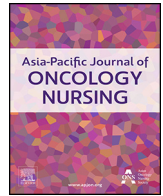


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Original Article

The impact of socioeconomic inequality on access to health care for patients with advanced cancer: A qualitative study

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ABSTRACT

Objective: In Canada, populations experiencing socioeconomic inequality have lower rates of access to screening and diagnosis and higher mortality rates than people from higher-income areas. Limited evidence exists concerning their experiences when living with advanced cancer. We explored how socioeconomic inequality shapes the experiences of patients with advanced cancer.

Methods: We utilized a qualitative study design that combined tenets of hermeneutic phenomenological inquiry and critical theory. Four individuals with advanced cancer from low-income neighborhoods, three family members, and six cancer care providers were accrued through a tertiary cancer center in a western Canadian city. One-on-one interviews and brief notes were used for data collection. Data were analyzed through thematic analysis.

Results: Three interrelated themes were identified: 'Lack of access to socioeconomic supports,' 'Gaps in access to health care resources and services,' and 'Limited access to symptom relief.' Patients experienced inadequate finances, housing, and transportation. Most patients lived alone and had limited family and social support. Patients reported lack of knowledge of available resources and health system navigation issues, including communication problems with providers and among levels of care. Cancer care providers and patients described issues achieving symptom relief as well as challenges associated with extensive disease.

Conclusions: Study findings suggest that socioeconomic inequality interferes with the ability of persons with advanced cancer to access health care and contributes to less optimal cancer outcomes. Socioeconomic inequality may increase symptom severity. Findings call for the development of tailored interventions for populations with advanced cancer and socioeconomic inequality.

Introduction

Cancer is the leading cause of death in Canada¹ and among the leading causes of death in the world.² Two in five Canadians are likely to receive a cancer diagnosis over their lifetime with a quarter of the Canadian population projected to die of cancer.¹ Canadian reports reveal significant improvements in cancer care as shown in the prevalence of cancer and overall survival.³ In 2018, approximately 60% of Canadians who previously had, or were living with, cancer had been diagnosed in

the past 5–25 years.³ Progress in cancer care has not been equal for all Canadians. Populations experiencing socioeconomic inequality are likely to face less optimal cancer outcomes compared to Canadians of higher socioeconomic status.^{4,5} The link between socioeconomic inequality and disparities in cancer outcomes has been reported in other countries.^{6,7}

Many of the problems associated with low socioeconomic status are connected to income inequality, or large income gaps between wealthy people and those living in poverty.⁸ Persons experiencing income inequality face significant social challenges such as substandard housing,

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low educational levels, unemployment, limited access to health care services, and a lack of opportunities for social advancement.^{9,10} In Canada, people in the lowest income quintile had a 7.4 times greater prevalence of substandard housing compared to those in the highest income quintile.¹¹ People experiencing income inequality are prone to experience discrimination and marginalization in the health care system.^{12–14}

The impact of socioeconomic inequality on people's health can be understood through the socioeconomic gradient in health. This perspective recognizes disparities in the health of individuals based on their social status where those at the bottom of the social hierarchy experience higher rates of disease than those at the top.^{15–17} Health differences that result from a lack of access to socioeconomic resources and power, health care, education, and insufficient living and working conditions are understood as health inequities.¹⁷ Health inequities are considered unfair and avoidable because they are associated with social, economic, political, and environmental conditions.^{11,17,18} In this article, we view cancer disparities associated with socioeconomic inequality as a cancer inequity.

Cancer disparities in populations experiencing socioeconomic inequality in Canada are evident in a decreased likelihood of access to screening, early diagnosis, and treatment.^{5,19,20} Disparities in cancer survival affecting people living in low-income areas were reported in Ontario,²¹ a Canadian province with the largest population size in the country. In this study, improvements in cancer-specific survival over the 1993–2006 period were notably larger for the most affluent groups.²¹ Employment status was associated with a higher likelihood of systemic and radiation therapy and high income was associated with an increased likelihood of reconstructive surgery in Canadian women with breast cancer.²² In the United States, low-income Latino and Black men and women with unmet practical needs had a high likelihood of non-adherence to cancer treatment appointments.²³ Income inequalities in four Canadian provinces were found to be associated with variations in the likelihood of receiving supportive care for people with cancer.²⁴ A link between socioeconomic inequality and symptom burden was reported for patients with cancer.²⁵

Socioeconomic inequalities in access to palliative care are a global challenge.²⁶ Income inequality is associated with increased use of acute care services near the end of life, a lower likelihood of not accessing specialist palliative care and a higher likelihood of a hospital death.^{27,28} In Canada, an increased likelihood of aggressive care at the end of life associated with income inequality has been reported.²⁴ Patients with advanced cancer experiencing socioeconomic inequality are likely to experience inequities in access to palliative care.^{29,30}

The spectrum of socioeconomic inequality involves diverse populations including those living in extreme poverty such as people experiencing homelessness. This population requires a specific focus given the multiple social and health challenges they face.³¹ Evidence is growing concerning cancer and palliative care disparities affecting unhoused populations with life-limiting conditions in Canada.^{32–35} There is a dearth of evidence concerning other population groups with low income and advanced cancer in Canada. We report findings from a study where we explored the experiences of patients with advanced cancer and socioeconomic inequality from the perspectives of patients, family members, and their cancer care providers.

Methods

Methodological approach

We conducted a qualitative research study and followed the principles of hermeneutic phenomenology and critical theory. Hermeneutic phenomenology is a rich philosophical tradition and school of thought that highlights the need to understand human experience.³⁶ Through hermeneutic phenomenology, we sought to delineate people's experiences of living with advanced cancer and socioeconomic inequality. Hermeneutic phenomenology integrates the description and

interpretation of people's experiences.³⁷ Description and interpretation are always intertwined.³⁷ The descriptive component guided the focus on direct experiential excerpts from participants' interviews. The interpretive component, on the other hand, guided the development of themes generated through analysis of data. We explored participants' lived experiences with a focus on their symptoms and illness-related concerns. This focus was informed by the literature showing disparities in symptom control associated with socioeconomic inequality.²⁵

Critical theory is another philosophical tradition that draws our attention to conditions that generate oppression with a view to create liberating experiences that challenge both oppressors and oppressive circumstances.^{38–40} We followed Brazilian critical educator Paulo Freire's critical theory approach. Working with people experiencing conditions of oppression and marginalization, Freire highlighted the need to examine systemic forces that create exploitation and dominance such as low wages, inequalities in access to education, health, food, and housing, among others.^{38,39} These systemic forces prevent people from being able to achieve their full potential.^{38,39} In this study, critical theory informed the focus on socioeconomic inequality as a social condition contributing to unjust health outcomes in people with advanced cancer. The critical theory analysis is done through problematization and conscientization.⁴¹ Problematization consists of questioning systemic conditions contributing to oppression.⁴¹ Our work of problematizing involved examining how socioeconomic inequality shaped patients' experiences when living with advanced cancer when doing data analysis and interpretation. Conscientization, in Freire's view, entails a work of personal transformation through critical awareness of unjust conditions contributing to oppression.⁴¹ This self-transformation then leads to taking action to address social injustice.⁴¹ Through conscientization, our hope was to contribute to increasing awareness among team members and cancer care providers of how socioeconomic inequality is an oppressive factor in patients' lives.

Research procedures

Settings and sample

The setting was a tertiary cancer center serving the northern half of a western Canadian province under a universal health care system. We followed purposive sampling and focused on patients with advanced cancer who lived in one of the city's 20 neighborhoods with high poverty rates.⁴² Neighbourhood as a proxy for low income has been used in studies of populations experiencing socioeconomic inequality.⁴³ We excluded populations experiencing homelessness or unstable housing. We estimated a sample size of 12–20 participants would be sufficient to achieve study objectives. Our planned sample size consisted of patients (4), family members (4–8), and cancer care providers (4–8). The sample included patients with advanced cancer and their family members if available and the patient consented to involve them. We invited cancer care providers suggested by patients themselves. A clinical staff member assisted with patient recruitment. Family members and cancer care providers were approached by a study team member following patient's consent.

Data collection

A research assistant (RA) conducted 30–60 min individual and family face-to-face interviews. An individual 10–20 minute face-to-face interview was conducted with cancer care providers. Using a conversational approach, we first invited participants to describe their health experiences from the beginning of their cancer diagnosis. We then asked probing questions to further explore their symptom and health-related concerns. For example, we asked patients about their needs concerning the relief of pain and other problems related to their illness, and their own preferences concerning how best to assist them with these. At the end of the interview, we invited participants (patients and family members) to describe ways in which people in the community could be or have been helpful. These questions served as a guide and the interviewer

often asked additional questions building on participants' descriptions of particular experiences. Family members were asked to share their perspectives with regard to patients' experiences of illness and symptom relief as well as supports or services they had been able to access. Cancer care providers were asked about their patients' disease trajectory, symptom relief or other issues, and supports patients had or could have accessed. Interviews were digitally recorded, transcribed verbatim, verified, and stored within a secure Health Research Data Repository. The RA wrote brief notes to record contextual information. In order to obtain a clinical profile of participating patients and with their consent, we reviewed patient's medical records since the time of first consult at the cancer center to extract data concerning diagnosis, treatments, and symptom scores, as available, based on the Edmonton Symptom Assessment System Revised (ESAS-r)⁴⁴ and demographics. The ESAS-r is an 11-point numerical rating scale for nine common symptoms and a 10th patient-reported problem.⁴⁵ Higher scores reflect higher symptom intensity.⁴⁵ We employed REDCap[®] for clinical data extraction.

Data analysis

Data analysis began shortly after data collection and involved one researcher (AS) and two research trainees (BL, BA). Themes were generated following a thematic approach.³⁷ Team members read and analyzed each transcript individually, followed by weekly or biweekly meetings to discuss preliminary understandings, initial codes, and possible themes. These themes were developed or discarded through dialogue, and analysis of new data. To increase the critical perspective and depth of data analysis and interpretation, the themes were later reviewed and further refined by one researcher (AS) and another research assistant (LH). NVivo12[®] served to organize transcripts, and manually analyze data. Interview data from patients were considered core experiential data while data from family members and cancer care providers served to expand understanding of patients' experiences and their context of care. The analysis generated a rendering of patients' experiences that integrated the perspectives of all participants.

We incorporated strategies to meet qualitative rigor criteria and control bias.⁴⁶ *Credibility* or the trustworthiness of study findings was achieved through purposive sampling, having multiple data sources, in-depth interviews, and extensive data analysis. *Dependability*, or the ability to produce similar study findings in comparable settings was achieved by keeping an audit trail, having independent data coders, engaging one study team member in data collection activities, and establishing inter-coder agreement. *Confirmability*, or the quality of findings to be verified by others, was met through the conduct of subsequent interviews that served to inform and confirm emerging themes, engaging expert clinicians and researchers (WD, BS, SW, AS, NB) in the interpretation of findings, and exploring participants' experiences through the eyes of diverse participants. Thick descriptions and multiple data excerpts were created to increase *transferability*, or the quality of findings to be applicable in other contexts. [Table 1](#) provides an overview of study strategies to meet rigor.

Ethical considerations

The study received ethics approval from the Health Research Ethics Board of Alberta Cancer Committee (IRB No. HREBA.CC-16-0832) on August 29, 2016. All participants signed a written informed consent.

Results

Thirteen study participants were accrued, including four patients with advanced cancer, three family members, and six cancer care providers. Patient ages ranged from 55 to 64 years old, three were males and one female. Three patients were born in Canada (one self-identified as Indigenous), one was an immigrant. [Table 2](#) provides an overview of patient demographic and clinical characteristics. Two patients had

Table 1
Qualitative rigour strategies.

Criteria	Strategies
Credibility	Purposive sampling and in-depth interviews with study participants Data triangulation by incorporating multiple data sources Prolonged data analysis, transcripts reviewed by independent coders prior to data analysis meetings
Dependability	Study documentation kept to generate an audit trail. All data collection done by the same study team member to ensure consistency in data collection processes.
Confirmability	High degree of agreement between data coders Subsequent interviews served to further inform and verify initial understandings Data interpretation and discussion by expert researchers and clinicians Analysis of patient experiences through the views of multiple participants served to further develop and verify themes
Transferability	Many commonalities identified across participants Thick descriptions to allow readers to explore potential application in their own contexts. Research findings similar to those of studies in other countries Study findings describe common human experiences and needs that may translate to other contexts

Table 2
Demographic and clinical profile of patients (N = 4).

Characteristics	n
Gender	Female (n = 1) Male (n = 3)
Age, mean (range)	59.25 years old (55–64)
Diagnosis	Advanced cervical cancer (n = 1) High-grade myxofibrosarcoma (n = 1) Advanced prostate cancer (n = 2)
Time from initial cancer diagnosis to metastatic disease	Metastatic disease at presentation or within 6 months (n = 3) 6 years (n = 1)
Housing situation	Lives alone (n = 3) Lives with relatives (n = 1)
Cancer treatment received	Surgery (n = 1) Chemotherapy (n = 2) Curative radiation (n = 2) Palliative radiation (n = 4) Androgen deprivation therapy (n = 2)

advanced prostate cancer, one had advanced cervical cancer, and one had a high-grade myxofibrosarcoma. Three patients had metastatic disease at time of diagnosis or within a 6-month period. All patients had reported severe symptoms in one or more cancer care consults. [Table 3](#) provides an

Table 3
Patient symptoms scoring as severe^a (N = 4).

Symptom	n
Pain	4
Lack of appetite	3
Tiredness	2
Depression	1
Anxiety	1
Constipation	1
Drowsiness	1
Wellbeing	2

^a Symptoms scoring ≥ 7 on a 0–10 scale with 10 being the worst. Data based on any ESAS (Edmonton Symptom Assessment System) collected since diagnosis.

overview of patients' severe symptom scores based on the ESAS-r (≥ 7) recorded at any point since their cancer diagnosis. The most commonly severe symptoms were pain ($n = 4$) followed by lack of appetite ($n = 3$). Two participants reported severe tiredness while single cases of severe depression, anxiety, constipation, and drowsiness were identified. Two patients rated their well-being very low (≥ 7).

We had three family members including a sibling and sister-in-law for one participant, and a sister for another participant. Providers included radiation oncologists, nurse practitioners, registered nurses, and radiation technologists (plural used to protect participants' anonymity). Sociodemographic characteristics for family members and cancer care providers were not collected.

Research findings revealed three interrelated themes: 'Lack of access to socioeconomic supports,' 'Gaps in access to health care resources and services,' and 'Limited access to symptom relief.' Below, we describe these themes with selected participants' excerpts. Table 4 provides an overview of the themes and subthemes with selected excerpts from participant interviews.

Lack of access to socioeconomic supports

All study participants described difficult experiences associated with a lack of income and challenges in accessing supports. These affected their ability to meet their personal and health care needs. The most

commonly affected areas were related to finances, housing, and transportation. Limited family support was also reported.

Financial challenges

Financial constraints interfered with patients' ability to afford medications, equipment, and/or medical supplies. Some patients received income assistance. One participant (P2) reported changes in work benefits that resulted in a prolonged lack of income while another (P1) recalled the need to save money to buy what she needed. Providers expressed their awareness of their patients' financial issues and recognized the need to understand each person's financial reality. Low income resulted in issues with access to medications and supplies. A patient (P2) described difficulties securing insurance coverage for pain medication, "My benefits company refused to pay for them because they said that I already had a supply... I had to pay for it... and there's a big difference between 4 dollars and 41 dollars".

Inadequate housing

Housing was a serious challenge for participants. One patient (P2) was at risk of losing his property due to mortgage default and another (P4) lived in a rented, unfinished basement and shared, "I can barely lift some stuff... Front stairs, there is no railing... hopefully we can get a new deck and proper hand railings, so I can get up and down the stairs". His (P4's) cancer care provider described the challenges arranging care in the

Table 4

The impact of socioeconomic inequality on access to health care for patients with advanced cancer. Overview of study findings.

Theme/Subtheme	Quotes
Theme 1. Lack of access to socioeconomic supports	
Financial challenges	One treatment can cause constipation. That's... not covered. One, it can cause diarrhea. That's not covered... Being on [income assistance] then, all that comes out of your grocery money. (P1) Yeah, it's a [Nicotine] spray – you just spray it in. And I can take it once every 15 minutes. But I was trying to go a half hour, 45 minutes... Yeah – well, because only so many shots in a thing... and that's 55 dollars, plus... (P4)
Inadequate housing	I'm kinda stuck [late on mortgage payments], I can't do anything about it. And they, [mortgage lender] told me "well you know I understand your situation but we've got protocol to follow." (P2) I wish we could have done more for [P3] in terms of making his living more accessible for where he is... Rather than requiring [P3] to move to a different city, and move in with family... (P3-CCP)
Transportation difficulties	The only thing that's really holding [P4] back is that transportation thing... because... he has a hard time breathing. (P4-R) He had difficulty coming in... and when we made our first appointment with him, he ended up having to cancel because his daughter wasn't here to bring him in (P4-CCP)
Limited family support	We weren't raised... with, "I love yous," and hugs and kisses and... all that stuff. It was just a bunch of people in the same house... and it wasn't until I got cancer that I started hearing from them more... (P1) Well... there was seven of us. We just lost... our sister two years ago... And then we lost our brother... So there's... five of us left... but we're all... everybody's estranged. (P4-Relative)
Theme 2. Gaps in access to health care resources and services	
Lack of knowledge of available resources	And how can you support them where they're at, and... what are you trying to get to? And how do you access services or what he may need... (P3-R) They need to tell you more what the social worker can do, because... I wouldn't have thought of going to them for help with finances. (P1)
Issues navigating the system	I kinda got lost in the shuffle... Like I never got information back from a lot of people... There's just too many people shuffling around the same patient. (P1) When I go to get my prescriptions, I – basically, I gotta go over the prescription forms two, three times to make sure that he's got everything on there... And I take a list with me, of what I need. And he still misses stuff... (P4)
Theme 3. Limited access to symptom relief	
Access to symptom relief and related health concerns	Just the drive to get up and go, it just isn't there unless you have got good pain relief, it's just not there. I haven't got the energy, when I get up I feel weak. (P2) It wasn't... consistent the more radiation the more swelling, the more pain... It was like 'I'm getting some pain from the radiation but the tumour feels better, but... now I can't sit on it comfortably' (P2-CCP). Well, it was... for me to walk any distance... before I could walk to my doctor's office in 10 minutes. Now, it takes me... sometimes, 40 minutes to get there. (P4) Last June. And everybody was helping me. [Chuckling] All these young guys were helping me and I said, "Jeez, I'm not that old." But I couldn't get around. I was sick. (P3)
Treatment side effects and complex disease presentation	I think it had a lot to do with the morphine [unsteadiness]. I think they were giving me too much morphine. (P3) It was basically a lot of fatigue and tiredness... for the most part, that's what he was struggling with. And I think we've had—so we ended up having to hold his drug a bit. (P3-CCP1) I was in and out of the hospital... in the week staying and then going home on weekends after treatment. And then I had the surgery, and the wound wouldn't heal... Because it had been heavily radiated. (P2)

P, Participant; R, Relative; CCP, Cancer Care Provider.

home because of a lack of a fixed address and his sister described risks due to inadequate housing, “He’s fallen a couple of times in that suite, at night, getting up to go to the bathroom”.

Transportation difficulties

All participants’ needed transportation assistance to access treatments at the cancer center. Their providers made referrals to social services to assist with these needs. One participant (P1) used public transportation to go to appointments, one (P3) had relatives for transportation support, and another (P4) paid friends for car rides. One participant (P2) who lived far from the cancer center, shared “I had to drive here, and then back for the weekends. I mean it was taking like 4, 4½, 5 hours to get home. Because I’d stop and stretch my leg.” His (P2’s) provider indicated, “I put a social work referral in regarding financial assistance, travel, and then somebody from social work contacted”.

Limited family support

Our findings revealed limited family presence in the lives of study participants. Only two patients (P3 and P4) suggested relatives for inclusion in the study. One participant (P1) expressed a preference not to have family involved in her care and another (P2) had no relatives in the country. Among those with relatives P3 moved in with his brother and sister-in-law following a decline in his health status, and P4 did not want to move in with his sister. Lack of family support posed challenges for providers, “Trying to figure out how to best help him [P4] under his circumstances... is what stood out for me. Because... he didn’t have a consistent caregiver”.

Gaps in access to health care resources and services

Lack of knowledge of available resources

Participants described challenges accessing health care services and resources as well as information about these. One patient (P1) mentioned it did not even occur to her to look for resources in the community. She shared “They need to tell you more what the social worker can do... I wouldn’t have thought of going to them for help with finances.” Unfamiliar with the Canadian health care system, P2 found it difficult to identify resources and expressed a need to have somebody to provide information about services and benefits, “And basically it’s... having the knowledge to know exactly what is fully available”. Relatives of P3 shared they had to find out about services, “If you don’t know about ‘em or where to go for them, that’s the tough part.” Providers reflected on ways of supporting their patients. P1’s provider reflected, “But it – it never came across as... significant, urgent... so, maybe we didn’t ask in the right way, or maybe it wasn’t something that she wanted to... bring up.”

Issues navigating the system

Participants recalled communication problems within the health care system that resulted in delays in care. One participant (P2) felt a lack of access to information related to his diagnosis and treatment and a feeling of not knowing what to do “I wasn’t sure of what to do, or who to see, and I wasn’t really given... anybody’s contact information....” The relatives of another patient (P3) described being unsure about his treatments because of his confusion. Another patient (P4) described, “The day after I saw [oncologist], in the mail, I’ve got my whole schedule of chemo and radiation treatments... And I found out that day that it was cancer”.

Limited access to symptom relief

Access to symptom relief and related health concerns

Achieving symptom relief was at times challenging for both providers and patients. Patients reported diverse physical and psychosocial concerns including pain, functional limitations, medication side effects, and anxiety. Providers described challenges related to extensive disease and intractable symptoms. One participant (P1) described episodes of severe pain that led her to alarmingly increase her pain medication. Her

provider described the challenges, “I recently referred [P1] to medical oncology... the trigger was... the fact that she had escalated her Tylenol® #3 to 30 tablets a day”. After undergoing palliative radiation, a patient (P3) experienced improvements. His provider shared, “[P3] was doing really well when we called him... So his pain had actually improved entirely. And then... all of his ESAS symptoms had decreased at the time of follow-up”.

Treatment side effects and complex disease presentation

Patients and providers described issues associated with extensive disease and complex symptom experiences. One participant (P1) described issues that resulted in pain, “For about a week, I was really constipated. And I even had to go to the hospital and have an enema... it got to the point where... it was pressing on things and I couldn’t pee”. After reaching maximum radiation doses, her provider, described the limited options available, “I’d see her in clinic, and say... it’s progressing in the pelvis... It was a debate about whether palliative treatment options would do anything meaningful for her”. Another patient (P2) described multiple hospital admissions to manage a skin-related problem that resulted from radiation treatments, “Because it had been heavily radiated, and the skin was useless is what the doctor said. So it was kind of back and forth”.

Discussion

Study findings suggest that socioeconomic inequality interfered with patients’ ability to access social supports, health care services, and symptom relief. Participants experienced socioeconomic challenges mostly related to finances, transportation, and housing. They reported a lack of knowledge of available resources and difficulties navigating the health care system. Findings showed that participants experienced difficulties attaining symptom relief in part because of complex disease presentation, lack of supports, and socioeconomic challenges. Findings suggest intersections among patients’ socioeconomic challenges and their health care and social needs.

Study participants struggled to access socioeconomic supports and reported issues related to finances, housing, and transportation. Health equity scholars Whitehead and Dahlgren discuss the concept of economic access, or the affordability of health services, as an important dimension of access to health care.¹⁸ In Canada, the economic burden of cancer ranges from significant medical and non-medical out-of-pocket costs to indirect costs such as loss of employment and the psychosocial toll of suffering and reduced quality of life.⁴⁷ A diagnosis of advanced cancer can lead to or exacerbate socioeconomic inequality due to high demand for resources.⁴⁸ Study participants described challenges covering health care-related expenses due to limited income. They experienced unsuitable housing for their health needs and had limited access to transportation. Findings related to housing align with Canadian reports showing that low-income groups have the highest housing needs.¹¹ Transportation barriers in access to cancer care have been reported for people experiencing socioeconomic inequality.⁴⁹ In addition, increased transportation demand was reported for people diagnosed with more advanced cancer.⁵⁰ Canadian studies with people experiencing homelessness and advanced cancer and other life-limiting conditions reveal how severe social inequalities pose a major barrier in access to health care and cancer care.^{34,35,51} Research to continue to delineate how socioeconomic inequality affects other population groups with advanced cancer is needed.

Study participants reported difficulties accessing health services and resources as well as navigating the health care system. Lack of access to cancer-related information was found to increase risk of delays in access to care in underserved Latina breast cancer survivors.⁵² In this study, women who lacked information about treatment options felt rushed to make decisions about their care.⁵² Educational interventions to meet the cancer and health system knowledge needs of underserved communities may serve to ensure their timely access to care. An educational

intervention tailored for Latino cancer co-survivors from low-income households increased both their cancer knowledge and self-efficacy.⁵³ Patient navigation is another intervention to address cancer disparities through the provision of health and social supports for underserved populations.⁵⁴ Patient navigators provide personalized care, patient education, care coordination, advocacy, and resolution of needs.^{55–57} A patient navigator program in Alberta, Canada, reported a decrease in emergency department visits and acute care admissions, increased assistance dealing with emotional and practical issues, and better coordination of care.⁵⁸

Findings suggest that study participants suffered from inequities in health outcomes such as inadequate pain and symptom relief and extensive disease presentation. In part, this was the result of socioeconomic inequality, however, other systemic and individual factors may be at play. Inequities in palliative care outcomes such as a decreased likelihood of physician home visits, home deaths, and access to supportive care at the end-of-life are reported for people experiencing low income.^{29,59,60} Inequities in symptom relief associated with low income and ethnicity for patients with cancer are reported.^{61–63} Extensive or aggressive disease also made it challenging to achieve symptom relief. Studies suggest a relationship between socioeconomic disadvantage and aggressive or invasive cancers.^{64–66} The link between socioeconomic inequality, advanced disease, and symptom burden poses the need to consider early access to palliative care to achieve better outcomes for this population. Early palliative care facilitates access to early treatment of symptoms and the prevention and management of potential complications,⁶⁷ may increase quality of life and symptom relief,⁶⁸ reduce aggressive care at the end of life, and improve survival.⁶⁹

Implications for nursing practice and research

Study findings provide an understanding of the experiences of patients with advanced cancer experiencing socioeconomic inequality in a western Canadian city. Research studies are needed to expand this understanding, continue to examine underlying roots of health inequities, as well as interactions among diverse systemic conditions that exacerbate inequities. Canadian scholars have called for qualitative studies of racialized populations to examine barriers in access to health care,^{70,71} a group experiencing elevated rates of socioeconomic inequality.⁷² In addition, there is a need to increase health equity education in the curricula of health professions. The integration of social justice and advocacy in the curriculum through educational projects has been recommended as a strategy to address health disparities.⁷³ Nurses can play a leadership role in health equity efforts and can be catalysts of change in their practice areas.⁷⁴ Charting socioeconomic inequities affecting patients in their health records,⁷⁵ dismantling institutionalized racism,⁷⁴ or advocating for change before policy makers⁷⁴ can be steps towards achieving equity for all.

Limitations

We faced challenges recruiting patients and their family members. However, we achieved our planned sample size. Studies have reported challenges recruiting patients with cancer experiencing low income.⁷⁶ Although our sample size was small, data provided sufficient depth to delineate participants' experiences. We explored the experiences of four patients, yet integrating providers, relatives, and clinical data assisted to develop a deeper understanding. Gadamer writes that the question determines in a sense the direction of the answer.⁷⁷ Our questions were centered on participants' experiences in the context of socioeconomic inequality with a focus on their symptom experiences. Participants were informed of the study's purpose and this may have led them to frame their answers in light of social inequality. It is likely that other elements of their experiences remained concealed. We do not purport to provide an exhaustive rendering of experience. Rather, these findings contribute to unveiling experiences about which little is known in Canada.

Members of underserved populations are historically underrepresented in research. In this study, we were able to learn from the experiences of four individuals representing underserved groups. Participants were at different stages of their advanced cancer and their experiences may differ from other individuals. Findings may not reflect the experiences of patients experiencing socioeconomic inequality in other settings or countries due to diversity of health care systems, palliative care services, and resources.

Conclusions

Achieving health equity requires that we examine both the conditions underlying inequities in access to health care and those that result in inequitable health outcomes.⁷⁵ In 2021, 7.4% of the Canadian population lived below the poverty line.⁷⁸ The poverty rate, however, was much higher for underserved populations.⁷⁸ Knowledge of how socioeconomic inequality affects underserved groups with cancer can inform the design of tailored interventions to improve cancer-related health equity and outcomes. A historical lack of trust affecting underserved communities due to systemic racism, discrimination, and marginalization may hinder the efforts of funders, researchers, and cancer care system stakeholders. Community engagement, respect, and reciprocity can serve to build trusting relationships and effect change together with those largely affected by the burden of socioeconomic and health inequality.

Ethics statement

The study received ethics approval from the Health Research Ethics Board of Alberta Cancer Committee (IRB No. HREBA.CC-16-0832). All participants provided written informed consent.

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CRedit authorship contribution statement

Anna Santos Salas: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Supervision, Validation, Visualization, Roles: Writing – original draft, Writing – review & editing. **Bronwen LeGuerrier:** Data curation, Formal analysis, Investigation, Methodology, Project administration, Visualization, Roles: Writing – original draft, Writing – review & editing. **Lucas Horvath:** Conceptualization, Data curation, Formal analysis, Validation, Visualization, Roles: Writing – review & editing. **Nahyeni Bassah:** Conceptualization, Roles: Writing – review & editing. **Bisi Adewale:** Data curation, Formal analysis, Visualization, Roles: Writing – review & editing. **Olga Bardales:** Formal analysis, Writing – review & editing. **Wendy Duggleby:** Conceptualization, Funding acquisition, Validation, Roles: Writing – review & editing. **Bukola Salami:** Conceptualization, Funding acquisition, Validation, Roles: Writing – review & editing. **Sharon M. Watanabe:** Conceptualization, Funding acquisition, Validation, Roles: Writing – review & editing. The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author [Anna Santos Salas]. The data are not publicly available due to ethical considerations and information that could compromise the privacy of research participants.

Declaration of generative AI and AI-assisted technologies in the writing process

No AI tools/services were used during the preparation of this work.

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