SA Journal of Oncology
ISSN: (Online) 2523-0646, (Print) 2518-8704

Quantitative exploration of barriers to access cancer services experienced by cancer patients in Lesotho

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Dates:
Received: 23 Nov. 2023
Accepted: 09 May 2024
Published: 08 July 2024

How to cite this article:
Ramathebane MM, Sooro MA, Maja LJ, Mputsoe K, Sello M, Mokhethi MC. Quantitative exploration of barriers to access cancer services experienced by cancer patients in Lesotho. S. Afr. j. oncol. 2024; 8(0), a291.https://doi.org/10.4102/sajo.v8i0.291

Background: Cancer mortality has been estimated to increase in sub-Saharan Africa to more than a million deaths in 2023. There is a need for an increase in cancer screening, diagnosis and treatment infrastructure to curb this rise in cancer mortality. Many people with cancer face significant barriers to accessing treatment.

Aim: The study aimed to explore barriers to accessing cancer care services experienced by cancer patients in Lesotho.

Setting: This study was conducted at the Senkatana oncology clinic in Maseru, Lesotho.

Methods: The study adopted a quantitative cross-sectional design. Cancer patient interviews were conducted using a structured questionnaire.

Results: A total of 115 patients responded to the questionnaire, and 79.1% were female. Over half of the participants (53.9%) found it difficult to access cancer services because they had to get services from multiple healthcare facilities in different areas. All of them had to join long queues. Distance from the healthcare facilities was also a challenge for a significant number (64.3%), and a substantial number (66.1%) had difficulties arranging transport to such facilities. Finally, financial issues, such as paying for transport, healthcare and diagnostic tests, were determined to be major constraints.

Conclusion: The study concludes that most cancer patients face financial and practical barriers. This affects access to cancer services, particularly for patients not residing in Maseru.

Contribution: The study shares information regarded as barriers to cancer services in a low- and middle-income country.

Keywords: access; cancer services; barriers; transport; Lesotho.

Introduction

In 2020, there were an estimated 19.3 million new cancer cases globally, and almost 10.0m cancer-related deaths occurred.[1] Female breast cancer was the most commonly diagnosed, followed by lung, colorectal, prostate and stomach cancers.[1] Lung cancer is the leading cause of cancer death (18%), while female breast cancer is the least (6.9%). In Africa, the incidence of cancer increased from 715 000 in 2008 to 1.1m in 2020, and the cancer deaths increased from 542 000 in 2008 to 711 000 in 2020.[2] In sub-Saharan Africa, 801 392 new cancer cases and 520 158 cancer deaths were estimated to have occurred in 2020.[3] Common cancers include breast and cervical cancers, ranking first in 28 countries and 19 countries, respectively.[3] In 2022, the incidence of cancer in Lesotho was 2027 cases, and the number of cancer deaths was 1411.[4] The top three leading cancers in Lesotho are cancers of the cervix, breast and prostate. The incidence of cancer of the cervix, breast and prostate are at 25.3%, 8.1% and 7.3%, respectively. Mortality rates of cervical cancer, breast cancer and prostate cancer are at 25.9%, 6.5% and 7.6%, respectively.[4,5]

Lesotho is a small country in sub-Saharan Africa surrounded by South Africa and is characterised by its mountainous terrain.[6] The landscape of Lesotho is dominated by the Maloti and Drakensberg mountain ranges, with peaks exceeding 3000 m. The country has about 2.2m people.[6] Lesotho is administratively divided into 10 districts. The healthcare system comprises the national, district and primary healthcare levels, including a mix of public and private healthcare providers.[6] The majority of the population relies on public health services.

Access to healthcare in Lesotho is hindered by the mountainous terrain, which can make reaching remote communities difficult, especially during bad weather. To improve healthcare accessibility and quality, healthcare facilities were expanded, and community health workers were introduced to provide health services in remote areas. However, Lesotho continues to struggle with healthcare disparities between urban and rural areas.[7] Additionally, shortages of healthcare professionals, limited infrastructure and inadequate funding further strain the healthcare system.[7,8,9]

Osei-Fofie et al. highlighted that there was a lack of facilities or trained oncologists and other healthcare professionals for cancer care in some low-income countries.[10] Osei-Fofie et al. further indicated that cancer patients who needed chemotherapy in Lesotho were taken to India for treatment, while those needing radiotherapy were taken to South Africa.[10] Senkatana Oncology Clinic is the only oncology clinic located at the Botshabelo complex in Maseru and serves the whole cancer population of Lesotho.[11,12] Senkatana Oncology Clinic was established through the Bristol-Myers Squibb Foundation Global Cancer Disparities (BMSF-GCD) (Africa) funding in 2020 as the first Lesotho cancer treatment centre.[11,12]

Many people with cancer face significant barriers to accessing cancer care and treatment. Financial issues prevent patients from accessing the care they need, and those who have survived cancer experience various financial hardships.[13,14] In Lesotho, cancer treatment is financially supported by the government, where almost $7m a year is spent on sending Lesotho cancer patients to South Africa and India for treatment and care.[15] The Ministry of Health Lesotho funds the provision of cancer treatment that cannot be offered by any health facility in the country.[16] Patients living in rural areas face significant challenges when it comes to accessing cancer treatment.[10] In addition to the physical distance, there may be limited transportation options, making it difficult for patients to get to appointments and receive treatment regularly.[17]

A lack of awareness about cancer, service availability and treatment options can be a major barrier for patients. Accurate and up-to-date cancer information is essential, without which patients may not be able to access cancer services.[18] Healthcare providers play an important role in educating patients about cancer and service provision.[12,19] This can include providing written materials, offering one-on-one counselling sessions and referring patients to support groups, social media, radio and television. Okyere et al. affirmed that a lack of awareness of cancer services, such as supportive and palliative care services, leads to symptoms of distress among cancer patients that impact their quality of life.[20]

Communication between patients and healthcare professionals is an important factor in cancer care, the lack of which may compromise access to appropriate care. Some patients have reported communication problems where healthcare providers are inaccessible or have limited cancer information.[21] Furthermore, some patients may feel uncomfortable discussing their health concerns with healthcare providers if they do not speak the same language or share the same cultural values.[22]

The barriers to cancer care in Lesotho are unknown, and understanding the burden is critical to improving patient outcomes and care delivery. The current study intends to explore the barriers constraining access to cancer care services for patients in Lesotho.

Methods

Design

A quantitative cross-sectional study was conducted using a structured questionnaire.

Setting

The study was conducted at Senkatana Oncology Clinic at the Botshabelo complex in Maseru. Senkatana Centre of Excellence was established in 2004 to address the human immunodeficiency virus (HIV) and/or acquired immunodeficiency syndrome (AIDS) pandemic as the first site to pilot antiretroviral therapy (S+ART) in Lesotho. Senkatana Oncology Clinic was established through the Bristol-Myers Squibb Foundation (BMSF) Africa cancer disparities funding in 2020 as the first Lesotho cancer treatment clinic. This is the only oncology clinic serving the whole country's cancer population.

Population and sample determination

The study participants were selected from the active cancer patient files at the Senkatana Oncology Clinic, which totalled 696. The sample size was calculated with a 5% margin of error and a 95% confidence interval. Convenience sampling was adopted to gather the data from the sample.

Inclusion and exclusion criteria

The study included all cancer patients available at the oncology clinic during the data collection period, and those who were not present were excluded.

Data collection instruments

Structured questionnaires were used to collect data from cancer patients. The questionnaire was developed from the published questionnaires on the subject.[23] It was reviewed by the researchers and an expert and adopted to suit Lesotho's situation. It included patient demographics and critical questions related to barriers to cancer services.

Data gathering process

Data collectors were trained before the collection of data for a week. Before scaling up the data-gathering process, a pilot study was conducted using the translated structured questionnaire on the first five patients. The data were analysed, and modifications were made to the questionnaire to ascertain that the questionnaire captured the information

intended to be collected. The data collection process was then scaled up over 12 weeks, where 115 patients were interviewed.

Data analysis

Data were captured into Microsoft Excel® and analysed using descriptive statistics with Statistical Package for Social Sciences (SPSS) version 16. Thirty-two point questions were administered to patients, and through the use of percentages, patients' barriers were identified. Patients' gender and occupation were related to barriers.

Ethical considerations

Ethical approval was granted by the Lesotho Ministry of Health, National Research and Ethics Committee (NHREC) (ID 04-2023). Permission to conduct the study was sought from the Ministry of Health and Senkatana Oncology Clinic. Only codes were used to identify the cases. All research data were encrypted and stored in a lockable cupboard. Patients filled out informed consent forms before the interview. Data collectors and researchers also filled out confidentiality forms.

Results

The target sample size was set at 248 patients, of which 115 were met by data collectors during the data collection period, translating into a response rate of 46.4%. Despite having a 12-week data collection period, which gave each patient at least two chances to be interviewed, most patients could still not be interviewed because they did not visit the clinic during the data collection period as stipulated in the inclusion criteria.

Characteristics of patients

The study further related the characteristics of patients.

Table 1 shows that female patients (79.1%) were more likely to be married than male patients (20.9%). Most patients were aged 35 years – 64 years, married and had completed primary education. Most were unemployed, with retail being the most common occupation. Most patients were Christians (99.1%) and 52.2% were HIV positive. Most patients had one to four biological children.

Table 2 shows cancer patient distribution based on HIV status and cancer type. Most were HIV-positive, with cervical, breast and prostate cancers among HIV-positive patients, and 47.8% were HIV-negative.

Barriers to access and cancer care services

The study further related the barriers to access to cancer care services.

Table 3 shows that most patients (95.7%) were not embarrassed to seek cancer care, had a positive attitude towards healthcare workers and had no competing priorities. They did not feel scared or worried about wasting time, had no difficulties making appointments and found the opening hours convenient. Most patients (93.9%) felt that healthcare professionals provided detailed information, were approachable and provided medical advice. Most (97.4%) reported not being busy and work demands did not hinder access to healthcare services. Most (94.8%) felt that a lack of information or awareness of cancer matters and a lack of physical guidance were not barriers to accessing cancer services. Overall, patients felt comfortable seeking services. The study found that 53.0% of patients struggled to access cancer services because of multiple facilities and queues (53.9%). A total of 66.1% had difficulties arranging transport to doctors and 64.3% believed distance from facilities was a barrier. Most patients did not have disabilities or mental health issues, and 69.6% reported difficulties in paying for healthcare, including transport and diagnostic tests.

TABLE 1: Demographic information of cancer patients.

Variable	Category	*n* (*N* = 115)	%
Gender	Male	24	20.9
	Female	91	79.1
Age (years)	< 35	5	4.3
	35–64	86	74.8
	> 65	24	20.9
Marital status	Single	11	9.6
	Married	57	49.6
	Widowed	34	29.6
	Separated	8	7.0
	Divorced	5	4.3
Educational status	None	8	7.0
	Primary	46	40.0
	Secondary or high school	45	39.1
	Certificate	1	0.9
	Diploma	7	6.1
	University degree	8	7.0
Occupational status	Employed	24	20.9
	Retired	12	10.4
	Self-employed	10	8.7
	Scholar	2	1.7
	Unemployed	67	58.3
Type of occupation†	Office assistant	3	8.8
	Executive secretary	1	2.9
	Factory worker	9	26.5
	Farmer	1	2.9
	Mechanic	1	2.9
	Nurse	3	8.8
	Retail	10	29.4
	Senior passport officer	1	2.9
	Teacher	2	5.9
	Tertiary student	2	5.9
	Village chief	1	2.9
Religious status	Christian	114	99.1
	Muslim	1	0.9
HIV status	Negative	55	47.8
	Positive	60	52.2
Number of biological children	0	7	6.1
	1–4	89	77.4
	5–8	16	13.9
	9–11	3	2.6

†, *n* = 34.

In summary, the results revealed the following as barriers faced by many patients: (1) queuing at multiple healthcare facilities, (2) getting services at multiple facilities, (3) difficulty arranging transport to the doctor, (4) distance from healthcare facilities even if transportation is available, (5) paying for healthcare is a problem, (6) paying for transport and (7) paying for diagnostic tests. Therefore, these are the barriers of concern.

TABLE 2: Distribution of cancer patients by type of cancer and HIV status.

Type of cancer	HIV status				Total (*N*)
	Negative		Positive		
	n	%	*n*	%	
Breast	17	58.6	12	41.4	29
Cervical	14	40.0	21	60.0	35
Prostate	11	53.4	10	47.6	21
Skin	2	40.0	3	60.0	5
Vulva	0	0.0	6	100.0	6
Other	11	57.9	8	42.1	19
Total	**55**	**47.8**	**60**	**52.2**	**115**

Gender and barriers of concern

The study further related gender to the barriers of concern.

Table 4 shows the results of the univariate analysis to define the association of gender with barriers to accessing cancer care services. The results indicated that difficulty arranging transport to the doctor (Odds Ratio [OR] = 0.338; 95% confidence interval [CI] = 0.135–0.852) is a significant barrier to accessing cancer care services among the included males. However, all other barriers of concern were not significantly associated with the gender of the patients.

Age and barriers of concern

The study further related age to the barriers of concern.

Table 5 depicts the results of the univariate analysis to define the association of age with barriers to accessing cancer care

TABLE 3: Barriers to access to cancer services.

Items	Yes		No		Do not know	
	n	%	*n*	%	*n*	%
Emotional issues						
Embarrassment	4	3.5	110	95.7	1	0.9
Negative attitude towards providers	1	0.9	113	98.3	1	0.9
Competing priorities	4	3.5	111	96.5	-	-
Feeling scared	31	27.0	84	73.0	-	-
Feeling confident talking about symptoms of cancer	26	22.6	89	77.4	-	-
Seeking services						
Feeling worried about wasting the doctor's time	20	17.4	95	82.6	-	-
Difficulty talking to doctors	6	5.2	109	94.8	-	-
Difficulty making an appointment	9	7.8	106	92.8	-	-
Opening hours are not convenient	3	2.6	112	97.4	-	-
Queuing at multiple healthcare facilities	62	53.9	53	46.1	-	-
Getting services at multiple facilities	61	53.0	54	47.0	-	-
Communication concerns with the service provider						
Information not provided and/or explained	6	5.2	108	93.9	1	0.9
Healthcare providers are unapproachable or unavailable	2	1.7	113	98.3	-	-
Not confident asking for information	2	1.7	113	98.3	-	-
Lack of medical recommendation	3	2.6	112	97.4	-	-
Practical issues						
Busy to go to the doctor	3	2.6	112	97.4	-	-
Having other things to do	2	1.7	112	97.4	-	-
Difficulty arranging transport to the doctor	76	66.1	39	33.9	-	-
Distance from healthcare facilities even if transportation is available	74	64.3	41	35.7	-	-
Work demands make getting healthcare difficult	3	2.6	112	97.4	-	-
Lack of information	3	2.6	111	96.5	1	0.9
Lack of awareness on cancer matters	8	7.0	105	91.3	2	1.7
Lack of health information	4	3.5	108	93.9	3	2.6
Lack of physical guidance	4	3.5	110	95.7	1	0.9
Medical issues						
Disability (and other medical issues) that make getting healthcare difficult	3	2.6	112	97.4	-	-
Mental health problems that make getting healthcare difficult	2	1.7	112	97.4	-	-
Financial issues						
Paying for healthcare is a problem	80	69.6	35	30.4	-	-
Paying for transport	76	66.1	39	33.9	-	-
Paying for diagnostic test	83	72.2	32	27.8	-	-
Worrying about accommodation during healthcare visits	16	13.9	59	51.3	40	34.8
Delays in transportation to South Africa	42	36.5	38	33.1	35	30.4

TABLE 4: Distribution of cancer patients by gender and barriers of concern.

Barrier	Responses	Gender				Univariate analysis		
		Female†		Male		OR	95% CI	*p*
		n	%	*n*	%			
Seeking services								
Queuing at multiple healthcare facilities	-	-	-	-	-	1.560	0.620–3.927	0.343
	No	44	48.4	9	37.5	-	-	-
	Yes	47	51.6	15	62.5	-	-	-
Getting services at multiple facilities	-	-	-	-	-	1.630	0.648–4.103	0.297
	No	45	49.5	9	37.5	-	-	-
	Yes	46	50.5	16	62.5	-	-	-
Practical issues								
Difficulty arranging transport to the doctor	-	-	-	-	-	0.338	0.135–0.852	0.018*
	No	26	28.6	13	52.4	-	-	-
	Yes	65	71.4	11	45.8	-	-	-
Distance from healthcare facilities even if transportation is available	-	-	-	-	-	0.581	0.233–1.450	0.242
	No	30	33.0	11	45.8	-	-	-
	Yes	61	67.0	13	54.2	-	-	-
Financial issues								
Paying for healthcare is a problem	-	-	-	-	-	0.667	0.260–1.712	0.398
	No	26	28.6	9	37.5	-	-	-
	Yes	65	71.4	15	62.5	-	-	-
Paying for transport	-	-	-	-	-	0.442	0.168–1.056	0.061
	No	27	29.7	-	-	-	-	-
	Yes	64	70.3	12	50.0	-	-	-
Paying for diagnostic test	-	-	-	-	-	0.564	0.218–1.461	0.235
	No	23	25.3	9	37.5	-	-	-
	Yes	68	74.7	15	62.5	-	-	-

OR, odds ratio; CI, confidence interval.

*, statistically significant.

†, reference category.

services. The results indicated that there was no significant association between patients' age and all the barriers of concern.

Level of education and barriers of concern

The study further related the level of education to the barriers of concern.

Table 6 presents the results of the univariate analysis to define the association of the level of education with barriers to accessing cancer care services. The results indicated that difficulty arranging transport to the doctor (OR = 3.696; CI = 1.454–9.395) is a significant barrier to accessing cancer care services among patients with higher education (> High school). However, all other barriers of concern were not significantly associated with the level of education of the patients.

Discussion

The study indicated the female-to-male ratio to be 4:1 for both the study sample and the study population. Similarly, Banks and Baker stated that hesitancy for males to utilise primary healthcare services, including prostate cancer services, could be one of the reasons why there are more females compared to males.[24] Dijksterhuis et al. highlighted that the influence of gender disparities on cancer screening and diagnosis underscores the significance of comprehending the effects of gender differences throughout the cancer care process.[25] The authors further suggested that biological and social determinants of health could be among the factors contributing to this disparity, thus worth taking into consideration.[25] Most cancer patients were in the age range of 35–64 years.

In the present study, most cancer patients were HIV positive. In Lesotho, cervical cancer was the leading cause of death among women, with an incidence rate of 27.8/100 000 in 2012, which was attributed to the high HIV incidence and prevalence.[26] The incidence of cancer in sub-Saharan Africa has been associated with infections such as HIV.[27] The current study shows that cervical, breast and prostate cancers were common among both HIV-positive and HIV-negative patients. These results are similar to the sub-Saharan African study that highlighted the same cancer types as the top five leading cancers.[3] In Lesotho, because of high HIV prevalence and limited cervical cancer screening,[12] cervical cancer is the leading cancer in the country. The results are similar to Dhokotera et al., who stated that high prevalence and poorly controlled HIV can increase the risk of human papillomavirus (HPV) co-infection, which, in turn, increases cervical cancer risk.[28] A study conducted in Southern Africa also indicated that 63.8% of women with cervical cancer were living with HIV, as were 27.4% of women in Eastern Africa.[29]

With regard to emotional barriers, the majority of patients did not experience emotional barriers. Patients showed a positive attitude towards cancer services, and they indicated this by stating that they were not embarrassed to seek cancer

TABLE 5: Distribution of cancer patients by age and barriers of concern.

Barrier	Responses	Age in years				Univariate analysis		
		< 55†		≤ 55		OR	95% CI	*p*
		n	%	*n*	%			
Seeking services								
Queuing at multiple healthcare facilities	-	-	-	-	-	0.793	0.380–1.654	0.536
	No	26	43.3	27	49.0	-	-	-
	Yes	34	56.7	28	51.0	-	-	-
Getting services at multiple facilities	-	-	-	-	-	0.848	0.407–1.767	0.661
	No	27	45.0	28	50.0	-	-	-
	Yes	33	55.0	28	50.0	-	-	-
Practical issues								
Difficulty arranging transport to the doctor	-	-	-	-	-	0.593	0.272–1.292	0.187
	No	26	43.3	22	40.0	-	-	-
	Yes	43	56.7	33	60.0	-	-	-
Distance from healthcare facilities even if transportation is available	-	-	-	-	-	0.810	0.377–1.738	0.588
	No	20	33.3	21	38.2	-	-	-
	Yes	40	66.6	34	61.8	-	-	-
Financial issues								
Paying for healthcare is a problem	-	-	-	-	-	0.689	0.310–1.530	0.359
	No	16	26.7	23	41.8	-	-	-
	Yes	44	73.3	32	58.2	-	-	-
Paying for transport	-	-	-	-	-	0.506	0.231–1.108	0.086
	No	18	29.0	23	41.8	-	-	-
	Yes	44	71.0	32	58.2	-	-	-
Paying for diagnostic test	-	-	-	-	-	0.745	0.329–1.688	0.480
	No	15	25.0	17	30.9	-	-	-
	Yes	45	75.0	38	69.1	-	-	-

OR, odds ratio; CI, confidence interval.
†, reference category.

TABLE 6: Distribution of cancer patients by level of education and barriers of concern.

Barrier	Responses	Level of education				Univariate analysis		
		≤ High school†		> High school		OR	95% CI	*p*
		n	%	*n*	%			
Seeking services								
Queuing at multiple healthcare facilities	-	-	-	-	-	0.797	0.321–1.981	0.625
	No	44	44.4	9	56.3	-	-	-
	Yes	55	55.6	7	43.7	-	-	-
Getting services at multiple facilities	-	-	-	-	-	0.763	0.307–1.895	0.559
	No	45	45.5	9	56.3	-	-	-
	Yes	54	54.5	7	43.7	-	-	-
Practical issues								
Difficulty arranging transport to the doctor	-	-	-	-	-	3.696	1.454–9.395	0.004*
	No	27	26.3	12	75.0	-	-	-
	Yes	72	73.7	4	25.0	-	-	-
Distance from healthcare facilities even if transportation is available	-	-	-	-	-	1.721	0.690–4.292	0.242
	No	30	42.9	11	68.8	-	-	-
	Yes	40	57.1	5	31.2	-	-	-
Financial issues								
Paying for healthcare is a problem	-	-	-	-	-	2.362	0.933–5.978	0.065
	No	25	25.3	10	62.5	-	-	-
	Yes	74	74.7	6	37.5	-	-	-
Paying for transport	-	-	-	-	-	1.904	0.760–4.768	0.166
	No	29	29.3	10	62.5	-	-	-
	Yes	70	70.7	6	37.5	-	-	-
Paying for diagnostic test	-	-	-	-	-	2.240	0.873–5.571	0.089
	No	23	23.2	10	62.5	-	-	-
	Yes	76	76.8	6	37.5	-	-	-

OR, odds ratio; CI, confidence interval.
*, statistically significant.
†, reference category.

services. These findings are similar to those of a study carried out among individuals living in Maseru, Lesotho, in 2021, which revealed that participants held favourable views towards cancer services and expressed a preference for seeking medical attention promptly upon experiencing symptoms suggestive of cancer.[12] However, there were some patients who reported feeling scared, some not confident about the symptoms of cancer and those who were worried about wasting the doctor's time suggesting interventions to address these barriers. Nevertheless, Elshami et al. suggested that within the Middle East, the primary barriers perceived when seeking cancer care were feelings of fear and apprehension about potential diagnoses, followed by practical and service-related obstacles.[23] Moreover, Elshami et al. noted that females and adolescents were more prone to cite fear as a hindrance to seeking medical guidance.[23]

In addition, patients were satisfied with the services they get from the clinic, including easy communication with doctors and other health service providers, appointment setting and convenient opening hours. Consistently, Mahapatra et al. found that interpersonal rapport and good doctor–patient relationships were a cornerstone of high patient satisfaction.[30] At Senkatana Oncology Clinic, the majority of the healthcare professionals are native citizens of Lesotho, and this eases communication with patients. Conversely, the study of Yashadhana et al. suggested that many patients from diverse backgrounds may not feel comfortable discussing their health concerns with healthcare providers if they do not speak the same language or share the same cultural values.[22] The study findings highlighted that patients prioritise cancer services over other engagements, such as being too busy or going to work. One study indicated that women were more likely busy to seek cancer services.[23] Some patients indicated that lack of information did not prevent them from accessing cancer services.[31] However, other studies note that some patients wished to be given information after diagnosis, and abut sided effects and after surgery.[31,32]

On the contrary, patients had problems with queuing for services at multiple healthcare facilities. Ramutumbu et al. found that patients are uncomfortable with long queues and a shortage of doctors, which delay early diagnosis and early treatment.[33] Patients also indicated arranging transport and distance from the facilities as barriers to cancer services. In Lesotho, there is only one cancer treatment clinic, and patients have to travel from all over the country to access cancer services at this clinic.[10,11] Cateche-Condor et al. state that patients living in rural areas or far from treatment centres often face significant challenges when accessing cancer treatment as there may be limited transportation options, making it difficult for patients to get to appointments and receive treatment regularly.[17] Further, patients highlighted financial barriers such as paying for healthcare, transport and diagnostic tests while seeking cancer services as noteworthy barriers. This might have an impact on the emotional barriers that some patients expressed. Similarly, the distance from healthcare facilities, even if transportation is available, might have an impact on the barrier of paying for transport. Difficulty in arranging for transport to the doctor may also be attributed to the location and topography of Lesotho.

Univariate analysis was carried out to determine the association of gender, age and level of education with barriers to accessing cancer care services. While patients reported encountering obstacles with all these barriers, statistical associations were observed between gender and the challenge of arranging transportation to the doctor, as well as between the level of education and the difficulty in arranging transportation to the doctor. The study of Elshami et al. reported similar results among adolescent and female adults.[23]

The study's implications are that barriers to cancer services are now known and can be addressed to improve access to cancer services. This has positive results on early screening, leading to early diagnosis and treatment. Regarding future research, follow-up on utilisation of cancer screening for males would be a useful study that will inform actions to take to encourage more males to use cancer services for early screening, diagnosis and treatment.

Limitations

The target sample size was set at 248 patients, of which 115 were met by data collectors during the data collection period, translating into a response rate of 46.4%. Despite having a 12-week data collection period, which gave each patient at least two chances to be interviewed, most patients could still not be interviewed because they did not visit the clinic during the data collection period as stipulated in the inclusion criteria. Only two interviewers were engaged, interviewing patients while queuing for services. The time taken for the interview of one patient denied other patients an opportunity to be interviewed.

Conclusion

The study shows that many of the barriers identified in this study are not considered constraints by patients in Lesotho. Queuing at multiple healthcare facilities and accessing services from multiple facilities, most of which are located in different areas, are identified barriers to access to cancer services in Lesotho. In addition, patients highlighted financial constraints in paying for transport, diagnostic tests and other healthcare costs while seeking cancer services. The barriers were found to be constraining, mostly to females than their male counterparts and the unemployed as opposed to other groups.

Recommendations

Based on the findings, it is highly recommended that cancer screening, diagnosis and treatment services be expanded to cover both the rural and urban regions of Lesotho. With the current prevalence of cancer, there is a need for more cancer treatment centres in the country. This will reduce the transportation and lodging costs patients incur to access services at the centre in Maseru.

The Government of Lesotho should sponsor diagnostic and healthcare costs to patients by sourcing diagnostic laboratory services from private laboratories through a third party that can have a contract with private laboratories.

Acknowledgements

The authors would like to extend their gratitude to Dr P. Ntsekhe, T. Mpo, M. Matsoso, A. Masilo and M. Tlebere for their valuable support. They would like to also thank the staff from Senkatana satellite clinics and the study participants. Data collectors and supervisors are also appreciated for the hard work they did.

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

M.M.R. was the principal investigator and contributed to the preparation of the manuscript. M.A.S. was the co-principal investigator and contributed to the preparation of the manuscript and typesetting. M.S. contributed to the data analysis and methodology of the study. K.M. contributed to the formulation of questionnaires and ethics approval and supervision of the study. L.J.M. contributed to the data cleaning and proofreading of the manuscript. M.C.M. contributed to the proofreading and supervision of the study.

Funding information

This study was supported by the Bristol-Myers Squibb Foundation – Global Cancer Disparities – Africa programme.

Data availability

Derived data supporting the findings of this study are available from the corresponding author, M.M.R., on request.

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References

1. Sung H, Ferlay J, Siegel RL, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2021;71(3):209–249. https://doi.org/10.3322/caac.21660
2. Sharma R, Fronterre C, Ssentongo AE, et al. Mapping cancer in Africa: A comprehensive and comparable characterization of 34 cancer types using estimates from GLOBOCAN 2020. Front Public Health. 2022;10:839835. https://doi.org/10.3389/fpubh.2022.839835
3. Bray F, Parkin DM, Gnangnon F, et al. Cancer in sub-Saharan Africa in 2020: A review of current estimates of the national burden, data gaps, and future needs. Lancet Oncol. 2022;23(6):719–728. https://doi.org/10.1016/S1470-2045(22)00270-4
4. Lesotho – Global cancer observatory [homepage on the Internet]. [cited 2024 Apr 07]. Available from: https://gco.iarc.fr/today/en/fact-sheets-populations#countries
5. World Health Organization. Cancer Lesotho 2020 country profile [homepage on the Internet]. [cited 2024 Apr 30]. Available from: Cancer Lesotho 2020 country profile (who.int)
6. World Bank. Retrieved 19 November 2018. Lesotho Health Network Public-Private Partnership (PPP) [homepage on the Internet]. 2016 [cited 2024 Apr 07]. Available from: https://www.worldbank.org/en/country/lesotho/brief/lesotho-health-network-ppp
7. Government of Lesotho. Lesotho: Public health Sector expenditure review. Maseru: World Bank Publication; 2017.
8. Lesotho Review. Healthcare [homepage on the Internet]. 2018 [cited 2020 Jan 20]. Available from: https://www.lesothoreview.com/contents/healthcare/
9. Dick-Sagoe C, Asare-Nuamah P, Dick-Sagoe AD. Public choice and decentralised healthcare service delivery in Lesotho: Assessing improvement and efficiency in service delivery. Cogent Social Sciences. 2021;7(1):1969737. https://doi.org/10.1080/23311886.2021.1969737
10. Osei-Fofie D, Cekwane KM, Hassan M, et al. Using innovative technology and collaborative efforts to reduce disparities and inequities in cancer care and improve the lives of patients in low-middle income countries in sub-Saharan Africa: South African and Lesotho Experience of the ECHO Model. Cancer Epidemiol Biomark Prev. 2023;32(6_suppl.):92. https://doi.org/10.1158/1538-7755.ASGCR23-Abstract-92.
11. Ministry of Health. Senkatana oncology clinic inaugurated [homepage on the Internet]. 2022 [cited 2024 Apr 7]. Available from: https://www.gov.ls/senkatana-oncology-clinic-inaugurated/
12. Ramathebane MM, Sooro MA, Kabuya RM, et al. Knowledge and attitudes relating to cervical and breast cancer among women in Maseru, Lesotho. Afr J Prim Health Care Fam Med. 2022;14(1):1–8. https://doi.org/10.4102/phcfm.v14i1.3459
13. Mattila PO, Babar Z, Suleman F. Assessing the prices and affordability of oncology medicines for three common cancers within the private sector of South Africa. BMC Health Serv Res. 2021;21:661. https://doi.org/10.1186/s12913-021-06627-6
14. Atieno OM, et al. Pilot study on assessing the direct medical cost of treating patients with cancer in Kenya, findings and implication for the future. J Med Econ. 2018;21(9):878–887. https://doi.org/10.1080/13696998.2018.1484372
15. International Atomic Energy Agency. Lesotho receives expert IAEA support for its first cancer centre [homepage on the Internet]. 2020 [cited 2024 Apr 08]. Available from: https://www.iaea.org/newscenter/news/lesotho-receives-expert-iaea-support-for-its-first-cancer-centre
16. UNICEF. Lesotho public health sector expenditure review [homepage on the Internet]. 2017 [cited 2024 Apr 08]. Available from: https://elibrary.worldbank.org/doi/abs/10.1596/29344
17. Cotache-Condor C, Kantety V, Grimm A, et al. Determinants of delayed childhood cancer care in low-and middle-income countries: A systematic review. Pediatr Blood Cancer. 2023;70(3):e30175. https://doi.org/10.1002/pbc.30175
18. Wong AR, Sun V, George K, et al. Barriers to participation in therapeutic clinical trials as perceived by community oncologists. JCO Oncol Pract. 2020;16(9):e849–e858. https://doi.org/10.1200/JOP.19.00662
19. Nakaganda A, Cira MK, Abdella K, et al. Expanding best practices for implementing evidence-based cancer control strategies in Africa: The 2019–2020 Africa cancer research and control ECHO program. J Cancer Policy. 2021;28:100286. https://doi.org/10.1016/j.jcpo.2021.100286
20. Okyere J, Kissah-Korsah K. Barriers to the integration of palliative care in Ghana: Evidence from a tertiary health facility. Palliat Care Soc Pract. 2023;17:1–11. https://doi.org/10.1177/26323524231179980
21. Shahid S, Finn LD, Thompson SC. Barriers to participation of aboriginal people in cancer care: Communication in the hospital setting. Med J Aust. 2009;190(10):574–579. https://doi.org/10.5694/j.1326-5377.2009.tb02569.x
22. Yashadhana A, Fields T, Blitner G, et al. Trust, culture and communication: Determinants of eye health and care among Indigenous people with diabetes in Australia. BMJ Global Health. 2020;5(1):e001999. https://doi.org/10.1136/bmjgh-2019-001999
23. Elshami M, Bottcher B, Alkhatib M, et al. Perceived barriers to seeking cancer care in the Gaza Strip: A cross-sectional study. BMC Health Serv Res. 2021;21:28. https://doi.org/10.1186/s12913-020-06044-1
24. Banks I, Baker P. Men and primary care: Improving access and outcomes. Trends Urol Men's Health [serial online]. 2013 [cited 2023 Aug 30]. Available from: https://www.menshealth
25. Dijksterhuis WP, Kalff MC, Wagner AD, et al. Gender differences in treatment allocation and survival of advanced gastroesophageal cancer: A population-based study. J Natl Cancer Inst. 2021;113(11):1551–1560. https://doi.org/10.1093/jnci/djab075
26. Elizabeth Glaser Paediatric AIDS Foundation (EGPAF). EGPAF-Lesotho Cervical Cancer Prevention Program [homepage on the Internet]. 2018 [cited 2023 Aug 30]. Available from: https://www.pedaids.org/wp-content/uploads/2018/12/2018_CaCxFactSheet.pdf
27. Okuku F, Omoding A, Walusansa V, et al. Infection-related cancers in sub-Saharan Africa: A paradigm for cancer prevention and control. Oncology. 2012;84(2):75–80. https://doi.org/10.1159/000343151
28. Dhokotera T, Bohlius J, Egger M, et al. Cancer in HIV-positive and HIV-negative adolescents and young adults in South Africa: A cross-sectional study. BMJ Open. 2021;11(10):e043941. https://doi.org/10.1136/bmjopen-2020-043941
29. Stelzle D, Tanaka L, Lee K et al. Estimates of the global burden of cervical cancer associated with HIV. Lancet Glob Health. 2021;9(2):e161–e169. https://doi.org/10.1016/S2214-109X(20)30459-9

30. Mahapatra S, Nayak S, Pati S. Quality of care in cancer: An exploration of patient perspectives. J Fam Med Prim Care. 2016;5(2):338–342. https://doi.org/10.4103/2249-4863.192349

31. Tsianakas V, Robert G, Maben J, et al. Implementing patient-centred cancer care: Using experience-based co-design to improve patient experience in breast and lung cancer services. Support Care Cancer. 2012;20:2639–2647. https://doi.org/10.1007/s00520-012-1470-3

32. Gibson F, Aldiss S, Horstman M, et al. Children and young people's experiences of cancer care: a qualitative research study using participatory methods. Int J Nurs Stud. 2010;47(11):1397–1407. https://doi.org/10.1016/j.ijnurstu.2010.03.019

33. Ramutumbu NJ, Ramathuba DU, Maputle MS. Barriers to accessing oncology services for effective cancer care in the public health institutions in Limpopo Province, South Africa: A qualitative study. Nurs Rep. 2023;13(3):956–968. https://doi.org/10.3390/nursrep13030084