

# Impact of social determinants of health on immigrant women's cancer prevalence, outcomes, and survival experiences: narrative review

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**Background and Objective:** This paper aims to review the social determinants of health to comprehend the cancer survival lived experiences of immigrant females. It can serve as a guideline for Canadian healthcare providers who wish to formulate an intervention for improving the quality of life of immigrant females who are cancer survivors. The intervention is formulated based on various factors associated with cancer development, health outcomes, and survival lived experiences of these immigrants.

**Methods:** This review was based on the review of different databases available in the literature including PubMed, Science Direct, MEDLINE, and EBSCOhost databases. It also employed search engines like Google Scholar and Google Engine to search the relevant websites and governmental and non-governmental reports.

**Key Content and Findings:** The results indicate strong effects of social determinants of health on cancer survivor immigrant women. The disparity in survival outcomes and survival experiences of different immigrant women may be attributed to the difference in their cultural, educational, and socioeconomic status as well as disparity in social support, and health service availability.

**Conclusions:** It is concluded that the lived experiences of cancer survivor female immigrants in Canada must be additionally explored to enable the experts to come up with more effective interventions based on social determinants of health for bringing improvement in the overall Canadian healthcare system.

Keywords: Immigrant women; cancer survival; social determinants of health

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## Introduction

The Canadian healthcare system has to face numerous challenges especially the medical and financial consequences because of Cancer (1). According to the estimations of the Canadian Cancer Society's Advisory Committee on Cancer Statistics (2), there is a high probability of cancer development in half of Canada's total population (50%) during their lives while fatality due to cancer is expected in 25% of the total Canadian population. Among different

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causes of fatality in Canada, the most prominent one is Cancer; it is the main cause behind 30% of mortalities in Canada (2). Statistics showed that the Canadian economy faced an average annual augmentation from 2.9 billion to 7.5 billion Canadian dollars in financial burden during the period from 2005 to 2012 because of Cancer. This amount was spent on hospital care, pharmaceutical care (both private and public) and physician care (3).

Various factors are associated with the causes and causation or aetiology of Cancer. These factors are mostly uncertain and complex aspects including human lifestyle factors (socio-behavioural), biological factors like genetics, and environmental factors (4). The risk of cancer development is not confined to biological factors only as evident from the fact that gene mutation or gene operation was found in only 5-10% of cancers (5). Hence, the role of other factors including environmental factors, and lifestyle factors in Cancer development cannot be denied. Keeping this in view, the majority of researchers have highlighted that social determinants of health render a significant contribution in cancer since there is strong correlation between socio-behavioural factors and social determinants of health. Common social determinants of health include occupation, qualification, child development, social position, and culture.

The previous six decades witnessed a great effect on the structure of Canadian society because of significant changes in the ethnic character of immigrants in Canada (6). Therefore, a considerable increase was seen in the interaction between healthcare providers and female immigrants. Such interactions become more effective and healthcare providers can offer better healthcare services when healthcare providers have adequate information about their own and the immigrants' cultures.

One of the vital features of Canadian society is Immigration where 21.9% of residents in the country are immigrants belonging to 200 nationalities (7). The immigrants to Canada may be categorised as follows: (I) financial immigrants who have come to Canada in search of financial benefits such as investors or skilled workers; (II) family immigrants who have been invited to Canada by their Canadian family member; (III) refugee immigrants who came to Canada as a refugee but had been offered the position of a permanent resident to prevent them from returning to home-country; and (IV) immigrants that are given permanent residential rights for reasons other than those specified above (8).

Several studies conducted in Canada indicated lesser

screening and consequently late diagnosis of breast cancer and lower chances of survival in the following categories of patients: (I) South Asian immigrants; (II) immigrants that have recently entered Canada; and (III) those belonging to immigrant and refugee families (9). Among all immigrants to Canada, the class of immigrants with the highest rate of cancer development was the one from the Middle East and Africa (10).

The social challenges faced by immigrant females mainly include comprehension of the Canadian culture, communication in a foreign language, looking for a job and mingling in the new society (11). Hence, immigrant females do not have the time and energy to search for different options and interventions offered by the Canadian healthcare system for the treatment of cancer. It is also challenging for them to get access to female practitioners and obtain cultural sensitivity education (12). The immigrant females also find it difficult to find cancer support groups in Canada that can understand the native language of immigrants to allow them to effectively express their cultural needs. This makes the cancer survival journey, experiences, and outcomes of female immigrants more challenging. This paper aims to offer valuable insights into how cancer development, health outcomes, and survival of immigrant females in Canada are affected by the abovementioned challenges and social determinants of health. The study also sheds light on the social determinants of health and their effect on cancer survival lived experiences of female immigrants. Such information is extremely valuable for professionals and healthcare providers as it enables them to come up with novel interventions that are suitable for immigrants and are consistent with their cultural values. These interventions help improve the quality of life of female immigrants. These interventions are developed keeping in view the immigrant's culture and other factors associated with their cancer survival lived experiences. We present the following article in accordance with the Narrative Review reporting checklist (available at https://jphe.amegroups.com/article/view/10.21037/jphe-22-72/rc).

## Methods

The authors reviewed the research works available in the English language extracted from Science Direct, PubMed, MEDLINE, and EBSCOhost databases with the help of search engines like Google Scholar and Google Engine as shown in *Table 1*. The included studies were published

Table 1 The search strategy summary

Items	Specification
Date of search	August, 2018–December, 2020
Databases and other sources searched	Science Direct, PubMed, MEDLINE, and EBSCOhost databases, gray literature, governmental reports
Search terms used (including MeSH and free text search terms and filters)	"Cancer", "Cancer survivorship", "Cancer survivor", "Cancer survival", "Immigrant women in Canada", "Cancer care in Canada", "Prevalence", "Social support", "Disparities and Social Determinants of Health", "Education", "Health service", "Socioeconomic status", "Ethnic" "Cancer care disparity", "Race" and "Culture"
Timeframe	2003–2020
Inclusion and exclusion criteria	English, Only the studies considering the disparity in cancer prevalence, outcomes, and experiences among different groups of immigrants were included. Articles that were not in English, or non-cancer related were not included
Selection process	These studies were checked for relevance with research objectives and short-listed studies were then reviewed

during the period from 2003 to 2020. The review included relevant research studies, websites, and governmental and non-governmental reports. The search was conducted using the following keywords; "Cancer", "Cancer survivorship", "Cancer survivor", "Cancer survival", "Immigrant women in Canada", "Cancer care in Canada", "Prevalence", "Social support", "Disparities and Social Determinants of Health", "Education", "Health service", "Socioeconomic status", "Ethnic" "Cancer care disparity", "Race" and "Culture". The search engines vielded more than 200 studies, reports, articles, theses, papers, qualitative studies, systematic reviews, descriptive studies, and experimental and quasiexperimental studies. These studies were checked for relevance with research objectives and short-listed studies were then reviewed. The literature review considered research works conducted in the domain of cancer prevalence in Canadian citizens and immigrants, the effects of social determinants of health on survival experiences, cancer prevalence and outcomes, and disparities among different groups in terms of cancer care provision. Only the studies considering the disparity in cancer prevalence, outcomes, and experiences among different groups of immigrants were included.

## **Cancer prevalence among immigrants in Canada**

The available literature lacks studies about population-level cancer outcomes in immigrants. The studies available in the literature have not extensively explored the association between cancer prevalence and immigrant features like the category of immigrant, immigration status, duration of stay in Canada, nationality, and culture. But, some Canadian studies have investigated this domain and established the connection between immigrant features and the prevalence of cancer, breast cancer screening, and cancer care outcomes (9,13-15). The same "healthy immigration effect" was found in both international and Canadian studies. Immigrants that had newly moved to Canada showed healthier bodies in comparison to the people already residing in Canada; this may be attributed to the selective immigration process (16,17). This is evident from lower mortality and morbidity rates among recent Canadian immigrants with reference to cancer and other chronic diseases and higher rates among Canadian citizens (10,13,18-20). But, the immigrants also show higher mortality and morbidity rates gradually as time passes and their stay in Canada is prolonged. The entire effect is lost over 10 years which indicates that the immigrants' health outcomes are influenced by social determinants of health (17). The main reasons behind this decline in health include stress, environmental changes, adoption of the host country's culture, lack of social support, changes in lifestyle, resorting to unhealthy behaviours like drinking or smoking, and lack of access to health services (13,21). In simple words, immigrants experience deterioration in health with time as they adopt the lifestyle of the host country as indicated by Cheung et al. (2017) (20).

The study indicated that cancer prevalence and type are also affected by immigrants' geographical backgrounds. According to McDonald *et al.* (2017), they noticed a lower rate of cancer prevalence among immigrants to Canada belonging to countries like the US, the UK, and Ireland in comparison to the Canadian population (13). Shuldiner *et al.* (2018) noted a higher prevalence of colorectal cancer among immigrants belonging to Central Asia and Europe while a higher prevalence of breast cancer in female immigrants belonging to North Africa and the Middle East (10). South Asian immigrants in Canada depicted the least risk of breast cancer and colorectal cancer development. In the research by McDermott *et al.* (2011), they noted the highest liver cancer development risk in immigrants belonging to South-East and North-East Asia in comparison to other immigrant categories due to the high prevalence of hepatitis B and C in South-East and North-East Asia (19).

Immigrants to Canada showed a disparity in cancer prevalence depending on the category of immigrants they belong to. The category of Refugee immigrants showed greater cancer incidence rates in comparison to those belonging to the non-refugee category (19). Considering the prevalence of cervical cancer, the research indicated a greater rate of cancer prevalence in female refugee immigrants in comparison to nationals of Canada and other categories of immigrants (19,22) since female refugee immigrants in Canada were rarely involved in cancer screening (22). Comparison of different categories of female immigrants also showed higher breast cancer development risk and delayed diagnosis among females belonging to the Family immigration category in comparison to female immigrants belonging to Economic class (9). The cancer survival experiences and outcomes are affected by the disparities among female immigrants in Canada with respect to cancer prevalence and survival.

## **Cancer survival journey**

The disparity in the cancer survival journey of different patients was indicated in the 2016 Annual Meeting of the American Society of Clinical Oncology (23). After this meeting, the experts became more interested in the factors behind this disparity in the Cancer survival journey. Experts became curious to know if this disparity is attributed to different cancer care programmes given to different patients. They were interested in exploring factors affecting the survival journey. The increasing cancer development and the higher number of survivors have made it imperative to comprehend different factors of their journey specifically their lived experiences. Such information is vital and enables practitioners and care providers to deliver patient-centred care to cancer survivors by fulfilling their psychological and physiological requirements, providing required resources, informing them about preventative behaviours, and offering proper interventions (24).

It was emphasized in several qualitative studies to obtain more insight into the psychosocial and treatment factors of cancer survival (25-27). Moreover, some research contributed to offering insight into the factors associated with various cases of cancer survival (23). The subsequent section presents a summary of selected studies on the cancer survival experiences of female cancer patients.

# Articulating meaning of cancer survival

Cancer patients experience confusion in convincing themselves about the change in status from cancer patient to cancer survivor due to misunderstandings regarding cancer survival (26). The sudden shift in their status from being cancer patients to cancer survivors leads to a lack of clarity; they do not know what kind of support to expect from their care providers, family, and friends. The change in their status also brings considerable changes in support extended to them (26,28). Consequently, they cannot determine their status as cancer patients or survivors or fighters and feel the urge to be provided care and support even after the treatment stage. Management of cancer fear can be more effective when Canadian immigrants and citizens are well acquainted with cancer survival.

# **Managing fear**

Cancer survivors are exposed to many fears and concerns throughout their fight against cancer. The reports indicated greater fear and apprehension in cancer patients belonging to the Immigrant category in comparison to non-immigrant patients (29). This fear and anxiety can hamper the recovery process and hence must be addressed for better health outcomes. According to earlier research, the majority of cancer survivors were concerned about the diagnosis phase, management of anxiety associated with treatment, getting post-treatment control and recovery, changes in physical appearance, sex life, social life, and particularly from disease recurrence (26,27,30). Courageous management of these fears and challenges is part and parcel of their survival journey (26). It is essential to enlighten female cancer survivors regarding the techniques and information for effective fear management. This is necessary to improve their cancer survival experience.

#### Power of knowledge and information

Understanding cancer risk, treatment methods, and outcomes affect cancer survivors' decision-making process during their cancer survival journey. Many recognises the value of information and knowledge in these areas (25,26). They can develop a sense of control over their circumstances, lower their anxiety, and create a plan for the future by using knowledge and information to help them make significant decisions for their health and well-being (31). Their body knowledge is also necessary to recognise changes and seek prompt medical attention from primary healthcare professionals (26). Social support, along with information, benefits cancer survivors. Unfortunately, as immigrant women do not have English proficiency, it becomes an obstacle for them to access cancer information programmes and translate their feelings and symptoms to medical professionals (11).

#### Social support

Numerous studies have shown the value of social support during the battle against cancer. Cancer patients believe that advice, social support, and emotional support from medical professionals, friends, family, coworkers, and other cancer patients benefitted them during their survival journey (25,26,32,33). This outpouring of kindness from people increased their morale in battling the disease, optimism, and acceptance towards their circumstances (26). However, because they live far away from them, immigrant women do not receive enough social support from family and friends (32). According to reports, women with better access to the healthcare system and more social support from their social network adhered more closely to cancer treatment plans and had a better understanding of how to use them (34). Accepting the disease condition and physical changes among cancer survivors depends immensely on social support.

Nevertheless, cancer survival affects the patient's relationship with healthcare providers, friends, and family. Schultz *et al.* (2004) have found that in various ethnic/racial groups, family relationships are affected (35). It is noted, for example, that Hispanic American cancer survivors are more likely to experience better relationships with their family in comparison to the family relationships of Caucasia American and African American survivors. Caucasian and Asian American women cancer survivors are affected by cultural views regarding the role of family and women, and

views on spousal support. According to Asian immigrants, due to their responsibilities and obligations towards their families, they face greater stress and have to put in more

#### **Physical changes in appearance**

effort to remain healthy (30,36).

Cancer survivors' capacity to deal with the treatment stage had an adverse impact by changes in physical appearance (such as hair loss) during the treatment stage (26,33). Many female breast cancer survivors experience anxiety, loneliness, and emotional anguish due to changes in their physical health and appearance (37,38). Furthermore, numerous changes in body image have impacted how women interact with their partners in relationships and social responsibilities (38). Additionally, limited access to healthcare services and health inequities harm cancer survival rates.

#### Health disparities in cancer survival journey

Several international and national research showed discrepancies in cancer survival rates (39,40). Socioeconomic level, ethnicity, race, education, cultural views, way of life, access to healthcare, and several other social influences are various factors that affect the cancer survival journey (23,41,42). Unfortunately, there is limited information on the best practices for strategies and regulations that address this health issue in cancer survival care. The following section will summarise the effects of social determinants of health, including socioeconomic position, education, culture, social support, and access to healthcare.

#### Socioeconomic status

Earnings and social standing have a huge influence on a person's way of life because it reflects housing, food security, health, education, social life, personal behaviour and coping mechanisms, and child development (43). Many studies have focused a great deal of attention on the influence of wealth and social standing on cancer outcomes, finding a solid link between socioeconomic position and cancer survivors' survival rates, physical health, and mental health (39,44,45).

Higher cancer death rates and cancer stage diagnosis are linked to lower socioeconomic levels (39,45). About 93% of Canadians have access to primary healthcare services, and this data was published in Canada, where the healthcare

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system is universal (46). Women from the high-income group, for instance, have breast cancer survival rates that are 4.5% higher than those from the low-income group (47). According to Sammarco and Konecny (2010), women cancer survivors who are from low-income and low-status backgrounds had worse quality of life (48), worse physical and mental health (44,49), and more depressive symptoms (50) than those from higher socioeconomic backgrounds.

Numerous theories are suggested to explain why low socioeconomic levels women have worse cancer survival rates. Cancer-related unhealthy behaviours like smoking, drinking, and eating poorly are connected to low socioeconomic position. Patients with lower socioeconomic levels have less access to healthcare services and are more likely to put off seeking treatment, which can delay diagnosis. There have also been reports of major obstacles due to environmental variables, low educational levels, and living in rural locations far from cancer treatment facilities (39,44,51).

# Education

One of the most important factors affecting people, communities, and public health is education. Education represents a person's capacity to access health services and information, as well as their health practices and overall health results (52). Numerous research studies have looked into the connection between education and female cancer. According to reports, education is related to many cancer types, incidence rates, survival rates, and the physical and mental well-being of cancer survivors (40).

Women who have less education are more likely to develop liver, stomach, and cervical cancer, while those who have more education are more likely to develop breast and ovarian cancer (44). As demonstrated by McDaniel *et al.* (2019), women in underdeveloped nations with low levels of education have lower survival rates often as compared to women in developed countries having better education (low survival rates suggest a higher rate of deaths in comparison to incidence rates) (40). The same pattern is also observed in developed nations, where women with less education tend to live shorter lives than women with higher education (53). For instance, compared to women with university degrees, patients with educational levels below high school have a 1.39 times greater mortality rate for breast cancer (51,53).

Additionally, cancer survivors who are less educated suffer from poorer mental and physical health, a lower quality of life, a lower perception of social support, and uncertainty throughout their survival (48,54). Women who are less educated (grades 6 to 12) and who also speak poor English have lower levels of emotional well-being, more recurrence dread, and are highly depressed (49,54).

Highly educated women participate in disease preventive and health promotion activities compared to less educated women, which leads to earlier cancer identification. They also attend routine breast and cervical cancer screenings more often (41,45). For instance, women with lower levels of education are reluctant to have mammography screening as demonstrated in Canadian data (45). Likewise, women with insufficient education are not aware of cancer screening programmes, their symptoms, the treatments they can access, and health legislation (13,14). In other words, women with lower levels of education and health literacy typically face delayed cancer diagnosis linked to advanced cancer stages, which results in lower cancer survival rates. Culture has an impact on cancer survival rates as well.

## Culture

To develop culturally competent public health intervention programmes, studies and comparisons of the epidemiology, treatment, diagnosis, and cancer survival outcomes among multiethnic and racial groups of women have been conducted. Race and ethnicity of women have a substantial influence on cancer incidence rates, survival rates, experiences, and outcomes. According to Holst-Hansson *et al.* (2018), women with different ethnic and cultural backgrounds have different survival experiences for a variety of reasons, including the way they view their illness, their terms with healthcare providers and family, their capability to explain their disease symptoms, their selection of the type of care and the level of compliance with the suggested care, and capability to share their feelings with others (27).

In Canada, studies and comparisons of the cancer survival rates of women from various ethnic and racial groups have also been conducted. First Nations women have been reported to have mortality rates and cancer incidence rates that are five times greater than those of non-indigenous women. This is said to be caused by poor lifestyle decisions, obesity, cultural preconceptions about sickness, delayed cancer diagnosis, a lack of knowledge of early signs, delay seeking medical assistance, stigma, and insufficiency of culturally relevant screening and cancer care programmes (55,56).

Furthermore, as compared to white women, visible minority women born in Canada experience reduced rates

of cancer incidence (13). Similar American research shows that Caucasian American women have greater breast cancer survival rates compared to Hispanic, Asian, Native, and African American women (57). However, as compared to women from other ethnic groups, Black African women are more likely to have cancer that has advanced stages, positive tumours, and the greatest fatality rates (57). Studies in Canada, the UK, and the USA have revealed that white women have greater breast cancer incidence rates than black women, despite black women having higher fatality rates (22,58,59).

Ethnic minority immigrant women are more likely than non-immigrant and white women to receive a later cancer diagnosis. It has been reported that South Asian immigrant women in Canada often show up with late breast and cervical cancer stages (14). Additionally, it has been discovered that, when compared to other immigrant women in Canada, women from the Middle East and North Africa had the highest chance of having breast cancer (10). It has been suggested that this is due to a variety of cultural beliefs, limited knowledge about health prevention and promotion programmes, less knowledge about the Canadian healthcare system, lack of English and French proficiency, insufficient education, inadequate income and low social status, difficulty accessing the healthcare system, age, and health illiteracy (15,22,60,61). This illustrates how socioeconomic determinants of health and their impact on cancer survival and outcomes are interrelated.

In comparison to immigrant women from Central Asia and Eastern Europe, Muslim women from South Asia, the Middle East, and Africa have the least rates of cancer screening, according to some studies conducted in Ontario (15,62). The aforementioned structural barriers, along with less access to sexual health information and body image during the survival journey, insufficient open discussion about sexuality in their communities, religion and culture, and certain rules about modesty, premarital virginity and sexual conduct are all related to this (12).

Many immigrants give preference to female family doctors who share their language and culture (12). But it is found that Canadian medical graduates are more likely than international medical graduates to screen eligible immigrant patients for breast, cervical, and colorectal cancer (63). This shows that the cultural ideas of the patient and doctor have a big impact on medical procedures.

In comparison to non-minority women, survivors of cancer from ethnic minorities and immigrant women, such as African, European, Asian Americans, and Latina, face reduced rates of emotional well-being, low quality of life, greater rates of fear of recurrence, and increased symptoms of depression (29,48,50). It was asserted by immigrant women from Iraq, Yugoslavia, and Latina that because of the cultural health view that cancer is a death sentence, and also because of less social support they receive, they hesitate to share their emotions and diagnosis with their family, friends, and children (12,27,48). According to another study, shorter sleep durations are experienced by breast cancer survivor women from ethnic minorities, e.g., White and non-Hispanic, which is why they experience greater pain, fatigue, depression, and sleep onset latency (SOL) (SOL refers to the time needed to transit from complete wakefulness to sleep) (64).

It has been demonstrated in multiethnic studies carried out on Hispanic, African, Latino, Asian, and Caucasian women that different strategies are adopted by women from distinct ethnic groups to survive and cope with sadness, worry, and fear of reoccurrence, depending on their cultural views and uncertainty. According to a few women, they were diagnosed with cancer due to God's will, and the outcomes of illness are controlled by God, irrespective of whatever they do. Here, women believe that they will be able to stay in control through prayers, spirituality, and turning towards God. Nevertheless, women from other ethnic groups and the more educated ones try to comprehend the reasons for being diagnosed with cancer (such as family, history, lifestyle, and breastfeeding) (27,30).

Different coping mechanisms are adopted by distinct ethnic groups for survival. Latino, Caucasian, and acculturated women make efforts to remain positive and exhibit higher involvement in healthcare. Such women try to exercise, adopt a healthy diet, and persistently try to do whatever they can for their survival. On the other hand, the less acculturated women prefer taking the advice of doctors. In addition, they are more at risk of falling sick because of their unhealthy lifestyle (27,30).

#### Access to health services

Cancer survival outcomes for women of different ethnic minorities are affected to a large extent by access to healthcare services, health prevention programmes, and health promotion. Many immigrant women in the USA and Canada face issues in accessing health services while undergoing cancer care (22,30,65). Some of the key reasons why immigrant women are unable to access health services include low levels of education, low socioeconomic status, and language problems. Another barrier to accessing health services is the unavailability of an interpreter (30). Though the universal healthcare system is established in Canada, several immigrant women still face problems in accessing health services because of extended waiting times, geographical barriers (i.e., those who live in rural areas), and a lack of family physicians (15,65). The overall access to healthcare services may also be affected by other barriers like sociocultural practice, unemployment, socio-demographic features, and unsuitable social conditions (15,66,67).

The aspect of patient-physician ethnicity and linguistic commonality can bring improvements in health outcomes, quality of care, health services satisfaction and persistent care (7). It was determined by Weerasinghe and Mitchell (2007) that culturally insensitive and indifferent healthcare was experienced by immigrant women in Atlantic Canada. For instance, often, healthcare providers did not correctly comprehend the relationship of immigrant women with their minds, bodies and social health (68). This issue is experienced in Canada and the US, where unfulfilled emotional, informational, spiritual, and practical support is experienced by ethnic minorities when receiving cancer care (69). Thus, female healthcare providers or healthcare providers from the same ethnic and cultural beliefs are preferred by most women belonging to an ethnic minority (12,70).

Most immigrant women do not, unfortunately, trust the healthcare system and are not willing to participate in health research (22). Some are apprehensive about the stigma, shame, and other adverse social outcomes, which is why they avoid using health prevention programmes. Some researchers reported participant's fear of diagnosis technology, cancer diagnosis and treatment approaches (such as radiotherapy and chemotherapy) (22,70,71). Hence, nurses and physicians need to educate women regarding various health prevention and promotion programmes, screening and treatment approaches, symptoms and other healthcare services (such as sexual health information). It is also important for healthcare professionals to be aware of offering culturally competent care.

## Conclusions

With an increase in the population of immigrant women in Canada, the likelihood of them interacting with healthcare providers is also increasing. However, immigrant women constitute a heterogeneous group belonging to distinct languages, religions, and backgrounds (72). It is believed that immigrant women are at risk because they face inequality in the provision of healthcare. A gap in the literature exists because the focus of Canadian studies is mostly on the prevalence of cancer and cancer screening rates (such as cervical, colorectal, and breast cancer screening) among immigrant women (12,13). However, little knowledge is available regarding their experiences and outcomes of cancer survival. There are lower cancer incidence rates among immigrant women; however, their rates of survival are also less than Canadian-born women (73).

The mental and physical health outcomes of survivors from ethnic minorities and/or with lower socioeconomic status and low educational levels will be poor. This is because of their insufficient knowledge regarding the Canadian healthcare system, certain cultural views regarding cancer diagnosis and cancer care procedures, inadequate proficiency in English/French, and inadequate access to health services. The Canadian healthcare system is universal yet health inequity is experienced by cancer survivors. The social determinants of health have a significant impact on survival outcomes and experiences. Inequitable survival outcomes are also brought about by racial, educational, and ethnic, differences in access to health services, social support, and socioeconomic status. Moreover, it is shown in this literature review that the health of these women is also influenced to a large extent by lifestyle modifications, social factors, and environmental changes. Hence, to ensure that the prevalence rates of cancer are not increased and that survival rates of this group increase, evidence-based and culturally competent preventive measures should be formulated by the healthcare system and health services providers by considering the effect of social determinants of health and other related factors. Language and culturally appropriate health education programmes should be designed by the healthcare system for immigrant women. When immigrant women access the healthcare system, oncall interpreters should be available for their assistance. Relevant support should be provided by welfare and health promotion programmes for this group of women during their cancer survival to decrease the inequities in cancer care. Conducting qualitative research studies that provide a deep understanding of the lived experiences of immigrant cancer survivor women is strongly recommended.

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*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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