documents related to the analysis, decision-making, and reconstruction process enabled confirmability. Whereas interviewing an adequate number of participants captured a variety of perspectives and experiences through multiple mediums, assuring credibility and confirmability. Establishing trust and rapport with the participants also fostered credibility. To further ensure credibility, I repeated back key components of participant narratives, so they could verify and clarify my understanding.

Reflexivity

As a qualitative researcher, it is vital to consider how my knowledge, experience, beliefs, and assumptions influenced the research process to enhance the study's validity and reduce the risk of bias (Holloway & Galvin, 2016). To ensure this occurred consistently throughout the research process, I documented my thoughts, opinions, and emotions in a reflexivity journal. To ensure transparency, I disclosed my experience working with newcomers and my rationale for exploring this area of research. I drew upon my recent cultural safety training which increased my awareness of systemic racism and better prepared me to work safely and effectively with equity-denied populations. I acknowledged my power and privilege and made efforts to neutralize this power imbalance by positioning my participants as the narrators, and myself as the knowledge

seeker while creating a caring, empathetic, safe space for sharing. My thesis supervisor oversaw all research process steps and provided ongoing guidance as I analyzed the data. Building in ongoing reflection, applying cultural safety principles, and being transparent promoted reflexivity and validity.

Ethical Considerations

Research involving human subjects must also meet the ethical standards set out by the Tri-Council Policy Statement to ensure justice and respect for the participants while safeguarding their welfare (Government of Canada, 2020a). Before participant recruitment, I obtained approval from the University of New Brunswick's research ethics board (REB # 2023-60). Potential research subjects received information about the study including the purpose, the affiliated institutions, possible risks and benefits, and their role (Doody & Noonan, 2016). Participants had an opportunity to ask questions, decide whether they wanted to participate, how much information they disclosed, and were able to withdraw at any time without consequence (e.g., without explanation, returning gift card, or concern about disappointing me) (Creswell & Creswell, 2018). Participant questions primarily focused on how I would ensure the confidentiality and security of the information shared. I obtained written consent before the interviews and reassessed it throughout the study. The consent form was prepared in English at a grade-seven literacy level as seen in Appendix I. I offered to read the consent form to the participants to ensure that those who had challenges reading English were fully informed. Two participants accepted this offer and none of the participants withdrew from the study.

I safeguarded participants' confidentiality and mitigated the risk of harm related to their involvement in this study. I was the only one who knew the identity of each

participant and how the stories connected to the individuals. For example, codes were assigned to participants to anonymize the study data and research report. To ensure that identifying or highly specific data was not shared in the final narrative, I omitted or modified the data to assure confidentiality. Interview audio recordings on my (password-protected) cellphone were uploaded to UNB's OneDrive soon after each interview, and then deleted from my cellphone. Field notes, journals, and audio recordings were securely stored within the University of New Brunswick's OneDrive and protected with a password only known to me. In alignment with the standards set out by the Canadian Institutes of Health Research, the data will be stored for five years and then destroyed (Government of Canada, 2013).

Given that early resettlement is a period of increased vulnerability for newcomers, it is essential to provide them with supportive resources (Seagle et al., 2020).

Accordingly, I provided participants with a local health and settlement services directory as well as information about counseling services to mitigate the psychological distress they may have experienced as they shared their stories (Appendix J). I was also prepared to address distress that may have surfaced as participants shared their experiences by following Wright et al.'s (2000) protocol for managing participant distress in the context of a research interview in Appendix K. To show appreciation for the participants' time and participation in the study, I gave a \$25 honorarium to each participant. I also offered to provide bus tickets to and from in-person interviews.

Conclusion

Narrative inquiry was the perfect tool to unlock the rich narrative accounts of Indian women living in Brampton. At the same time, this methodology aligns with my

epistemological and ontological perspective that health is individually constructed, and meaning is derived through lived experience. I recruited participants through purposive and snowball sampling through trusted community settlement organizations. Then I collected data through unstructured interviews, field texts, and reflexivity journal entries, followed by analysis according to Clandinin and Connelly's holistic and thematic framework. I attended to issues of rigor and upheld ethical standards as I learned about the lived experiences of my participants and how these experiences impacted their health, giving voice to this equity-denied group, exposing broader social-cultural factors influencing their experience, and the support they require.

Chapter Four: Findings

Drawing from the narratives of Indian women new to Canada, I will unveil their settlement journey and the impact of this experience on their health. After describing the study participants, I present their experiences throughout three phases of settlement including ‘*seeking and discovering*,’ ‘*compromising and surviving*,’ and ‘*transitioning and accepting*.’ As I depict each step, I describe the factors that altered their experiences and emotions to demonstrate the impact on their psychological health. Then, I burrow further to understand the impact on health by sharing participants’ perspectives on health and the impact of settlement. Finally, I share participant recommendations for improving the settlement experience which focus on bolstering resources to support health.

Participant Characteristics

Informed by the demographic survey findings, I will describe the eight participants who partook in this study, including their immigration pathway, education level, employment status, and income. Aligning with this study’s inclusion criteria, all participants identified as females, between 25-39 years of age (mean = 30) and were born in India (see Table 7). Seven (87%) participants were married, and one was single (12.5%). All study participants resided in Canada for six years or less, with seventy-five percent of the participants immigrating in 2019 or 2022. Twenty-five percent (25%) of the participants immigrated through the family class, 25% as economic class, 12.5% as sponsored, and 37.5% as other (e.g., international student or work visa). Among the participants, four (50%) reported attaining a diploma or bachelor’s degree and the remaining participants (50%) had graduate education. Two participants (25%) obtained full-time employment, while the remaining continued to seek work. Sixty-three (63%) of

the participants disclosed their household income, revealing incomes of \$25,000-50,000 for 25% and \$50,000-80,000 for 37.5%. The impact of these demographic findings on health is examined in the discussion section of this document.

Phases of Settlement

Participant narratives revealed three phases of settlement, beginning with *discovering and seeking*, followed by *compromising and surviving*, and ending with *transitioning and accepting*. I present an overview of each stage in Table 9, including phrases shared by participants to describe how they were feeling, their key activities, thoughts, and emotions. I outline each phase supported by participant narratives to make apparent factors that altered their experiences, making it better or worse, and the emotions experienced during each phase. Participant names were replaced with pseudonyms to protect their identities.

Phase 1: Discovering & Seeking

The initial phase of settlement was characterized by discovering and seeking, whereby participants explored, learned, and searched. Throughout this phase, participants began assessing their surroundings, discovering the natural environment, the people, the Canadian accent, the food, hiring and recruitment practices, the value of their currency, the cost of living, and how they fit in. Simultaneously, they began seeking essential resources, such as employment, healthcare, transportation, bank accounts, and registrations. As they progressed through seeking and discovering, they faced challenges related to the wintry weather, differing cultures, reduced socialization, long commutes, inflated cost of living, as well as employment and healthcare barriers. Seeking was a process that came with lengthy periods of waiting which created feelings of worry and

loneliness. Despite these challenges, participants demonstrated persistence as they sought to understand systems, acquire resources, and get answers. Experiences while discovering and seeking led them to compare their new life with the comforts of home and made them realize that life in Canada was going to be more challenging than anticipated. Throughout this phase, their emotions quickly shifted from hope and optimism to worry, isolation, and disappointment.

Upon arrival, participants discovered the environment and community surrounding them. Those who arrived in spring, summer, or fall appreciated Canada's clean air and vast green spaces. Maninder shared:

I come from a country which is ...very polluted. ...The AQI (air quality index) level there (in India) ...sometimes goes up to 350-400, so I didn't want that ...for my kids. So, when I came here, ...the fresh air [was] a blessing.

Many participants enjoyed sightseeing at Ontario's natural landmarks, such as Niagara Falls and the Blue Mountains. While sharing these experiences, several women remarked about the vast distance across Brampton and Ontario.

The discovery experience was markedly different for those who arrived during the winter. The frigid temperatures, snow, and freezing rain made life difficult and uncomfortable for them. They worried about the cold weather's impact on their physical and mental health as they experienced it for the first time. Harinder explained,

Weather impacts ...your mood ...When there's sunlight, you feel good from [the] inside. It's not sunlight for three or four months in winter [here, and] that's... depressing.

Sukhpreet also shared how she felt when she arrived:

When I came here, it [was] ...February. [It was] very snow[y and] very cold... [For] 2-3 days I ...shut down, [I spent the] ...whole day in [my] room because... outside [it is] ...very cold.

During the winter, people were more likely to stay inside where it was warm. This experience impacted the women physically and psychologically:

In the winter months, it gets really depressing here... because you don't see a single soul outside ...This is not what we are used to. When I came here, my skin, oh my God, it was so dry. ...My entire family ...had nose bleeds every single morning... (Maninder).

Participants appreciated discovering Brampton's large immigrant community and the availability of food from home, as this gave them a sense of belonging.

[In] Brampton... all our community food is conveniently available. ...You can get your choice of food and the taste is pretty similar to back home...You can fulfill any of your wishes in terms of food, I would say. In [the other province] it was difficult, ...they didn't have... many Indian restaurants and whatever was there, probably they modified the taste according to their people (Aisha).

The community here is ...[mostly] Indian, so the transition has not been that difficult ...in terms of culture. ...My kids ...get to see their own food [and] their people, so it is not ...a drastic change for them (Maninder).

Soon after arrival, participants set out to complete administrative processes, such as registering for school, obtaining a bank account, and official documentation (e.g., social insurance number). They found that the steps to get these resources took considerable time and presented new challenges. Gurpreet shared her experience, saying,

Service Ontario ...[offices] are ...too crowded, so newcomers have to wait outside for hours ...in [the] cold weather.

In addition to waiting, communication emerged as a compounding factor in the 'seeking' narrative. Although all participants learned English in India, a few found it challenging to understand Canadian accents, and sometimes, Canadian-born persons had a tough time understanding them too, making seeking more difficult. Priya narrated,

I faced [a] challenge for accent. [The] English accent is different for us. We [are] use [to a] British accent, [but] here [the accent] is American.

These experiences caused participants to feel frustrated.

When participants sought transportation, they discovered that it was inefficient and it was hard to find help, which made seeking more difficult. Participants found Brampton's public transportation system had indirect routes and infrequent route availability, and this limited their ability to seek and discover.

[Initially], we did not have a car and ...transportation ...[was] a task. ...If you miss one [bus, you] ...wait almost an hour or ...more at times to get to a destination. ...If you have to go to just one place, it takes a[n] ...entire day, then ...you do not have time to do anything else (Maninder).

Sometimes I get lost (laughing). ...I do not know ...how to [use the public] transport[ation system] ...because [there is] nobody to help me. So, I was asking ...where to get ...[the] presto card. ...Sometimes people help, and sometimes they say, "I am busy." Every[body] [says this] because [of their] busy schedule. Everyone [is] running, and they [do] not reply (Priya).

Many participants discovered they needed to learn how to drive and buy a vehicle to overcome these barriers, but new challenges arose as they sought these resources. They discovered that learning to drive in Canada was different than in India, and it took time to understand the driving rules. Rajbir narrated, "*I know how to drive a car in India, ...but here [it] is ... a great challenge.*" Participants also experienced obstacles in obtaining credit to purchase a vehicle because they did not have adequate employment or credit history in Canada.

We have to buy [a] car on my credit, [but] I don't have [a full-time] job. ...So, they are telling [me] if you don't have [a] full-time job [you cannot get a loan, and if] ... they reject me ...[it will] give [a] bad effect on my credit (Neru).

As participants sought resources such as food, clothing, transportation, and shelter, they discovered unexpected financial challenges. They realized that the value of their currency (rupees) was low compared to the Canadian dollar and the cost of living

was high. They responded to this tricky situation by being cautious about how they spent their savings.

People should... understand ...that when you are coming from a different country, no matter how much you are earning back [home], ...here, ...even if [you are] ... spending a dollar, ... [it is equivalent to] 60 rupees, so ...it makes a difference. I mean, for how long [can] you live on your savings? You need to start earning as soon as you come here (Maninder).

Discovering that living in Canada was expensive and their savings had a lower value than anticipated made newcomers concerned about their ability to manage financially and made seeking employment a priority. Sukhpreet narrated her concern about the cost of living saying,

I need more money and ... [I want to] help ...my husband because ...everything is very expensive, so it is very necessary to get a job.

Gurpreet echoed her sentiments, as she shared that the high cost of basic resources (e.g., food and clothing), rent, and taxes made life difficult,

When we come here, it's too difficult to live here ...things are too expensive, and we have to pay a lot of rent ...and there are...so many taxes.

As participants sought housing, they discovered that the cost of rent was high, and their credit history was insufficient which restricted their housing options. Initially, many lived in shared accommodations, renting a room or basement until they had adequate income to move somewhere more private. Although these options were more affordable, those who lived in basement apartments worried about the impact of this environment on their health. Gurpreet narrated,

I don't feel good [living]... in [a] basement, ...because it's too dark and there is no[t] proper ventilation.

Some participants contemplated buying or renting a home, but their insufficient credit history and Canadian work experience remained barriers. Maninder narrated her experience:

I do not know where to go. ...Everyone asks for your credit score [but we] do not have that much credit history... I am trying to look for a house, but ...I need someone to understand that I am new here... [In] a year or so, ... I will be able to... afford a house or get a better place for myself, but [at] ...this time... I need support.

Participants began searching for employment in their professional fields. They spent a lot of time and effort developing a resume, searching job postings, and applying for positions. Most of the time, there was no response from potential employers, causing them to feel anxious. Sukhpreet shared how she felt as she waited, saying,

I applied [for] a job in my field... [but there are] no jobs in Canada and in my field, [so]...I feel very nervous.

Neru described this experience further, saying,

It is just this stress, and you are not in control. ... You are trying so hard, but nobody is giving you what you need. A chance to get a job.

Participants responded by intensifying their employment search, but they soon learned that employers were seeking applicants with Canadian education and work experience. This realization was disappointing for participants as they expected Canadian employers to recognize their training and experience from India.

Nobody ...call[s] you for an interview without [a] reference. Even for a basic job, everybody asked for the reference. So, I was not satisfied (Gurpreet).

After living in Canada for a few months, many participants sought healthcare. This experience was challenging during the pandemic, as most HCPs were not accepting new patients. Those who were lucky to secure a HCP had to search for several months

before obtaining one, and when they did, they experienced more waiting. They were dissatisfied with the timeliness of appointments and how care was delivered.

We try to find a family doctor. We visited too many doctors, and they said we are not accepting new patient[s]. [Finally], ...we found a family doctor, ...but ... when we call[ed] them for the appointment, the waiting time is too high (Gurpreet).

The women continued to seek accessible care and over time they learned to use walk-in clinics when their HCP was not available. Appointment delays led to increased walk-in clinic use. Gurpreet said, “[If] it’s too difficult [to get an appointment], then we have to go to the urgent care.” They also experienced delays in accessing urgent care. This situation caused feelings of anxiety as narrated by Maninder, who said:

I fear going to the health system here, especially when I hear [that] people ...[go] to the ER (emergency room) [when] they have been ...really sick, and ...they had to wait for hours and hours. ...[It] ...scares me. ...If something ...like that happens, what am I gonna do? ...I just keep praying [that] ...no one falls sick (Maninder).

In the process of seeking, participants discovered that the healthcare system in Canada was harder to access and the approach to care was different from India too. Aisha said, “In India, ...if I am in pain [at] ...midnight, ...there is lots of doctor[s] in walking distance.” Similarly, Harinder shared,

In India], everything is easily available whenever you have an emergency. [When] you go to [the] doctor; you [can]see a doctor and ...meet [a] specialist within few hours.

After securing healthcare, participants discovered that Canadian HCPs spent a lot of time obtaining their health history and providing self-management advice, rather than prescribing medication.

Back home, we used to just go [to] the doctor, talk it out, get our medicines, that’s it. Here, it is different ...[doctors] want to know the history, ...[having] ...long

elaborate talks. ... There is not much use of medications here. 80% of [the] time, ... I have been prescribed Tylenol or Advil. So, it kind of ...makes you feel like, if the doctor is gonna prescribe that, then why go to the doctor at all? (Maninder).

When participants could not get the treatment they wanted, they often self-medicated.

Aisha said, “...Sometimes people ...medicate themselves at home ...which makes things even worse sometimes.” The Canadian style of healthcare delivery and delays in accessing care were associated with feelings of disappointment, isolation, and worry.

I [saw] the gynec[ologist] ... She talk[ed] to me to resolve my problems, but they do not give me ...medicines. ...I do not think it is good. ... I am afraid because people’s health [can] get very trouble[d]. No one can help me (Sukhpreet).

A few participants also discovered challenges in accessing healthcare services not covered by OHIP, such as vision and dental care. When participants required uninsured health services, most had no extended health insurance benefits, so they had to pay for treatment or go without it. While seeking these services, they discovered that the cost was high, and this created financial hardship.

I got bad tooth pain, ...so I went to ...a dentist. ...At that time, we only [had] ... start[ed] doing [a] basic job... It is very hard to cover the expenses. ...I paid \$2,400 from my pocket, [which was] ...a lot (Harinder).

Participants who had friends and family in Canada received anticipatory guidance pre-arrival and throughout the ‘seeking and discovering’ phase which helped prepare them to settle in Canada.

I got support from my sister. She was already [in Canada since] ...2017. That’s why it was [a] little easy for me to settle down. ...I already understood...[that] things gonna be changed. I already have my mindset for that. I know I have to do a lot of hard work at the initial stage. For the first few months, I found difficulty because I do not find [a] job at that time. But after[wards], ...it was not that much hard for me (Harinder).

[My husband's] cousin, and like my sister-in-law, my brother-in-law are PR (permanent residents) here and they ...are helping with everything. ...They told [us] that life is very hard here, but when the days pass, you love to live here (Rajbir).

In contrast, those who were alone had a harder time seeking and discovering.

I saw my friends who came alone... They literally feel down from inside. It was, of course, in the initial period because we feel homesick because... back home we never get a long time away from our family (Harinder).

The first night ... was awful... until I got connected to my husband. I did not have any SIM (subscriber identity module) card. I went to a pharmacy to buy the SIM card, but unfortunately, they didn't have [one]. They said SIM cards are available in the Walmart,so you have to go down the street, take another bus and you can buy. The problem was ...I didn't have the [public transit] card. ...It was snowy [and]...it was all hilly. They have steeps, not the flat surface, so... it was scary. Moreover, I didn't know where the Walmart was, and I didn't have GPS at that time on my phone ...so it was ...very difficult. And then I got to connect with my husband. Then I was ...in tears. Like okay, where I am? (Aisha).

For some, discovering cultural differences created tension within families, limited social support, and contributed to missing home.

Although ...my sister-in-law is here, ... it's not like we are mingling with each other. They are also in ...another state of their mind, like you know, so we have different cultures... like in traditional Punjabi families ...all the property [will be] inherited to [the] boy, rather than ...girls. ...Even for me, ...I have a brother to all the all the property my dad has I don't claim. ...I'm like, okay, this all belong[s] to my brother, but she has a different kind of opinion. She is like 50-50 (laughing), you know, it's okay... for the modern family, ... but for us as a traditional family, it doesn't (speaking slowly). So that is another conflict and probably that is the reason that we don't, probably because it's only us, we are not ready, or we are finding it hard to mingle with other people or in the community on the whole. ... My son... doesn't see many people ...specifically for his own age. ...My sister-in-law ...has a two-year-old daughter. If we were in good terms with her, we could ... go to her place and, you know, enjoy and spend some time together (Aisha).

You don't see a single soul outside during the winter months and this is not what we're used to. We're used to seeing people ... here and there, even during night time... The culture there (in India) is like no one stays at home. ...We all go out, we all are on the streets playing, talking, jelling around, but here it's different. The culture. That's what my kids miss (Maninder).

Phase 2: Compromise & Survive

During phase two, participants became aware that life in Canada would be difficult, so they had to compromise and survive. In this context, compromising entailed cognitively adjusting expectations of how they wanted and expected things to be and accepting circumstances below their expectations. Surviving involved applying significant effort and doing whatever it took to meet their needs. As these newcomers, compromised and survived, they faced a spectrum of challenges cascading from unemployment to low-paying unskilled work, unstable, undesirable, and unaffordable housing, disrupted work-life balance, relationship tension, and mistreatment. These experiences were associated with feelings of worry, overwhelm, sadness, and discouragement.

With mounting bills and no job prospects, participants became determined to ‘survive’ in Canada. They compromised their expectations and considered applying for unskilled positions to make ends meet. Desperate for work, participants were relentless in their search as they followed up with potential employers and went out on foot from business to business. Despite compromising and undertaking intensive efforts, participants continued to wait for an opportunity to work.

I am not getting a job from [the] last seven months ...as a quality analyst, so I... switch[ed to look for] a job in customer service. I want a job so that I can improve my life [and] I can help my family more. [The] whole day... I [think], ...I don't have a job, I don't have a job.... [This is] in my mind... all day, 24 by 7... I don't get any other thoughts (Rajbir).

After several months of persistent searching, many participants found low-paying, casual, or part-time positions outside their professional field. For example, Gurpreet found a job outside her field as a security guard. She shared,

I ...[am] not satisfied with my job. ...I was in IT [information technology] ...back home. But here it was very hard to find [a] job in [my] own field (Gurpreet).

Participants had no choice but to compromise and accept these positions as they needed to feed their families and pay their bills. Maninder shared how her family compromised to survive, saying,

In the span of ...six months, my husband ...changed ...jobs [three times]. [He took] ...anything ...just [so we could] ...run the family, run the house.

When participants compromised and accepted low-paying positions, many continued to struggle to survive financially. Some participants (or their spouses) began working more than one job or double shifts to cover their expenses. Priya shared that she had to “work like a machine.”

Sometime[s]... I did ...double shifts. ...I [studied in the] morning, [then did] night shift, sometimes [with only] two hours [of] sleep.... It was suffering for me (sigh; laugh). Yeah, ...this way of life [is] not good [for] proper sleep (Priya).

Rajbir’s husband also worked double shifts and like other participants, he considered working as an Uber driver to increase his earnings. Rajbir worried about the impact of this on her husband’s health and their family.

Because I am not working, ...my husband has to work double shifts (strained high-pitched laugh). We hardly find any time to ...wander around... I am telling [him], how much you will do? ...He [is] working 18- 19 hours [a day, and] ...now he is telling me, “Now I got a license, so I can Uber [too]. I said, “No, no, no, you can’t do this because ...your health will [be] bad” (Rajbir).

Living off one income made it difficult to cover the cost-of-living expenses, and this made participants desperate to find work. Rajbir said, “I want a job, so [that] I can improve my life, [and so] I can help my family more.” When participants could not find work and contribute to their family’s income, they expressed feeling stressed and helpless. A few participants also shared how financial stress caused tension within their

marital relationships. Neru shared, “...It [has an] effect on [my] relationship. ...[He] (her husband) shouts at [me] ...because he is frustrated.”

Although participants took it upon themselves to do everything possible to make ends meet and live a decent life, people at some of their workplaces did not support them as much. Some participants narrated how they faced discrimination and harassment by colleagues, supervisors, and established immigrants from South Asian countries. The interviewees shared that employers knew they were desperate for work, and they felt that some took advantage of their situation by treating them poorly. This experience caused them to feel devalued, powerless, and anxious. Here are some narratives of how colleagues and supervisors treated participants in the work setting:

The main problem I ...faced... [is that] Indian people ... [do not] like Indian people... They do not treat good, they... treat... like a low [class]. ...The senior person[s]...are supposed to take care of new people... [but] we are afraid to tell them ...our problem[s]. We... hide when they come, ...so they do not see us and don't shout [at] us. [The way we are treated] affect[s] ...my work abilities (Neru).

We took the intercompany transfer. ...Indian people were running [the business]and you know, ...it is not good. I had to do the same duties and responsibilities that I was doing in [the other province], ...I was getting ...around \$18 [per hour] when I left, ...[but] here they offered me \$15.50 [per hour]. ...The person I was replacing ... [got] higher pay, ...so I argued with them. ...I still remember [how] the senior manager talked to me (Aisha).

The diversity of colleagues varied participants' experiences in the workplace.

Where I work, there are lots of Punjabi [persons]...they make fun of me, and they shout at me ...when [work] is very fast. ...If ...my finger cuts, they don't give me time to heal... they make fun. They say, “Don't cry like a baby. It's Canada” (Neru).

On the other hand, Neru narrated experiences working in other settings and found that working with people from diverse cultures created a positive work environment.

When people are [from] mixed [cultures], they treat each other good ... They respect each other' [s] culture because they don't know their culture, so they ... assume and respect [one another] equally (Neru).

Sometimes participants felt that the way their pay was determined, and performance was assessed lacked transparency and was unfair.

Within two months, [my husband] ...was fired from his job without any reason. His supervisor said, "Your... performance is moderate." [My husband] ...said, "Can you tell me on what parameters ...you [are] measuring my performance?" They had nothing to say. ...He was eight days short of his probation, ...he would have joined the union, but... he was kicked out (Maninder).

These examples show how many participants compromised their need for dignified and respectful treatment to 'survive' financially. Aisha was unique as she chose to stand up to her supervisor, demanding fair pay and opportunity. When her supervisor did not support her, she resigned.

Inadequate income caused participants to compromise their choice of housing to survive financially. Maninder narrated her experience trying to balance what her family needed with what they could afford:

I can't just go ...out of budget, [then I won't be able] to feed my kids. ...I need accommodation, but I know the cost of [what we want, and if I get that], then I wouldn't be able to survive at all.

To find accommodations within their means, participants had to compromise and live in accommodations that did not meet their expectations. Neru narrated her experience, saying:

The key is always money because the home is not like we [would] choose. ...If I have money, I [would] choose [an] apartment. I don't choose [to] share rooms, ...[but] I always [must] choose a room in my budget. ...Only my husband has [a] job, and he earn[s] ...\$2000 every month with ...overtime ...and our rent is \$1500 [a month] ...So... it's very, very hard.

At the same time, the demand for housing was high, so property owners continuously increased rent prices, knowing that they could find someone else to rent. Some of the participants shared experiences whereby property owners invaded their privacy or created environments that felt unsafe. Although participants wanted to address these situations, the cost of housing was high relative to their income, so they felt they must tolerate the situation or move. Neeru shared her experience renting a room:

[My property owner] drinks and loudly shouts ...at night ...He come[s] and sit[s] in the kitchen, ...so I don't feel [like I have] privacy. ...Because home is less and rent is high, ... [we] shut our mouth[s], so we don't ...get in trouble. ...But if [a] home is available and rent is low, ... it's fair. [We would not feel] like we ...have to tolerate this ...situation.

All the participants shared narratives of multiple moves due to these factors. Yet, each move required effort to get to know a new neighborhood, become familiar with local resources, and develop new connections.

When you stay at one place [and] ...the lease is for one year, ...you get familiar with the place, the neighborhood, the schools, and what is around, [and] by that time... you have to go [to] another place (laughing) (Rajbir).

Over time, most of the women and their families could afford accommodations that better aligned with their needs and expectations. Priya narrated her experience,

[Initially, I lived in] ...one room, but [it]... was not good for study[ing] [and] people [were] of [a] different type, ...so I found ...[a] basement where I ...[have] no disturbances.

While most of the participants moved into a residence that offered more privacy, this was not always the case, as they had to stay within their budget. For example, Aisha's family rented a house that provided them more control over their living space, but they had to compromise by subletting rooms to afford their rent.

We rented the house, but... we still share the rooms with other people ...but that too sometimes is difficult. Yeah, because people are of [a] different mentality

and opinions and ...sometimes ...we are also not ready to compromise because they are not our ...relatives. If I am working... in a good job, ...I would never keep those people in my house (Aisha).

These narratives illustrate the challenges participants face securing housing and how they had to continuously compromise to survive financially.

Since Canada did not offer the opportunities they expected, the women had to compromise their expectations and adjust to their new unsupported “independent” roles. Participants shared that they were used to receiving support from their family and house helpers to complete household chores and errands. Aisha recalled, “*We used to go together at least for groceries because for some heavy stuff I need manpower (laughing).*”

Back home, we used to have ...a lot of house help ...[for] basic household chores like cleaning, ...dishes and all that stuff, ...but here ...you do it on your own, [so] a big chunk of my time goes into that, which was not the case back home (Maninder).

In India we have too much time to cook food [or] our mothers cook[ed] food, [but] here we have to we have to cook our food by own and we also have to go work, and sometimes, we are too tired (Sukhpreet).

They found it difficult to work, care for their families, and maintain their homes independently, and they missed the support they used to have. This massive shift in roles was overwhelming for many participants, once they started working. To get everything done, they had to compromise their own needs.

Here...you do [everything] ...on your own, ... I am not able to focus on myself, give myself my ‘me time’, and obviously [I] can’t focus on my health too. ...I guess ...the transition ...is going to take a while. ...You need to get used to ...doing the household chores, yourself. ...It ...take[s] a toll on your body. ... You gotta think, ...the kids gotta eat, the house has to... be cleaned, the dishes have to have to be done ...but at the same time, you are trying to make a life here, you are trying to get your finances right, you are trying to ...explore the places and meet new people, so ...you gotta rush, rush, rush everything. [It is] ...like a bomb ...ticking ...in your brain. You ... become like ...[a] calendar [with an] ...alarm clock inside you (Maninder).

Participants shared narratives of times they felt overwhelmed and dissatisfied with their new lives to the extent that the compromise in lifestyle seemed too great, and they contemplated returning home. Neru shared,

We cannot compromise [our] needs in a long way, it's effects on our health, our relationship health, ...mental health, everything.

Despite their best efforts and ongoing compromises, some participants felt shame when they did not find the success and prosperity, they hoped Canada would offer. This feeling was worse for participants whose family members sacrificed to help them start a life in Canada. Neru shared her narrative,

Parents invest their lifetime money to us, and they are expecting something [in return]. So, it is very difficult to go and say [to them], it is not working. It is...a psychological burden.

To survive these challenges, participants reached out to relatives already established in Canada, supportive partners, fellow students, and other newcomers for support. Aisha narrated the importance of her social network for enduring challenging times as she shared:

My sister was here, [so] I feel [a] little better. She is with me, ...my husband from back home, [and] my daughter ...used to talk to me. That is the biggest part. I got one or two friends [too]. We spoke to each other, [and] we understand each other, so I think that is why I am here today (Aisha).

Participants made an effort to establish new social connections through school, work, or community settings too. Harinder shared,

They (newcomers) should ...network with the right people, who can [help steer them in] ...the right direction.

Some participants reached out to newcomer agencies for support in preparing resumes, searching for employment, or improving their communication skills (e.g., English classes). Sukhpreet shared her experience, saying,

[The] employment agency is good because ...[they] help[ed] me ...resolve my resume and ...someone replied to [me] ...shortly [afterward]. The Brampton library is very helpful for me because I also attended ...English classes.

The aid obtained through these avenues, helped participants expand their opportunities and their circle of support. Since there were many organizations offering services for newcomers, it was sometimes hard to know where to start and who to trust.

The main thing is... I don't know the process where I have to go. I think they (newcomers) don't get ...proper guidance where... they have to go (Rajbir).

Although other immigrants were not always supportive, participants found solace in knowing that others faced similar challenges, and after a few years, things got better.

However, some participants were reluctant to share their experiences, increasing their distress. Some did not want to burden others, and others considered sharing their struggles taboo. For example, Neru had a close, caring relationship with her mother in India but felt she could not tell her mother about her hardships in Canada.

Sharing is not good when I came to Canada. When I am [in] India, I [tell] ...my mother if a mosquito bite[s] me, but in Canada, ...my mother is so far, she will [feel] helpless. She [is] ...not able to come and care for me, so ... I am...hiding things from her, so [that] she will be okay (Neru).

Despite these fears, several participants expressed that they needed to share their experiences and they felt relief when they did. However, when opportunities to meet new people arose, participants often felt nervous and worried about their safety. For example, Neru said,

If somebody asked me to ...have a coffee, ...in my conscious mind, I always thought, ...Is it safe, or not?

Similarly, a few participants shared that they were suspicious of my intentions and offer to provide them a gift card for participating in this study. They discussed the situation

with their friends and family before responding to my invitation or attending the interview.

So, in my mind why you are giving a gift card, right? So... before our interview, I talked to three people, so I got a call from Sarah about this. They told me. Yeah, it's okay, go through [with] it (Rajbir).

During phase two, participants faced challenges in acquiring employment, transportation, housing, income, and support. However, they compromised by accepting work and housing that did not meet their expectations, making an effort to make new connections even when this did not feel safe. At the same time, they continually expended effort such as working extra hours, learning how to drive, acquiring a vehicle, and drawing upon their supports for strength to survive.

Phase 3: Transitioning & Accepting

In this final phase of settlement, participants transitioned and accepted their new lives. ‘*Transitioning*’ describes the process of participants progressing from the first two phases when everything seemed unfamiliar and they felt unsupported (or had a reduction in support), overwhelmed, discouraged, and de-skilled to becoming familiar, supported, and skilled at work, within their roles, and community. This progression led to participants feeling satisfied, confident, and supported. ‘*Accepting*’ describes a turning point at which participants shifted their expectations, accepted the reality of their new lives, and developed a hope of a better future (opportunity and financial security). Although participants continued to expend a lot of effort and life continued to be difficult, it became more stable, and they began to feel a sense of control, hope, and pride.

Over time, participants transitioned from novice to experienced, competent, and praised employees. For example, Priya overcame her employer's initial performance concerns, and as she became more proficient, her employer praised her and assigned her new responsibilities. Priya proudly shared,

After two months, I was giving training to newcomers. [Her supervisor told new employees], "She is perfect. Ask her everything."

Acquiring Canadian work experience and references enabled participants to transition from working multiple part-time jobs, into full-time, more permanent positions.

Everybody ask [us to] do fast [work]... which was not easy at that time because initially ...we don't have any experience. ...When I started in a warehouse, they asked me to put stickers on the boxes and the belt was going on. It was very hard. ... Now I got my position in the restaurant... I'm working there since 2019 (Harinder).

Other participants shared experiences of acquiring skills to improve their employment opportunities. For instance, Aisha shared:

I understand ...for the job I am looking for, I need to go for another certification. I am ready to do that. ...I have been ...working with ...newcomer agencies ... [and] I also joined [an]... adult learning school. So [I] am working ... towards it. Hopefully, I will get [something better].

Priya, an internationally educated nurse, undertook steps to get her education recognized in Canada.

I started my National Nursing Assessment Service [eligibility] application, [and] it take[s] three months. ...[After]they accept [my application], they [will] make some reports, ...then I am going to continue (Priya).

With time, many participants transitioned into more desirable and stable housing. Access to stable income and employment was a crucial factor in this transition. Many participants dreamed of becoming homeowners. Gurpreet and her husband fulfilled this

dream and purchased a home, which gave them a sense of pride and control, as evident in her narrative,

Now we have our own house... the experience is very good because we are the owner and we can do anything ...we want. ... It is too good... (laughing).

Transitioning into stable homes and jobs led the women to develop stronger ties to their supports and resources. Participants shared narratives of transitioning from feeling alone and unsupported to developing a supportive network.

When you come to a new country, you have to make friends because you don't have family here, and ...you never know when you need someone, so you need to ...create that circle where you ...[have] people who you can rely on and you can call upon when there is an emergency, especially when you have kids. You really need to have those kind[s] of people around you (Maninder).

Rajbir narrated her experience finding a basement apartment owned by a caring property owner who regularly checked in on her and offered her support.

[My property owner] is ...helping me out. ...With the grocery, she says, "If you want to go there, I can help you. "...If you want more food, then you can tell her... [I have a cough today, and] she called me [to say], ..."I can hear that you [are]... not feeling good. I have a medicine [for you]" (Rajbir).

As participants found stability, they became positioned to extend support and guidance to other newcomers.

One of my colleague's son[s] came here ...seven months [ago]. ...He is ...studying ... [and he does not] ...have a job. So, his mother is calling me [saying], Please, take care of my son. I have lots of worry about him that he cannot go [in]to depression." So I tell her, "... Don't worry, I will take care of him." (Rajbir).

At this point, participants transitioned from feeling overwhelmed and surprised by the cost of living, to becoming familiar and skilled at predicting their expenses and staying within budget. This transition gave them a sense of security.

If we [can] cover our expenses, ...know where to spend and where to save, [and] ...have some planning for the [future] ...then it is easy to be settled down here. (Harinder).

Similarly, being familiar with one's community and knowing how to access resources enhanced their sense of control. For example, participants transitioned from feeling that healthcare was difficult to access, to knowing how the healthcare system worked. Now they knew how to get care after hours and in urgent situations, which gave them peace of mind.

Now... we use walk-in [clinics]. [My family doctor] ...takes patients by appointments after three [and] ... walk-ins in the morning. Because my husband is working ...[until] 6 o'clock, ... it is difficult for us to see him in the morning. So, it is better to go ...[to] a walk-in...[for] better access to the healthcare (Aisha).

Many participants shared narratives of reaching a critical juncture at which they did not want to return home, they accepted their new life and wanted their hard work and sacrifices to be worthwhile. Aisha shared,

After all this up and down, I do not want to go back (speaking slowly). I want to make my life ...here.

In this final phase of the settlement journey, participants narrated establishing realistic expectations, and life became predictable. Participants felt confident in their ability to make a good life in Canada as they had the knowledge, skills, resources, and support they needed. They accepted the current state and developed a positive outlook for their future.

We can easily manage here and ...if we have money, we can have [a] little more... in the future. ...I felt good that I can earn better than [in] my hometown ...I [would not have] got [the] same chance in my back home, ... so, I need[ed] to migrate here (Harinder).

Participants in this phase relax and smile, expressing their sense of support, control, and peace of mind as they say, "Life's good."

Health

Expanding on the impact of settlement, I will share participants' objective health ratings, their subjective health assessments, and their perspectives on health. This will bring to light factors that contributed to and challenged their health. Through their narratives, it will become evident how they interpreted their health when facing challenges.

Participants rated their health upon arrival in Canada and their health at the time of their interview. Their self-reported health ratings demonstrated minimal change throughout settlement (see Table 7). None of the respondents reported an improvement in their health, six indicated no difference, and two reported a decline. The two women who indicated a decline in their health had vastly different narratives. One was isolated, had poor housing conditions, unstable employment, difficulty affording healthy foods, and experienced discrimination where she lived and worked. She endorsed worry, shame, and sadness.

We are not even ...living a life we are ...supposed to live in our home country, [where] ...our home is free ...[and]my mother made me good food (laughing). [Here], there is no food available, no house available, and no health[care]. ...If they [would] give us [a] job ...at least, ... [we could] manage our money. ... We feel shame because they (our parents) already give [us] lots of money ... and they feel ...we are like in [a] good country. So why we are selfish? Why ...are [we] not doing good? (Neru).

The other woman had full-time employment, a supportive spouse, friends, and family in Canada, and owned a house. However, she also struggled with the cost of living and her roles, feeling like she had inadequate time to rest, prepare healthy meals, or spend time with her family.

We go [to] work, and we have to do work also at our home, so I feel stressed. ...Yeah, ...life is ...stressful here in Canada. ...When we live[d] in ...[a] basement,

the stress level is [a] little bit low, and when we came to [own] our home, the mortgage is high, so the stress is high (Gurpreet).

Throughout her story, Gurpreet narrated, “*I don’t feel good,*” and at times, she expressed feeling sad and exhausted.

As participants shared what health meant to them, they consistently focused on health habits, stress, and weight. They spoke about the importance of having healthy foods (e.g., homemade meals, fresh fruits, and vegetables), adequate sleep, and avoiding alcohol and smoking.

To stay healthy, ...we have to avoid alcohol and tobacco ...[and] drugs. ...Our health is very important. ...If we are healthy, ...we can do some work and ...live [a] long [life]... We have to ...take care of our health. We have to take ...more ...veggie food (vegetarian foods), green vegetables ...and ... avoid any junk foods (Gurpreet).

Participants narrated facing challenges maintaining a healthy diet as they did not have enough time or support to prepare homemade meals.

In Canada, ...people eat junk foods like pizza, burger[s], and coke ...because people have no time to cook food or eat healthy. ...Life is too busy here, [because people] ...have to work for the whole day. ...Back home, we eat ... food which is ...[prepared] by our mothers or we cook [our] own, and it is mostly ...green leafy vegetables (Gurpreet).

The women needed to spend extra effort, money, and time to obtain healthy foods. This situation was a notable change from home, where they could buy fresh fruits and vegetables at neighborhood markets for a reasonable price.

[I am] not able to eat good food, ...it cost too much for me and health wise ...cheap food ...is very processed food. It's made me [gain] 13 kilograms ...I'm trying to avoid this... I'm use[d] to... organic fruits, but they are very expensive, but health is [a] must, so I ...cut all the driving [and] travelling expense[s] to buy good food. In India, we ...have access straight to the farm. ...people come home and give you groceries. ... [Food is] fresh, cheap, and like on my door (Neru).

Participants narrated settlement as stressful, and they attributed changes in their health to stress. For example, Neru said,

I am gaining weight, not only for food, [but] because [of] stress. [My] sleep [is] not as good as [it was] before, ...and it [has] affect[ed] my hair and skin.

Maninder elaborated:

If you are stressed out, it is eventually going to show on your overall health. ...I have had a lot of stomach issues ever since I have come here. I guess I could say [it is] all really due to stress. ...My sleeping patterns have changed, too.

All participants described having feelings synonymous with anxiousness (worry, fear, troubled, afraid, or scared) or unhappiness (feeling down, depressed, or sad) (see Table 8).

I get anxiety a lot because of when things don't get done on time or if I have something on my mind (Maninder).

You have to see go to your family doctor ... then he will refer to [you to] the specialist and he will see whatever the going on your body right. So initially, I used to [feel] afraid, literally it is a fear in my mind (Harinder).

Some participants who experienced isolation or separation from their immediate family described themselves as depressed.

I [am] depressed, because I have no job and [the] whole day, ...I live in a basement, ...in one room [with] ...no one [to] ...talk to me (Sukhpreet).

That was ...a difficult part of my life [during the COVID-19 travel restrictions] ... I stay[ed] away [for] ...three years from my daughter [and] my family... I can't forget that time. Mentally, [I] ... was ...depressed. ... [Eventually] ...we got the visa. It was like a relief from a long pain (Aisha).

Recommendations

Participants shared recommendations for improving the settlement experience for future newcomers. As evident in Table 10, participants suggested that a broad range of

SDOH be made accessible. Their dominant recommendations focused on improvements related to employment, navigation support, and healthcare.

The thread of navigation support encompassed a broad range of information, relating to transportation, housing, employment, preventive healthcare, and healthcare access. Participants suggested that guidance and information be made available to newcomers as soon as they arrive and delivered in their language by experienced Indian immigrants. For example, Gurpreet suggested:

There should be [information at] the airports which can help ...newcomers [find out] how they can get jobs in Canada, and ...how they can meet ...family doctors.

The leading recommendation was for Canadian employers to acknowledge and accept participants' foreign education and experience. Maninder said,

[Employers should] ...acknowledge ... people's experience [from] back home, in terms of their education and their previous working [experience].

Participants also shared recommendations spanning from improving access and efficiency of Service Canada offices (to obtain a social insurance number), initial guidance about where to look for a job, how to enter the job market, responsiveness from potential employers (e.g., providing timely responses to applicants and feedback to those who interview), to ensuring equitable hiring practices, oversight of worker treatment (e.g., assuring treatment with dignity and respect), and fair wages.

[The] government should make some more service Canada [offices], so it will be easy for newcomers to get their SIN number. ...They [also] have to increase the wages. ...The minimum wage should be \$20.00 [per hour] (Gurpreet).

[Ensure] fair employment, ...senior [staff should be] under more observation than the newcomers, because if seniors ...are doing their job good, they can help newcomers. ...If people [are not] ...able to do [a] job, give them guidance... [so]they are able to do so (Neru).

The third recommendation is related to improving the Canadian healthcare system. Participants wanted healthcare delivered the way it is in India. They want same-day access to HCPs (including specialists) and OHIP-covered dental and eye care. They did not want to wait, suffer, worry about their health, or pay for care. Participants strongly believed that habits influenced health and that maintaining their health was important. They wanted to know what changes they needed to make to maintain their health. Harinder suggested:

In the first stage, ...healthcare providers [should] tell [newcomers] ...which diet they should change according to this country ...and what type of multivitamins we should take... because everybody [needs] ...vitamin D.

Participants believed current healthcare system barriers were due to insufficient HCPs and delivery settings. They recommend hiring more HCPs and setting up more hospitals and urgent care centers to make healthcare timelier. Gurpreet suggested:

They have to make new hospitals and urgent clinics, so that everyone get[s] treatment instantly [and] ...nobody [has]...to wait ...[or] bear pain for [a] long time.

The newcomers interviewed feel that accessible and comprehensive health care, including preventative health care and health promotion, would improve their health.

Conclusion

Throughout each phase of the settlement journey, all participants shared narratives describing difficult experiences causing a range of negative feelings, including powerlessness, overwhelm, worry, and sadness (see Table 8). While ‘*discovering and seeking*,’ participants assessed their surroundings, acquired essential resources, and sought employment, transportation, and healthcare. They began their journey full of hope and optimism, but the process of ‘*seeking and discovering*’ needed systems, resources,

and answers took a long time and required a great deal of effort as a barrage of obstacles surfaced. When this occurred, they described feeling alone, sad, and anxious. They faced challenges using public transportation, finding private, secure, affordable housing, stable work, adequate income, and fair treatment, so they made compromises to make things work.

When resources were finally obtained, they were insufficient, making it difficult for the women to manage their households, and care for their families, and themselves. They had to ‘*compromise*’ their expectations for stable work utilizing their skills and take on new roles and unstable low-paying jobs that did not utilize their skills or provide adequate income, so they could pay their bills. They worked hard to ‘*survive*,’ sacrificing their needs (e.g., rest, family time, privacy, self-esteem) and health-promoting habits which were associated with feelings of powerlessness, overwhelm, exhaustion, worry, and sadness.

Over time, the women became more familiar, skilled, and supported, enabling them to manage their budgets, access needed resources, forge supportive networks, acquire work experience and competence, and adjust to their new roles. This opened the door for them to move into the ‘*transitioning and accepting*’ phase whereby they found stability at work, home, and in their roles. Gradually life did not seem as hard, and a sense of control, security, hope, and pride developed. This transition led to participants accepting their new lives and feeling satisfied with their decision to immigrate and plan for their future. Reflecting on their settlement journeys, participants made recommendations to support future newcomers better through improvements in employment, healthcare, and navigation support.

Chapter Five: Discussion

This study investigated eight Indian women's experiences of settling in Brampton, Ontario, illuminating the process of settlement and how this journey impacted their health. These women narrated rich interconnected stories to share the socially constructed realities they faced, bringing to light a new understanding of the factors that impacted their health during settlement. They described their settlement experience as stressful and lonely. As they moved through the three phases of settlement, their experiences were associated with changes in their moods suggesting psychological health decline and a risk of depression and anxiety. I compare participants' experiences with the stages of cross-cultural adjustment to demonstrate the unique features of participants' experiences, noting factors that supported and challenged them. Then, I present the factors that contributed to participants' feeling stressed, worried, and sad by examining the influence of immigration selection, the process of acculturation, SDOH barriers, and healthcare access barriers. Through this analysis, a predisposition to poverty, health inequity, and untreated mental health conditions became apparent. The findings of this study are supported by literature from other contexts demonstrating pervasiveness and outcome evidence reinforces the critical nature of these findings. Participant-derived recommendations follow, outlining implications for policy, practice, and research. I conclude by examining the validity of this study's findings as I present the strengths and limitations.

Impact on Health

Participant narratives strongly suggested psychological decline during settlement. All the participants described their settlement experience as stressful or used a word that

is a synonym for the word stressful, such as hard, pressure, suffering, difficult, or burden (Oxford Advanced Learner's Dictionary [OALD], 2023) 168 times during their interviews. Stressful is defined as “a stressful situation or event [that] is difficult to deal with and makes you feel worried and unhappy” (Cambridge Dictionary, n.d.). Similarly, the World Health Organization (2023) defines stress as “a state of worry or mental tension caused by a difficult situation”. An association between a stressful settlement experience and mood was evident in all participant narratives as they described feeling worried (e.g., anxious, fearful, troubled, afraid, or scared) or unhappy (e.g., down, depressed, or sad). How participants narrated their settlement experiences by altering their facial expressions, rate of speech, and vocal pitch to convey their emotions was congruent with how they described their experiences. In addition to persistently feeling stressed, worried, and unhappy, many participants also shared narratives of feeling exhausted, devalued, guilty, and ashamed, as well as having trouble sleeping, weight gain, and changes in their function, and relationships (see Table 8) suggesting progression from symptoms of stress to a decline in mental health.

Many of the participants reported symptoms aligning with the diagnostic criteria for clinical anxiety and depression. The symptoms of these conditions overlap and often co-exist as evident in the diagnostic criteria (Coryell, 2021; Craske & Bystritsky, 2023; Katzman et al., 2014). For example, generalized anxiety disorder is diagnosed when excessive worry occurs on most days for at least six months, and these symptoms cause distress or functional impairment (Craske & Bystritsky, 2023). In addition to worry, anxiety can also cause individuals to feel restless, irritable, and have trouble relaxing, and sleeping (Craske & Bystritsky, 2023). Depression is diagnosed when there is evidence of

a down, depressed, or hopeless mood and anhedonia that persists for several days a week for at least two weeks, causing distress or impairment in function (Coryell, 2021).

Depression commonly causes changes in sleep, interest, concentration, appetite, psychomotor activity, self-esteem, and feelings of guilt (Coryell, 2021). Depression and anxiety are both associated with inattention, irritability, fatigue, and insomnia which can impact function in relationships, at home, and work (American Psychological Association, 2019; Katzman et al., 2014).

Newcomer Mental Health

Given that participants' narratives suggested psychological health decline and risk of developing depression and anxiety, I compared this finding with other studies of newcomers to determine if this was expected. Karasz et al. (2019) and Beiser (1988) found that newcomers were susceptible to psychological distress due to migration and the risk for mental health conditions increased over time (DeMaio & Kemp, 2010; Wu & Schimelle, 2005). However, unlike Wu and Schimelle's (2005) finding of gradually increasing depressive symptoms over two decades, this study's participants began to feel depressed soon after arrival, similar to the findings from Samuel's (2009) study of Indian newcomer women. The literature also demonstrates an increased prevalence of mental health conditions for North American South Asian immigrants, compared to permanent residents (Shah et al., 2023). This risk was magnified during the pandemic, at which time South Asians (living in Canada) were the racialized group most likely to report fair or poor self-rated mental health, moderate or severe anxiety symptoms, and the worst mental health outcomes (Statistics Canada, 2020). The findings of this study are consistent with the literature highlighting the mental health risk for South Asian women.

The Settlement Experience

There is a dearth of information about the concept of settlement and the experience of newcomers during settlement within the literature, so I compared the three phases of settlement described in this study with stages described in cross-cultural adjustment theory. The original adjustment model was developed by a sociologist named Lysgaard (1955), who described the feelings and emotions experienced during newcomer adjustment as following a three-step U-shaped pattern over time. This model describes newcomers beginning their journey in a '*honeymoon phase*' whereby they feel positive emotions such as excitement and euphoria (Lysgaard, 1955). Five to eleven months later, a phase of '*culture shock*' ensues when emotions and function decline, and newcomers begin to feel homesick (Lysgaard, 1955). Culture shock is an adaptation process described as a feeling of disorientation in response to a new culture or way of life (OALD, 2023). 18 months after arrival, newcomers progress to the phases of '*recovery*' and '*adjustment*,' whereby newcomers learn to cope, acquire needed resources, and then gradually transition to feel confident and satisfied (Lysgaard, 1955).

The initiation of Lysgaard's first two phases within the first year of settlement, as well as many of the associated activities and emotions, align with this study, as participants started out feeling excited as they discovered the Indian community, beautiful landscapes, clean air, and the prospect of a better life. However, participants began to experience negative emotions (e.g., devalued, anxious, sad, and alone) soon after arrival as they '*discovered*' the winter weather, the prohibitive cost of living, and spent time '*seeking*' (e.g., transportation, resources, housing, employment) and waiting for answers, not after five to eleven months. Consistent with this study's finding, other

researchers have also found that the initial adjustment phase is challenging for newcomers (Fitzpatrick, 2017; Lopeza, 2021), differing from Lysgaard's model that associates the '*honeymoon phase*' with feelings of elation (Lysgaard, 1955).

Although the second phase of settlement for Lysgaard's model and this study were associated with a decline in emotion and function, this study's participants experience of '*compromising and surviving*' varied due to the barriers faced, so their struggles extended beyond '*culture shock*' (realizing life would be different and missing home). Whereas the final phases of '*recovery and adjustment*' (from Lysgaard's model) and '*transitioning and accepting*' (from this study) both involved learning to cope, acquiring stable resources, and progressing to feel confident. However, there was variation in this study's participants satisfaction and progression. Many participants did not progress to Lysgaard's '*adjustment and recovery*' phase by 18 months, as they were stuck struggling, hoping, and waiting. Those who progressed to phase three did not seem overtly satisfied as seen in Lysgaard's final phase,' rather, they seemed to have settled and accepted their new reality, showing progression towards their baseline status, but it is unclear if all the compromises they made to settle permitted recovery. Their satisfaction may have been modulated by the resources and opportunities made available to them. At the same time, it is important to note the differing context and composition of the study populations compared, as Lysgaard's (1955) participants were predominantly Norwegian students settling in the United States after World War Two. Therefore, a multitude of distinct socio-cultural, political, and acculturation factors likely impacted the experience of the participants compared.

Contributing Factors

Many factors contributed to how participants felt throughout settlement, such as access to employment and income, barriers to utilizing their education and experience, changes in culture and roles, and healthcare access barriers. Participant narratives were congruent with theories that seek to explain the factors contributing to health decline. Accordingly, I present evidence from this study and compare it with evidence regarding the immigration selection process (De Maio & Kemp, 2010; Newbold, 2005b; Vang et al., 2017), the process of acculturation (Newbold 2005b, 2006), healthcare access barriers (McDonald & Kennedy, 2004; Newbold, 2005b), and SDOH barriers (Gautier et al., 2020; Kobayashi & Prus, 2012; Lane et al., 2018; Newbold, 2005a, 2005b; Newbold & Danforth, 2003; Sethi, 2013; Subedi & Rosenberg, 2014; WHO, 2022a).

Immigration Selection Process

This study reflects a group of young, highly educated immigrant women who arrived in Canada with health they rated as good or better (see Table 8). They expected to continue working in their professional fields and maintain or improve their socioeconomic status. However, most of the participants found that their education and experience (attained in India) had no value here. Facing this reality caused them to feel disappointed, devalued, and powerless, and over time, their loss of status and disempowerment led to frustration, worry, and sadness. Participants demographic profiles were congruent with selection theory which posits that newcomers are healthier because they arrive younger, are better educated, and are more skilled (De Maio & Kemp, 2010; Vang et al., 2017), yet these characteristics did not confer protection, as participants were blocked from utilizing their assets.

The experiences of this study's participants are like other newcomers in Peel region, as they are also highly educated, but not able to utilize their foreign education and training and obtain adequate employment or income (Peel Newcomer Strategy Group, 2019). This situation of de-skilling, unemployment/underemployment, and low income impacts the resources available to newcomers and can affect their self-worth, leading to feelings of hopelessness, and negative mood symptoms (Beiser, 1988; Islam et al., 2014; Karasz et al., 2019). The effects of this situation extend beyond individuals. Bloom and Grant (2001) determined that our economy loses up to 5.9 billion dollars each year because newcomers are not able to apply their skills and knowledge in the workforce. There is a clear domino effect when newcomers are unable to utilize their foreign skills and training, this impacts employment, which impacts income, which impacts health, which impacts the economy.

Process of Acculturation

Acculturation appeared to contribute to the decline of this study's participants due to marked differences between cultures and roles. The process of balancing cultures and adjusting to new roles appeared to be associated with acculturative stress. I present the factors that supported and challenged this transition, then compare participants' experiences with literature regarding acculturation, acculturative stress, as well as studies of other newcomers, and Indian women.

Brampton's sizeable Indian immigrant population supported newcomers from this study in remaining connected to their culture of origin, as they were surrounded by a community who looked, spoke, dressed, ate, worshiped, and embraced their culture, providing them an immediate sense of familiarity, security, and belonging (Sam, 2006).

However, there was variation among study participants, as those who resisted the adoption of Westernized norms experienced conflict and isolation, whereas those who balanced their culture of origin while acquiring new friends and assumed Canadian ways, experienced more support, and less distress over time (see Table 8). This aligns with Berry's finding that individuals who maintain their original culture and connection while also fostering relationships and adopting behaviors of their new culture have better outcomes, satisfaction, self-esteem, and positive emotions (Sam & Berry, 2010).

Study participants relayed positive feelings as they discovered natural landmarks, improved air quality, and a strong representation of their culture in Brampton. These findings align with Needham et al.'s (2017) study examining the association of acculturation (e.g., attitudes about traditions: fasting, shopping at South Asian grocery stores, maintaining South Asian friends) and the health of South Asian immigrants (86% of participants were from India). Ethnic density (proportion of ethnic minority residents in an area), social cohesion, and the quality of the natural environment were found to influence health outcomes (Needham et al., 2017). The latter variable entailed spending time outdoors in natural settings (e.g., in parks, gardens, and forests), and this exposure promoted health and well-being by mitigating the effects of inadequate housing by enhancing social cohesion and modulating stress (Hordyk et al., 2015).

Given participant experiences of exclusion when working in settings with one dominant culture, and improved experiences when working with staff representing diverse cultural backgrounds, I explored the literature to determine the ideal ethnic density to support acculturation. Congruent with participant narratives, living within a community with a high proportion of the same culture reinforced behaviours and identity

with the immigrant's culture of origin, but this increased the risk of alienation (Miller et al., 2009), whereas a more diverse community promoted integration and reduced the risk of mental health conditions (Yoon et al., 2013). Furthermore, English language proficiency was found to decrease the risk of alienation, especially when the language lessons were not restricted to a specific cultural group (Miller et al., 2009). This is important as Brampton's newcomer organizations rarely see immigrant women from cultures other than India, so the integration of Indian women with other newcomers is affected. To promote favorable health outcomes, strategies are required to ensure newcomers have an opportunity to spend time outdoors, learn English, and connect with others, whereas community planners need to ensure the dispersion and diversity of newcomers.

Acculturative Stress. Study participants narrated feeling overwhelmed balancing their new 'independent roles' in Canada. This experience aligns with a phenomenon known as acculturative stress. The degree of acculturative stress is proportionate to the difference between the cultures (Samuel, 2009), with adjustment to a similar culture being associated with less stress and markedly distinct cultures contributing to more stress. This phenomenon is associated with symptoms of stress, depression (Ren & Jiang, 2021; Samuel, 2009), and anxiety (Hovey & Magana, 2002), like the experience of this study's participants. Study participants had to adjust to living in a Westernized society, embedded with the norms of independence, autonomy, self-reliance, and achievement, vastly different from the collectivist culture they knew (Karasz et al., 2019). They were accustomed to a culture that valued family cohesion, conformity, solidarity, interdependence, and gender norms (Karasz et al., 2019), but to survive in Canada, they

had to shift into new ‘independent roles’ where they worked non-stop without the support of their families, sacrificing their own needs and health-promoting habits.

Throughout their narratives, participants repeatedly commented that they had no time to rest or care for themselves as they were so busy managing work and home, everyone around them was also busy, and there was no one to help them. They yearned for the support they used to have from their families and domestic helpers. The experience of juggling multiple roles without domestic support was also identified in other studies of South Asian (Choudhry, 2001) and Indian newcomer women (Samuel, 2009). Just like this study, the women in Choudhry’s (2001) study felt they had no choice but to cope the best way they could, even though this shift impacted their health, well-being, and ability to maintain traditional roles.

Four causes of acculturative stress for middle-aged Indian immigrant women were identified by Samuel (2009). Although Samuel’s study took place in Atlantic Canada, which is quite different than Brampton, as only 0.02% of the population represent South Asian immigrants, participant narratives of their settlement experience, challenges, and change in roles also caused them to feel distressed and sad (Samuel, 2009). The sources of acculturative stress were 1) intergenerational conflict, 2) discrimination (employment-related), 3) depression, and 4) coping (Samuel, 2009).

In this study, participants who experienced discrimination conveyed that this experience was stressful, and they narrated feeling nervous about meeting new people. (see Table 8). These associated feelings (stress and the need to be cautious) were more pronounced for participants experiencing discrimination in multiple settings. These findings align with the sources of acculturative stress identified by Samuel (2009).

Similar to participant's narratives, Berry expanded upon this association finding that the experience of discrimination negatively impacted integration (Flores & Brotanek, 2005; Sam & Berry, 2010) by impairing the ability to trust, foster new relationships, maintain employment, and feel a sense of belonging.

Within this study, acculturative stress contributed to difficulty coping and was associated with feeling unhappy, but depression was not narrated as a source of stress. Similarly, intergenerational conflict barely surfaced in this study, however the setting within Brampton, likely buffered this factor, making it easier for newcomers to maintain their culture of origin. Although it was not revealed in participant narratives, it is possible that living within Brampton may have had the opposite effect by increasing pressure on participants to retain their culture of origin, making it more difficult for them to 'straddle' both cultures. Samuel (2009) explored strategies for managing acculturative stress and mood symptoms, learning that spirituality, meditation, family, and friends supported coping.

To further elucidate how acculturation impacts the roles of Indian women, one must first understand the vital role these women play in caring for and promoting the health of their families (Dyck & Dossa, 2007). Dyck and Dossa (2007) learned that Indian women perceived healthy eating, prayer, and traditional healing as key components of health maintenance. Preparing entire meals made from scratch each day (e.g., homemade roti, vegetables, rice, curd, and dhal or meat) takes a significant amount of time, so maintaining this tradition while also completing customary prayers, contributes to the burden of women who also manage households, care for families, and work outside the home. To maintain these traditions, newcomers must be able to readily

access (e.g., affordable, and quick to access) resources (e.g., places of worship, ingredients), have adequate time to carry out traditional practices (e.g., pray, make traditional meals with fresh ingredients), and have guidance regarding traditional ways (Dyck & Dossa, 2007).

When this study's participants found that fresh foods were harder to access (e.g., not affordable, not readily accessible), and they did not have enough time or support to make meals at home, they worried about the impact on their health. In Dyck and Dossa's (2007) study, the women perceived food from external sources to be inferior, not only because it was less nutritious; it was also a cultural compromise. Participants in this study did not share the cultural significance of homemade meals, nor did they share the importance of their religious and traditional healing practices in maintaining their health. However, they narrated valuing a healthy diet, accessible and affordable food, home-cooked meals, and support to prepare food. This new insight could lead the way to culturally informed health promotion strategies, such as communal food preparation (Alberta Health Services, 2018), mentoring regarding traditional methods, support groups, and prayer spaces within the workplace.

Social Determinants of Health Barriers

Despite participants' association of health with health behaviors, their narratives unanimously associated physical and psychological symptoms with experiences of facing barriers to accessing SDOH. All participants faced tremendous challenges securing employment and income, and most had trouble obtaining appropriate housing, transportation, and healthcare, as noted below:

- education: 88% were unable to obtain work in their professional field;

- income: 100% who disclosed their income, lived in poverty, or had low income;
- housing: 100% of those in Canada for more than six months moved at least twice;
- transportation: 75% of participants reported transportation challenges;
- discrimination: 67% experienced discrimination or harassment;
- healthcare access: 100% of those who sought healthcare experienced delays.

Throughout the settlement journey, participants shared how their experience changed as they gradually acquired SDOH. Woodgate and Busolo's (2018) study also supported this association by documenting how the settlement experience of African youth improved as they acquired determinants of health. However, when access to SDOH is restricted, access to other determinants is also restricted, and this adversely impacts health (De Maio & Kemp, 2010; Khanlou et al., 2017; Newbold & Danforth, 2003; Samuel, 2009; Sethi, 2013; Simich et al., 2006; Subedi & Rosenberg, 2014; WHO, 2017; Woodgate & Busolo, 2018). This is referred to as intersectionality, and it is evident in the findings presented above as well as participant narratives. Employment and income are key examples of this.

Income and Employment. The ability to secure employment is critical to health, well-being, and access to resources for living (Maximova & Krahn, 2010; Newbold & Danforth, 2003; Samuel, 2009; Subedi & Rosenberg, 2014; WHO, 2017). In contrast, when an individual cannot attain a secure job, adverse health consequences exist, as demonstrated in all participants' narratives. When participants applied for jobs in their professional fields as architects, IT professionals, quality analysts, and health care professionals, employers did not consider hiring them as they did not have Canadian work experience or education.

Some participants who compromised by applying for unskilled positions acquired employment, only to experience unstable jobs and low pay. Eighty-three percent of the women who obtained work in Canada changed jobs at least twice within two years, suggesting precarious employment. Furthermore, three participants were unemployed, two worked for agencies, and three had full-time employment (one in their field and two outside of their fields). Notably, the participant who acquired full-time work in her field was on a work permit; she has applied to become a permanent resident. In stark contrast to the women, all the participants' spouses obtained full-time work. Desperately needing work and compromising made them vulnerable to discrimination and harassment by colleagues and supervisors. Mirroring the experience of this study's participants, the degree-holding participants in Samuel's (2009) study also had difficulty finding basic jobs, experienced discrimination at work, and struggled with low income for several years until they found jobs that were satisfying and utilized their skills.

Aligning with the evidence presented above, it is well-established that newcomers face a variety of barriers related to employment. The Ontario Human Rights Commission (OHRC) (2013) identified the four most common employment-related barriers faced by newcomers, including (1) dismissal of foreign credentials and experience, (2) language and communication difficulties, (3) lack of integration support (e.g., job-related learning opportunities), (4) and rejection of overqualified applicants. Furthermore, the OHRC (2013) states that the requirement for Canadian work experience is discriminatory, and this requirement only applies in rare circumstances.

There was evidence of all these barriers within participants' narratives, however, most of the barriers were experienced at the application stage. Participants narrated

waiting for a long time after applying, most of the time not receiving any response from potential employers. There is evidence that resumes are often reviewed in less than 10 seconds (DePaul, 2020), with unconscious bias guiding decision-making (Knight, 2017; Tulshyan, 2019). One study found evidence that Asian (Chinese, Indian, Pakistani) named applicants were 28% less likely to get an interview invitation compared with applicants with Anglo names, even when they had similar experience and education. This disadvantage impacted Asian women more than men and was more pronounced (40%) in small organizations, and for applicants with only foreign work experience (62.5%.) (Banerjee et al., 2018). These examples substantiate the roles that gender bias and racism contribute to employment barriers. These practices prevent newcomers from contributing their skills and undermine Canada's economic recovery plan. This situation suggests the need for a flexible, individualized approach, whereby an individual's qualifications and skills are assessed, and opportunities are provided to demonstrate qualifications and skills through avenues like paid internships or probationary periods (OHRC, 2013). The OHRC (2013) developed a best practice guide to assist organizations in examining and improving their practices to remove potential barriers for newcomers.

Employment and Gender. This study's participants were predominantly married, mothers of young children, and they made significant efforts to enter the workforce, but many employers did not give them a chance to work. This situation is substantiated in Canada's employment statistics. In 2021, employment rates were lower for newcomer women than Canadian-born women (59% vs 70% respectively), even though newcomers were better educated (50% of newcomers had a bachelor's degree or higher vs. 35% for Canadian-born women) (Drolet, 2022). Just as seen in this study, a

higher proportion of men are employed in the Peel region, than women (ROP, 2021). The pandemic increased gender inequity, as women were more likely to experience a loss or reduction in employment (e.g., due to COVID impacts of female-dominant jobs) and increased childcare demands (e.g., school and daycare closures; isolation requirements) (Momani et al., 2021; Qian & Fuller, 2020). Some of the reasons posited for this marked gap in employment include culturally reinforced gender roles, choosing caregiving roles at home, childcare costs, and inability to find work aligning with credentials (Drolet, 2022). The rationale presented by Drolet (2022) may explain why some women do not have full-time employment, but it does not align with the narratives shared by the women in this study.

Health Care Access Barriers

Participants experienced delayed access to healthcare which caused them to feel worried, frustrated, and dissatisfied. COVID-19 restrictions influenced participants' healthcare experience, as many HCPs adjusted care delivery to virtual modes, and many closed their practices to new patients, markedly restricting access. Participants waited several months to obtain a HCP, and when they finally got one, they could not get an appointment in a timely way, they also waited a long time to see a specialist and get emergency care.

Participants did not understand how to navigate the healthcare system and they did not like the way care was delivered, leaving them feeling alone and worried. Similarly, other studies have found that newcomers were dissatisfied with treatment (e.g., prescribing practices), time spent in appointments (rushed), communication by professionals, and timeliness of appointments which caused them worry (Pandey et al.,

2022; Woodgate et al., 2017). Although participants learned how the Canadian healthcare system worked over time, they had to adjust their expectations and learn how to access various levels of care according to their needs.

Access to mental health care seemed to be an ongoing barrier given that all participants experienced affective mood symptoms, yet they did not report seeking care for these symptoms. The literature demonstrates the impact of culture and stigma on perceptions of health, mental health conditions, and health-seeking for South Asian immigrants (Islam et al., 2014; Karasz et al., 2019). For instance, participants' conceptualization of health expressed through their narratives focused on physical health and health behaviors and excluded the sphere of psychosocial health. Similarly, Meadows et al. (2001) found that immigrant women focused on their physical health when describing their health; only revealing their psychological health as they described experiences, as seen within this study.

The South Asian culture influences this association by viewing psychological health as 'private' (Samuel, 2009), the presence of mental health conditions as a sign of weakness and seeking help as a sign that the family could not solve the 'issue' (Karasz et al., 2019). At the same time, Western ways of treating anxiety and depression, such as cognitive behavioral therapy and anti-depressant or anxiolytic medications conflict with their cultural beliefs, limiting accessibility and efficacy (Centre for Addiction and Mental Health [CAMH], 2023). The impact of stigma has been found to prohibit most (approximately 85%) South Asian immigrants (CAMH, 2023) from identifying their mental health symptoms and seeking help (Islam et al., 2014; Karasz et al., 2019),

strongly suggesting that newcomers have unequal access to healthcare, requiring adjustments in delivery to overcome systemic and cultural barriers.

Culture also influences how South Asians present when seeking healthcare. The literature demonstrates that South Asian persons are more likely to present to a HCP with physical or somatic symptoms (e.g., body pain or insomnia) rather than affective symptoms which can make diagnosis more challenging (Karasz et al., 2020; Lai & Surood, 2008). Educators of HCPs must ensure students are aware of this nuance when considering differential diagnoses for South Asian persons presenting with unexplained physical symptoms. At the same time, developing a therapeutic rapport and spending adequate time may also promote disclosure as suggested by the readiness of participants to share symptoms during their interviews.

Significance of the Findings

Poverty

In this study, participants' experiences of insufficient employment and income were correlated with poverty and low-income status. Although only 63% of participants shared their income, 100% of those who disclosed this, lived in poverty or had low income (see Table 7). The province of Ontario defines poverty as a net family income of \$43,212, and low income as less than \$82,500 (Government of Ontario, 2023). A comparison of median annual income by sex, immigration, and racialized groups found that minority immigrant women were the group with the lowest income and most likely to be precariously employed or unemployed (Momani et al., 2021).

Inadequate income and employment are prevalent in the Peel region also. For example, Peel's unemployment rate has continuously increased to 13.5% (2021) and in several neighbourhoods the unemployment rates range from 14.6-19.5% (ROP, 2021).

These rates are far higher than the record high seen at the height of the pandemic (Statistics Canada, 2023). The underemployment and unemployment of newcomers have contributed to an increased rate of poverty (two and a half times Peel's general population) (Region of Peel and Diversity Institute, 2009), and a considerable proportion (52%) of Peel's neighbourhoods meet the low-income threshold. This is significant as a high proportion of newcomers live in these neighbourhoods (Peel Newcomer Strategy Group, 2019).

As evident in this study and others, the opportunity for income recovery is bleak, as pervasive employment barriers often contribute to newcomers working survival jobs to support their families and cover their basic expenses, inhibiting them from getting their credentials recognized or upgraded (CFRAC, 2021). In this study, only one participant initiated getting her foreign credentials recognized. Another study from 2015 similarly found that only 5% of employed newcomers pursued foreign credential recognition (CFRAC, 2021). The headline of a recent Government of Canada (2022) news release read, "*Newcomers are essential to Canada's short-term recovery and long-term prosperity.*" This headline highlights the disconnect between immigration's strategic goal and newcomers' reality. If we aim to have healthy, educated, experienced persons immigrate to bolster our workforce, why do newcomers face so many barriers to utilizing their assets? What will be the consequences of Canada's largest racialized group (Islam et al., 2014) living in poverty, not working in jobs that utilize their skills, and feeling sad and anxious?

Study participants who were persistently unable to earn adequate income to meet their basic needs narrated experiencing mental health symptoms, changes in nutrition,

and their function (suffering, exhaustion, impaired sleep). Evidence demonstrates that a decline in socioeconomic status is associated with stress, a decline in well-being, and mental health (CFRAC, 2021), but the impact of chronic low income and poverty contributes to more significant health effects. Poverty and low income are associated with a significant decline in health, including a shorter life expectancy, higher mortality, mental health conditions (MHCOC, 2021), and chronic disease (AAFP, 2021; OASH, 2023). These outcomes translate to increased suffering, functional impairment, decreased productivity, and increased healthcare utilization and costs (OASH, 2023), and have ripple effects on women's function as household managers and carers (OECD, 2003).

Health Inequity

The challenges experienced by participants provide evidence that Canadian systems and processes preferentially provide access (or 'privilege') to Canadian-born persons, while creating barriers for newcomers. When societal structures confer access to health resources based on income, education, occupation, gender, and ethnicity, while reducing resources and access for those with less status (WHO, 2013), such as immigrants and women, it impacts the social and economic conditions influencing health (WHO, 2013), as seen within this study's narratives. Participants shared narratives of difficulty having their foreign training and experience recognized suggests discrimination (OHRC, 2013). Similarly, the prevalence of poverty/low income also suggests unequal distribution of resources. Furthermore, data from other studies showed that even though a higher proportion of South Asian immigrants have post-secondary education, compared to Canadian-born persons, South Asian newcomers are more likely to experience unemployment, work in jobs below their skill level, and be paid less, even after obtaining

experience and education within Canada (Region of Peel and Diversity Institute, 2009). The persistence of this employment barrier further suggests systemic discrimination of South Asian newcomers. Another often hidden uncurrent of health inequity occurs when society ascribes less power and privilege to girls, restricting their social resources (WHO, 2010). This inequity is more prevalent within cultures that reinforce gender-based norms and privilege (WHO, 2010), such as in India (WHO, 2021). In families with strong gender-based role adherence, the burden of performing paid work as well as unpaid care work (within the home), contributes to women's experience of overwork and the development of mental health conditions over time (Momani et al., 2021). This finding may provide insight into unspoken factors that contributed to this study's participants' experience of overwork and mood symptoms.

Given that South Asian women experience an early and dramatic decline in their health post-settlement (Kim et al., 2013) and a high prevalence of mental health conditions (Bousmah et al., 2019; Karasz, 2019; Kuo et al., 2020; Samuel, 2009; Sethi, 2013), health inequity may be an influencing factor. Similarly, the robust finding of employment barriers experienced by the educated women of this study, but not their male partners further suggests gender inequity. Furthermore, I am concerned that these findings signal that Brampton's Indian community may be reinforcing traditional Indian gender norms, modulating Indian immigrant women's privilege, restricting their access to employment, and perpetuating mistreatment. However, action to ensure these women have adequate resources for health could lead to improvements in their labor productivity, human capital (e.g., higher cognitive function and reduced absenteeism),

financial security, mortality, and fertility rates (OECD, 2003). These improvements in health impact individuals, families, and society in the short and long term (OECD, 2003).

Untreated Mental Health Conditions. Given that all participants described affective mood symptoms (feeling stressed, worried, and unhappy), as well as physical, and functional symptoms associated with clinical depression and anxiety, yet did not report seeking care, some of the participants may have undiagnosed mental health conditions. Early identification of depression and anxiety is imperative as these conditions can cause distress, impaired function, and increased morbidity and mortality (Coryell, 2021; Craske & Bystritsky, 2023). Early diagnosis enables the initiation of interventions promoting remission and optimizing outcomes (Coryell, 2021; MHCO, 2019; Craske & Bystritsky, 2023). For example, the median recovery time for depression is approximately 20 weeks (Coryell, 2021). However, this varies relative to the duration and severity of symptoms (Coryell, 2021), with late intervention prolonging duration and increasing severity (Bukh et al., 2013; Spijker et al., 2002).

Depression's effects extend beyond psychological dysfunction and productivity, also causing an increase in all-cause mortality (50-100 times), suicide risk (27 times), and accidental death risk (double) (Coryell, 2021). Further, the experience of psychological distress also elevates the risk of cardiovascular disease (28%) and cancer (Karasz et al., 2019) through behavioural (e.g., smoking, poor diet, sedentary lifestyle) and biological factors (e.g., sympathetic nervous system activation, increased inflammation, platelet activation) (Pimple et al., 2019). Upstream interventions to reduce sources of distress, as well as early identification and intervention, could limit suffering, and minimize loss of

function, productivity, illness, and death (Coryell, 2021; Craske & Bystritsky, 2023; Karasz et al., 2019; Pimple et al., 2019).

Implications

The experiences of these women led me to wonder if settlement needs to be so difficult. What needs to change so Indian women can thrive during settlement rather than struggle to survive? Can we improve the assessment of newcomer health? I will reflect on these questions as I present the implications of this study's findings for policy, practice, and research.

Policy

There is significant room for improvement when considering potential policy implications, especially regarding navigation support and human resource management (e.g., credentialing, hiring, and employee treatment). A novel approach is possible whereby newcomers' needs are anticipated, they are supported, and oriented early in their settlement journey (CFRAC, 2021). This is possible, as I have seen how emergency services can rapidly set up to support government-assisted refugees to secure identification, employment, housing, and healthcare within a few days of arrival. Additionally, the study participant who migrated on a work permit was able to secure employment and have her professional experience and education recognized in Canada before her arrival. Similarly, participants who came to Canada as international students were able to enroll in universities and colleges before arrival. These variations lead me to believe that Ontario's process for welcoming newcomers could have a similar design, whereby newcomers are prepared and supported to begin their lives in Canada.

Much of the disappointment and difficulty experienced by study participants were due to unmet expectations and barriers. An improved process would facilitate credential

assessment, employment and healthcare searches, and administrative processes. For this to happen, immigration policies and protocols would need to be revised to mirror the processes currently in place for persons immigrating on work permits and international students. This change would ensure that potential immigrants know how Canada will evaluate their education and experience. If additional skills training is required, approved immigrants could have the option to start training in their home country with their support network. Additionally, newcomer agencies could connect with individuals soon after they are accepted for permanent residency to support their search and application for employment (including resume and interview preparation). Similarly, newcomer agencies could assist newcomers in completing administrative processes (e.g., obtaining SIN applications, bank accounts, and cell phone plans) and searching for a HCP (CFRAC, 2021).

Another critical change would be to develop clear protocols to guide employers in screening and selecting foreign-trained individuals. Hiring practices that promote equity, diversity, and inclusion (EDI) (Government of Canada, 2023b) and remove opportunities for racism and unconscious bias (e.g., name-blind recruitment (Banerjee et al., 2018), artificial intelligence tools or EDI training) would promote equitable recruitment processes. To support this initiative, employers should be supported to complete anti-racism and EDI training and standardized credential evaluation services (Samuel, 2009). Local governments could promote the hiring of newcomers by offering employers incentives to hire newcomers, such as the physician assistant grant strategy implemented by Health Force Ontario (Government of Ontario, 2010). Additionally, newcomers could be supported to enter the workforce through mentorships, internships, childcare, language

development, and microloans (Momani et al.,2021). Once hired, employers must ensure newcomers are treated with dignity and respect. This can be completed by enforcing trauma and violence-informed human resource practices and auditing compliance (OHRC, 2013). A spectrum of human resource practices are required to ensure newcomers are interviewed, hired, and treated fairly in the workplace.

The second biggest issue that impacted newcomer settlement was a lack of support, especially during the first two settlement phases. Although study participants recommended that support and guidance be available as soon as they arrive at the airport, narratives of participants who had friends and family living in Canada shared that anticipatory guidance in advance of arrival made them feel more prepared for living in Canada. If experienced immigrants could be connected to newcomers to provide guidance and support at planned intervals and upon demand before, during, and after arrival, this could reduce the isolation, frustration, and distress experienced by newcomers while also creating opportunities for established newcomers to obtain experience, employment, and build their self-efficacy.

A peer support approach, partnering new immigrants with experienced immigrants could be designed following the “Let’s Buddy Up to Increase Access” program recommended by Woodgate et al. (2017) to address healthcare access barriers. This culturally tailored approach is transferrable to settlement while aligning with recommendations from this study’s participants as well as other Canadian newcomers (CFRAC, 2021), and meeting the needs for navigation and social support by utilizing community members and leaders to create peer mentors and networking opportunities. This strategy may yield improvements in health, as early (within the first year) newcomer

service utilization positively impacts physical and mental health (Maximova & Krahn, 2010), and increased social support improves self-perceived mental health (Chadwick & Collins, 2015; Hawkins et al., 2021), and may reduce the risk of postpartum depression (Nilaweera et al., 2014). Congruently, improvements in coping, positive thoughts, and emotions were evident in this study and other studies as newcomers developed strong networks of support (Samuel, 2009; Woodgate et al., 2017; Woodgate & Busolo, 2018).

Practice

To improve healthcare for newcomers, it must be more accessible; HCPs must provide anticipatory guidance (Pandey et al., 2022), and assessments must include coping, support, and screening for mental health symptoms. Newcomers from India expect same-day access to HCPs, and when this is not available, they feel worried and alone. HCPs should also guide patients about the levels of health care available, including when to seek primary care, urgent care, and emergency care, as well as options for virtual care, to empower newcomers as they seek health care. HCPs caring for newcomers should be encouraged to share aspects of their assessment that reassure them and teach red flag symptoms requiring follow-up (Pandey et al., 2022) to build newcomer trust, understanding, and empowerment. HCPs must also be available to listen and support newcomers, connect them to social determinants of health supports (e.g., employment), provide preventative health education (Shah et al., 2023), and be astute in exploring somatic complaints and reports of stress.

Furthermore, to promote access, healthcare delivery models must be delivered in a culturally safe manner that overcomes barriers (e.g., culture and stigma) to accessing mental healthcare (Islam et al., 2014; Sethi, 2013). HCPs working with South Asian

newcomers should seek education and training regarding culturally sensitive and effective care approaches, such as the CAMH and the Mental Health Commission of Canada's new toolkit focusing on mental health care for South Asian women (CAMH, 2023). This evidenced-based tool kit presents a culturally adapted cognitive behavioural therapy method, as well as novel approaches to mental health care, such as educating family members, offering support groups, and engaging religious leaders (CAMH, 2023). Contrary to the standard of care for depression and anxiety treatment in Westernized countries (cognitive behavioural therapy and pharmacotherapy), treatment models incorporating social interaction were found to be more effective for South Asian immigrant women (Shah et al., 2023). For those who accept referrals for counseling, HCPs need to be mindful of potential financial and cultural barriers (within the Indian culture and Western society) that impact access and establishment of therapeutic rapport. Home visits delivered by Indian community health workers (Sethi, 2013) are suggested to improve outreach and early intervention (Samuel, 2009). By being informed and altering the healthcare delivery approach, HCPs can break down barriers and become more effective in caring for South Asian newcomer women. This approach may also be transferrable to prenatal and postpartum interventions that are accessible, culturally tailored, and foster social support, mitigating the increased prenatal health risks and long-term sequelae presented in chapter two, while promoting improved maternal and child outcomes.

Research

The insights from this study generate vast research opportunities; however, the priorities should align with those identified by participants, including navigation,

employment, and healthcare access. It would be helpful to review best practices for newcomer support/orientation programs, including literature from other high immigrant-receiving countries to identify effective program components. Then, test the interventions on a small scale to determine the impact. Secondly, primary care providers need evidence-based training and tools to guide caring for newcomers that incorporate risks, culture, and overcome barriers. There is an opportunity to improve collaboration across sectors, and share expertise, and resources to develop interventions employing a SDOH approach.

Thirdly, there are significant gaps in bridging foreign-trained immigrants' education and training, as evident in this study. National statistics show that only 29% of foreign-trained immigrants work in their professional field (Government of Canada, 2020c), and regional data found that credential assessment of foreign-trained professionals is rarely pursued by Peel's newcomers (Region of Peel and Diversity Institute, 2009). Addressing this gap could begin with examining credentialing processes locally and abroad to determine best practices. For example, do some professions (e.g., nursing) have standardized and efficient procedures that could provide a template for other occupations? It would also be important to determine newcomers' most common professional designations and assess if we have credentialing processes for each discipline. Given that only one of the study participants was engaging in a credential review, learning what inhibits other foreign-trained professionals from exploring this path, and devising strategies to support newcomers may be helpful.

Lastly, this study demonstrated that further work is required to develop an effective, evidence-based framework to evaluate newcomer health over time. Objective

health ratings do not align with narrative reports, and although this method may be effective and efficient, it is not enough to know that health declines over time. We need a comprehensive method to enable understanding of the factors that impact health to guide the development of interventions to better support newcomers. Due to culture and stigma, health evaluations often omit the psychosocial aspects of health, whereas narrative approaches promote trust, sharing of experience, and meaning, yielding deeper insight.

Strengths and Limitations

The methodology of this study was its key strength, providing a vehicle to deeply learn about participant experiences from their voices while also addressing the knowledge gap. Approximately an hour was spent listening to participants share their stories in ways that were most meaningful to them with minimal interruptions. These in-depth interviews generated a vast amount of data which promoted deep understanding. Then I spent an extensive amount of time becoming familiar with and analyzing the data. At the same time, these powerful narratives evoked emotion, they were hard to forget, and they have the potential to compel listeners to act. Personally, the voices and stories of these women caused me to feel empathy, sadness, anger, and frustration. As I ruminated over their stories, I felt a strong compulsion and duty to share their experiences and make clear the difficult situation these newcomers faced.

As a Canadian-born Caucasian woman, I am aware that the narratives shared by participants may have changed according to their perception of my ability to understand and validate their perspective (Spitzer, 2011). Trust and acceptance of participants' perspectives promoted sharing fulsome accounts of their experiences, yet solitary interviews may have limited the depth of the narratives shared as participants had limited

opportunity to get to know and trust me. Therefore, critical factors that are intensely private may have been excluded. In some ways, being an outsider enabled participants to construct narratives and explain factors that influenced their experience from their chosen vantage, such as treatment by other South Asians. In contrast, it may have caused them to hold back from sharing subjects seen as taboo, or that might make me uncomfortable. For example, none of the participants shared experiences of mistreatment by persons outside the South Asian culture, or difficult interactions with HCPs, and only one participant shared an experience of marital strain despite the prevalence of abuse and discrimination against South Asian women in the literature (WHO, 2021). I established trust by sharing my experience of caring for newcomers, my desire to better understand their experience, and use the information shared to advocate for better newcomer support. During the interviews, I listened carefully, gave my full attention, and used non-verbal cuing techniques to encourage participants to share their stories with me.

At the same time, as a novice researcher, my knowledge of research design, interview techniques, and data analysis may have impacted the quality of the data and findings. For example, narrative inquiry generates a large volume of data, which can be difficult for a new researcher to distill without filtering core ideas (Holloway & Galvin, 2016). I overcame this challenge by acquiring a strong understanding of narrative inquiry, using data collection and analysis tools such as an interview guide, field text record, and reflexivity journal, and working closely with my experienced supervisor.

Another limiting factor may have been the timing of the study. While it is hard to know how much the pandemic altered the narratives, robust data about how this group experienced this historic event was uncovered. Similarly, the timing of my study, when

Canada welcomed the highest number of newcomers to immigrate in Canadian history, is a crucial point to check in and learn about the settlement experience of newcomers and elicit their recommendations, as it creates an opportunity to adjust and potentially improve our course.

Conclusion

I have shared compelling narratives of eight Indian women settling in Brampton, Ontario. These women described their settlement journeys in their own words demonstrating a pattern of three distinct phases of settlement. These women perceived their journey as difficult, and they felt unsupported as they faced a barrage of SDOH barriers to establish their lives in Canada. A high proportion of these women faced barriers to utilizing their education and foreign work experience which led to precarious employment, low income or poverty, unstable housing, transportation barriers, and discrimination. Despite these circumstances, these women persevered, assumed independent roles, abandoned their aspirations, and accepted their new reality. The struggles faced led to a decline in their psychological health. The findings of this study were consistent with the four theories that explain factors contributing to newcomer health decline, however, SDOH barriers had the most significant impact.

While Canada continues to welcome the highest number of new immigrants in Canadian history to address our impending human resource deficit and avert the resultant economic and social consequences, these ready and willing newcomers face barriers to contributing to society. If we take no action, Indian women, who are part of Canada's largest and growing racialized group (Statistics Canada, 2022), are likely to continue living in poverty, working in unskilled jobs, feeling alone, sad, and anxious, remaining at

higher risk for health decline, chronic health conditions, adverse prenatal outcomes, and mortality (De Maio & Kemp, 2010; Maximova & Krahn, 2010; Simich et al., 2006). Alternatively, upstream policy, practice, and research interventions are recommended to remove systemic barriers that contribute to inequity and racism, while implementing culturally tailored approaches that enable newcomers to utilize their skills, promote support, mutual aid, and well-being (e.g., spirituality, mediation, time in nature) could reduce sources of distress and positively impact newcomer and population health.

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Table 1*Sample Age*

Author	Child	Youth	Adult	Senior	All
Blair & Schneeberg, 2014			X		
Bousmah et al., 2019			X	X	
Chadwick & Collins, 2015		X	X		
Dean & Wilson, 2010			X		
DeMaio & Kemp, 2011		X	X	X	
Dowling et al., 2019		X	X	X	
Dowling et al., 2020			X		
Dunn & Dyck, 2000			X		
Gautier et al., 2020		X	X	X	
Gushlak et al., 2011					X
Hawkins et al., 2021			X		
James et al., 2019			X		
Khanlou et al., 2017			X		
Kim et al., 2013			X		
Kobayashi & Prus, 2012			X		
Kwak, 2016	X	X			
Kuo et al., 2020			X		
Lane et al., 2018	X				
Markides & Rote, 2019					X
Maximova & Krahn, 2010		X	X		
McDonald & Kennedy, 2004					X
Morassei et al., 2022					X
Newbold, 2005a		X	X		
Newbold, 2005b		X	X		
Newbold, 2006			X		
Newbold & Danforth, 2003		X	X	X	
Omariba, 2015			X	X	
Sethi, 2013			X		
Shishengar et al., 2017			X	X	
Simich et al., 2006			X		
Subedi & Rosenberg, 2014					X
Vang et al., 2017					X
Woodgate & Busolo, 2018	X	X	X		
Wu & Schimmele, 2005					X
Ziersch et al., 2020			X	X	
Zui et al., 2017	X	X			

Note.

Child: 0-14 years; Youth: 15-24 years; Adult: 25-64 years; Senior: Age 65+

Table 2*Immigration Class*

Migrant Class	Refugee	Economic	Family	Combined
Blair & Schneeberg, 2014				x
Bousmah et al., 2019				x
Chadwick & Collins, 2015				x
Dean & Wilson, 2010				x
DeMaio & Kemp, 2011				x
Dowling et al., 2019	x			
Dowling et al., 2020	x			
Dunn & Dyck, 2000				x
Gautier et al., 2020				x
Gushlak et al., 2011				x
Hawkins et al., 2021	x			
James et al., 2019	x			
Khanlou et al., 2017				x
Kim et al., 2013				x
Kobayashi & Prus, 2012				x
Kwak, 2016				x
Kuo et al., 2020	x			
Lane et al., 2018				x
Markides & Rote, 2019				x
Maximova & Krahn, 2010	x			
McDonald & Kennedy, 2004				x
Morassey et al., 2022				x
Newbold, 2005a				x
Newbold, 2005b				x
Newbold, 2006				x
Newbold & Danforth, 2003				x
Omariba, 2015				x
Sethi, 2013				x
Shishengar et al., 2017	x			
Simich et al., 2006				x
Subedi & Rosenberg, 2014				x
Vang et al., 2017				x
Woodgate & Busolo, 2018				x
Wu & Schimmele, 2005				x
Ziersch et al., 2020	x			
Zui et al., 2017	x			

Table 3*Study Design*

Design	Qualitative	Mixed	Quantitative	Review	Cross-Sectional	Longitudinal
Blair & Schneeberg, 2014			x		x	
Bousmah et al., 2019			x		x	
Chadwick & Collins, 2015		x			x	
Dean & Wilson, 2010	x				x	
DeMaio & Kemp, 2011			x			x
Dowling et al., 2019			x			x
Dowling et al., 2020	x				x	
Dunn & Dyck, 2000			x		x	
Gautier et al., 2020	x				x	
Gushlak et al., 2011				x	n/a	n/a
Hawkins et al., 2021				x	n/a	n/a
James et al., 2019			x			x
Khanlou et al., 2017				x	n/a	n/a
Kim et al., 2013			x			x
Kobayashi & Prus, 2012			x		x	
Kwak, 2016			x		x	
Kuo et al., 2020			x		x	
Lane et al., 2018		x			x	
Markides & Rote, 2019				x	n/a	n/a
Maximova & Krahn, 2010			x		x	
McDonald & Kennedy, 2004			x		x	
Morassei et al., 2022				X	n/a	n/a
Newbold, 2005a			x		x	
Newbold, 2005b			x		x	
Newbold, 2006			x		x	
Newbold & Danforth, 2003			x		x	
Omariba, 2015			x		x	
Sethi, 2013		x			x	
Shishengar et al., 2017				x	n/a	n/a
Simich et al., 2006		x			x	
Subedi & Rosenberg, 2014			x		x	
Vang et al., 2017				x	n/a	n/a
Woodgate & Busolo, 2018	x				x	
Wu & Schimmele, 2005			x		x	
Ziersch et al., 2020	x				x	
Zui et al., 2017			x		x	

Table 4*Study Population: Country of Origin*

Author	Specific	General
Blair & Schneeberg, 2014		x
Bousmah et al., 2019		x
Chadwick & Collins, 2015		x
Dean & Wilson, 2010		x
DeMaio & Kemp, 2011		x
Dowling et al., 2019		x
Dowling et al., 2020		x
Dunn & Dyck, 2000		x
Gautier et al., 2020	Haiti	
Gushlak et al., 2011		x
Hawkins et al., 2021		x
James et al., 2019		x
Khanlou et al., 2017		x
Kim et al., 2013		x
Kobayashi & Prus, 2012		x
Kwak, 2016		x
Kuo et al., 2020	Syria	
Lane et al., 2018		x
Markides & Rote, 2019		x
Maximova & Krahn, 2010		x
McDonald & Kennedy, 2004		x
Morassey et al., 2022		x
Newbold, 2005a		x
Newbold, 2005b		x
Newbold, 2006		x
Newbold & Danforth, 2003		x
Omariba, 2015		x
Sethi, 2013		x
Shishengar et al., 2017		x
Simich et al., 2006	Africa	
Subedi & Rosenberg, 2014		x
Vang et al., 2017		x
Woodgate & Busolo, 2018	Africa	
Wu & Schimmele, 2005		x
Ziersch et al., 2020	Africa and SE Asia	
Zui et al., 2017		x

Table 5*Study Population: Gender*

Author	Sex	Mixed
Blair & Schneeberg, 2014		x
Bousmah et al., 2019		x
Chadwick & Collins, 2015		x
Dean & Wilson, 2010		x
DeMaio & Kemp, 2011		x
Dowling et al., 2019		x
Dowling et al., 2020		x
Dunn & Dyck, 2000		x
Gautier et al., 2020		x
Gushlak et al., 2011		x
Hawkins et al., 2021	Female	
James et al., 2019		x
Khanlou et al., 2017	Female	
Kim et al., 2013		x
Kobayashi & Prus, 2012		x
Kwak, 2016		x
Kuo et al., 2020		x
Lane et al., 2018		x
Markides & Rote, 2019		x
Maximova & Krahn, 2010		x
McDonald & Kennedy, 2004		x
Morassey et al., 2022		x
Newbold, 2005a		x
Newbold, 2005b		x
Newbold, 2006		x
Newbold & Danforth, 2003		x
Omariba, 2015		x
Sethi, 2013		x
Shishengar et al., 2017	Female	
Simich et al., 2006		x
Subedi & Rosenberg, 2014		x
Vang et al., 2017		x
Woodgate & Busolo, 2018		x
Wu & Schimmele, 2005		x
Ziersch et al., 2020		x
Zui et al., 2017		x

Table 6*Literature Review Summary Table*

Authors and Country	Sample	Issue of interest	Research design/ Article type	Key findings	Limitations
Blair & Schneberger, 2014 Canada	Individuals 20-64 years old Immigrated to Canada within 0-9 years N = 5,757	Assess if the health of recent immigrants has changed over the past ten years	Correlational study Analysis of CCHS data to calculate the association between time and SPH	Recent immigrants more likely to report better health Higher odds of reporting worse health for females, older persons, persons experiencing life stress (strongest association), and smoking Increasing risk factors and chronic diseases declining towards or lower than Canadian-born and COO populations Odds of better SPH associated with higher education	Cross-sectional Data does not isolate subgroups based on country of origin. Definition of recent immigrants (0–9 years); broad classification of participants at various stages of settlement
Bousmah et al., 2019 Austria, Belgium, Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and	Individuals over 50 years old and persons living in the same household (regardless of their age) N= 100,000	Analysis of 5 health measures (BMI, chronic conditions, chronic diseases, mental health, depression) between immigrants and citizens, and between immigrants based on country of origin	Correlational study Analysis of panel data from SHARE survey Data was collected in 2004–2005, 2006–2007, 2010–2012, and 2013. The consistent methodology for surveys	Large health differentials depending on COO wealth; increased chronic conditions if from a low-income COO decline in SPH, and increased BMI if from medium/high-income COO Health worsens overtime for all five measures Health decline increases with increased time in the host country; health declines below native-born by 20 years - obesity/overweight and chronic conditions	-SRH ratings do not adjust for individual health perceptions/culture Citizenship status is binary; no discernment between classes of immigrants

Switzerland				converge by approximately 30 years of residence in the host country; ADL limitations evident around 50 years - women less likely to report poor health, be overweight/obese, or have physical limitations; more likely to experience poor mental health	
Chadwick & Collins, 2015 Canada	Individuals aged ≥ 12 immigrated within nine years and live in large or small urban centers N= 1909 Exclusion: Communities with a population between 400,000 and 1,000,000,	Examine the relationship between SPMH, social support availability, and urban center size, for Canada's recent immigrants	Mixed methods from 2009-2010 CCHS survey data	Social support is positively associated with higher SPMH and living in large urban centers Settlement service organizations (SSO) in small urban centers offer more social support; facilitate personal relationships and access to other agencies Recent immigrants in small urban centers are twice as likely to report low SPMH than those in large urban centers.	Health regions did not perfectly align with the geographic boundaries or population sizes of the CMA's selected communities; which could cause discrepancies within the analysis Cross-sectional data No data re: prior mental health history Unknown impact of cultural interpretations of survey questions Interviews were conducted with settlement service providers who spoke on behalf of recent immigrant clients; limiting the migrant voice in our findings SSOs (Settlement Service Organizations) are not the only providers of social support for newcomers
Dean & Wilson, 2010 Canada	Adult immigrants residing in the GTA Age ≥ 20 N= 23 7 countries of origin represented:	Qualitatively examine perceived changes in health and reasons for health status change among immigrants according to the duration of residence	Qualitative interviews	Most participants described their health as stable or better 30% of participants reported a decline in their health due to migration stressors (employment) and natural aging	Cross-sectional Interviews only in English The timing of the interviews prevented participation by some individuals Heterogenous sample (country of origin and duration of residence) Recruitment by a community service

	Africa n=1, East Asia n=4, Eastern Europe n=5, Latin America/Caribbean n=2, Middle East n=3, South Asia n= 8, Western Europe n=1	Comparison groups according to the duration of residency: <3 years (recent) 3-10 years (mid-term) >10 years (long-term)		Those who reported their health was no different said this because they did not feel ill, or a doctor told them they were "healthy" Men were more likely to report improved health Minimal variation in responses when compared throughout residency Longer-term immigrants reported health decline due to physical conditions; recent immigrants related decline to mental health Most participants viewed health as physical and mental well-being, some perceptions also included spirituality; few described health on a physical level e.g., not sick of "having a working body."	organization; potential for sampling bias Included newcomers with only one month of residency; the period is too early to impact health
De Maio & Kemp, 2010 Canada	Persons ≥ 15 years old who immigrated between 10/2000 and 09/2001. N=7720 Immigrated within ten years The majority immigrated from Asia (63.9%), Europe (15.3%), and Africa (9.2%)	1)To what extent do immigrants experience deterioration in their self-reported overall health and SPMH? (2) What role do racialized population status and the experience of discrimination or unfair treatment play in negative transitions? and (3) Are health	Correlational Analysis of LSIC data Data collection at six months (wave 1), two years (wave 2), and four years (wave 3) post-migration	Dramatic deterioration of SRH: 43.0% reported excellent health in Wave 1, fell to 23.0% in Wave 3 A dramatic decline in SRH (Self-Reported Health) and mental health HIE lost after ten years for immigrants 45-65 years old Recent immigrants, >65 years old, worse health than Canadian-born	Data exclusively based on SRH; unknown how health is perceived, lack of uniform definition of health, does not account for the impact of culture on perception Use of racialized population as an explanatory variable Did not examine for differences among immigrant groups The study period may limit transitions in health (four-year follow-up) reported

		transitions patterned by socioeconomic or demographic factors?		Non-European immigrants are more likely to have a significant decrease in SRH Health deterioration associated with low education and income Discrimination associated with a decline in SRH for visible minorities; strongly related to poor health outcomes Strong predictors of mental health decline: low-income, female, racialized population Immigration is associated with an increased incidence of depression, weight gain, and chronic conditions	
Dowling et al., 2019 Australia	Persons aged 15-83 Refugees granted permanent residency 3-6 months before the study N=2399	Examine the association between migration factors and the self-rated general health of adult humanitarian refugees living in Australia.	Correlational Analyzed the first three waves of data from the 'Building A New Life in Australia' longitudinal survey (5-year study) Data collection: interviews and survey	High incidence of poor general health throughout the three-year follow-up Poor general health associated with the female sex, increasing age, and financial stressors University education and the absence of chronic health conditions were protective against declining health	Risk of recall bias; retrospective reporting and self-reporting Unknown impact of culture and personal interpretation of health Inconsistent data collection methods Findings not generalizable to refugees within the country asylum seekers
Dowling et al., 2020 Australia	Humanitarian refugees Aged 22-55 N= 19 Persons able to speak and read basic English	Examine the relationship between health and migration experience	Interpretive phenomenological analysis Semi-structured interviews	Impact of SDOH: poverty, difficulty obtaining housing, employment, income, food, health care Refugees expressed feelings of anger, shame,	No translators were present at the interviews Retrospective accounts; potential recall bias Health measured through self-reporting Potential selection bias; The timing of interviews may have

	<p>Immigrated ≤ 4 years</p> <p>Immigrated from Middle Eastern countries</p> <p>79% female; 79% unemployed</p>			<p>sadness, helplessness, worry re: safety (personal and family members), and feeling like an outsider</p> <p>Barriers to attaining employment and financial support</p> <p>Men unable to work/adequately provide for their families</p> <p>experienced low self-esteem and depressed mood</p> <p>When overqualified for a job, a decline in mental health occurred</p> <p>Unstable work appears to affect mental and physical health; hard jobs cause pain</p> <p>Discrimination caused emotional distress for women; suggesting an association between discrimination and refugee mental health and well-being</p> <p>Mental and physical health influenced by pre-migration trauma/loss and migration stressors</p> <p>Enablers of health and well-being: social support, spirituality, goals</p> <p>Government support led to a sense of security and a feeling of welcome</p>	<p>excluded working participants</p> <p>Asking participants directly about their health could cause participants to link the impact of their migration experiences with their health</p> <p>A high proportion of participants experienced trauma; impacting findings and generalizability</p>
Dunn & Dyck, 2000	<p>NPHS data from 1994/1995</p> <p>Age ≥ 20</p>	<p>Investigate the SDOH in Canada's immigrant</p>	Correlational	<p>The clear and consistent pattern between socioeconomic</p>	<p>Cross-sectional</p> <p>The impact of language and culture is unknown</p>

Canada	10 years of residency N=2297 immigrants	population using the NPHS looking for differences in health status and health care utilization between immigrants and non-immigrants, immigrants of European and non-European origin, and immigrants of 10 years residence in Canada		characteristics and immigration characteristics or health status	
Gautier et al., 2020 Canada	Haitian migrants Aged 21–76 years old 1-6 years of residency N= 23	Haitian migrants' representations of their situation and SPH in Montreal, Quebec	Qualitative Framed by SDOH	Clear impact of SDOH; social position, living and working conditions Challenges related to migration status, income, occupation, language, living and working conditions, and chronic stress Impact of racism, social support, spirituality	Snowball sampling Possible social desirability bias Cross-sectional; potential for recall bias
Gushlak et al., 2011 Canada	20 systematic reviews and clinical trials from Ovid MEDLINE (1996–2009) and other web-based databases N= 20 articles	Identify demographics and health status data for migrant populations from population studies and health service implications associated with migration to Canada	Literature review	The standardized all-cause mortality rate is lower for immigrants and refugees than for Canadian-born Subgroups with increased mortality risk: stroke (Southeast Asian), diabetes (Caribbean), AIDS (Caribbean), and liver cancer (men) Canadian refugees, low-income immigrants, and recent non-	Cross-sectional Possibility of confounding variables

				European immigrants: increased risk of transitioning to poorer health Less cancer remission for stomach, nasopharyngeal, and liver post-migration, increased rates of prostate and breast cancer post-migration for some populations Impact of SDOH	
Hawkins et al., 2021 USA	Peer-reviewed literature (2009-2019) Google Scholar, JSTOR, Global Health, PubMed, CINAHL, Sociological Abstracts, and Social Service Abstracts re: refugee women's health N=52 articles	1) What health care, social support, violence, and mental health help or hinder refugee women's health post resettlement, and 2) how can the Social-Ecological Model framework be adapted to inform the implementation of programs targeting refugee women at various levels?	Literature review (quantitative and qualitative studies)	-refugee women are vulnerable to violence during migration; high rates of PTSD -social support is vital for reducing isolation, improving access to health care, and mental health outcomes; social support is challenging to maintain; moderated by factors such as English language fluency -health care influenced by health literacy, cultural differences, communication concerns, and access issues	-lacking comprehensive review of discrimination, and violence, sexual violence faced by refugees. -includes all refugee classes; some studies included males, combined immigrants and refugees; did not isolate evidence specific to refugees -no evidence re: older adult refugee women -studies have varying designs and sample sizes, which may impact interpretation/generalizability
James et al., 2019 UK	Participants of the 2005 SNR data Refugees granted asylum, humanitarian protection, or discretionary leave between December 2005 - March 2007 25-34 years old	Investigates the extent to which social support moderates the effect of (a) post-migration stressors on emotional distress, (b) the maintenance of emotional	A correlational study using SNR data collected four times over 21 months Framed findings within the SDOH framework	- the experience of emotional distress mediated the relationship between post-migration stressors and health over time; no evidence that perceived social support influenced the relationship	-researchers assessed if social support was provided but did not examine the frequency or quality of support. -only sampled refugees; not generalizable to other groups -the unknown impact of cultural interpretation of health -the possibility that literacy may have

	N= 869 Origin: Africa (56%); Middle East (20%); Asia (11%).	distress over time, and (c) the effect of emotional distress on the longitudinal health of refugees		-emotional distress appears to contribute to poor health outcomes	precluded some individuals from participating
Khanlou et al., 2017 Canada	English primary and secondary sources, including systematic reviews re: maternal health of migrant women between 2000 –2016 Residency <5 years N=126 studies	Examine and outline evidence about maternal health and healthcare services for migrant women in Canada, from pregnancy through to post-partum	Literature review	-recent immigrants - higher risk of having low birth weight (below the 10th percentile) infants - longitudinal studies of younger immigrant women in Canada <2 years and those with poor self-perceptions of their health and low income had a high prevalence of PPD -positive correlation between eclampsia in immigrant women and the number of months since immigration -the impact of SDOH on health	-excluded grey and unpublished literature - did not screen for quality of studies; significant variations in study methodologies and sampling
Kim et al., 2013 Canada	Immigrants to Canada aged 20 - 59 years who completed the LSIC study between 04/2001- 11/2005 N=6,660 Residency ≤ 4 years South Asian and Chinese each >20% sample, West Asian and Latin each 5% of the sample Exclusion: resided in Canada before PR application	Examine how general health changes within four years of arrival in Canada; focusing on changes in SRH, gender, and ethnicity	Prospective cohort study Stratified sampling of data from the LSIC	- evidence of a decline in SRH and ethnic disparities within two years -A significant and steady increase in poor health over four years, especially for ethnic minorities and women -higher risk of poor health among West Asian and Chinese men; South Asian and Chinese women; rates of ~ 3 to 5x higher than for European immigrants	-the possibility of reporting bias -health expectations may differ according to cultural background, values, and wellness threshold of the ethnic group - omissions of stress and coping resource variables that may have contributed to differences in the study outcomes -study period limited to 4 years

	and refugee claimants within Canada				
Kobayashi & Prus, 2012 Canada	Immigrants completing 2005 Canadian Community Health Survey (CCHS) 2005 CCHS Age ≥45 Inclusion: live in private occupied dwellings N= 132,221	Effects of immigrant and racialized population status on SRH for males and females in mid-(45-64) and later life (65+)	Correlational study	-robust HIE among new immigrant middle-aged men, particularly non-whites -older men of color are disadvantaged in health compared to Canadian-born men, even when demographic, economic, and lifestyle factors controlled -middle-aged women and immigrants, regardless of their ethnicity or number of years since immigration, are more likely to report poor health compared to the Canadian-born - older women and recent non-white immigrants are more likely to report better health compared to Canadian-born women; the finding is explained by differences in demographic, economic, and lifestyle factors	-data does not differentiate according to immigrant class -linguistic and cultural barriers may prevent consultation w HCPS, resulting in under-diagnosis of health problems -meaning of health varies according to perception, age, culture, and ethnicity -cross-sectional data -no standardized health status and utilization data pre-immigration -an age defined in five-year groups (e. g., 45-49 years) rather than the actual age -data does not assess the impact of variables such as ethnicity/ country of birth -must live in a privately occupied dwelling; many newcomers live in multi-family dwellings
Kwak, 2016 Canada	Foreign born Adolescents captured in CCHS in 2007, 2009, and 2011 Age 12-19 years N=2919	Identify differences between non-immigrants and immigrants and between recent and long-term immigrants to verify 1) whether immigrant adolescents	Correlational	-HIE present for adolescents; better health in all measures for each survey year -girls experienced more health problems regardless of immigrant status, especially for chronic and psychological	-cross-sectional data -length of residence measured with two categories (<10 years/>10 years); limits conclusions about the trajectory of the adolescent health conditions -no data to explore the impact of social contexts for immigrant adolescents compared with non-immigrants

		show better health than their non-immigrant peers, (2) whether the health of immigrant adolescents varies with the length of residence and gender, and (3) whether persistent trends would be shown across the three survey years		illnesses (same as Canadian-born) -recent immigrant boys and long-term resident girls PMH more affected in 2009 and diagnosed with psychological illnesses in 2011	- The study considered immigrants as one group; data did not identify ethnicity; sample sizes comparing recent and long-term immigrants were small
Kuo et al., 2020 Canada	Adult Syrian refugees living in Windsor, Ontario. N = 235 -mean age of 36.6 years (SD = 11.85) -average residency 12 months; displaced for an average of 39 months -the majority were GARs	Explore and examine critical post-migration predictors of mental health and physical health	A descriptive and correlational study Using data from the national SYRIA-lth survey and grounded in the SDOH model	- age, sex, and satisfaction with health services perceived control, and perceived stress predicted mental health in a significant way - age, satisfaction with health services, and perceived stress predicted physical health -being a woman was a risk factor for mental health concerns; older age was a risk factor for both mental and physical health problems	-selection bias: no random selection; limits generalizability -cross-sectional study; limits ability to assess change in health over time -researchers analyzed the relationships between the predictors and health outcome-dependent variables based on their correlations; direct causal connections between them cannot be made
Lane et al., 2018 Canada	Immigrant and refugee children aged 3–13 living in Saskatchewan Residency < 5 years N= 300 Participants' origin: Asia (49.3%), Middle East (28.2%), Africa (11.7%)	Health status of immigrants and refugees in Canada for less than five years	Mixed methods Critical realist methodological approach Interviews, questionnaires, and objective data	-struggles to attain their desired standard of living lead to feeling disheartened -more refugees (23%) had stunted growth compared with immigrants (5%) -hyperlipidemia incidence: 60% of refugees, 42% of immigrants	-cross-sectional design -the focus on physical health, some SDOH; mental health and social support not assessed

Inclusion:
 healthy children
 not currently
 being treated for
 malnutrition or
 serious medical
 conditions

-29% of
 newcomer
 children had
 borderline or
 elevated blood
 pressure
 -Creatore et al.
 (2010) observed
 that newcomers
 from the
 Caribbean, Latin
 America, South
 Asia, and sub-
 Saharan Africa
 have a 2–3 times
 higher risk of
 developing type II
 diabetes and
 develop it at an
 earlier age
 -association
 between income
 and weight; low
 income – low
 weight; higher
 pay, more likely
 to be
 overweight/obese
 -refugees
 appeared to have
 more SDOH
 challenges (lower
 education,
 financial support,
 and income)
 -"not fitting in"
 and bullying and
 emotional eating

Markides & Rote, 2019	Immigrants in Canada, Australia, the USA, Europe	Summarize findings on aging and the immigrant health effect in the three most common immigrant destinations	Literature review	-HIE most pronounced for mortality, recent immigrants, immigrants from non-European origins, and immigrants in early adulthood and midlife -only recent immigrants have better health; decline in health advantage over time; within 10–20 years, immigrant health converges below Canadian-born levels	-rigor in selecting studies not presented -sources of literature search not disclosed/period not disclosed
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				<p>-immigrant health advantage was most apparent in adulthood</p> <p>-late-life immigrants report worse SRH and more physical disability</p> <p>-HIE is only present in recent, working-aged immigrants; long-term working-aged immigrants reported more psychological distress and worse adaptation than same-aged recent immigrants. – health of late-life immigrants impacted by duration of residence</p> <p>-recent midlife immigrants had better health than long-term immigrants and fitness like Canadian-born</p> <p>-older recent immigrants had poorer health than the Canadian-born</p> <p>-refugees experience more psychological and physical problems, especially if they arrive at a late age</p>	
Maximova & Krahn, 2010 Canada	<p>Participants of the 1998 settlement experience of refugees in Alberta study</p> <p>Age 15-21 years</p> <p>Residency 1-6 years</p> <p>N= 525</p>	<p>Examine which factors are associated with changes in refugees' mental and physical health status</p>	<p>Correlational study</p>	<p>-refugee camp experience or having held professional/managerial jobs in one's home country associated with a more significant decline in mental health</p> <p>-completion of a university degree in one's home country was</p>	<p>-SRH</p> <p>-the impact of translated versions of existing health scales</p> <p>-potential for recall bias</p> <p>-selection bias possible: refugees who moved from Alberta were not invited to participate</p> <p>-may not be generalizable to refugees in other</p>

	Country of origin: former Yugoslavia (63%); Middle Eastern countries (17%), Central/South America (9%), Africa (6%), East Asia (3%), Poland (2%)			<p>associated with a greater decline in physical health status</p> <p>-employment associated with more significant improvements in mental health status</p> <p>-perceived economic hardship was associated with greater declines in physical health status</p> <p>-A higher number of settlement services received during the first year in Canada was associated with greater improvements in both mental and physical health</p> <p>-longer residence in Canada is associated with more significant declines in physical health status but not in mental health; physical health declines within six years</p>	Canadian locations or other source countries
McDonald & Kennedy, 2004	Data from 1996 NPHS and 2000-2001 CCHS	Confirm the existence of HIE, specifically that immigrants are in better health on arrival in Canada compared to native-born Canadians and that immigrant health converges with years in Canada to native-born levels	Correlational study	-HIE and an unhealthy convergence in Canada regarding chronic conditions	-cross-sectional data
Canada	NPHS: all ages CCHS: > 12 years of age N= 18,754		-similar survey questions, response categories	- controls for the region of origin and year of arrival do not account for the observed effects	-survey-based data does not uncover perception of health/cultural factors
			-Theoretical underpinning with Frank (1995), Dunn and Dyck's (2000) Population health theory: Major determinants of health status are cultural, social, and economic factors	-support HIE convergence in physical health rather than convergence in screening and detecting existing health problems.	
				-compelling evidence of an	

				<p>HIE for recent immigrant arrivals</p> <p>-immigrants are less likely to have a chronic condition; incidence approaches native-born levels after approximately 20 years</p> <p>Pattern of convergence in health outcomes and health service use</p> <p>- immigrant men who arrived in the 1950s and early 1960s are in better health than recent immigrants and native-born, but the same is not valid for immigrant women</p>	
Morassaei et al., 2022	English studies published after 1990 re: post-migration health outcomes of immigrants or refugees by admission classes or the potential impact of admission classes on post-migration health outcomes	What is the current evidence on admission classes' role in the post-migration health outcomes of immigrants and refugees in Canada?	Literature review of quantitative studies	-Economic-class immigrants have better health outcomes than other classes of immigrants; refugees have the worst health outcomes for studies that assessed health care needs, deterioration in SRM, SPMH, the incidence of diabetes and syphilis	- most studies focused on within-immigrant group differences rather than comparing immigrants and refugees to non-migrant individuals
Canada	All ages N=27		Many studies used LSIC 2000-2001 data sets at six months, 2, and 4 years	refugees have the worst health outcomes for studies that assessed health care needs, deterioration in SRM, SPMH, the incidence of diabetes and syphilis	-limitation to accessing high-quality data that includes information on immigrant entry programs and contextual factors related to settlement, socioeconomic demographics, and health outcomes
				- immigrants, regardless of admission class, had better health outcomes in terms of SRH and chronic conditions compared to the Canadian-born	-studies had an inconsistent classification of recent immigrants; ranging from 3 to 20 years
				-refugees are more likely to report lower SRH 6 months post arrival compared	

				to economic class newcomers -refugees and family-class immigrants are more likely to transition to poor health after 2–4 years of arrival compared to economic-class immigrants - no differential risk of deterioration in general health after four years of arrival between different immigrant admission classes -refugees: higher risk for ER visits for self-harm and death by suicide compared with economic-class immigrants -immigrants across all admission classes were significantly less likely to report non-life-threatening and chronic severe conditions compared to Canadian-born individuals	
Newbold, 2005a	Immigrants aged ≥ 20	Identify differences in self-assessed health between the immigrant and native-born populations, the factors that contribute to immigrant self-assessed health, and the factors associated with declining self-assessed health status	Descriptive analysis and correlational study	- mixed support for the HIE; native- and foreign-born neither more nor less likely to rank their health as fair or poor -foreign-born people are at greater risk of experiencing poor health relative to native-born over time -younger individuals, higher income adequacy, non-smokers, married,	-potential for confounding variables -contributing factors need further exploration i.e. systemic barriers, discrimination, health literacy, social/cultural barriers
Canada	Excluding those who died or who emigrated from Canada between 1994/ 95 and 2000/01; excepting those living on Aboriginal reserves, Canadian Forces Bases, or residents in some remote places) N= 1305				

				and workers were less likely to rank their health as 'unhealthy.' -rapid decline in health status suggests changes in perceived health	
Newbold, 2005b Canada	Data from 1994/95 to 2000/01 NPHS - household residents in all provinces and territories, except those living on Aboriginal reserves, Canadian Forces Bases, or residents in some remote places; those who had died or who had left Canada Immigrants aged ≥ 20 N=1305	Health status, need for care, and use of health care in the Canadian foreign-born population	Descriptive and correlational survival analyses	- the health status of immigrants quickly declines after arrival, with a concomitant increase in the use of health care services - survival analysis of the risk of a change to poor health indicates no difference between immigrants and the native-born -the risk of hospitalization was greater for immigrants with low-income -declining health among recent arrivals is observed; no overall difference by nativity status, except for women and immigrants with low-income - decline occurs within ten years of arrival	-immigration class not specified -the potential impact of language/literacy and cultural factors
Newbold, 2006 Canada	Random selection of individuals who completed the NPHS in 1994/5, 1996/97, 1998/99, and 2000/01 cycles Persons ≥ 35 years Inclusion: persons residing in all provinces and territories	Focusing upon chronic conditions: compare the health of immigrants with that of the Canadian-born population.	- descriptive analysis and correlational study	-there does not appear to be any evidence of the healthy immigrant effect concerning self-assessed health status - evidence of HIE concerning chronic conditions -prevalence increased relative to the native-born over time. - a significant relationship	Direct comparison of these proportions across cohorts and relative to the native-born does not consider the age and sex profiles for each cohort, leading to different health statuses -did not differentiate further than native-born vs. foreign-born; no information re: immigration class or country of origin or recent immigration

	Exclusion: people living on Aboriginal reserves, Canadian Forces Bases, or remote places. N= 911			between chronic conditions and cohort, suggesting that the period of arrival in Canada is a critical component of overall health status within the immigrant population -HIE advantage decreases over time, with health status converging across the cohort -foreign-born were neither at greater nor lesser risk of experiencing a hospitalization relative to the native-born -employed, non- whites, and those aged <65 years less likely to report a chronic condition - 1994/5 cycle: some post- secondary or post- secondary education or high income more likely to report a chronic condition	
Newbold & Danforth, 2003 Canada	Participants from 1998/9 NPHS Excluded individuals residing in institutions Aged ≥12 N= 2058	Evaluate immigrant health status within the broader determinants of the health framework Comparisons made to the Canadian- born population to determine if immigrants experience differential health status relative to non- immigrants	Descriptive and correlational analysis of factors associated with health status embedded within the SDOH Variables: duration of residence: 0–4 years, 5–9 years, 10+ years	-immigrants experience worse health status across most dimensions relative to non- immigrants; except most recent arrivals -analysis of SDOH variables: individuals with lower education and income, not working, or are older are more likely to be 'unhealthy.' - long-term residents, health status is lower	-lack of temporal depth (did the health status of immigrants change relative to earlier periods and with reforms within the health care system), -broad/non-specific classification for the period of arrival, race, and origin

				than that of the native-born population	
Omariba, 2015 Canada	A random sample of 20% of participant data from the 1991 Canadian census cohort: Mortality and cancer follow-up Age 25 -75 N=2,734,835 Inclusion: private households, residents of noninstitutional collective dwellings and Indian reserves); and (3) not long-term institutional residents (prison, nursing home, or hospital)	Establish whether immigrants overall and selected foreign-born ethnic groups (Western Europeans, South Asians, Chinese, and Filipinos) have an advantage over non-immigrants in avoidable mortality Assess the effect of sociodemographic and socioeconomic factors differences by the duration of residence	Cohort study based on questionnaire responses Deaths grouped by cause of death and by behavioral risk factors -estimated age-standardized mortality rates (ASMR), rate ratios, and rate differences and fitted hazard regression models for the overall	-compared to the Canadian-born persons, foreign-born men and women had lower ASMRs (Age Standardized Mortality Rates) for overall avoidable mortality and selected causes of avoidable mortality; irrespective of the duration in Canada, compared to non-immigrants -the only exception was ischemic heart disease among South Asian women. - results suggest differential access to and use of health services, differences in protective health-related behavior, and the healthy immigrant effect	-control factors measured at baseline could create results bias; characteristics may not correspond to the period leading up to the event of death. -except for education, data do not contain risk factors such as alcohol use, smoking, and physical activity -no qualitative data to uncover cultural/individual perceptions/meanings -excludes persons residing in Canada applying for PR or with no status -a small proportion of racialized persons sampled
Sethi, 2013 Canada	Newcomers and newcomer service providers Age: 25 -44 years. Residency ≤ 5 years 45 countries of origin: India & China top two countries 48% landed; 34% PR, 5% refugee n=212 service providers	Health experiences of immigrants settling in smaller urban and rural regions Perspectives of service providers working with newcomers in Canada's urban-rural communities	Community-based participatory research Mixed methods questionnaires-adapted from LSIC	-barriers accessing health services: lack of culturally appropriate services, discrimination -differences between newcomers' and service providers' responses to the survey questions - cultural variations between the newcomers' and the service providers' perceptions of 'health.'	-discrepancy between the newcomers' quantitative and qualitative responses may reflect methodological issues -Quantitative responses based on a Likert-type scale or 'yes' or 'no' do not account for differing cultural beliefs and meanings that participants assign to 'health.' -did not assess if the immigration pathway impacted the experience

	n= 237 newcomers			-the impact of SDOH -Incongruence: quantitative responses suggest newcomers' mental health is good; qualitative responses do not	
Shishen-gar et al., 2017 USA, Australia, Europe, Canada, Syria	Adult refugee women Peer-reviewed and grey literature published between 2005 and 2014 N= 25 articles	Analyze the relevant literature from the past decade to help understand refugee women's resettlement and socio-cultural experiences and the impact of these experiences on their health and overall well-being	Integrative review Resource-based model used as a framework CASP PRISMA	-Cultural factors, social and material factors, personal factors, and resilience were identified as the main themes influencing the health of refugee women - Promotion of factors that enable resettlement is vital in promoting the health and well-being of refugee women - suggest circumstances surrounding resettlement may adversely affect the health of asylum seekers or refugees; adopting effective strategies mitigates these impacts - inability to communicate in the language of the host country may affect integration - integration is easier for those who arrive at a younger age - some studies found language barriers do not constrain the integration of refugees; prejudice and family breakdown are more significant barriers	-inconsistency in findings -variation in study designs -low-quality studies included -some studies had tiny sample sizes -no time specified for the resettlement period; possibility of recall bias

				<p>-language deficiency, lack of information, and "shyness" impact healthcare</p> <p>-affordable and quality accommodation can facilitate successful resettlement and accelerate the integration process</p> <p>-lack of secure employment and stigma - significant obstacles to attaining safe and convenient housing – varies according to location</p> <p>-separation from a family linked with risk of depression</p>	
<p>Simich et al., 2006</p> <p>Canada</p>	<p>Sudanese adults who: (1) Immigrated to Canada between 2000 and 2003 and (2) resided in one of seven designated Ontario cities (84% refugees: GAR 62%; Landed-in-Canada refugees (15%); privately sponsored (7%). Family class (10%); economic/independent class immigrants (6%)</p> <p>N= 220</p>	<p>To examine the association between economic hardship and health among recent Sudanese immigrants in Ontario; and expectations of life in Canada with health</p>	<p>Descriptive and correlational study: mixed methods</p>	<p>-those whose life in Canada was not what they expected and those who experienced economic hardship experienced poorer overall health and reported more symptoms of psychological distress</p> <p>-individuals who experienced economic hardship were between 2.6 and 3.9 times as likely to experience loss of sleep, constant strain, unhappiness and depression, and bad memories compared with individuals who do not experience hardship</p>	<p>-short period did not support longitudinal design</p> <p>-possible sampling bias: some persons were not available during interview times</p> <p>-unable to investigate or control for premigration factors</p> <p>-a substantial proportion of refugees represented in the sample; a considerable proportion were GARs; the experience of persons without government assistance may differ</p>

Subedi & Rosen-berg, 2014	Sample of immigrants completing 2001 and 2010 CCHS	Explored potential causes of variation in the health status of recent and more established immigrants comparing 2001 and 2010 CCHS	Correlational study	- a significant difference in the socioeconomic characteristics and health outcomes of immigrants living in Canada for less than and more than ten years -health conditions are associated with age, sex, ethnicity, smoking habit, BMI, total household income, > 5 consultations with a family doctor per year, and work stress -males are less likely to report poor health than females if residency is < 10 years -men are more likely to report poor health after ten years of residency -daily smokers are more likely to report poor health -if the number of consultations with an MD is <5 per year, the patient less likely to report poor health	- cross-sectional -The age of the immigrant population at arrival varies -persons living in Canada >10 years are more mature, qualified, and experienced than newcomers -data collection inconsistency: age and income variables are included as continuous due to differences in classification in 2001 and 2010 CCHS -persons who are sponsored or residing in Canada while waiting for H&C applications are excluded
Canada	Exclusion: persons living on reserves and other Aboriginal settlements, full-time members of the Canadian Forces, the institutionalized population, and persons residing in the Region du Nunavik and Region des Terres Cries-de-la-Baie-James health regions of Quebec Residency < 10 years: n=3708 Residency > 10 years: n= 6956	Four hypotheses: lifestyle change, barriers to health care services, poor SDOH, and work-related stress were tested to understand variations in health status			
Vang et al., 2017	78 studies quantitative studies published between 1980 - 2014	Examined evidence for the HIE across various stages of the life course and various health outcomes within each stage	Systematic review Narrative synthesis	-HIE appears to be strongest during adulthood but less so during childhood/adolescence and late life -foreign-born health advantage is also more robust for mortality but less so for morbidity -HIE is more robust for more recent immigrants -positive selection as an explanation	-researchers used the same databases multiple times across many of the studies -within each life-course stage, studies that contained multiple health indicators were coded more than once; which may put greater emphasis on some results - studies differed in the covariates that they adjusted for; inconsistent adjustment for duration of
Canada	Inclusion: studies comparing health outcomes between immigrants and native-born Canadians re: mortality, SRH, mental health, chronic conditions,	Examined evidence for positive selection and duration effects			

	functional limitations/disability, and risk behaviors. French/English			for the HIE remains underdeveloped	residence in Canada across the studies -very few studies of immigrant health during childhood and late life - narrative review to synthesize the results; prevents calculation of effect sizes of the HIE for specific health outcomes
	Exclusion: review articles, editorials, non-original research articles; studies focusing on healthcare access or utilization				
Woodgate & Busolo, 2018	African immigrant and refugee youth	Explores how SDOH shaped African immigrant/refugee youth's settlement journey experiences	Narrative inquiry Framed findings within SDOH	-3 narrative typologies: chaos, quest, and restitution. -Chaos: themes of 'facing challenges' and 'still the outsider.' -Quest: themes of 'stepping out of your comfort zone and 'being relentless.' -Restitution: theme 'supportive environments.' -Youth were more likely to experience restitution when they received social support and found a sense of belonging -SDOH had a significant impact on each stage of the settlement journey; an increase in SDOH access was associated with progress to restitution -identified gaps in settlement supports/unmet health needs	-premigration experiences are likely to impact the physical and mental health of refugees; the experience of refugees is different than other newcomer groups -cross-sectional data - interviews were provided in 3 languages; some youth may have preferred to be interviewed in other languages; may have limited/alterd narrative. -generalizability: are there factors unique to Winnipeg that increased the SDOH impacts for settling refugees? How does the refugee youth experience in Winnipeg compared to areas like Toronto?
Canada	Age 13–29 Arrived ≤ 6yr N = 52				
Wu & Schimmler, 2005	Participants of the NPHS Cycle 2 1996-97.	Investigate the HIE on depression over the length of residence	Correlational study Data were collected by telephone interview and	-soon after arrival in Canada, depression incidence increased and continued to	- measuring depression across diverse cultures may be limited due to varied expression of symptoms - cross-sectional data
Canada	Inclusion: Canadians from all provinces and				

	territories, except individuals living in Indian Reserves, Canadian Forces Bases, and some remote areas and institutions. Age ≥ 12 years Exclusion: cases where any mental health measure was missing. n= 10,972 women n= 59,566 men		face-to-face visits if the respondent did not have a phone Years since migration captured in 5-year increments until >35 years	increase for several decades	-potential confounding factors - if the proportion of female participants were higher, would the incidence have been higher -the study did not distinguish immigrants by immigration classes
Ziersch et al., 2020 Australia	Refugees who immigrated from SE Asia and Africa to live in rural South Australia Age 18-68 Residency <10 years N=44	Explored experiences of refugees settling in a rural Australian town, examining interconnections between SDOH and integration	Grounded theory	-varied settlement experiences re: SDOH and integration -enablers for integration, health/well-being: a sense of safety, social connectedness, and support -challenges: employment opportunities, mismatched education provision, experiences of discrimination, constrained access to services - challenges can affect integration, health and well-being, and subsequent onward migration intentions	-potential selection bias; (snowball) may have missed less connected people - research did not extend to views of the broader community, which would have given further insight into the integration -the study included participants from cultural backgrounds in a specific rural town; findings may not be transferrable
Zui et al., 2017 Australia	Refugee children Age 6 months - 15 years *All received their PR status before arrival	Describe how the health, development, and social-emotional well-being of refugee children change over time	Longitudinal cohort study	-most refugee children had expected developmental and well-being outcomes by year 3; a small number had persistently poor social-	-power was insufficient due to the small sample size -halted recruitment; not enough interpreters -analyzed the two age groups as separate subgroups, which further reduced the power

N=61

emotional
outcomes
-over time,
increased parental
employment,
English
proficiency, and
reduced stressful
life events
-SDOH improved
by year 3. Parents
were studying
English, receiving
government
financial support
and primary
health care, and
feeling
supported
-15% of children
had a chronic
disease, 3% were
obese/overweight

- excluded children
who had been in
immigration detention
-the impact of
premigration trauma is
unknown
-findings not
generalizable to other
refugee migration
streams

Note:

BMI: body mass index

CCHS: Canadian Community Health Survey

COO: Country of origin

HIE: healthy immigrant effect

LSIC: Longitudinal Survey of Immigrants to Canada

NPHS: National Population Health Survey

PPD: post-partum depression

PTSD: post-traumatic stress disorder

SPH: self-perceived health

SPMH: self-perceived mental health

SNR: Survey of New Refugees

SRH: self-rated health

Table 7*Demographic Survey Responses*

Question	Response	Percent
Age		
25-29	5	62.5
30-34	1	12.5
35-39	2	25
Gender		
Female	8	100
Male	0	0
Non-binary	0	0
Prefer not to answer	0	0
Other	0	0
Marital Status		
Single	1	12.5
Married	7	87.5
Divorced	0	0
Widowed	0	0
Prefer not to answer	0	0
Education Level		
Grade school	0	0
Some high school	0	0
Diploma or degree	4	50
Master's or PhD	4	50
Employment Status		
Not working	2	25
Homemaker	0	0
Part-time work	0	0
Full-time work	2	25
Seeking work	4	50
Annual Household Income		
<20K	0	0
20-50K	2	25
50-80K	3	37.5
80K +	0	0
Prefer not to answer	3	37.5
Place of Residence		
Live with friends or family	0	0
Rent room	4	50
Rent an apartment/condominium	1	12.5
Rent home	2	25
House	1	12.5
Source of Health Care		
Pay for care	0	0
Walk-In Clinic/ER	2	25
Family Doctor	2	25
Community Health Centre	0	0
No health care	1	12.5
Family Doctor + WIC/ER	3	37.5
Present Health		
Excellent	1	12.5
Very good	1	12.5

Good	4	50
Fair	1	12.5
Poor	1	12.5
Health Upon Arrival		
Excellent	1	12.5
Very Good	2	25
Good	4	50
Fair	1	12.5
Poor	0	0
Immigration Class		
Economic	2	25
Family	2	25
Sponsorship	1	12.5
Refugee	0	0
Other	3	37.5
Country of Origin		
India	8	100
Year of Arrival		
2017	1	12.5
2018	0	0
2019	3	37.5
2020	0	0
2021	0	0
2022	3	37.5
2023	1	12.5
<i>Note:</i>		
WIC: walk-in clinic		
ER: emergency room		

Table 8

Overview of Individual Participant Journeys

Part- icipant Journey	Aisha	Priya	Harinder	Neru	Sukh- preet	Gurpreet	Manin- der	Rajbir
			Learn about life in Canada				Learn about life in Canada	Partner-work permit
	Arrive Secure housing	Arrive Secure housing	Secure housing Arrive	Arrive Secure housing	Arrive	Arrive Secure housing	Secure housing Secure job (WP (Work Permit))	Arrive Secure housing
	Start school Adjust (surroundings) Secure basic resources	Start school Adjust (weather)	Start school Adjust (language)	Reunite w family Adjust (weather, language) Struggle w cost of living	Adjust (weather)		Arrive Live w friends 6/12	Adjust Seek resources Enroll son in school
	Job Search Wait Adjust job search Obtain work (PT (Part Time))	Job search Wait 4/12	Job search Wait 5/12	Job search Obtain work (T) *Mistreated	Job search Wait 1/12 Adjust job search	Job search Wait Adjust job search Obtain job (FT) after 5/12	Start job Adjust (weather)	Job search Wait Adjust job search
	Work/ study	Work/ study Performance issues	Work/ study	Job search Obtain work (PT) Move Job search	Wait Questioning		Move	Wait Spouse: double shifts
	Acquire skills/ support/ work reference Obtain PR Reunite w family Move Obtain work Leave job	Move Job search Obtain 2 nd job	Seek health care 6/12 Learn: maintain health	Obtain work (PT) Job search Wait Seek health care Wait Connect to communit	Acquire support/ resources Acquire skills (English classes, driver's license)	Work/life Move	Job search (spouse) Spouse: 3 jobs in 6/12 Work/life Acquire support (friends) Connect to resources Acquire skills (driver's license)	Acquire support (make friends) Connect to resources (driver's license)

	Move Job search Seek health care Questioning Connect to community resources WIC (Walk in clinic) Plan to move	Complete studies Improved work performance Obtain PR Apply for credential recognition Wait work	Job search Start job (FT) Adjust to employer expectations Reunite w family Move Life easier Develop hope	y resources	Secure health care Wait Develop hope		Obtain car Questioning Secure healthcare Secure credit Plan to move Develop hope	
Contextual factors	International student First lived in Quebec Arrived pre-COVID, during winter Obtained PR while in Canada Inter-company transfer Resigned from job	International student Nurse Single Arrived pre-COVID Obtained PR while in Canada	International Student Arrived pre-COVID	Came from a family with low SES Financial support from family enabled immigration Arrived during the COVID pandemic	Newly married Most recent participants Economic recession	Secured FT employment Arrived pre-COVID	Secured employment pre-arrival (work permit) Higher-income relative to other participants Arrived within the past year Established career and family before arrival Economic recession	Sponsored (open work permit) Arrive with husband + son during winter Husband work visa Arrived during pandemic Arrive during an economic recession
Challenge	Separated from husband + child Learning French Understanding English Demotion Conflict with employer	No family in Canada Employer's expectations; performance	Separation from husband + child Adjust to the English accent Treatment by employer	Struggled alone Challenge w languages Mistreatment	 Challenge with languages Unemployed	No prior work Mistreatment	Young children Secure employment for spouse	Remains unemployed

	Mistreatment	ance issues	Adjust to employer's expectations			Job (outside field)	Miss culture/lifestyle from home	
	Conflict with family r/t culture			Spousal conflict	Differing cultures difficult	Stand for long hours		
	Not ready to mingle with others	Navigation + transportation	Access health care					
	Navigation + transportation	People too busy to help	No EHB			Healthcare access		
		Winter Weather	Need guidance			Learn about a walk-in clinic	Weather	
	Winter Weather	Balance work/school	Balance school/work	Housing Issues			Managing demands	
	Change in roles	Housing: disturbance		Low pay			Assumptions re: immigrants	
	Cost of housing		Budget	Cost of living	Live in basement			
				No Canadian friends/family		Low pay		
					Cost of living		Loss of support managing home	
					No family in Canada			
Resources	Family/friends in Brampton	Foreign-trained nurse	Family in Brampton	Husband already settled in Brampton	Connect to participants	Family and friends in Brampton	Friends in Brampton	Family in Brampton
	Supportive spouse		Supportive spouse/family		Supportive spouse		Supportive spouse	Supportive property owner
	People from the same culture; familiar food	Positive feedback from the employer	Prepared for change			Employment (out of field)	Immediate employment	Husband secured FT employment
	Positive student experience	Positive student experience	Friends	Participants program		Transportation	Live w friends	
	Extended health benefits		Support to obtain resources/health care		Community and employment resources		Obtain driver's license/carer.	
							Secured credit	

			Discover WICs Learn to budget					
Dominant feeling/ emotion	Difficult/ hard Over- whelmed Scared Alone Hope	Suffering Alone Happy	Difficult/ hard Down/ depressed Afraid Alone	Difficult Sad Shame Worry/ Afraid Alone Hope Happy	Difficult/ hard Depresse d Worry/ troubled Alone Hope	Difficult/ hard Sad Tired/ do not feel good Happy Better	Hard/ pressure Sad/ depressed Worry Alone Happy Better	Difficult/ hard Worry Alone Hope Better
Dominant SDOH	Employ- ment Income Housing Health Care	Employ- ment Income Immigra- tion Social Support	Employ- ment Income Health Care Mental health	Employ- ment Income Housing Social Support Mental health Discrimin- -ation	Employ- ment Income Health Care Social support Mental health	Employ- ment Income Housing Health Care Mental health	Employ- ment Income Housing Health Care Transport -ation	Employ- ment Income Housing Health Care Social support Mental health Discrimin- ation

Note:

WIC: Walk-in clinic

T: Temporary

PT: Part-time

FT: Full-time

WP: Work permit

Bold words: Highest frequency of mentions

Table 9

Phases of Settlement

Phase	1	2	3
Theme	Discovering & Seeking	Compromising & Surviving	Transitioning & Accepting
Participant Quote	"Things gonna be different."	"It's not gonna be easy."	"Things will get better." "Life's good."
Activities	Explore Adjust to weather Secure housing Secure basic resources Complete administrative processes Search for employment (in professional field) Learn the value of the currency	Intensive job search (outside professional field) Waiting Questioning Obtain some employment Struggle with the cost of living Get a driver's license Seek health care Gather support/resources	Acquire work experience Build skills Search for a better job Obtain stable job Manage budget Obtain stable housing Establish support network Master navigating resources Balance roles Accept new life Form realistic expectations Plan for future
Thoughts & Emotions	Hope Optimism Worry Alone Disappointed	Worry Sad Struggle Powerless Overwhelmed/ Exhausted Dissatisfied Alone	Hope Pride Feel secure Feel supported Sense of control Happy
Better	Prepared for changes Family/friends in Brampton Live w friends/family Support/guidance Live near others of the same culture Access to familiar foods Immediate employment Private living space Arrive: spring/summer/fall Study in Canada	Supportive spouse Supportive friends/family Extended health benefits Connect to participants Support to obtain resources, employment, health care Supportive property owner Spouse: FT (Full Time) Employment	Positive feedback from an employer Opportunity to have credentials recognized Obtain a driver's license Obtain vehicle Secure credit Manage budget Learn about WICs (Walk in clinic) Social support FT employment
Worse	Unprepared for changes Arrive during winter Recession/lockdown Language challenges No navigation support Separation from family Unemployment Isolation Waiting No Extended health benefits	Unemployment or unstable employment (self/spouse) No job references Expectations to work in their field Low-paying job (outside field) Mistreatment/- Work more than FT hours No health care Housing: Inflated cost; no privacy Spousal conflict/distress No support from family abroad	Discrimination Inflated cost of living/Taxes Inadequate employment/income Not eligible for work in their field Job outside of her field Live w strangers Isolation Feel overwhelmed Not enough time (self/home) Young family

Table 10*Participant Recommendations*

Social Determinants of Health	Recommendation
Social Support	<ul style="list-style-type: none"> - <i>treat participants equally</i> - provide guidance - <i>recognize the contributions of participants</i> - have established immigrants support participants
Employment & Working Conditions	<ul style="list-style-type: none"> - guide participants entering the job market - increase the number of Service Canada offices - make the process of getting a SIN (Social Insurance Number) card easier - potential employers respond/give feedback to applicants - <i>ensure equal access to jobs (prevent favoritism)</i> - <i>ensure treatment with dignity/respect (workplace)</i> - <i>acknowledge previous education and experience</i> - increase wages to \$20 per hour
Housing	<ul style="list-style-type: none"> - support participants to obtain affordable housing - government to control increases in rental prices - <i>ensure treatment with dignity/respect</i> - <i>support participants to obtain credit history</i> - reduce taxes for participants
Health care & Health Behaviours	<ul style="list-style-type: none"> - hire more HCPs - improve access to healthcare - timely (instant) access to all levels of healthcare - make new hospitals and urgent clinics - OHIP to cover dental and eye care - educate re: how to be healthy in Canada (e.g., vitamin D supplementation) - improve access to fresh, affordable food
Education & Literacy	<ul style="list-style-type: none"> - provide information to participants at the airport and schools (in their language) about community resources (e.g., libraries, healthcare, how to get a job)
Transportation	<ul style="list-style-type: none"> - guidance for using public transit - more frequent bus times - more direct bus routes - expand public transportation (e.g., subways)
Discrimination	*See italicized recommendations above

Appendix A

Letter to Newcomer Service Organizations

Facility Address,
Brampton, ON,
Postal Code

Date

Dear Director of ---,

My name is Sarah Kipp. I am a Master of Nursing student at the University of New Brunswick. I am studying the impact of settlement on the health of South Asian women. Current research shows that newcomer health declines within the first ten years of residence in Canada. South Asian women are disproportionately impacted as they experience a decline that is three to five times higher than other groups. Women who immigrate from South Asian countries also experience a higher incidence of certain prenatal risks, chronic health conditions, depression, and mortality risks.

As a nurse caring for newcomers over the past thirty years, I often hear about their struggles and physical and psychological symptoms as they adjust to life in Canada. I want to learn about South Asian women's settlement experiences, how they make meaning of their experiences, and how their health has been impacted. I am interested in learning about the factors that contribute to the decline in South Asian women's health with the hope of identifying the support required to address this issue.

I will meet with study participants individually in private community locations or through virtual mediums, depending on the woman's preference. I will ask a few open-ended questions to draw out the settlement experiences of these women and how these experiences have impacted their health. I would like your support to promote and recruit research participants. I am seeking to interview South Asian women 25- 45 years of age who have immigrated to Canada within the last 1-6 years (2017-2021).

I would be grateful if you would provide me with an opportunity to discuss my study further. Please contact me via telephone at (647) 962-7592 or email at sarah.kipp@unb.ca to arrange a meeting. Please understand that your initial phone call or email does not mean that you or your facility consents to support this study. You may also call my supervisor Dr. David Busolo at (506) 648-2898 if you have any questions or concerns. If you would like to speak with someone not directly involved in the study, you may phone Dr. David Coleman, University of New Brunswick's Research Ethics Board Chair. He can be contacted at (506)453-5189 or ethics@unb.ca

Thank you for considering my request.

Sincerely,

Sarah Kipp PHC-NP, Master of Nursing Student, University of New Brunswick

This study has been reviewed by the Research Ethics Board at the University of New Brunswick and is on file as REB 2023-60.

Appendix B

Recruitment Flyer: English Version

The Impact of Settlement on the Health of South Asian Women

SHARE YOUR EXPERIENCE
Are you new to Canada?



Study Purpose:
Many South Asian women say their health changes after moving to Canada. This study seeks to understand why this happens and what support newcomers need.

Participants will:
-Meet with a researcher for 1-1.5 hours
-Confirm I understand your story

Are you eligible?

- South Asian
- Female
- 25-45 years old
- Immigrated in 2017 or later

To learn more: Contact Sarah Kipp
UNB Master of Nursing Student at sarah.kipp@unb.ca

This study has been reviewed by the Research Ethics Board at the University of New Brunswick and is on file as REB #XXXX

Receive:
\$25 gift card
Bus tickets to attend
Interviews in private community spaces



The Impact of Settlement on the Health of South Asian Women

Share your experience

Are you new to Canada?

Study Purpose: Many South Asian women say their health has improved since moving to Canada. This study seeks to understand why this happens and how we can help more women.

You will:

-Meet with a researcher for 1-3 hours

-Confirm I understand your story

Are you eligible

South Asian Female

25-45 years old

Moved to Canada in 2017 or later

To learn more: Contact Sarah Kipp, Master of Nursing Student

sarah.kipp@unb.ca

Receive:

Readability Statistics	
Counts	
Words	104
Characters	510
Paragraphs	17
Sentences	3
Averages	
Sentences per Paragraph	1.5
Words per Sentence	11.0
Characters per Word	4.7
Readability	
Flesch Reading Ease	64.9
Flesch-Kincaid Grade Level	6.9
Passive Sentences	0.0%

OK

Appendix C

Recruitment Flyer: Punjabi Version

ਸਾਊਥ ਏਸ਼ੀਅਨ ਔਰਤਾਂ ਦੀ ਸਿਹਤ 'ਤੇ ਵਸੇਬੇ ਦਾ ਪ੍ਰਭਾਵ

ਆਪਣੇ ਅਨੁਭਵ ਨੂੰ ਸਾਂਝਾ ਕਰੋ

ਕੀ ਤੁਸੀਂ ਕੈਨੇਡਾ ਵਿੱਚ ਨਵੇਂ ਹੋ?



ਖੋਜ ਦਾ ਮਕਸਦ:

ਬਹੁਤ ਸਾਰੀਆਂ ਸਾਊਥ ਏਸ਼ੀਅਨ ਔਰਤਾਂ ਰਿਪੋਰਟ ਕਰਦੀਆਂ ਹਨ ਕਿ ਕੈਨੇਡਾ ਆਉਣ ਤੋਂ ਬਾਅਦ ਉਹਨਾਂ ਦੀ ਸਿਹਤ ਵਿੱਚ ਗਿਰਾਵਟ ਆ ਜਾਂਦੀ ਹੈ। ਇਹ ਖੋਜ ਇਹ ਸਮਝਣ ਦੀ ਕੋਸ਼ਿਸ਼ ਕਰਦੀ ਹੈ ਕਿ ਅਜਿਹਾ ਕਿਉਂ ਹੁੰਦਾ ਹੈ ਅਤੇ ਇਸਦੀ ਰੋਕਥਾਮ ਕਰਨ ਲਈ ਕਿਸ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ।

ਭਾਗ ਲੈਣ ਵਾਲੇ:

-1-1.5 ਘੰਟਿਆਂ ਲਈ ਖੋਜਕਰਤਾ ਨੂੰ ਮਿਲਣਗੇ
-ਪੁਸ਼ਟੀ ਕਰਨਗੇ ਕਿ ਉਨ੍ਹਾਂ ਦੀ ਕਹਾਣੀ ਨੂੰ ਸਹੀ ਤਰ੍ਹਾਂ ਸਮਝਿਆ ਗਿਆ ਹੈ

ਕੀ ਤੁਸੀਂ ਯੋਗ ਹੋ?

- ਸਾਊਥ ਏਸ਼ੀਅਨ
- ਔਰਤ
- ਉਮਰ 25 – 45
- 2017 ਵਿੱਚ ਜਾਂ ਇਸਤੋਂ ਬਾਅਦ ਪ੍ਰਵਾਸ ਕੀਤਾ ਗਿਆ

ਭਾਗ ਲੈਣ ਲਈ ਜਾਂ ਹੋਰ ਜਾਣਕਾਰੀ ਲਈ:

ਸਾਰਾਹ ਕਿੱਪ, UNB ਮਾਸਟਰ ਆਫ ਨਰਸਿੰਗ ਵਿਦਿਆਰਥੀ ਨਾਲ ਸੰਪਰਕ ਕਰੋ

sarah.kipp@unb.ca

ਇਸ ਅਧਿਐਨ ਦੀ ਨਿਊ ਬਰੰਜ਼ਵਿਕ ਯੂਨੀਵਰਸਿਟੀ ਦੇ ਰਿਸਰਚ ਐਥਿਕਸ ਬੋਰਡ ਦੁਆਰਾ ਸਮੀਖਿਆ ਕੀਤੀ ਗਈ ਹੈ ਅਤੇ ਇਹ REB #XXXX ਦੇ ਰੂਪ ਵਿੱਚ ਫਾਈਲ ਵਿੱਚ ਹੈ



ਤੁਹਾਨੂੰ ਪ੍ਰਾਪਤ ਹੋਵੇਗਾ :

\$25 ਦਾ ਗਿਫ਼ਟ ਕਾਰਡ

ਅਤੇ ਬੱਸ ਦੀਆਂ ਟਿਕਟਾਂ

ਇੰਟਰਵਿਊ ਕਮਿਊਨਿਟੀ ਟਿਕਾਣਿਆਂ 'ਤੇ ਕੀਤੇ ਜਾਣਗੇ

Appendix D

Interview Guide

1. Introduction:

- Greet participant
- Introduce self: live/work in the Brampton area, experience caring for newcomers
- Provide an overview of the interview process: hear their story, audio recording, consent
- Orient participant to space, invite the participant to take a break, have a drink, or go to the washroom
- Ask the participant to complete the demographic survey.
- Outline the topics that I want to understand:
 - What does health mean to you? How would you describe your health?
 - How has your experience of settling affected your health?
- Aim: To understand your experience settling in Canada, the challenges you faced, and how they impacted your health, as well as the supports you found to be helpful. How can HCPs best support newcomers during settlement?

2. Gather the story: (Listen using non-verbal cuing (e.g., smile, hmm, nod).

- Can you take me through your experience of starting a life in Canada?
- Tell me how your experience as a newcomer made you feel.
 - Share with me your experiences that were difficult.
 - Tell me about your experiences that made you feel good.
- How do you feel that settling affected your health?
- How could the experience of newcomers be improved?

3. Exploration:

- a. Rephrase parts of the story and repeat back to confirm understanding
- b. Ask follow-up questions to explore areas of interest e.g., “What happened before/after or can you say a bit more about?”
 - i. SDOH
 - ii. Acculturation
 - iii. Consider three-dimensional space:
 1. situation: environment, social, cultural, and political issues
 2. continuity (past present, future)
 3. interaction: feelings, hopes, reactions, moral dispositions

4. Conclusion:

- Discuss next steps
- Seek participant referrals
- Provide honorarium and bus tickets/parking

Appendix E

Demographic Survey

DEMOGRAPHIC SURVEY

The impact of settlement on the health of South Asian women

Question	Circle your answer				
How old are you?	25-29	30-34	35-39	40-44	45+
What is your gender?	Female	Male	Non-binary	Prefer not to answer	Other
What is your marital status?	Single	Married	Divorced	Widowed	Prefer not to answer
What is your highest level of education?	Grade school	Some High school	High School	Diploma or Degree	Masters or PhD
What is your employment status?	Not working	Home maker	Part-time	Full-time	Seeking work
What is your annual household income?	Less than 20,000	20,000-50,000	50,000-80,000	80,000 +	Prefer not to answer
Where do you live?	Live with friends or family	Rent room	Rent apartment or condo	Rent home	House
How do you get health care?	Pay for care	Walk-in clinic/ER	Family doctor	CHC	No health care
How do you describe your present health?	Excellent	Very Good	Good	Fair	Poor
What was your health like when you came to Canada?	Excellent	Very Good	Good	Fair	Poor
What immigration class did you apply to?	Economic	Family	Sponsorship	Refugee	Other

Where were you born? _____

What year did you arrive in Canada? _____

Appendix F

Field Text Guide

FIELD NOTE GUIDE

DATE & TIME: _____ PARTICIPANT #: _____

Setting	Description	ROOM SKETCH
Location	Sights/sounds etc.:	
Witnesses	Role/relationship: Reason: Consent obtained:	
Proximity to points of interest		

WEATHER



INTERVIEW OVERVIEW:

- Atmosphere
- Non-verbal behavior
- Depth of context/responses
- Review interview questions
- Personal reflections

PARTICIPANT INTERACTIONS

Overall appearance

Initial non-verbal behaviour

Demeanor

Interactions with environment/others

OVERALL IMPRESSION

● _____

● _____

● _____

Reflections:

- Interview setting
- Interviewing/facilitation
- Potential bias
- Changes for future interviews
- Tentative codes/themes
- SDOH/Acculturation

(Adapted from Phillipi et al., 2020).

Appendix G

Reflexivity Journal Framework

Guiding Framework

Personal	Who am I, and what is my background and upbringing? What are my expectations, assumptions, and conscious and unconscious reactions to the contexts, participants, and data? How is the research impacting me?
Interpersonal	What relationships exist? (include research team) How do these relationships influence the research and the people involved? (e.g., consider motivations, expectations, and assumptions) What power dynamics are at play?
Methodological	How am I making methodological decisions? How are my experiences and values influencing my interpretation of the data? Document each decision including my rationale, its implications, and how I feel about it. Reflect on decisions for ethical, rigorous, and paradigm alignment.
Contextual	How are aspects of context influencing the research and people involved? (Consider socio-cultural and historical context).

(Adapted from Olmos-Vega et al., 2022)

Appendix H

Letter of Invitation



Dear participant,

Thank you for your interest to take part in my study. My study is called *'The Impact of Settlement on the Health of South Asian Women in Ontario.'* This study aims to know the experiences of South Asian women during their first six years in Ontario.

I (Sarah Kipp) would like to hear about your experience as a newcomer. I would like to know how your experience affected your health. I would like to know if you faced any challenges that affected your health. I would like to know what helped you to get over these challenges. Also, I would like to hear what you think healthcare providers can do to better support newcomers.

I invite you to take part in an interview. The interview will be between you and me. The interview will take about 1 hour. The interviews can be done from your home using Microsoft TEAMS or we can meet at a community space or agency you are familiar with and connected with. Some examples of partner agencies are Punjabi Community Health Services, Brampton Multicultural Community Centre, and WellFort Community Health Services. I will listen as you share your experience. I will ask you some questions and take a few notes. I will ask questions such as "Can you take me through your experience of starting a life in Canada? Tell me how your experience as a newcomer made you feel. I will audio record the interview.

What you share with me may help healthcare providers and policymakers better understand how to support you. What you share with me will be used to write a report about what I find from the study.

Before you take part in the interview, I will ask you to provide consent (permission) to take part. I will read or let you read the consent (permission) form. I will answer questions about the study. Afterward, you will freely give or refuse to give permission to

take part. Your choice to take part or not is voluntary. Voluntary means you can choose to take part or not. If you decide to take part in the research, I will plan a time and place for the interview that will work for you. If you choose not to take part, your choice will not affect any services you receive. You will continue to receive the same access to services you received before this project. You are free to withdraw your consent at any time.

This study has been reviewed by the Research Ethics Board at the University of New Brunswick and is on file as REB 2023-60. Your name and any information that can identify you will be kept secret. The information will only be known to me and the translator, (if you want one). Feel free to contact me at (647)962-7592 or my Supervisor, David Busolo at David.Busolo@unb.ca. Also, if you have any concerns about the study or your rights please call Dr. David Coleman, University of New Brunswick's Research Ethics Board Chair. He can be contacted at (506)453-5189 or ethics@unb.ca

Thank you again for agreeing to take part in this useful study.

Yours Sincerely,

Sarah Kipp PHC-NP, BScN

Master of Nursing Student

Sarah.kipp@unb.ca

The screenshot shows an email interface with a readability statistics pop-up window. The email text is partially obscured by the pop-up. The pop-up window, titled "Readability Statistics", contains the following data:

Counts	
Words	513
Characters	2,475
Paragraphs	12
Sentences	33
Averages	
Sentences per Paragraph	5.5
Words per Sentence	14.9
Characters per Word	4.4
Readability	
Flesch Reading Ease	65.2
Flesch-Kincaid Grade Level	7.8
Passive Sentences	15.1%

The email text visible behind the pop-up includes: "Thank you for your interest to take part in my study. My study is called 'The Impact of Settlement on the Health of South Asian Women' the experiences of South Asian women during... I (Sarah Kipp) would like to hear about your know how your experience affected your health challenges that affected your health. I would these challenges. Also, I would like to hear w better support newcomers. I invite you to take part in an interview. The interview will take about 1 hour. The interview ZOOM or we can meet at a community space connected with. Some examples of partner agencies Services, Brampton Multicultural Community Services. I will listen as you share your experience take a few notes. I will ask questions such as 'Tell me your story of settling in Canada starting from when you first arrived?' and 'How has your health been since moving to Canada?' I will audio record the interview. What you share with me may help healthcare providers and policymakers better understand how to support you. What you share with me will be used to write a report about what I find from the study. Before you take part in the interview, I will ask you to provide consent (permission) to take part. I will read or let you read the consent (permission) form. I will answer

Appendix I

Consent Form

Title: The Impact of Settlement on the Health of South Asian Women in Ontario

Principal Investigator (PI):

Sarah Kipp, Master of Nursing Student, University of New Brunswick

Email: sarah.kipp@unb.ca Phone: 647-962-7592

Supervisor:

David Busolo, Faculty of Nursing, University of New Brunswick

Email: David.Busolo@unb.ca Phone: 506 458 7760

Thesis Committee Member:

Tracey Rickards, Faculty of Nursing, University of New Brunswick

Email: Tracey.rickards@unb.ca

This consent form has two parts:

1. Study information part. In this section, we talk about the study. Also, we will talk about your role.
2. Consent certificate part. Here, we ask you to decide to take part or not. If you agree to take part in the study, you will write your name, sign, and date in this section. The research assistant will sign after your name.

Part 1: Research Information

Thank you for your interest to take part in my research study: *'The Impact of Settlement on the Health of South Asian Women in Ontario.'* This form has information about my research. You can read it on your own, an interpreter can read it to you, or I can read it aloud for you. I will inform you how I would like you to take part in this research. Please feel free to ask questions or for more information about the study. Feel free to think about your decision. Discuss it with friends or family members before you decide. After you agree and sign this form, you will receive a copy to keep.

Why are we doing this research?

- To better understand South Asian newcomers' experiences living in Ontario
- To better understand how the experience as a South Asian newcomer affects health
- To better understand the challenges South Asian newcomers face
- To learn from South Asian newcomers about the support they find helpful
- To learn how healthcare providers can support South Asian newcomers better

What type of research is this?

- This research will be done through individual interviews and a short survey.

Why have I been chosen to take part?

- You have been chosen because your experience as a South Asian newcomer is important. You can help me understand the experiences of South Asian newcomers affect newcomer health.

What is required of me to take part in this research?

- If you would like to take part in an individual interview, I would like you to choose a location that works for you (e.g., space at a partner agency). I will meet with you at the location of your choice at an agreed-upon time. If you prefer, we can meet virtually through Microsoft TEAMS. I will ask you questions about your experience as a newcomer. I will ask you questions about your experience as a newcomer and how your experiences affected your health.
- The individual interviews will be recorded using an audio recorder. Each interview will take about 1 – 1.5 hours. After the interview, I will listen to the recording and type it out in your exact words.
- All information will be shared with you in English. If you would like an interpreter for your interview, let me know and I will arrange one.
- Being part of this study is your choice. You can change your mind and stop taking part in the study at any time. This includes stopping to take part in the interviews.
- You can answer only the questions you want to answer. If you do not want to answer some questions you can tell me during the interview, and I will skip those questions. Also, you may take a break at any time during the interviews.

- After your interview, if you want to tell me more about your experience, you can reach out to me at sarah.kipp@unb.ca. I will respond to your message, and we will arrange a time to meet.

What are the benefits and risks of taking part in this study?

- What you share with me during this study will inform healthcare providers and policymakers about how to better support newcomers. The project could benefit you, your family, and other newcomers.
- You will receive a gift of thanks called an honorarium. The honorarium will be in the form of a \$25 grocery gift card. You will receive this gift card at the start of the interview, and you can keep it. You will get to keep it whether you finish the interview or not. You will get to keep it if you choose to answer only part or none of the interview questions. You will also get to keep the gift card if you later decide to withdraw from the study.
- If you have expenses related to the study, I will reimburse you. The expenses may include bus tickets to and from the interview and parking costs.
- When you talk about your experience settling in Ontario, you may think of a difficult past. If you feel uneasy or experience painful memories during the interview or focus group, please tell me. You can ask for a break or stop taking part. If you feel you need extra support, you can contact Crisis Support Peel Dufferin at (905) 278-9036. I will also connect you with other places where you can get help.

How will the information that you provide us be used?

- What you and other newcomers share with me may be used to write reports, presentations, and academic publications. The information may be shared with community organizations and community members. Also, what you tell me may be used to support other research in the future. If what you tell me is used to answer questions not related to this study, I will seek ethical approval again.

Who will have access to your identity and information?

- Your identity and personal information will always remain confidential and will not be shared. The only time when I cannot keep your privacy is when the law requires me to share your identity. For example, if you are involved in the abuse

of children or are likely to hurt yourself or others, I will inform law enforcement officers. In such cases, I will let you know about my intention to share your information.

- Your name will be replaced by a pseudonym to identify different interviews.
- Information from this study will be stored on Microsoft's online OneDrive file hosting system. Files stored on OneDrive will be password protected. Computer files will also be stored on a password-protected computer. The password will only be known to me. Hard copies of files will be scanned to OneDrive, then shredded with a cross-cutting shredder.
- All information from the study will be destroyed after five years. The period of five years will allow the research team to analyze and publish the results.
- If you would like, I can give you a copy of the study report once it is complete. The report will be about what I found out at the end of the study. There is a section on the Consent Form where you can indicate this. If you express interest in receiving a copy of the report, I can mail or email it to you.

Part 2: Consent Certificate

I have read or listened to the information above. I have thought about it. I have asked questions. I have discussed or chosen not to discuss the information with someone else. Questions that I have asked, have been answered to my satisfaction. My signature on this form indicates that I have understood the information. It also indicates that I am satisfied with the information about how I will be involved in the research project.

By signing this form, I agree that any information shared by other participants during discussion groups or otherwise will be kept private and not shared with others.

This signature does not waive my legal rights. It does not release the researchers or those involved in institutions from their legal and professional responsibilities.

I freely choose to take part. Also, I am free to leave the study at any time. I know that I will only answer the questions that I want to answer. If I choose not to answer any question at any time it is okay for me and Sarah. Also, if I choose to leave the interviews for any reason at any time it is okay. I understand that is okay for me and Sarah.

I understand that if I choose to not sign this document, I will not be able to take part in this study.

I understand that I should always know what is happening. I can ask questions about what is happening at any time. I can ask a question about anything at any time while I am a part of this study.

I understand this research has been approved by the University of New Brunswick Research Ethics Board.

If I have any concerns or complaints about this research, I may contact Dr. Busolo at (506) 458-7760. Additionally, if I have any concerns about the study or my rights, I can call Dr. David Coleman, University of New Brunswick's Research Ethics Board Chair. He can be contacted at (506)453-5189 or ethics@unb.ca

A copy of this consent form has been given to me. The copy is for me to keep for my records and reference.

I agree to take part in this study: Yes ___ No ___

I would like a copy of the study report once it is complete: Yes ___ No ___

Name of participant: _____

Signature of participant: _____

Date: _____

Day/Month/Year

Statement of the person obtaining consent

I have accurately read out or allowed the participant to read the information above and to the best of my ability made sure that the participant understands what has been promised will be done:

Name of the person obtaining consent _____

Signature _____

I understand this research has been approved by the University of New Brunswick Research Ethics Board.

If I have any concerns or complaints about this research, I can contact the Research Ethics Board at (506-458-7760. Additionally, if I have any concerns, I can call Jason Hickey, Chair of the Research Ethics Board at (506-458-7644 and his email is Jason.hickey@unb.ca.

A copy of this consent form has been given to me. The copy is for me to keep for my records and reference.

I agree to take part in this study: Yes ___ No ___

I would like a copy of the study report once it is complete: Yes ___ No ___

Counts	
Words	1,219
Characters	5,863
Paragraphs	52
Sentences	79
Averages	
Sentences per Paragraph	2.5
Words per Sentence	13.4
Characters per Word	4.4
Readability	
Flesch Reading Ease	67.2
Flesch-Kincaid Grade Level	7.2
Passive Sentences	26.5%

OK

Appendix J

Local Health and Settlement Services Directory

Brampton Newcomer Resource Guide

SETTLEMENT SUPPORT



COSTI Immigrant Services:	905-459-6700
Brampton Multicultural Community Centre:	905-790-8482
Indus Community Services:	905-275-2369
Language Instruction for Newcomers:	1-888-242-2100
Newcomer Centre of Peel:	905-306-0577
Polycultural Immigrant & Community Service:	905-403-8860
Punjabi Community Health Services:	905-677-0889

HEALTH SERVICES



Brampton Civic Hospital:	905-494-2120
Bramalea Community Health Centre:	905-451-6959
Dental Clinic, University of Toronto:	416-864-8000
East Mississauga Community Health Centre:	905-602-4082
Peel Public Health:	905-799-7700
Telehealth Ontario:	1-866-797-0000

FOOD BANKS



Knights Table:	905-454-8725
Seva Food Bank:	905-361-7382
Salvation Army Family Services:	905-791-1085
Regeneration Outreach:	905-796-5888

EMPLOYMENT & INCOME



ACCES Employment:	905-454-2318
Achev:	905-595-0722
Centre for Education & Training:	905-457-4747
COSTI Employment Services:	905-459-8855
Dixie Bloor Employment Services:	905-624-2442
Family Services of Peel Employment Services:	905-368-0322
Ontario Works:	905-793-9200
John Howard Society Employment Services:	905-459-0111

COUNSELLING



Family Services of Peel:	905-453-5775
Catholic Family Services of Peel-Dufferin:	905-450-1608
Tangerine Walk-in Counselling:	905-795-3530
South Asian Welcome Centre Inc.:	905-595-0677
Distress Centre Peel (24 hrs):	905-459-7777
24.7 Crisis Support:	905-278-9036

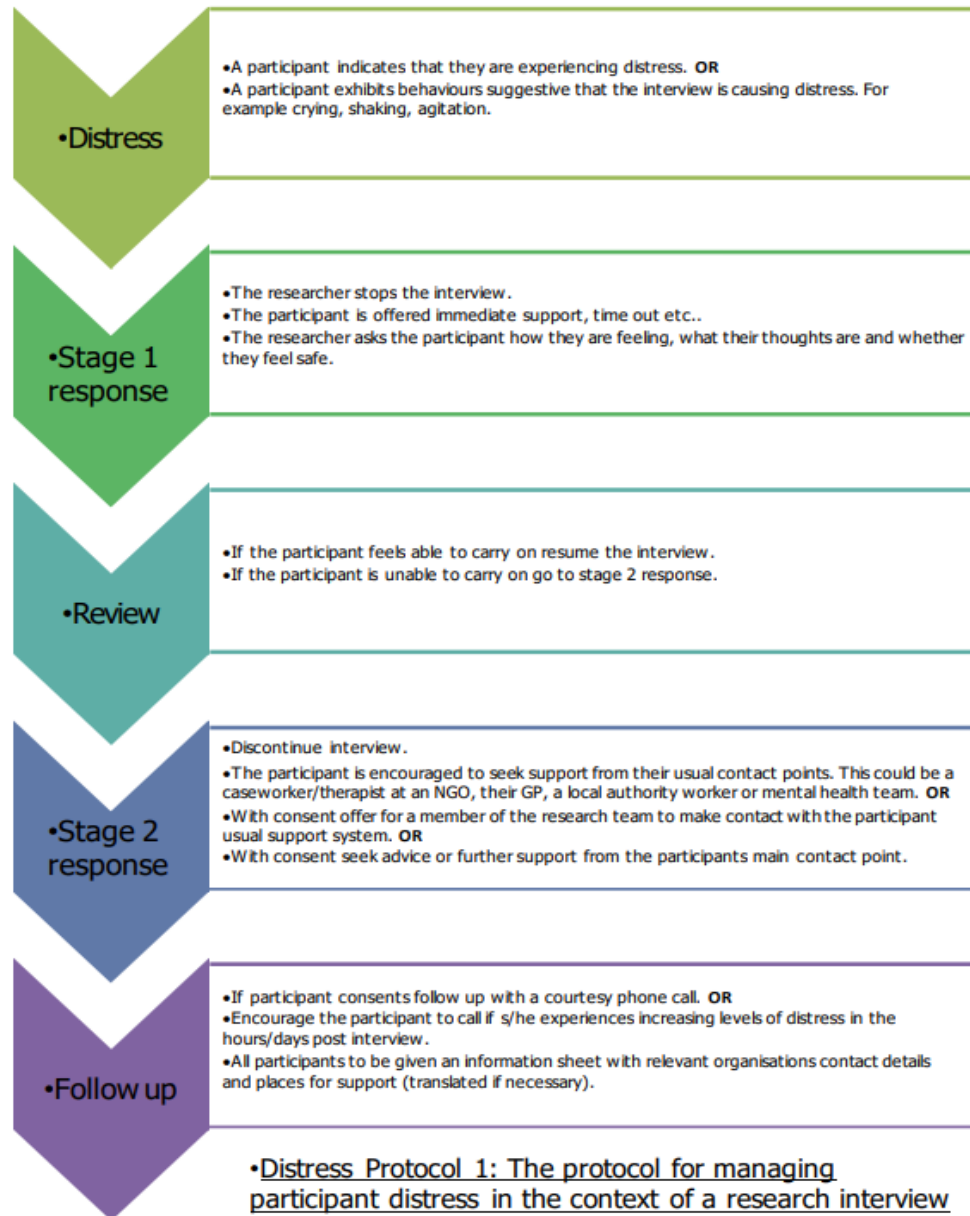
TRANSPORTATION & HOUSING



Brampton Transit:	905-874-2999
Supportive Housing in Peel:	905-795-8742
Family Life Resource Ctr.:	905-451-4115
Interim Place North:	905-676-8515
Peel Access to Housing:	905-453-1300
Angela's Place:	905-795-8742
Peel Family Shelter:	905-272-7061

Appendix K

Distress Protocol



(Wright et al., 2020)

Curriculum Vitae

Sarah R. Kipp, PHC-NP, BScN, MN-C

EDUCATION AND TRAINING

University of New Brunswick, Fredericton, NB | Master of Nursing: 2020 - 2024

York University, Toronto, ON | Primary Health Care Nurse Practitioner Advanced Certificate: 2003

York University, Toronto, ON | Bachelor of Science in Nursing Honours: 2002
Summa cum laude graduate

Humber College, Toronto, ON | Nursing Diploma: 1995

PUBLICATIONS: N/A

CONFERENCE PRESENTATIONS:

2021, Advanced Access in Primary Care, Health Quality Ontario, Toronto, Ontario

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2009, Advanced Access, QIIP Learning Collaborative for Primary Care, Toronto, Ontario