



Experiences of men undergoing prostate cancer screening at a hospital in Gauteng, South Africa

**Authors:**

Boitumelo M. Komane¹ 
Anna Mosalo¹ 

Affiliations:

¹Department of Health Studies, College of Human Sciences, University of South Africa, Pretoria, South Africa

Corresponding author:

Boitumelo Komane,
boitumelokomane6@gmail.com

Dates:

Received: 15 Apr. 2024

Accepted: 19 July 2024

Published: 27 Nov. 2024

How to cite this article:

Komane, B.M. & Mosalo, A., 2024, 'Experiences of men undergoing prostate cancer screening at a hospital in Gauteng, South Africa', *Health SA Gesondheid* 29(0), a2698. <https://doi.org/10.4102/hsag.v29i0.2698>

Copyright:

© 2024. The Authors.
Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

Read online:

Scan this QR code with your smart phone or mobile device to read online.

Background: Prostate cancer is a global concern and a leading cause of death among men. Screening for prostate cancer is crucial for early detection and to mitigate advanced disease and high-cost treatments. However, men are not well informed about the disease and tend not to be supported during prostate cancer screening.

Aim: The aim of the study was to explore the experiences of men undergoing prostate cancer screening at a hospital in Gauteng province, South Africa.

Setting: The study was conducted at a tertiary care hospital in Gauteng province.

Methods: A qualitative exploratory research design was followed. A convenient sampling method was used and the data were collected through in-depth interviews conducted with 19 participants. The data were analysed using thematic analyses.

Results: Three themes were generated, namely: (1) prostate cancer knowledge, (2) screening influencers and (3) support needs.

Conclusion: The insights from the study underscore the need for improved management of discomfort and pain during screening (including education) and emotional support, as well as considering poor uptake and the high prevalence of prostate cancer among black men.

Contribution: The study highlights the importance of informing men about the prostate cancer screening process to gain their cooperation, including the management of discomfort and pain, and to provide a support person during the process while addressing the high prevalence of the disease among black men.

Keywords: cancer; experiences; men; prostate; screening; support.

Introduction

Prostate cancer is a public-health issue affecting men globally (Marima et al. 2022:3567). The estimated prostate incidence rate is 37.5 per 100 000 and 1.6 million new cases worldwide (Marima et al. 2022:3567). Prostate cancer is the fifth cause of cancer death among men worldwide and accounts for 366 000 deaths and 6.3 million disability-adjusted life years each year (Sung et al. 2021:209). Most of the burden of prostate cancer is reported to be high in low- and middle-income countries (LMICs), including South Africa; whereas the burden is reported to be low in high-income countries (Sung et al. 2021:209). While there is limited reporting of prostate cancer cases in Africa, the incidence is reportedly on the rise on the continent (Hamdi et al. 2021:1). Hamdi et al. (2021:1) also found that North and Southern Africa had a notable prevalence of prostate cancer and that East, West and Central Africa had higher mortality rates associated with the disease. The observed disparities may be significantly influenced by the availability of healthcare resources and medical devices (Hamdi et al. 2021:1).

In South Africa, prostate cancer is common among men across all the provinces and accounts for 13% of male deaths (Ramaliba et al. 2022:1). The incidence and mortality rates of prostate cancer have reportedly been found to be higher among black men in South Africa in comparison to men of other races (Nkoana et al. 2022:1390). According to the National Cancer Registry (NCR) of South Africa, the incidence of prostate cancer was reported to be 61.8 per 100 000 person-years in 2022 (Ramaliba et al. 2022:1). However, these figures might not have been accurate, as the NCR is a pathology-based cancer registry and those who did not undergo screening might not have been reported.

Prostate cancer screening involves digital rectal examination (DRE) and prostate-specific antigen (PSA) testing (Benedict et al. 2023). The PSA detects the presence of a prostate-specific antigen produced by prostate tissue, while the DRE involves a healthcare provider inserting a gloved, lubricated finger into the rectum to check for abnormalities in the prostate. Despite the controversies because of false positives, overdiagnosis, overtreatment and related complications, PSA is a viable method for prostate cancer screening through early detection (Benedict et al. 2023). This is particularly important in Africa, where mortality rates are higher compared to other regions of the world (Seraphin et al. 2021:4221).

Accordingly, the Prostate Cancer Foundation of South Africa recommends that PSA testing should be undertaken by men of especially African descent, starting at the age of 40 years (Badenhorst et al. 2024:103). Despite efforts to promote early screening, a significant number of prostate cancer cases in South Africa and across Africa remain undiagnosed and consequently underreported. While the majority of prostate cancer patients in South Africa utilise the public-health system, the referral process to see an oncologist is complex and has multiple levels. Patients typically start at a primary healthcare centre, usually at a local clinic, before being referred to a district hospital. From there, they move to a regional hospital and, finally, a tertiary care hospital with oncology facilities.

Fong et al. (2023:448) found that prostate cancer screening was a sensitive, embarrassing and invasive procedure that could result in emotional distress. Foster et al. (2023:296) found in their study that prostate cancer screening was stigmatised and that the stigma seemed to stem from the association of the screening procedure with the DRE, as there was a fear that undergoing the DRE implied a loss of masculinity in some way. The study further found that the DRE was associated with homosexuality (Foster et al. 2023:296). However, little research has been performed to understand men's experiences and perceptions of the screening procedure and what kind of support they would like to receive while undergoing screening, particularly in the South African setting.

The researcher, as a male service user at a particular care facility, was unsure about the available screening services for prostate cancer at the primary and secondary care levels. This roused his interest to conduct the study and on conducting a review of literature, he found the paucity of studies on the experiences of men undergoing prostate cancer screening at primary care clinics. Hence, the researcher proposed to study the experiences of men undergoing prostate cancer screening at a specific hospital in Gauteng province, South Africa.

Purpose of the study

The study aimed to explore the experiences of men undergoing prostate cancer screening at a tertiary care

hospital and to understand their preferences for support during the screening process.

Research questions

What are the knowledge and awareness of men regarding prostate cancer and screening at the specific tertiary care hospital?

What are the experiences of men undergoing prostate cancer screening at the specific tertiary care hospital?

What are the support needs of men undergoing prostate cancer screening at the specific tertiary care hospital in Gauteng?

Significance of the study

The study highlighted gaps in the existing research on the experiences of men undergoing prostate cancer screening, including the importance of providing a support person during screening. The study identified common issues related to screening and, as such, healthcare workers will gain insights into making the necessary changes to improve the screening process. Other hospitals can use the findings of the study as guidance to improve the screening process.

Research methods and design

A qualitative exploratory research design was employed to investigate the experiences of men undergoing prostate cancer screening at a specific tertiary care hospital in Gauteng province. Face-to-face interviews were conducted to gain an in-depth understanding of the participants' experiences. A qualitative approach was chosen to prioritise understanding the problem rather than explaining it, as it was essential to capture the reality constructed by the participants (Cho, Grenier & Williams 2022:685). This approach was crucial given the diverse perceptions and varied experiences of the participants regarding prostate cancer and the screening process.

Research setting

The study was conducted at a tertiary care academic hospital in Gauteng province. The hospital is one of the largest hospitals in South Africa. It has a dedicated urology department, with some patients referred from neighbouring secondary care facilities and others walk-ins from Soweto and surrounding informal settlements as well as the neighbouring townships in Gauteng province. The majority of the patients are from middle- and low-income communities and do not have medical insurance, thus they cannot afford private hospital care (Ballard & Hamann 2021:91).

Population and sampling

A population is a group of individuals who share the same characteristics at a specific time and place (Fellows & Liu 2021:110). The target population for this study consisted of

men aged 40 years or older who came to the specific tertiary care hospital between February and July 2022 for prostate cancer screening. Convenient sampling, which involves selecting participants who are readily accessible in a specific setting (Hennink & Kaiser 2021), was used to explore the experiences of 19 men undergoing prostate cancer screening at the particular hospital in Gauteng province. In-depth interviews were conducted to gain detailed insights into the experiences of these men who attended the prostate cancer screening at the tertiary care hospital.

Selection criteria

Selection criteria are the characteristics that potential study participants must possess to be included in the study, whereas exclusion criteria outline the factors that render participants ineligible (Patino & Ferreira 2018:84). The participants were recruited based on the following criteria during their prostate cancer screening at the specific tertiary care hospital between February and July 2022: men aged 40 years or older, men referred for prostate cancer screening to the specific academic hospital's urology clinic in 2022, men with a family history of prostate cancer and men who were still at the workup stage without confirmed prostate cancer.

Participants with the following characteristics were excluded from the study: men under 40 years of age attending to other urologic conditions, men already undergoing prostate cancer treatment, men over 40 years of age who were too ill to participate and men presenting with other psycho-emotional problems. Men younger than 40 years were excluded, as they were less likely to present with prostate cancer (Rawla 2019:63).

Research instrument

To collect the data for this study, semi-structured individual interviews were conducted with the participants using a self-developed interview guide. This guide was necessary to ensure that the questions were specifically tailored to gather in-depth information on the participants' prostate cancer knowledge, perceptions, support needs and experiences relevant to the study context. The questions were open-ended to allow the participants to freely express their thoughts and provide details about their experiences undergoing prostate cancer screening.

The interview guide consisted of two sections: Section A pertained to demographic information, while Section B comprised of semi-structured questions about prostate cancer knowledge, perceptions, support needs and experiences. The guide was validated by colleagues with qualitative research experience and staff working at the urology clinic of the tertiary care hospital.

The interview guide was piloted with two participants who met the inclusion criteria and had similar characteristics to the prospective participants. This pilot testing was done to

verify the participants' understanding of the questions and ensure the guide's clarity and relevance. The pilot participants were recruited using the same method as for the main study participants. Since no issues were encountered during the pilot testing, no changes were made to the interview guide and the data from the pilot interviews were included in the final analysis.

Data collection

Individual interviews were chosen as the primary data collection method because they are well suited to exploring personal experiences and perceptions in detail. This method allows for a deeper understanding of participants' perspectives and ensures a comprehensive exploration of the research topic (Sperber et al. 2023:1).

The interviews were conducted between February 2022 and July 2022, each lasting approximately 40 min. Most of the interviews took place in a private room at the hospital to maintain confidentiality and privacy. The participants were informed about the study's purpose and written informed consent (including consent for audio recording) was obtained prior to each interview.

To address the participants' language preferences, most of the interviews were conducted in Setswana, as it is the predominant language in the area and the researcher's native language (he resides in a similar community and has good communication and understanding of the language). A few of the interviews were conducted in English and isiZulu, which are also widely spoken languages. This ensured that the participants could communicate comfortably in a language they understood, and the researcher was conversant in these languages as well. Multiple visits were done as participants were only available at the screening centre on specified days (only on Wednesdays) and only two participants were interviewed daily to allow reflection time on the interviews.

Field notes were taken during the interviews to capture non-verbal cues and contextual information, which supplemented the audio recordings. Bracketing was employed by the researcher by keeping his preconceptions and personal biases in abeyance, thereby ensuring the integrity and authenticity of the data. Data saturation was reached with 15 participants and thereafter 4 additional interviews were conducted, as no new themes emerged to confirm saturation (Guest, Namey & Chen 2020:2).

Data analysis and management

Thematic analysis served as the cornerstone of this study's data analysis approach (Lester et al. 2020:97). The process commenced with the careful transcription and translation to English language of recorded interviews, ensuring fidelity to the participants' narratives and facilitating an immediate immersion in the data. This initial step aimed to capture nuances and subtleties that might inform subsequent thematic exploration.

Following the transcription, the thematic analysis proceeded through iterative stages of data immersion and coding. The researcher engaged in multiple readings of the transcripts to identify recurring patterns, meaningful segments and initial codes. This methodological rigour was crucial in uncovering the identified themes and categories directly from the data, thus minimising the imposition of preconceived notions or biases. The themes were generated directly from the data.

To enhance the reliability of the findings, the transcriptions underwent rigorous quality checks against the original recordings to verify accuracy and to preserve the participants' intended meanings. Furthermore, collaboration with an experienced external qualitative co-coder ensured consistency in coding decisions, further bolstering the credibility and depth of the thematic analysis. The co-coder signed a data agreement form to ensure that the data would not be shared outside the research.

The data were stored electronically, encrypted on Dropbox and will be discarded after 6 years to allow sufficient time for potential re-analysis and to share the de-identified transcriptions if the study is submitted to a peer-reviewed journal. Only the researcher, the intercoder and the supervisor had access to the data.

Reflexivity was maintained throughout the research process to account for the researcher's potential biases and their impact on the study. Discussions about the data and findings included the researcher, the intercoder and the supervisor, ensuring a collaborative and thorough examination of the data.

Trustworthiness

The principles of credibility, dependability, confirmability and transferability were applied to assess the trustworthiness of the study (Maher et al. 2018:3). Credibility was enhanced through prolonged engagement and persistent observation at the urology clinic, which allowed for the collection of comprehensive and in-depth data until data saturation was reached. To enhance transferability, a thick description of the findings was provided, enabling readers to determine the applicability of the study to other contexts. Dependability was maintained by creating a detailed audit trail, which included field notes, effective communication, the use of high-quality recording equipment and ensuring a comfortable environment for the participants. Confirmability was achieved by implementing strategies such as member checking, where the participants reviewed the findings for accuracy, and by maintaining a reflective journal to document the researcher's thoughts and potential biases throughout the study. These measures collectively enhanced the reliability and validity of the research findings.

Ethical considerations

The ethical standards were upheld throughout the study by following all the ethics principles (Armond et al. 2021:1). The principle of beneficence was respected by ensuring that, even

though there were no direct benefits to the participants, the findings would be used to increase prostate cancer screening uptake through dissemination to public-health officials and policymakers. The principle of respect for persons was maintained by honouring the participants' decisions, including their right to withdraw from the study at any time without consequence. The principle of non-maleficence was upheld, as no harm resulted from the participation and potential psychological harm was mitigated by arranging free counselling for those who might experience distress during the interviews; however, the service was not utilised as none of participants experienced any psychological harm. Justice was ensured by adhering to legal standards and allowing the participants to ask questions and make informed decisions about their involvement while still accessing healthcare benefits.

Ethical approval to conduct this study was obtained from the University of South Africa, College of Human Sciences Research Ethics Review Committee (61263079_CRECHS_2021) and with permission from the facility and the department head at the specific tertiary care hospital. The participants were fully informed about the study, signed informed consent forms and participated voluntarily. They were made aware of the potential benefits of the study to future screening practices and services. Confidentiality was strictly maintained, with all the collected information anonymised and no identifying details linked to the data. No emotional trauma was reported during the data collection, and the ethical considerations were rigorously followed to protect the participants' rights and well-being.

Results

Demographic information

A total of 19 men, aged between 54 and 84 years, participated in the study. The ethnic composition of the participants was Zulu ($n = 6$), South Sotho ($n = 4$), Swazi ($n = 2$), Tsonga ($n = 2$), mixed race ($n = 1$), Ndebele ($n = 1$), North Sotho ($n = 1$), Xhosa ($n = 1$) and other ($n = 1$). Most of the participants ($n = 15$) resided in urban areas; 4 were from rural areas and had been referred to the hospital. The marital status of the participants was that most were married ($n = 14$), with others being culturally married ($n = 2$), cohabiting ($n = 1$), in a stable relationship ($n = 1$) or single ($n = 1$). In terms of education, most of the participants had completed tertiary education ($n = 10$), 7 had completed Grades 11 and 12, and 2 had completed Grades 8 to 10. The majority of the participants ($n = 15$) were state pensioners who were receiving a monthly pension income of over R2000.00. Of the 4 unemployed participants, 2 received a monthly income of over R2000.00 and the other 2 had no monthly income.

Discussion of the themes

Three themes were generated from the study: (1) prostate cancer knowledge, (2) screening influencers and (3) support needs. Once the themes emerged from the data, several categories were developed from codes and represented

similar issues (Table 1). The quotes reflect the perspective of the participants at the specific tertiary care hospital.

Theme 1: Prostate cancer knowledge

The first theme to be generated was knowledge about prostate cancer, as the participants were asked to explain what they knew about prostate cancer. Two categories were identified, namely: (1) a lack of knowledge about the disease and (2) partial knowledge about the disease.

A lack of knowledge about the disease: Most of the participants in the study lacked knowledge about prostate cancer and as a result, did not go for screening. Others indicated that they had heard about prostate cancer but did not know much about it. Two of the participants said:

'I do not want to lie, truly speaking I do not know anything about it. It is only when I was attending the clinic, this year [2022], then they send me here [to the academic hospital], saying it looks like I have cancer. I do not know anything, even what causes it I do not know!' (Participant 3, male, 84 years old)

'I am beginning to hear the word prostate cancer here at the hospital. The time I started being ill.' (Participant 4, male, 71 years old)

Partial knowledge about the disease: Partial knowledge is defined as either knowledge that is used consistently but contains errors or knowledge that is used inconsistently (Ugochukwu et al 2019:168). Although some of the participants did not know about the disease, others knew very little about it, though the information was not wholly accurate. Participants described prostate cancer as follows:

'They say something close up [pausing and pointing down to their trousers and penile area] ... of swollen down there, close-up of down there.' (Participant 1, male, 66 years old)

'Uhm one thing I know about prostate cancer is that it grows in the pubic area. And it is giving problems with urinating.' (Participant 6, male, 73 years old)

'I hear that they say a person has difficulties with urinating. Some says the urine just goes off [meaning uncontrollably].' (Participant 3, male 84 years old)

Theme 2: Screening influencers

Another theme that was generated from the data was screening influencers. Three categories that influenced the participants' decisions to go for screening at the specific tertiary care hospital were identified as: (1) referrals by a healthcare

practitioner and having other comorbidities, (2) a family history of prostate cancer and knowing someone affected by the disease, and (3) symptoms experienced prior to diagnosis.

Referrals by a healthcare practitioner and having other comorbidities: Some of the participants in the study had been referred to the urology department by healthcare practitioners, which had influenced their decision to go for screening. Others reported that they usually went to local clinics for other medical reasons such as other comorbidities, including going for follow-ups for diabetes and high blood pressure, and had then been referred for screening. With regard to referral by a healthcare practitioner, one of the participant stated:

'I am usually attending the clinic for high blood pressure. I have high blood, so when I was attending the clinic. Then when they took blood ... the results came then they told me that it looks like you have prostate, then the sister [professional nurse] gave me a letter referring me and said I should go to the hospital.' (Participant 3, male, 84 years old)

Family history of prostate cancer and knowing someone affected by the disease: Some of the participants cited having witnessed a family member or relative having the disease as the reason for accessing healthcare. Participants reported that they feared having the same experience as their family member and explained:

'Uhm prostate cancer my father actually had one and he passed on so, even my brother! But after my brother passing on, I started taking blood from the clinic telling them to make thorough check, whatever kind of disease, they must just do.' (Participant 2, male, 57 years old)

'As I was saying my father had one; I didn't want to end up in a situation I saw happening to him. So, I wanted it to be detected as early as possible.' (Participant 4, male, 71 years old)

Symptoms experienced prior to diagnosis: In this study, it was found that participants had experienced prostate cancer symptoms such as erectile dysfunction, urinary incontinence and urine blockage that had led them to go to the hospital. They said:

'The thing that took me to the clinic, I was at a shop a hardware shop, I just realised that I was not able to hold my urine. I just noticed late when I have wet my pants. Then from there [laughing] [embarrassed] I went to a doctor.' (Participant 13, male, 58 years old)

'At respiratory I asked the doctor, after attending me he asked me what else is bothering me. And then I told the doctor that when I sleep with my woman, I no longer get strong you know my "4 5" [South African slang for "penis"] becomes soft, that's when he sent me here at Urology.' (Participant 4, male, 71 years old)

'I can feel that my urine is hot [burning], but I can sit [took] for two months while the urine is burning me until I discuss this with another man. Maybe while we are chilling somewhere, and we have a conversation, and he says maybe this thing is caused by 1 2 3 [other causes]. I am already sick and feeling pains things like that.' (Participant 15, male, 62 years old)

Theme 3: Support needs during prostate screening

Participants in the study identified their need for support during prostate screening, which generated as the last theme

TABLE 1: Themes and categories of the study findings.

Themes	Categories
Prostate cancer knowledge	1. A lack of knowledge about the disease 2. Partial knowledge about the disease
Screening influencers	1. Referrals by a healthcare practitioner and having other comorbidities 2. Family history of prostate cancer and knowing someone affected by the disease 3. Symptoms experienced prior to diagnosis
Support needs during prostate screening	1. Provision of information about the disease 2. Provision of counselling before and after screening 3. Provision of effective pain control and treatment 4. Having a support person present during screening

with four categories: (1) provision of information about the disease, (2) provision of counselling before and during screening, (3) provision of effective pain control and treatment and (4) having a support person present during screening.

Provision of information about the disease: The findings of the study reveal that participants needed information about prostate cancer. They expressed the need for information as follows:

'I need information to know how far the cancer is and, also to know if it is growing or what, I just want the support to know about treatment.' (Participant 18, male, 68 years old)

'The doctor should tell me how long that thing is on me, how do I feel, such question like when you pass urine what you feel and all those things ... this process sometime when you are embarking on this journey of prostate cancer, you have to be informed what is going to happen.' (Participant 15, male, 62 years old)

Provision of counselling before and after screening: Most of the participants reported that they received no counselling during the screening and felt that counselling would be beneficial. They reported that healthcare practitioners at the specific hospital did not provide information, but simply proceeded to carry out the examination. The participants stated:

'No, you don't have that kind of counselling. You see the doctor, you don't talk. If you don't ask questions the doctor also doesn't ... The doctor just writes and then give you the next appointment date that's it ... I should get one on one with the doctor [*implying the need for a counselling session*].' (Participant 15, male, 62 years old)

'No, they didn't give me any information about prostate cancer here at the hospital! when I arrived here, they just examined me. No there is no counselling that I received.' (Participant 18, male, 68 years old)

Provision of effective pain control and treatment: Some of the participants in the study seemed anxious to receive treatment and get better. Some of them were concerned about whether they could be cured or treated. They said:

'Let's say maybe cancer treatment, when they give people medication, when they have diagnosed how advanced the cancer is, they should give medication that can treat the cancer.' (Participant 5, male, 70 years old)

'Okay you see now I have only one worry, which I do not know if I might find it on the doctors or what. Is that, is this thing cured or what.' (Participant 3, male, 84 years old)

Other participants expressed the need for effective pain control. One participant stated:

'They didn't inject anything to neutralise pain ... Maybe before they do biopsy maybe they should give someone an injection just to relief or to reduce the pain.' (Participant 17, male, 66 years old)

Having a support person present during screening: Some participants expressed the need for a support person in the screening room. This person could be either a nurse or a family member. The responses of participants are provided as follows:

'There was only one doctor, a female doctor ... nah! [*irritable*] she was just alone.' (Participant 19, male, 69 years old)

'It was only me and the doctor. There was no nurse.' (Participant 18, male, 68 years old)

'Fortunate enough one of my family members is a nurse, I spoke to him about this procedure, he was very much aware of what is happening because ...' [*The participant then had to ask his relative once he was home*] (Participant 10, male, 62 years old)

'I said what is this blood in the urine? He then said, 'It will disappear after some couple of days'.' (Participant 11, male, 63 years old)

Discussion

The purpose of the study was to explore the experiences of men undergoing prostate cancer screening at a tertiary care hospital in Gauteng province. The study revealed that the participants' knowledge about prostate cancer was still a concern, as was evident from the narratives shared. This finding from the study supports that of the study conducted by Baratedi et al. (2020:87) to understand screening barriers in sub-Saharan Africa, where it was found that men lacked knowledge about prostate cancer. Furthermore, it was reported that healthcare workers were not advising the men to return for their screening results after screening. The findings of our study support those of Ugochukwu et al. (2019:168) and Ojewola et al. (2017:151), who found that the majority of the participants in their studies had poor knowledge about prostate cancer. The findings of our study reveal that a small number of the participants had partial knowledge about prostate cancer, which was incorrect. This also confirms what Matshela, Maree and Van Belkum (2014) found in a study to test an intervention to detect prostate cancer in a semi-rural settlement community in South Africa, where some of the participants knew little about prostate cancer.

Healthcare practitioners play an important role in motivating older men who have other ailments and comorbidities such as high blood pressure and diabetes to do prostate cancer screening (Enaworu & Khutan 2016:525; Shungu & Sterba 2021:925). Some of the participants had been referred for prostate screening by a healthcare practitioner, had a family history of the disease, knew someone affected by the disease or had experienced symptoms prior to visiting a healthcare facility. This finding confirms what was reported by Shungu and Sterba (2021) and James et al. (2017:1), who found that healthcare professionals were influential in participants' decision to screen for prostate cancer or that advancing age and experiencing symptoms of the disease prompted participants to go for screening. Previous studies identified a family history of the disease as one of the major risk factors for developing prostate cancer (James et al. 2017:1; Williams et al. 2018:2165). The findings of the study concur with that of Enaworu and Khutan (2016), where participants accessed prostate cancer screening because they had been influenced by a relative or family member to do so.

Some of the participants went for a hospital consultation after experiencing symptoms such as difficulty in passing urine and incontinence. This finding is consistent with that of Enaworu and Khutan (2016:525), who found that experiencing symptoms was the main factor that influenced men in Nigeria to screen for prostate cancer. However, this finding of the

study was not consistent with that of Gellerstedt et al. (2022:2485), who found that men showed up for prostate cancer screening despite not having any symptoms.

Smith and Koehlmoos (2011:1) reported that the provision of information was critical for good health, such as reported in our study, where participants expressed a need for information about the disease. Similar findings were reported by Eibich and Goldzahl (2020:1), who found that health knowledge among European women was improved through the provision of health information. Participants in the study reported a need for counselling before and during screening, as this was obviously not provided based on narratives shared on this issue. However, it is crucial for participants to receive some form of counselling as a means to gain their cooperation during screening. These findings confirm what was reported by Al-Omari et al. (2022:1) in their study to identify gaps in supportive care needs among cancer survivors in Amman, where men in their study required counselling. Furthermore, in a study investigating support needs among men who attended urological oncology clinics, Lintz et al. (2003:769) found that 48% of the participants desired face-to-face counselling as a support service. Prashar, Schartau and Murray (2022:1) explored the experiences and supportive care needs of patients with prostate cancer and found that pre- and post-screening counselling were crucial to ease the emotional stress associated with a health problem among patients in healthcare settings. The study also found that participants needed effective pain control and treatment during screening. This finding is consistent with that of Kalakou et al. (2021:1), who explored the supportive care needs of men with prostate cancer after their discharge from hospital in western Norway and found that men needed treatment support. In addition, there was a significant improvement following the administration of pain relief to patients diagnosed with cancer in Taiwan (Su et al. 2021:1903).

Having a support person present during screening was also reported by participants in our study. Although no studies on the presence of a support person during screening was found, many qualitative studies cited in the literature identify the support of a person such as a family member, friend or partner as an important source of emotional support during the prostate cancer or cancer journey (Prashar et al. 2022:1).

Limitations of the study

Because of the qualitative nature of the study, the sample size was small. The study can therefore not be generalised to all men attending the specific tertiary care hospital. Participants may have given socially desired responses because of having discussed the situation with others, as the interviews were conducted on alternate days and the participants might have shared some questions.

Conclusion and recommendations

The study provides evidence that a lack of knowledge about prostate cancer remains a challenge, especially in sub-Saharan countries. The lack of knowledge contributes to

feelings of discomfort and anxiety among men undergoing screening. Also, the lack of the presence of a support person meant that men felt anxious and uncomfortable during screening. It is important that patients at least be informed by healthcare professionals about screening prior to the actual procedure to gain their cooperation and to allay their fears. It would be ideal to look at pain control measures during screening to make sure that men feel at ease, as pain is an obstacle in screening.

It is recommended that men be treated with sensitivity and that a support person (nurse or family member) be available to ensure their cooperation during screening. It is essential that doctors provide a mild analgesic during screening as well as prescribe counselling before and after screening.

Acknowledgements

The authors would like to acknowledge all the participants who took time off their busy schedule and participated in the study. This article is based on the author's thesis entitled 'Experiences of men undergoing Prostate cancer screening at a specific hospital in Gauteng province' towards the degree of Master of Public Health in the Department of Health Studies, University of South Africa, South Africa, July 2023, with supervisor Dr A Mosalo. It is available here: https://uir.unisa.ac.za/bitstream/handle/10500/30418/dissertation_komane_bm.pdf?isAllowed=y&sequence=1.

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

B.M.K. and A.M. wrote the article, conceptualised the research question and conducted the qualitative analysis. A.M. and B.M.K. analysed the data and critically reviewed and supported the final design of the article.

Funding information

This study was funded by the National Research Foundation Freestanding Master's Scholarship with grant number MND200601526484.

Data availability

The data for this study are available from the corresponding author, B.M.K., upon reasonable request.

Disclaimer

The views and opinions expressed in this article are those of the authors and are the product of professional research. The article does not necessarily reflect the official policy or position of any affiliated institution, funder, agency or that of the publisher. The authors are responsible for this article's results, findings and content.

References

- Al-Omari, A., Al-Rawashdeh, N., Damsees, R., Ammar, K., Alananzeh, I., Inserat, B. et al., 2022, 'Supportive care needs assessment for cancer survivors at a comprehensive cancer center in the Middle East: Mending the gap', *Cancers (Basel)* 14(4), 1. <https://doi.org/10.3390/cancers14041002>
- Armond, A.C.V., Gordijn, B., Lewis, J., Hosseini, M., Bodnár, J.K., Holm, S. et al., 2021, 'A scoping review of the literature featuring research ethics and research integrity cases', *BMC Medical Ethics* 22(50), 1–14. <https://doi.org/10.1186/s12910-021-00620-8>
- Badenhorst, A., John, J., Perera, M. & Adam, A.G., 2024, 'Prostate cancer screening guidelines: To PSA or not to PSA?', *Wits Journal of Clinical Medicine* 6(2), 103–108. <https://doi.org/10.18772/26180197.2024.v6n2a8>
- Ballard, R. & Hamann, C., 2021 'Income Inequality and Socio-economic Segregation in the City of Johannesburg', in T. Tammaru, S. Marcińczak, M. Van Ham & S. Musterd (eds.), *Urban Socio-Economic Segregation and Income Inequality: A Global Perspective*, pp. 91–109, Springer International Publishing, Cham. https://doi.org/10.1007/978-3-030-64569-4_5
- Baratedi, W., Tshiamo, W., Mogobe, K. & McFarland, D., 2020, 'Barriers to prostate cancer screening by men in sub-Saharan Africa: An integrated review', *Journal of Nursing Scholarship* 52(1), 85–94. <https://doi.org/10.1111/jnu.12529>
- Benedict, M.O.A., Steinberg, W.J., Claassen, F.M. & Mofolo, N., 2023, 'Strategies to enhance the approach to prostate cancer screening of South African black men in the Free State: A Delphi study', *Journal of Public Health in Africa* 14(7), 1–10. <https://doi.org/10.4081/jphia.2023.2333>
- Cho, Y., Grenier, R. & Williams, P., 2022, 'Introduction: Innovation in qualitative research in HRD', *European Journal of Training and Development* 46(7/8), 685–692. <https://doi.org/10.1108/EJTD-05-2022-0058>
- Eibich, P. & Goldzahl, L., 2020, 'Health information provision, health knowledge and health behaviours: Evidence from breast cancer screening', *Social Science and Medicine* 265(C), 113505. <https://doi.org/10.1016/j.socscimed.2020.113505>
- Enaworu, O. & Khutan, R., 2016, 'Factors influencing Nigerian men's decision to undergo prostate specific antigen testing', *African Health Sciences* 16, 524–532. <https://doi.org/10.4314/ahs.v16i2.21>
- Fellows, R.F. & Liu, A.M., 2021, *Research methods for construction*, John Wiley & Sons, Hong Kong.
- Fong, J., Venables, M., D'Souza, D. & Maskerine, C., 2023, 'Patient communication preferences for prostate cancer screening discussions: A scoping review', *The Annals of Family Medicine* 21(5), 448–455. <https://doi.org/10.1370/afm.3011>
- Foster, S., Carvallo, M., Wenske, M. & Lee, J., 2023, 'Damaged masculinity: How honor endorsement can influence prostate cancer screening decision-making and prostate cancer mortality rates', *Personality and Social Psychology Bulletin* 49(2), 296–308. <https://doi.org/10.1177/01461672211065293>
- Gellerstedt, L., Langius-Eklöf, A., Kelmendi, N., Sundberg, K. & Craftman, A., 2022, 'Men's experiences of receiving a prostate cancer diagnosis after opportunistic screening – A qualitative descriptive secondary analysis', *Health Expectations* 25(5), 2485–2491. <https://doi.org/10.1111/hex.13567>
- Guest, G., Namey, E. & Chen, M., 2020, 'A simple method to assess and report thematic saturation in qualitative research', *PLoS One* 15(5), 1–2. <https://doi.org/10.1371/journal.pone.0232076>
- Hamdi, Y., Abdeljaoued-Tej, I., Zatchi, A.A., Abdelhak, S., Boubaker, S., Brown, J.S. et al., 2021, 'Cancer in Africa: The untold story', *Frontiers in Oncology* 11, 1–19. <https://doi.org/10.3389/fonc.2021.650117>
- Hennink, M. & Kaiser, B., 2021, 'Sample sizes for saturation in qualitative research: A systematic review of empirical tests', *Social Sciences and Medicine* 292, 1–5. <https://doi.org/10.1016/j.socscimed.2021.114523>
- James, L., Wong, G., Craig, J., Hanson, C., Ju, A., Howard, K. et al., 2017, 'Men's perspectives of prostate cancer screening: A systematic review of qualitative studies', *PLoS One* 12(11), 1–3. <https://doi.org/10.1371/journal.pone.0188258>
- Kalakou, F., Aase, K., Kjosavik, S. & Husebø, S., 2021, 'Supportive care needs of men with prostate cancer after hospital discharge: Multi-stakeholder perspectives', *International Journal of Qualitative Studies Health Well-being* 16(1), 1–6. <https://doi.org/10.1080/17482631.2021.1960706>
- Lester, J., Cho, Y. & Lochmiller, C., 2020, 'Learning to do qualitative data analysis: A starting point', *Human Resource Development Review* 19(1), 94–106. <https://doi.org/10.1177/1534484320903890>
- Lintz, K., Moynihan, C., Steginga, S., Norman, A., Eeles, R., Huddart, R. et al., 2003, 'Prostate cancer patients' support and psychological care needs: Survey from a non-surgical oncology clinic', *Psychooncology* 12, 769–783.
- Maher, C., Hadfield, M., Hutchings, M. & De Eyto, A., 2018, 'Ensuring rigor in qualitative data analysis: A design research approach to coding combining NVivo with traditional material methods', *International Journal of Qualitative Methods* 17(1), 1–3. <https://doi.org/10.1177/1609406918786362>
- Marima, R., Mbeje, M., Hull, R., Demetriou, D., Mtshali, N. & Dlamini, Z., 2022, 'Prostate cancer disparities and management in southern Africa: Insights into practices, norms and values', *Cancer Management and Research* 14, 3567–3579. <https://doi.org/10.2147/CMAR.S382903>
- Matsshela, R., Maree, J. & Van Belkum, C., 2014, 'Prevention and detection of prostate cancer: A pilot intervention in a resource-poor South African community', *Cancer Nursing* 37(3), 189–197. <https://doi.org/10.1097/NCC.0b013e31829194d2>
- Nkoana, S., Sodi, T., Makgahlela, M. & Mokwena, J., 2022, 'Cancer survivorship: Religion in meaning making and coping among a group of black prostate cancer patients in South Africa', *Journal of Religion and Health* 61(2), 1390–1400. <https://doi.org/10.1007/s10943-021-01406-3>
- Ojewola, R.W., Oridota, E.S., Balogun, O.S., Ogundare, E.O., Alabi, T.O., Banjo, O.O. et al., 2017, 'Knowledge, attitudes and screening practices regarding prostatic diseases among men older than 40 years: A population-based study in Southwest Nigeria', *The Pan African Medical Journal* 27, 151. <https://doi.org/10.11604/pamj.2017.27.151.10605>
- Patino, C.M. & Ferreira, J.C., 2018, 'Inclusion and exclusion criteria in research studies: Definitions and why they matter', *Journal Brasileiro Pneumologia* 44(2), 84. <https://doi.org/10.1590/s1806-37562018000000088>
- Prashar, J., Schartau, P. & Murray, E., 2022, 'Supportive care needs of men with prostate cancer: A systematic review update', *European Journal of Cancer Care* 31(2), 1–7. <https://doi.org/10.1111/ecc.13541>
- Ramaliba, T.M., Sithole, N., Ncinitwa, A. & Somdyala, N.I., 2022, 'Prostate cancer patterns and trends in the Eastern Cape province of South Africa, 1998–2017', *Frontiers in Public Health* 10, 1–5. <https://doi.org/10.3389/fpubh.2022.882586>
- Rawla, P., 2019, 'Epidemiology of prostate cancer', *World Journal of Oncology* 10(2), 63–89. <https://doi.org/10.14740/wjon1191>
- Seraphin, T.P., Joko-Fru, W.Y., Hämmerl, L., Griesel, M., Mezger, N.C.S., Feuchtnr, J.C. et al., 2021, 'Presentation, patterns of care, and outcomes of patients with prostate cancer in sub-Saharan Africa: A population-based registry study', *Cancer* 127(22), 4221–4232. <https://doi.org/10.1002/cnrc.33818>
- Shungu, N. & Sterba, K., 2021, 'Barriers and facilitators to informed decision-making about prostate cancer screening among Black men', *The Journal of the American Board of Family Medicine* 34(5), 925. <https://doi.org/10.3122/jabfm.2021.05.210149>
- Smith, R. & Koehlmoo, T., 2011, 'Provision of health information for all', *BMJ (Clinical Research ed.)* 342, 1–5. <https://doi.org/10.1136/bmj.d4151>
- Sperber, A.D., Bor, S., Fang, X., Bangdiwala, S.I., Drossman, D.A., Ghoshal, U.C. et al., 2023, 'Face-to-face interviews versus Internet surveys: Comparison of two data collection methods in the Rome foundation global epidemiology study: Implications for population-based research', *Neurogastroenterology & Motility* 35(6), 1–19. <https://doi.org/10.1111/nmo.14583>
- Su, W., Chuang, C., Chen, F., Tsai, H., Huang, C., Chang, T. et al., 2021, 'Effects of good pain management (GPM) ward program on patterns of care and pain control in patients with cancer pain in Taiwan', *Supportive Care in Cancer* 29, 1903–1911. <https://doi.org/10.1007/s00520-020-05656-x>
- Sung, H., Ferlay, J., Siegel, R.L., Laversanne, M., Soerjomataram, I., Jemal, A. et al., 2021, 'Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries', *CA: A Cancer Journal for Clinicians* 71(3), 209–249. <https://doi.org/10.3322/caac.21660>
- Ugochukwu, U., Odukoya, O., Ajogwu, A. & Ojewola, R., 2019, 'Prostate cancer screening: What do men know, think and do about their risk? Exploring the opinions of men in an urban area in Lagos State, Nigeria: A mixed methods survey', *Pan African Medical Journal* 34, 168. <https://doi.org/10.11604/pamj.2019.34.168.20921>
- Williams, V., Awasthi, S., Fink, A., Pow-Sang, J., Park, J., Gerke, T. et al., 2018, 'African-American men and prostate cancer-specific mortality: A competing risk analysis of a large institutional cohort, 1989–2015', *Cancer Medicine* 7(5), 2160–2171. <https://doi.org/10.1002/cam4.1451>