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Navigating cancer care in Cameroon: a theory-guided inquiry on patient experiences at Mbingo Baptist Hospital

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Abstract

Background Cancer remains a leading cause of morbidity and mortality globally, with rising incidence rates, especially in low- and middle-income countries (LMICs). This burden is pronounced in Sub-Saharan Africa (SSA), where Cameroon faces escalating cancer challenges, primarily due to inadequate healthcare infrastructure and limited access to early detection and treatment. The study aimed to explore the experiences of cancer patients at Mbingo Baptist Hospital in Cameroon in Cameroon, focusing on the barriers to obtaining quality diagnosis, treatment, and follow-up care, and to examine the impact of these challenges on their physical, emotional, and social well-being.

Methods This study employed a qualitative descriptive design, conducting in-depth interviews with eleven cancer patients in December 2023 and January 2024. Participants were selected using purposive sampling, and data were analyzed using thematic analysis to identify key barriers in the cancer care pathway. The biopsychosocial model guided the exploration of patients' experiences, capturing the interplay between biological, psychological, and social dimensions of their healthcare journey.

Results The analysis revealed significant delays in diagnosis, substantial financial burdens, and emotional and psychological distress among patients. Key themes identified include challenges in the diagnosis and treatment processes, the financial impact of cancer care, emotional and psychosocial repercussions, and difficulties in accessing healthcare services. Despite facing these obstacles, patients also reported instances of resilience and support within their families and communities.

Conclusion The study underscores the urgent need for systemic improvements in cancer care in Cameroon and similar contexts. Enhancing healthcare infrastructure, broadening financial protection, and fostering awareness and early detection are imperative. Additionally, integrating a holistic care approach that considers the biopsychosocial aspects of patient health is crucial for improving outcomes. Addressing these recommendations requires collaborative efforts from governmental and non-governmental organizations, healthcare providers, and the international community to tailor cancer control strategies to the unique needs of LMICs, aiming to alleviate the cancer burden and enhance patient quality of life.

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Keywords Cancer care, Cameroon, Sub-Saharan Africa, Patient experiences, Healthcare barriers, Biopsychosocial model

Introduction

Cancer represents one of the leading causes of morbidity and mortality worldwide, with approximately 19.3 million new cases and nearly 10 million cancer-related deaths in 2020 [1]. The global burden of cancer is expected to grow to 28.4 million cases by 2040, a 47% rise from 2020, largely due to population growth and aging [2]. The most common cancers globally are breast, lung, colon, rectum, and prostate cancers. Low- and middle-income countries (LMICs) bear a disproportionate share of the cancer burden, primarily due to limited early detection and restricted access to treatment facilities. The challenges in LMICs, where healthcare infrastructure and resources are often insufficient, exacerbate cancer mortality and morbidity rates [1].

Sub-Saharan Africa faces unique challenges in the fight against cancer, characterized by an increasing burden of both infectious agent-related cancers (such as cervical, liver, and Kaposi sarcoma) and cancers associated with westernized lifestyles (such as breast, colorectal, and prostate cancer). The region is expected to experience a 70% rise in annual cancer cases and deaths by 2030, driven by population growth, aging, and the adoption of behaviors associated with economic development and urbanization [3]. However, healthcare systems in many Sub-Saharan African countries remain unprepared to address this rising burden effectively, hindered by a lack of infrastructure, human resources, and comprehensive cancer control strategies [4].

Cameroon mirrors these regional challenges, grappling with a significant and growing cancer crisis. Over 20,745 new cancer cases and approximately 13,199 cancer deaths are reported annually, with a high incidence-to-mortality ratio of over 63%, indicating a severe healthcare challenge [5, 6]. Although critical services such as surgery and chemotherapy are available in urban centers like Yaoundé and Douala, access to comprehensive cancer care remains limited due to resource constraints. Prior studies have examined the systemic barriers that patients encounter in obtaining timely diagnoses and adequate treatment, with findings underscoring the impact of delayed diagnosis, limited trained personnel, and the scarcity of specialized treatment facilities [6–8].

The burden of cancer in Cameroon predominantly affects adults, with breast and cervical cancers being the most common in women, while prostate and liver cancers are prevalent in men [5]. These cancers underscore significant obstacles in both diagnosis and treatment

access, alongside the socio-economic challenges that many patients face. Efforts like the National Cancer Control Plan aim to mitigate the impact of cancer through a comprehensive approach that includes prevention, diagnosis, treatment, and palliative care [6]. However, progress has been slow, and the substantial hurdles to effective implementation highlight the need for improved public health strategies.

Mbingo Baptist Hospital (MBH) is a faith-based hospital in the northwest region of Cameroon, operating a comprehensive oncology unit led by medical and radiation oncologists. This unit includes specialized nursing staff and offers palliative care. A radiotherapy bunker is under construction with plans for a linear accelerator, marking a significant advancement for cancer treatment services in the region. As a comprehensive cancer center, MBH presents a unique opportunity to understand the full patient experience within Cameroon's healthcare landscape, especially given the limited data and resources for cancer care in rural areas. The lack of consistent data collection impedes the accurate estimation of cancer burden at MBH, including diagnosis types and treatment outcomes, thus limiting a thorough understanding of patient needs. This study was conducted as a prelude to a two-pronged quality improvement project which includes formalizing cancer registration at MBH and setting up a patient navigation service to assist patients throughout their treatment journey (Pfizer grant number: 76049131).

While previous studies provide valuable insights into systemic and structural barriers, there remains a gap in understanding the personal experiences of patients navigating the cancer care continuum in Cameroon. Our study aims to fill this gap by focusing on the lived experiences of patients, particularly those receiving care at Mbingo Baptist Hospital. By employing a phenomenological approach, we seek to capture the nuanced, multi-dimensional impact of these barriers on patients' physical, emotional, and social well-being. This qualitative perspective complements existing research by offering a deeper understanding of how systemic issues manifest in individual patient experiences, thereby informing more patient-centered interventions and policies.

Method

Study design

This study adopted a qualitative descriptive design to explore the experiences of cancer patients seeking care in Cameroon. A framework analysis approach was uded Afungchwi et al. BMC Cancer (2025) 25:958 Page 3 of 12

to guide data interpretation, allowing an examination of the biological, psychological, and social dimensions of patient experiences using the biopsychosocial model. This approach was selected for its practicality and ability to organize complet narrative data into structured, actionable themes [9].

Study setting

The study was conducted at Mbingo Baptist Hospital's oncology unit, located in Cameroon's Northwest Region. This site was selected due to its status as a comprehensive cancer care provider in a resource-limited setting, equipped with a multidisciplinary team and recent infrastructure developments. Additionally, this study served as a prelude to establishing a patient navigation system for the oncology unit, requiring a clear understanding of the challenges that the patients face. The setting also offered access to a diverse population of adult cancer patients experiencing varying stages of diagnosis and treatment.

Participants and sampling

A convenience sampling method was employed, allowing us to recruit adult patients from the oncology unit who were available and willing to participate. The population comprised all adult male and female patients receiving treatment for any type of cancer at the hospital's oncology unit during December 2023 and January 2024. A sample size of 15 was chosen to allow for in-depth exploration of each participant's experience while balancing feasibility and time constraints. Transcripts were coded simultaneously within the same period as the interviews and data saturation was detected with no new themes emerging from additional interviews and enrolment was stopped after 11 interviews [10].

Recruitment and enrollment

Participants were identified and approached by an oncology nurse familiar with the patient population, using the oncology unit's registry. Patients were provided with study information and invited to participate. Eligible participants included adult patients (aged 18 and above) receiving treatment at the hospital who could communicate in English, French, or Pidgin English. Exclusion criteria included patients in critical condition or those unable to provide informed consent due to cognitive impairment. Informed consent was obtained from all participants before proceeding with the interviews.

Data collection

Semi-structured in-depth interviews were conducted in a private counseling room within the oncology unit, based on the researchers' intention to ensure confidentiality and comfort. All interviews were conducted during the day within office hours. The interviews were conducted between December 2023 and January 2024, lasting between 40 and 65 min, with an average duration of 55 min. The interview guide was developed by the research team informed by 10 shorter interviews that asked individuals to tell their story, with input from literature on cancer care in low-resource settings, particularly focusing on the biopsychosocial model as a guiding framework [11]. The biopsychosocial model informed the questions and probes, designed to elicit insights into biological, psychological, and social aspects of participants' experiences. For instance, questions explored physical symptoms and treatment effects, emotional and psychological impacts, and the social and financial support received.

Pilot testing

To enhance the clarity and sensitivity of the interview guide, pilot testing was conducted with two adult cancer patients who met the inclusion criteria but were not enrolled in the final study. The pilot aimed to evaluate the comprehensibility, relevance, and emotional appropriateness of the questions. Based on feedback from these sessions, minor revisions were made to simplify medical terminology, adjust question sequencing for smoother flow, and include additional probes related to financial strain and emotional coping. This process helped ensure that the guide was contextually appropriate and methodologically sound, and it strengthened the rigor of the data collection approach [12].

Data analysis

Thematic analysis, guided by the biopsychosocial model, was employed to analyze the qualitative data systematically. All interviews were audio-recorded, transcribed verbatim, and imported into Atlas.ti 9 for data organization and management, enabling structured coding and retrieval of thematic content. This approach involved open coding, charting codes into a matrix aligned with the biological, psychological, and social domains, and interpreting patterns across cases. This approach facilitated both inductive and deductive theme development, with the model helping to classify but not constrain emergent themes [13].

One nurse researcher coded the data. The codes were reviewed by two additional researchers; one gynecologic oncologist and a medical anthropologist to enhance reliability, and discrepancies were resolved through discussion. Themes were identified through collaborative discussion and categorized within the predefined domains of the model, ensuring consistency while preserving the richness of the participants' narratives.

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To increase rigor, the guide underwent pilot testing with two patients who were not included in the study sample. Throughout the study, reflexivity was maintained through team discussions, particularly on potential biases due to the researchers' professional backgrounds in oncology and healthcare. Additionally, the study adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist to ensure comprehensiveness and rigor [14].

Ethical considerations

Ethical approval was granted by the Cameroon Baptist Convention Health Board Institutional Review Board (CBCHBIRB 2023–65). Participants received study information sheets in English or French, with interpretation to Pidgin English where necessary, and all provided written informed consent.

Findings

Eleven interviews were conducted over a three-month period from November 2023 to January 2024. There were 9 (81.82%) females and 2(18.18%) males. This was not a statistically significant difference (p=1.0). The ages ranged from 19 to 80 years with a median of 57(IQR 19.5). A majority of the participants were married (6, 54.5%), while two (18.8%) were single, two (18.8%) widowed, and one (9.09%) divorced. Majority (7, 63.6%) were diagnosed in 2023, and one (9.1%) each for 2022, 2021, 2019, and

2018. Majority of participants had primary school level education (6, 54.6%), two (18.2%) had secondary level education, one (9.1%) had completed high school, while two (18.2%) had no formal education. The most common occupation was housewife (4, 36.4%). Other occupations were trader, farmer, student, security guard, teacher. The monthly income in USD ranged from 0 to 269.95 with a mean of 40.08(SD0.09). The thematic analysis identified eleven main themes that encapsulate the experiences of the participants. We discuss the themes as they relate with the biopsychosocial model framework of this study. Figure 1 shows the components where each theme falls and how the themes intersect between the various components.

Biological component

Theme 1: diagnosis process

Some patients reported positive aspects of their diagnosis process, particularly regarding early detection and proactive health-seeking behaviors. For example, one patient noted,"I had no problem. It started just like a little lump. When I discovered the abnormality, I went to the health center at Sabga, and from there I was referred to Mbingo Annex Bamenda" (Participant 004). Another patient reflected on the importance of immediate action, stating,"I felt there was a lump inside my breast...When I was referred, I didn't waste any time and the next day I was here" (Participant 005). These experiences highlight



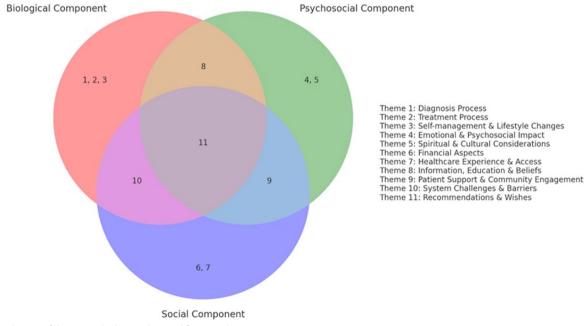


Fig. 1 Distribution of themes in the biopsychosocial framework

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the importance of early detection and the effectiveness of the referral system in some cases.

However, the journey to a diagnosis was not without its hurdles, with many patients experiencing significant delays and misdiagnoses. Delays in diagnostic investigations were common, with one patient recounting,"After a month I was called by a staff of the hospital and the result handed over to me. I was made to understand that I was suffering from cancer"(Participant 001).

Misdiagnoses compounded the emotional toll on patients. One recounted being initially told their symptoms were due to "wax" [vaginal warts] before later learning they had cancer (Participant 001). Another patient shared a harrowing experience of being incorrectly treated for gastric issues when they were actually suffering from cancer (Participant 006).

Health system delays were also a source of frustration and despair, with one patient directly blaming the health system,"I am blaming (*named hospital*). I am not happy with them. They said it was not cancer...Look at the torments I am going through now"(Participant 007).

Theme 2: treatment process

Some patients had positive experiences regarding the explanation of their treatment plans, which helped them understand the course of their treatment and set expectations. One patient appreciated the thorough explanation, stating,"They explained to me my diagnosis and said with the treatment, it was going to limit the spread of the disease. The doctor explained to me that they had to start with the treatment then after the treatment they would be able to do the surgery"(Participant 004). This clarity provided patients with a sense of direction and hope, as another recounted,"I have been informed that I shall be administered 6 sessions of chemotherapy. That after the 6th session I shall undergo surgery to remove the mass I am having in my tubes"(Participant 006).

However, the treatment process was not without significant challenges. Many patients faced harsh side effects from their treatments, which were often described in vivid and distressing terms. One patient detailed their ordeal,"The medicine is very powerful and disturbing. At times when you take the medicine you are only vomiting. You lost appetite to eat. My legs and fingers have become black...It is really disturbing me in particular"(Participant 007). Another patient echoed this sentiment, highlighting the unbearable pain and side effects,"With all the pains one undergoes, and other side effects after chemo, I think it is unbearable"(Participant 010).

Compounding these difficulties was the lack of clear information regarding the treatment. Patients frequently reported not receiving adequate explanations about their treatment plans, expected outcomes, or how to manage side effects. One expressed frustration, saying,"The medical staff did not tell me the cause, nor how it was going to be treated. No nurse nor medical doctor was explicit as to what was to be done to me"(Participant 001). The absence of detailed information left patients feeling uncertain and anxious, with another stating,"I do not know. I think they started with chemotherapy before ending up removing the breast...I was always coming after three weeks"(Participant 005). These negative experiences highlight the importance of effective communication and support systems to help patients navigate the complexities of cancer treatment.

Theme 3: self-management and lifestyle changes in cancer patients

Several participants made significant alterations to their diets, incorporating more fruits and vegetables, reducing consumption of certain foods, and abstaining from alcohol. For instance, one patient mentioned,"I have changed my diet as I now consume mostly fruits. The doctor has advised that I eat a lot of fruits and avoid things like plantains and rice"(Participant 008). Another noted the careful avoidance of alcohol and a shift towards more fruit and vegetable consumption (Participant 009).

Patients also shared the compounded challenges of managing cancer on top of other chronic conditions. One individual, grappling with HIV alongside cancer, expressed the emotional weight of dealing with multiple serious health issues:"First of all I am HIV positive... and I never thought for a moment that another illness of such a magnitude can befall me"(Participant 001).

The reasons patients cited for undergoing treatment were deeply personal and varied. One patient found motivation in their innocence regarding the cause of their illness, stating,"What is giving me the strength to undergo treatment is the fact that I am innocent as to the cause of my illness... With medical treatment. I am going to get well"(Participant 009).

Patients pondered over the potential reasons behind their cancer diagnoses. Queries ranged from dietary causes to hereditary factors, with one patient questioning,"I was wondering if it was the types of food that I was eating that brought the cancer?"(Participant 004). Another considered mystical reasons, reflecting on the mysterious onset of their condition (Participant 011).

The prospect of chemotherapy was met with apprehension by some, primarily due to concerns about its cost and side effects. One patient explicitly stated their dread of the treatment:"If they tell me you will start chemotherapy then I'll say let death come and take me because chemotherapy is money, it is costly"(Participant 002).

Before seeking hospital treatment, some patients attempted to manage their symptoms through

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self-medication, often based on advice from non-medical sources. One recounted"I took so many fungi medicines and many types of antibiotics without the doctor's prescription"(Participant 002).

Psychosocial component

Theme 4: emotional and psychosocial impact

Despite the overwhelming nature of a cancer diagnosis, many patients find strength and courage within themselves and from their support networks. This resilience is often fueled by a determination to fight the disease and a hope for recovery. For instance, one patient expressed a proactive attitude,"I just decided not afraid of anything. I told myself that the only way out is to embrace treatment"(Participant 001). Another found motivation in familial responsibilities,"Just from the desire to get well and take care of my children, other family members and loved ones"(Participant 003). The act of sharing their experiences in interviews also provided emotional relief for some, as one patient remarked, "Yes. Communicating with you has distracted me a bit and has made me to forget some of my worries"(Participant 001).

However, the emotional toll of cancer is often marked by fear, existential dread, and trauma. Many patients grapple with the initial shock and fear of the disease's lethality,"I was disturbed because I was thinking that I might be having cancer and just from the name, one is afraid. Everyone knows that cancer kills rapidly"(Participant 003). The uncertainty and seriousness of cancer provoke existential fears, with patients contemplating their mortality,"I cried. I was thinking that I was going to die. When I was informed my only thought was that I was going to die"(Participant 006).

The emotional trauma extends beyond fear of death, affecting patients'daily lives and sense of self,"I am still disturbed on how comes that I am suffering from cancer. I am still to find out"(Participant 001). Moreover, the emotional impact is not always mitigated by time or treatment progress, "From when I received the news that I am having cancer till now, I am still disturbed. We all know that cancer kills"(Participant 006).

Theme 5: spiritual and cultural considerations in cancer patients

A common theme was the profound trust in divine will and the comfort found in spiritual practices. One patient articulated this reliance as,"I have just placed everything in the hands of the Lord because I have that conviction that if it is not the will of God, something cannot happen to you"(Participant 001). Another shared their unwavering spiritual identity, emphasizing the continuous role of faith throughout their life and illness (Participant 002).

Morning devotions and general prayers were cited as significant sources of motivation and hope. The encouraging messages delivered during these times helped patients foster a sense of hope and strength."Yes, prayers are a daily routine in this hospital. The prayers are encouraging because prayers give us strength when we are weak, courage when we are afraid and equally hope"(Participant 002). Despite the positive impact of general prayers, several patients expressed a longing for more personal spiritual engagement."Nobody has come up directly to me to pray with me,"one patient noted, highlighting a gap in personalized spiritual care (Participant 004).

Alongside their faith, some patients turned to traditional medicine as part of their treatment regimen. This included the use of herbs, supplements, and other nonconventional remedies believed to offer health benefits or complement their medical treatments. For instance, one patient mentioned consuming blood medicine made from herbs (Participant 001), while another spoke of the dual use of doxepin cancer brush and Jugsimur health drink (Participant 002).

Social component

Theme 6: financial aspects

Some patients found aspects of their care to be financially manageable, such as affordable amenities at the treatment center,"When we want to eat anything, we go to the refectory and eat at an affordable price"(Participant 006). Additionally, instances of financial assistance from medical facilities provided crucial support,"When I met her, all the tests they asked me to do in Hospital General, she did it for free, the scanning etc."(Participant 002). The support from family members also played a critical role in mitigating financial difficulties, with patients receiving both emotional and financial aid,"It is thanks to the assistance from my family that I am able to pay the bills"(Participant 001).

The financial challenges of cancer treatment were a recurring concern, with many patients facing difficulties in affording the necessary care. The initial expenses could be overwhelming,"I was asked to pay a deposit of 200,000frs [\$329USD] here before surgery. I cried the entire day"(Participant 001), and the ongoing costs of treatment and investigations added to the financial strain,"I paid much money. Anytime I come for rendezvous I pay at least 50000 FRS or 60000 FRS CFA [\$82—\$99USD] before they would administer drips"(Participant 004). Financial difficulties were compounded by high treatment costs, "That I am going to pay 100,000 FRS CFA per session"[\$165USD] (Participant 006), and the burden of wrong diagnoses prior to reaching the cancer center, "The tests cost 12,000frs CFA"(Participant 006).

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The emotional toll of these financial burdens was significant, with patients expressing despair and frustration at their inability to afford care,"I started crying because I did not have money, and was [worried] about what to do"(Participant 006). The high costs of investigations were particularly distressing, with patients lamenting the expenses associated with essential diagnostic tests,"The CD4 test was done for 6,000 CFA... but in private hospitals, you pay more than 40,000 CFA for the CD4 count test"(Participant 002). Health financing is therefore important in improving cancer patients' access to health as they journey with cancer from diagnosis to treatment. Today, many people do not go for screening, early diagnosis, or to receive treatment due to the cost and absence of health insurance schemes. Hospitals are increasingly becoming detention centres for patients that are unable to pay the bills.

Theme 7: healthcare experience and access

Patients reported positive experiences with the medical team at Mbingo, emphasizing the care and support they received. Satisfaction with the medical team was a common sentiment, as patients felt well taken care of,"I am happy. The nurses and medical doctors are receptive and friendly. They have concern for their patients" (Participant 001). Good referral counseling was also appreciated, helping patients understand their diagnosis and treatment options,"I was referred to a lady who received me, sat me down and told me my results. She said Madam, your results show that you have cancer of the vulva but don't panic because it is treatable" (Participant 002). The willingness to refer others to Mbingo further illustrates the trust and satisfaction patients had in the care they received,"I shall ask the person to go to Mbingo for treatment. The way you are taken care of makes you feel you are going to get better"(Participant 006).

Despite the positive reports, some patients encountered challenges in accessing Mbingo, particularly due to transportation issues and the sociopolitical situation,"Sunday night we boarded a car to Bamenda without knowing that Monday was a ghost town in Bamenda. [Ghost town is an enforced no travel day at risk of loss of life from revolutionary forces. It has been in place in NW Cameroon since 2017.]. The car left us at Kombuh" (Participant 003). Grievances with the medical team, such as perceived inattentiveness or lack of support, were also noted,"However, no particular nurse has assisted me from one place to another as I am receiving treatment"(Participant 004). These experiences highlight the areas for improvement in patient care logistics and communication. Positive experiences bring patients satisfaction which has an effect on trust, loyalty and advocacy. Satisfied patients return for future care and endorse their providers to others.

Theme 8: information, education, and beliefs

Some patients actively sought information online, utilizing the internet as a primary source of learning about their condition. They reported using Google to find home remedies and to understand more about their symptoms and potential treatments,"I just Googled and saw that when you are feeling itches you can warm water add salt and use"(Participant 002). This proactive approach highlights a willingness to engage with their health concerns and seek out potential solutions independently.

However, the reliance on the internet and traditional beliefs also exposed patients to a plethora of myths about cancer. Some believed in the curative properties of household remedies or traditional medicine,"When the growth first manifested, it was like'egussi'[discharge]. When you cut it and apply salt on it, it will disappear"(Participant 002). These misconceptions sometimes led to delays in seeking professional medical treatment or reliance on ineffective treatments. Additionally, the belief in mystical causes of cancer, such as night poisoning or curses, illustrates the deep-seated cultural narratives that can complicate the understanding and acceptance of a cancer diagnosis,"I equally think that it can be mystical. Someone can inflict you with the disease"(Participant 010).

Lack of prior screening and education on cancer signs were also noted as issues. One patient admitted to never having been screened for cancer before their diagnosis,"Yes I have never been screened before"(Participant 001), indicating a gap in preventive health measures. Another recalled education on cancer signs during pregnancy consultations, which somewhat prepared them for recognizing symptoms,"That at any moment we touch our breast and feel a node inside, it is necessary to go and consult"(Participant 003).

Theme 9: patient support and community engagement

Patients reported significant psychosocial support from family members, who provided encouragement, accompanied them to treatment sessions, and assisted financially. For instance, one patient shared about her husband's practical inquiry about the next steps, showing readiness to tackle the challenge together, "He simply asked me of the way forward... He asked me of when I thought I would go to Mbingo" (Participant 001). Relatives and close friends played crucial roles in offering emotional support, financial aid, and encouragement, reinforcing the patients' morale to fight the disease, "Their zeal is to see that I receive the maximum level of healthcare... This is giving me the courage to move on" (Participant 009).

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The diagnosis led to significant distress within families, draining financial resources, and causing emotional separation. Patients expressed concern over the burden their illness placed on their children and the financial implications of their treatment,"The money that is used in paying my hospital bills could have been used in taking care of their needs"(Participant 001). The emotional toll was evident, with families having to adjust to the absence of a parent or spouse and the redirection of household resources towards medical expenses, "It is draining the financial resources of my parents... They are now financially broke"(Participant 008).

Community support was notably limited, with many patients reporting a lack of financial and emotional assistance outside their immediate family circle. Some patients felt isolated, fearing judgment or ostracization, leading them to keep their diagnosis confidential,"I cannot tell any other person except this sister of mine and very close family members"(Participant 006). This isolation was compounded by a general absence of organized support networks or groups for cancer patients within their communities.

Additional themes

Theme 10: system challenges and barriers

Patients expressed frustration with the high demand on doctors'time, leading to long waits and postponed appointments. One patient noted,"Even yesterday as I was supposed to meet him, but he was occupied as there were many other patients soliciting his services" (Participant 006), emphasizing the strain on both patients and physicians due to the limited healthcare resources.

The process of discharge and follow-up was described as confusing, with patients often relying on information from fellow patients rather than direct communication from medical staff (Participant 001).

Several patients pointed out the lack of amenities for distraction or relaxation within the hospital environment. For example, one lamented the absence of a television for entertainment during their hospital stay (Participant 001).

A significant barrier for many was the lack of health insurance, compounding the financial burden of cancer treatment."I do not have any health insurance. How can a housewife be talking of health insurance?"shared one patient, highlighting the gap in support for non-working or low-income individuals (Participant 003).

Non-English-speaking patients reported difficulties in understanding medical explanations and instructions,"A certain lady prayed with us this morning... I do not understand the English

language"(Participant 003), pointing to the need for more inclusive communication strategies in multilingual settings. Many patients reported not receiving detailed information about their diagnosis, treatment options, or the stage of their cancer,"They have not explained it well to me"(Participant 003), which could significantly impact their understanding and management of the disease.

Theme 11: recommendations and wishes

Patients expressed concerns over the high costs of treatment, with one patient highlighting,"The procedure is not that time consuming, but the major problem is the cost"(Participant 001). The delay in receiving lab results was another issue raised, pointing to inefficiencies that could exacerbate the anxiety and uncertainty faced by patients during diagnosis (Participant 009).

The lack of decentralized cancer treatment facilities forces patients to travel long distances for care, leading to additional financial and emotional strain. Patients suggest that more cancer treatment centers should be opened around the country (Participant 003) to make treatment more accessible and reduce travel-related hardships.

Patients highlighted a notable gap in treatment counseling, expressing a desire for more transparent and detailed communication about their treatment plans. One patient articulated their need for clarity, stating,"I think my treatment plan should equally be made known to me"(Participant 001). Additionally, the call for enhanced nursing care was prominent, with patients advocating for more dedicated and patient-focused nursing approaches. As one patient recommended,"The hospital administration should be strict with the nurses. The nurses are supposed to attend to the patient whenever he or she expresses the need"(Participant 011).

The absence of radiotherapy facilities in some centers forces patients to travel extensively for treatment, incurring significant costs and logistical challenges. To mitigate these issues, patients suggest the need for broader availability of radiotherapy services. One patient reflected on the hardships of accessing radiotherapy, urging, "The worst is the price to pay for radiology... So our greatest cry is that the machine should be made available here at Mbingo and the price to pay for it, drastically reduced" (Participant 007).

Patients unanimously call for the reduction of medical bills, stressing that high costs can deter or delay treatment, potentially leading to preventable deaths. The plea is for more affordable care, "They should reduce the cost of everything" (Participant 002), which echoes

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across several interviews, emphasizing the financial barrier as a critical issue needing immediate attention.

Discussion

The findings from our study at Mbingo Baptist Hospital underscore several critical challenges in cancer care that resonate with broader themes identified in cancer care across SSA, as detailed in the Lancet Commission report by Ngwa et al. [15]. These challenges include infrastructural limitations, the burden of late-stage presentation, financial hardships, and the necessity for holistic care models that encompass the biopsychosocial aspects of patient well-being.

Biological component

Our findings highlight substantial delays in diagnosis and access to care, which are symptomatic of broader infrastructural limitations within the healthcare system in Cameroon. Similar observations have been made across SSA, where limited diagnostic facilities, scarcity of specialized healthcare professionals, and logistical challenges compound the problem of late-stage cancer presentation [15, 16]. For instance, a study in Kenya observed that the scarcity of diagnostic and treatment facilities significantly delays cancer care, mirroring our observations in Cameroon [17].

Consistent with findings from other regions in SSA, our study notes an issue of late presentation among cancer patients. This is attributed to a combination of factors, including lack of awareness, cultural beliefs, and the initial pursuit of alternative treatments [15, 18]. Late presentation exacerbates the challenges of treatment and significantly worsens prognosis, a pattern observed in multiple SSA settings [4].

Furthermore, the attitude towards cancer as a death sentence, compounded by myths surrounding its treatment, notably chemotherapy, fosters fear and avoidance of conventional medical care. This fear is often exacerbated by a lack of accurate information and education about cancer, as well as by stories of adverse effects from others who have undergone treatment. Use of Traditional and Complementary Medicine in paediatric cancer patients in Cameroon has been described by Afungchwi et al. [19]. In a related study, Ladas et al. [20] emphasized the need for culturally sensitive educational programs that address local beliefs and misconceptions, thereby enhancing the acceptance and utilization of biomedical cancer treatments.

Psychological component

The biopsychosocial model's relevance, underscored by our findings, highlights the importance of integrating psychological and social support into cancer care. This holistic approach is gaining recognition across SSA, with evidence suggesting that addressing psychological and social determinants can improve treatment adherence and quality of life [15, 21]. For instance, a study in Ethiopia emphasized the role of psychosocial support in enhancing cancer care outcomes, aligning with our recommendations for more comprehensive care models [22].

Self-medication and the use of traditional medicine are common practices in Cameroon, often rooted in cultural beliefs and the perceived meaning of cancer. Many individuals regard cancer as a curse or a consequence of supernatural forces, leading to a preference for traditional healers who are believed to offer both spiritual and physical healing. This perspective is supported by Elit et al. [23], who found that cultural stigma and the belief in supernatural causes of cancer significantly health seeking behaviours related to cancer prevention and treatment. These practices not only delay the timely diagnosis and treatment of cancer but also expose patients to potential harm from unproven therapies. Worthy of note is that in a public letter form the Regional Delegate of Public Health for the North west region that the bottled produce "jigsimur", named by one of our respondents had been linked to kidney failure and death in a couple of patients and calling for a stop in the use of this product in the population until more information is available about its chemical composition and safety [24].

Social component

The financial burden of cancer treatment emerges as a dominant theme in our study, with patients facing significant hardships that affect their treatment adherence and outcomes. This issue is not unique to Cameroon but is a widespread challenge across SSA, where out-of-pocket expenditures for healthcare are high, and health insurance coverage is limited [15, 25]. Studies in countries like Nigeria and Uganda have documented the catastrophic financial impact of cancer diagnosis on families, emphasizing the need for more robust financial protection mechanisms [26, 27].

Based on our findings, several recommendations emerge. First, enhancing healthcare infrastructure, including diagnostic and treatment facilities, is crucial for early detection and effective management of cancer. Second, financial protection mechanisms, such as national health insurance schemes that cover cancer care, are essential to alleviate the economic burden on patients. Third, public health campaigns aimed at increasing awareness and early detection, along-side debunking myths about cancer, can help reduce

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late-stage presentation. Lastly, integrating the biopsychosocial model into cancer care by providing holistic support services is critical for improving patient outcomes.

Implications for policy, practice and further research

Cancer care in Cameroon requires comprehensive policies that address the intertwined physical, financial, and psychosocial needs of patients. Establishing a national cancer registry is crucial for accurately tracking cancer incidence, outcomes, and survival rates, providing data that can guide effective policymaking and resource distribution. Decentralizing diagnostic and treatment services to reach more regions can help alleviate geographical and financial barriers that prevent patients from accessing timely care. Policies to subsidize treatment costs, particularly for low-income individuals, would address a significant barrier to care, as out-of-pocket expenses frequently lead to treatment abandonment in low- and middle-income countries (LMICs) [28].

In practice, a patient-centered approach emphasizing holistic care is essential, integrating not only medical treatment but also emotional, psychosocial, and informational support tailored to individual needs. Patient navigation services, which guide patients through diagnosis and treatment processes, are effective in minimizing delays and enhancing treatment adherence, which can improve overall outcomes [29]. Following this study, Mbingo Baptist Hospital is undertaking a quality improvement project by implementing patient navigation with reinforced cancer registration. The perspectives of healthcare providers will be investigated and this study on patient perspectives will be repeated at the end of the two year quality improvement project to determine if perspectives have changed or evolved. Training healthcare providers to understand and respect the cultural and spiritual beliefs of patients can also strengthen providerpatient relationships and encourage better adherence to treatment. Addressing logistical issues, such as improving transportation access for rural patients, is equally important, as these logistical challenges frequently hinder treatment continuity in LMICs [30].

Further research should investigate the perspectives of healthcare providers and caregivers to provide a more comprehensive understanding of cancer care challenges. Additionally, studying the long-term psychosocial, financial, and social impacts of cancer care on patients would provide insights for developing sustained support systems. These insights collectively emphasize the importance of a collaborative approach to developing a more patient-centered, accessible, and efficient cancer care system in Cameroon and similar settings.

Strengths and limitations

This study offers a detailed account of cancer patients' experiences in Cameroon through a qualitative descriptive lens, using the biopsychosocial model to structure findings. The approach enabled us to explore complex, real-world barriers and facilitators in cancer care while providing a practical framework for interpreting patient experiences. To our knowledge, this is the first study in Cameroon to apply a structured theory-guided approach to understanding these issues from a patient perspective and the interviewer was an experienced anthropologist. However, the study's single-center design and focus solely on patient perspectives may limit generalizability across Cameroon and overlook valuable insights from healthcare providers and caregivers. Additionally, self-reported data could be subject to recall bias, especially for complex or long-term treatment journeys. Future research could expand on these findings with multi-center studies and larger samples to enhance representativeness and applicability.

Concluson

In conclusion, this study at Mbingo Baptist Hospital has illuminated the multifaceted challenges faced by cancer patients in Cameroon, aligning with broader trends in Sub-Saharan Africa. The significant hurdles in early detection, access to comprehensive care, financial constraints, and the emotional and psychosocial toll on patients and their families underscore the urgent need for systemic improvements in cancer care. Our findings, grounded in the biopsychosocial model, emphasize the necessity for a holistic approach to cancer treatment that addresses the complex interplay of biological, psychological, and social factors affecting patient outcomes.

As the global and regional burden of cancer continues to rise, the insights from this study highlight the critical areas for intervention, including the enhancement of healthcare infrastructure, the expansion of financial protection mechanisms, the promotion of cancer awareness and early detection, and the integration of holistic care models. Addressing these challenges requires concerted efforts from government bodies, healthcare institutions, non-governmental organizations, and the international community to implement comprehensive cancer control strategies that are tailored to the unique contexts of LMICs like Cameroon. Investing in healthcare infrastructure, improving healthcare professionals'training, expanding access to affordable treatment, and fostering community support networks are essential steps in mitigating the cancer burden and improving the quality of life for patients and their families.

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Supplementary Information

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Supplementary Material 1.

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Authors' contributions

All authors participated in the conception of the project and read and approved the manuscript for submission. Glenn Mbah Afungchwi contributed to the study concept, data analysis, manuscript writing and read and approved the manuscript for submission. Eric Makiyighome Tum contributed to the study concept, conducted and transcribed interviews, contributed to the manuscript writing and read and approved the manuscript for submission. Laurie Elit contributed to the study concept, data analysis, manuscript writing and read and approved the manuscript for submission. The Cancer Quality Improvement Team at Mbingo Hospital contributed to the conception of the project and read and approved the manuscript for submission.

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Data availability

Transcripts of interviews are obtainable against reasonable requests through the corresponding author.

Declarations

Ethics approval and consent to participate

Each participant was provided with clear information about the study objectives and their role in the study. They were also provided with information sheets. Information was provided in English and French and pidgin English interpretation was provided for participants who were not comfortable with English or French. Participation was upon signed informed consent and they were allowed to withdraw their participant at any time. Ethical clearance was obtained from the Cameroon Baptist Convention Health Board Institutional Review Board (CBCHBIRB 2023–65).

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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