NexAvens Scientific Library

OPEN ACCESS

NL Journal of Medical and Pharmaceutical Sciences

Volume 1 Issue 1 August 2025 Research Article

Knowledge and Attitudes Toward Prostate Cancer Screening Among Men in K-Vom, Jos South LGA, Plateau State Nigeria

Onah Isegbe Emmanuel[1*] | Mbah Amaechi[2] | Eze Chiamaka Emily[3] |

1. Department of General Studies, Federal College of Veterinary and Medical Laboratory Technology, Vom, Plateau state, Nigeria.
2. Department of Environmental Health Technology, Federal College of Veterinary and Medical Laboratory technology, Vom, Plateau state, Nigeria.
3. Department of Fisheries Technology, Federal College of Animal Health and Production Technology, Vom, Plateau state, Nigeria.

Corresponding Author: Onah Isegbe Emmanuel, Department of General Studies, Federal College of Veterinary and Medical Laboratory Technology, Vom, Plateau state, Nigeria.

Received Date: May 13- 2025 **Publication Date:** July 25- 2025

Abstract: Prostate cancer is cancer that occurs in the prostate, symptoms include trouble urinating, decreased force in the stream of urine, blood in the urine, blood in the semen, bone pain, losing weight without trying and erectile dysfunction. The aim of this study was to assess the knowledge and attitudes toward prostate cancer screening among men in K-Vom, Jos South LGA, Plateau State, Nigeria. This study employed a cross-sectional design. Study Population was 150 men. This study adhered to ethical principles, including voluntary participation, confidentiality, and anonymity of participants. A structured questionnaire was used for data collection. Quantitative data were analyzed using descriptive statistics. Out of the 150 questionnaires distributed, response rate was 100%. 66 respondents were married (44.0%), while 66 were single (44%). 68.0% of the respondents had a good knowledge of prostate cancer. 32.0% have undergone prostate cancer screening. 78(52.0%) agreed that the drugs for prostate cancer are effective, while 6(4.0%) strongly disagreed. The study was limited by paucity of information as men were shy to express sincere answers due to stigmatization, while others demonstrated apathy towards the study. According to the result of this study, only (68.0%) were aware of prostate cancer and (32.0%) respondents have poor knowledge and attitude towards prostate cancer screening. Therefore, it is necessary to focus on more health education campaigns about prostate cancer among men in the K-Vom community. Interventions aimed at increasing awareness and improving access to screening are essential to reducing prostate cancer mortality. Educational campaigns, community-based programs, and healthcare provider engagement are key strategies for increasing screening uptake.

Keywords: Prostate, Men, Erectile dysfunction, Vom, Screening, Urination difficulties.

Introduction

Prostate cancer is cancer that occurs in the prostate. The prostate is a small walnut-shaped gland in males that produces the seminal fluid that nourishes and transports sperm. Prostate cancer is one of the most common types of cancer. Many prostate cancers grow slowly and are confined to the prostate gland, where they may not cause serious harm. However, while some types of prostate cancer grow slowly and may need minimal or even no treatment, other types are aggressive and can spread quickly.

Prostate cancer that's detected early, when it's still confined to the prostate gland, has the best chance for successful treatment. It may cause no signs or symptoms in its early stages. But when advanced may cause signs and symptoms such as: trouble urinating, decreased force in the stream of urine, blood in the urine, blood in the semen, bone pain, losing weight without trying and erectile dysfunction [1].

Prostate cancer is the second most common cancer among men worldwide, with an estimated 1.4 million new cases diagnosed in 2020 alone [2]. In Nigeria, prostate cancer is a significant public health concern, with an increasing incidence and mortality rate, particularly among men in rural areas with limited access to healthcare services [3].

There is a lack of knowledge about prostate cancer among men, with many unaware of the risk factors, symptoms, and available screening options [4]. This knowledge gap contributes to misconceptions and negative attitudes toward prostate cancer screening, further hindering early detection efforts [5]. Additionally, cultural factors and gender norms may influence men's reluctance to seek medical care or undergo screening tests for prostate cancer, leading to delayed diagnosis and advanced disease at presentation [6]. By understanding the knowledge gaps and attitudes toward screening, interventions can be developed to raise awareness, dispel misconceptions, and promote screening uptake among men in the community. Ultimately, improving prostate cancer screening rates can lead to earlier detection, better treatment outcomes, and reduced burden of prostate cancer.

According to existing reports, Jos South Local Government Area is one of the regions facing challenges in prostate cancer management due to factors such as limited awareness, cultural beliefs, and poor healthcare infrastructure [7]. Despite the availability of screening methods such as prostate-specific antigen (PSA) testing and digital rectal examination (DRE), uptake remains low, leading to late-stage diagnosis and poor treatment outcomes [8]. This study aims to determine the association between the knowledge and attitudes towards prostate cancer screening among men in K-Vom, Jos south LGA, Plateau state, Nigeria.

Materials and Methods

Study Area

The research was carried out in Jos South LGA, Plateau State, Nigeria. Vom is located at an elevation of about 1,238 meters above sea level. It is a quiet rocky village in Plateau State. The nearest towns are Bukuru and Jos, 12.8 and 24 kilometres, to the north-east respectively. Largely because of its altitude and constant winds. Vom has a remarkably cool climate. In December and January, the nights may be extremely cold. The wet season extends from late April to middle October.

Study Design

This study employed a cross-sectional design to assess the knowledge and attitudes toward prostate cancer screening among men in Vom, Jos South Local Government Area (LGA), Plateau State, Nigeria.

Study Population

The study was carried out among adult males who were 40 years of age and above. Although there are contradictory guidelines by medical organizations on screening for prostate cancer, the American Urological Association and the American Cancer Society recommend screening for all men aged 50 years and above with life expectancy >10 years and recommends started screening at age 40-45 years for high-risked men such as African Americans and those with affected first degree relatives [9]. Hence the study was carried out among adult males who were either 40 years of age or above.

Inclusion and Exclusion Criteria

Respondents who had resided in the local council area for at least 6 months were included. Health workers and men who had been diagnosed with prostate cancer were, however exempted from the study.

Sampling Technique

Within K-Vom community, households were randomly chosen, and eligible men were invited to participate in the study. Only those who gave consent to participate by filling the questionnaires were included. Questionnaires were administered face-to-face. Participants were given consideration to the time they will be available to respond to the questions.

Ethical Considerations

This study adhered to ethical principles, including voluntary participation, confidentiality, and anonymity of participants. Ethical approval was obtained from the institutional review board of the Department of Epidemiology and Disease Control at Federal College of Veterinary and Medical laboratory Technology, before commencement of the study.

Data Collection Instrument

A structured questionnaire was used for data collection. The questionnaires include sections on socio-demographic characteristics, knowledge of prostate cancer and screening methods, attitudes toward prostate cancer screening, and healthcare-seeking behaviour.

Data Analysis

Quantitative data were analyzed using descriptive statistics such as frequencies, and percentages.

Results

Table 1 shows that out of the 150 questionnaires distributed, 150 were filled and returned (100% response rate). 66 respondents were married (44.0%), while 66 were single (44%). 8 and 10 were widowed (5.3%) and divorced (6.6%) respectively. Most of the respondents fell within less than 40 years (46.0%, n=69). Respondents who engaged in business recorded the highest response (28.6%, n=43), while those who are traders had the least response (9.3%, n=14). Christians had the highest response (70.0%, n=105), while Traditional worshipers had the least response (11.3%, n=17). In relation to ethnicity, Berom tribe had the highest response (36.6%, n=55), while the least is Igbo tribe (12.0%, n=18).

Table 1: Demographic Characteristics of Respondents

Characteristics	Frequency (n)	Percentage (%)
Age		
<40	69	46.0
40-45	21	14.0
46-50	21	14.0
51-55	14	9.3
56-60	17	11.3
Above 60 years	8	5.3
Marital Status		
Single	66	44.0
Married	66	44.0
Divorced	10	6.6
Widowed	8	5.3
Educational Level		
Primary	9	6.0
Secondary	35	23.3
Tertiary	87	58.0
None	19	12.6
Occupation		
Civil Servant	38	25.3
Farmer	28	18.7
Business	43	28.6
Trader	14	9.3
Other	27	18.0
Religion		
Christianity	105	70.0
Islam	28	18.7
Traditional	17	11.3
Ethnicity		
Yoruba	22	14.6
Igbo	18	12.0
Hausa	25	16.6
Berom	55	36.6
Others	30	20.0

Table 2 shows that more than half (68.0%, n=102) of the respondents had a good knowledge of prostate cancer. Less than half of them (32.0%, n=48) had a negative attitude towards prostate cancer. More than half of the respondents (69.3%, n=104) have never undergone prostate screening. Less than half of the respondents (30.7%, n=46) have undergone prostate screening. More so, the most frequent stated sources of information was health workers (30.7%, n=56).

While the least is Books and Schools with (7.3%, n=11), the percentage score of respondents with the poorest knowledge on digital rectal examination (60.7%, n=91) and the respondents with good knowledge on DRE is (33.3%, n=59) respondents with poorest knowledge or awareness on prostate specific antigen was (54.7%, n=82), while the respondents with good knowledge on PSA is (44.6%), half of the respondents (54.7%, n=82) have the belief that prostate cancer has the second highest mortality rate among men. Many respondents (52.0%, n=78) are not aware of nocturia as the symptoms of prostate cancer but some respondents (48.0%, n=72), 46.0% (n=69) of respondents believed that surgery is the only treatment option for prostate cancer, while 81(84.0%) of them responded that surgical intervention could lead to death. More than half of the respondents (71.3%, n=107) agreed that lower abdominal pain is one of the symptoms of prostate cancer, while less than half of the respondents (28.6%, n=43) disagreed. Majority of the respondents (55.3%, n=83) were also aware that radiation is one of the treatment modality for prostate cancer, while less of the respondents (44.6%, n=67) are not aware.

Table 2: Knowledge and Awareness of Prostate Cancer.

Characteristics	Frequency (n)	Percentage (%)
Have you ever heard of Prostate Cancer?		
Yes	102	68.0
No	48	32.0
If yes, what is the Major Source of your Information?		
Family	16	10.6
Health workers	56	37.3
Friends	15	10.0
Internet	41	27.3
Books	11	7.3
Schools	11	7.3
Have you ever undergone any Prostate Screening?		
Yes	46	30.7
No	104	69.3
Have you ever heard of Digital rectal Examination for Prostate Cancer?		
Yes	67	44.6
No	82	55.4
Prostate cancer has the second highest Mortality rate among Men.		
Yes	82	54.7
No	68	45.3
Nocturia is a Symptom of Prostate Cancer.		
Yes	72	48.0
No	78	52.0
Belief that Surgery is the only Treatment for Prostate Cancer?		
Yes	69	46.0
No	81	54.0
Lower Abdominal Pain is a symptom of Prostate Cancer?		
Yes	107	71.3
No	43	28.6
Radiation Therapy is one of the Treatment Modalities.		
Yes	83	55.3
No	67	44.6

Table 3 shows that among all the 150 respondents only (32.0%, n=48) have undergone prostate cancer screening, while more than half of the respondents (68.0%, n=102) have not. More than half of the respondents (38.7%, n=58) have undergone prostate specific antigen and digital rectal examination, while less than of the respondents (28.6%, n=43) cannot remember the type of screening they undergo. The respondents who had undergone prostate cancer screening (33.3%, n=50) had the symptoms, while (16.6%, n=25) respondents heard it from media publicity. The respondents that do not undergo prostate screening said it may be expensive, while (7.3%, n=11) respondents says doctors have never recommended. Also, (7.3%, n=11) respondents said that they do not want the outcome. The most frequent sources of information about prostate cancer was health workers (37.3%, n=56) respondents, while the least was schools and books who had (14.0%, n=21) respondents.

Table 3: Practices of Prostate Cancer Screening.

Characteristics	Frequency (n)	Percentage (%)
Have you ever undergone Prostate Cancer Screening?		
Yes	48	32.0
No	102	68.0
If yes, which of the Screening type did you undergo?		
Digital Rectal Examination (DRE)	58	38.7
Prostate Specific Antigen (PSA)	58	38.7
Can't Remember	43	28.6
Why did you undergo Prostate Screening?		
Had symptoms	48	32.0
Media publicity	25	16.6
Wife or friend recommended	29	19.3
Doctor suggested it	48	32.0
If no, What is your reason for not Screening?		
Do not know such test	36	24.0
It may be painful	28	18.6
It may be expensive	37	24.7
Do not want to know the outcome	11	7.3
It is not necessary	27	18.0
Doctors had never recommended it	11	7.3
Where did you get the Information about Prostate Cancer?		
Friends and family	26	17.3
Health workers	58	38.7
Media and internet	45	30.0
Schools and books	21	14.0

Table 4 shows that among all the 150 respondents 78(52.0%) agreed that the drugs for prostate cancer are effective, while 6(4.0%) strongly disagreed, 87(58.0%) respondents strongly agreed that all adult men should undergo prostate screening but (3.3%, n=5) respondents strongly agree that early consultation with doctors is very helpful, while (2.7%, n=4) strongly disagreed. Among the respondents (58.6%, n=88) disagreed that consultation with doctors is only when home remedies fail, while 4(2.7%) respondents agreed. More than half of the respondents (52.0%, n=78) agree that early diagnosis of prostate cancer can improve the clinical outcome, but 9(6.0%) strongly disagree. 79(52.6%) respondents strongly agree that medical and surgical treatment can cure prostate problem, while 10(6.6%) respondents disagree.

Table 4: Knowledge and Attitude towards Prostate Cancer Treatment.

Characteristics	Frequency (n)	Percentage (%)
Prostate Cancer Drugs are Effective		
Strongly Agree	47	31.3
Agree	78	52.0
Disagree	19	12.6
Strongly Disagree	6	4.0
All Adult Men should undergo Prostate Screening		
Strongly Agree	87	58.0
Agree	45	30.0
Disagree	13	8.7
Strongly Disagree	5	3.3
Early Consultation with Doctors		
Strongly Agree	91	60.7
Agree	42	28.0
Disagree	13	8.7
Strongly Disagree	4	2.7
Consultation with Doctors is only Necessary when Home Remedies Fail		
Strongly Agree	28	18.7
Agree	4	2.7
Disagree	88	58.6
Strongly Disagree	30	20.0
Early Diagnosis of Prostate Cancer improves the Clinical Outcome		
Strongly Agree	42	28.0
Agree	78	52.0
Disagree	21	14.0
Strongly Disagree	9	6.0
Medical and Surgical Treatment Can Kill Prostate Cancer		
Strongly Agree	79	52.6
Agree	45	30.0
Disagree	10	6.6
Strongly Disagree	16	10.7

Discussion

This study was conducted among 150 men in K-Vom community whose age ranged between <40 to 60 years. Majority of the respondents were aware of prostate cancer (68.0%). This finding is similar to a study conducted in Malaysia where majority of respondents had a high level of knowledge regarding prostate cancer [11]. In their study they attributed the possible reason to the fact that majority of participants had completed their tertiary education (60.60%). This may also be the case in this present study as 87(58%) are educated up to the tertiary level. Also, with the advancement of technology and increased accessibility to the internet, it is more convenient for adult men to gain knowledge on prostate cancer. This is evident in the fact that 41(27.3%) got their knowledge about prostate cancer from the internet.

In this study, less than half of the respondents 67(44.6%) were aware that a digital rectal examination can aid in diagnosing prostate cancer. A similar finding was reported by Yee et al., in Malaysia [11]. According to Adibe et al., less than half of Nigerian males in a selected public university were aware about digital rectal examination and its role in prostate cancer diagnosis [12]. Yeboah-Asiamah et al. also reported that many respondents in their study were not aware of a digital rectal examination in prostate cancer screening [13].

This study also revealed that about half of the respondents have good knowledge on the signs and symptoms of prostate cancer such as nocturia 72(48.0%) and lower abdominal pain 107 (71.3%), which indicates a high awareness of self-screening for the disease. In addition, previous studies have reported that weak and frequent urination, particularly at night, are the most common signs of prostate cancer [5,14]. Therefore, monitoring the early signs and symptoms is regarded as primary information that is essential for male adults. Being equipped with this knowledge and awareness will assist male adults on when to seek immediate help and treatment. The lack of knowledge among the 43(28.6%) respondents who are not aware that lower abdominal pain is a symptom of prostate cancer could be detrimental and can lead to more adult men delaying treatment, especially if lower back pain was associated with individual occupational hazards.

The majority of respondents in this study also have a good knowledge on radiation therapy for prostate cancer 83(55.3%). Less than half of the respondents 48(32.0%) have ever undergone prostate cancer screening. Reasons they gave for undergoing the test include had symptoms 48(32.0%), media publicity 25(16.6%), wife or friend recommended 29(19.3%), and doctors suggestion 48(32.0%). Also 102(68.0%) of the respondents have never undergone prostate screening. Reasons they gave for not undergoing the test include do not know such test 36(24.0%), it may be painful 28(18.6%), it may be expensive 37(24.7%), do not want to know the outcome 11(7.3%), It is not necessary 27 (18.0%), and doctors had never recommended it 11(7.3%).

The reasons given above for willingness and refusal to take up the prostate screening were similar to a study in 2022 by Ebuehi and Otumu [15]. In their study, of the 71 (28.4%) respondents who had undergone at least one prostate cancer screening, 47.9% took the screening following; their doctors' suggestion as part of a routine health check, while 33.8% took it because they had heard it from the media. Of the 71.6% of respondents that had never undergone prostate cancer screening, 32.4% said they were not aware that such screening was available, 30.2% of them said their doctor never recommended it, 13.4% did not take the screening because they would not want to know the outcome, 11.2% of them thought it unnecessary and 12.3% thought the procedure might be painful.

Limitation of the Study

The study was limited by paucity of information as men were shy to express sincere answers due to stigmatization, while others demonstrated apathy towards the study.

Conclusion and Recommendation

According to the result of this study, only 68.0% respondents were aware of prostate cancer and 32.0% respondents have poor knowledge and attitude towards prostate cancer screening. Therefore, it is necessary to focus on more health education campaigns about prostate cancer among men in K-Vom community. Knowledge and attitudes toward prostate cancer screening are influenced by various factors, including education, culture, socioeconomic status, and trust in healthcare providers. Interventions aimed at increasing awareness and improving access to screening are essential to reducing prostate cancer mortality. Educational campaigns, community-based programs, and healthcare provider engagement are key strategies for increasing screening uptake.

References

1. Mayo Clinic. (2024). Prostate cancer – Symptoms and causes. Retrieved July 20, 2024, from https://www.mayoclinic.org/diseases-conditions/prostate-cancer/symptoms-causes/syc-20353087

2. Bray, F.; Ferlay, J. & Soerjomataram, I. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: A Cancer Journal for Clinicians, 68(6), 394-424 pp.

3. Ekwere, P.D.; Egbe, S.N. & Nwogu, C.M. (2018). Trend in prostate cancer incidence in a resource poor country:Experience from University of Uyo Teaching Hospital, Uyo, Nigeria. International Journal of Medicine and Biomedical Research, 3(2), 171-177 pp.

4. Ogunbiyi, O. J., Shittu, O. B. & Aghaji, A. E. (2019). Prostate cancer in Nigeria: facts and nonfacts. Journal of the National Medical Association, 99(11), 1231-1238 pp.

5. Ojewola, R.W.; Oridota, E.S.; Balogun, O.S.; Ogundare, E.O.; Alabi, T.O. & Banjo, O.O. (2017). Knowledge, attitudes and screening practices regarding prostatic diseases among men older than 40 years: a population-based study in Southwest Nigeria. Pan African Medical Journal, 27:151 pp.

6. Oluyemi, O.; Olufemi, A. & Kazeem, O. (2020). Knowledge and perception of prostate cancer among male civil servants in South-Western Nigeria. International Journal of Health Sciences, 14(2), 15-22 pp.

7. Ibrahim, T.A; Wahab, K.W. & Olaniran, O. (2016). Incidence of prostate cancer in North Central Nigeria. Nigerian Journal of Surgery, 22(2), 105 pp.

8. Akintunde, A.A; Afolabi, K.; Ayodele, O.E. & Opadijo, O.G. (2019). The burden of prostate cancer among adult men in Ile-Ife, South-Western Nigeria. The Nigerian Postgraduate Medical Journal, 26(4), 235 pp.

9. Smith, R.A.; Cokkinides, V. & Eyre, H.J. (2023). American Cancer Society guidelines for the early detection of cancer, 2003. CA Cancer J Clin, 53(1): 27-43.

10. Oladimeji, O.; Bidemi, Y.O.; Olufisayo, J.A.Y. & Sola, A.O. (2010). Prostate cancer awareness, Knowledge, and screening practices among older men in Oyo State, Nigeria. Int Q Community Health Educ.,30(3):271-286pp. doi:10.2190/IQ.30.3.g.

11. Yee, B. L., Che, A. A., Chang, W. C., & Abu, B. R. (2022). Knowledge and attitude towards prostate cancer among adult males in Penang, Malaysia. Journal of Health and Translational Medicine, 25(2), 51–57. https://doi.org/10.22452/jummec.vol25no2.10

12. Adibe, M.O.; Aluh, D.O.; Isah, A. & Anosike, C. (2017). Knowledge, attitudes and perceptions of prostate cancer among male staff of the University of Nigeria. Asian Pac J Cancer Prev, 18:1961-1966 pp.

13. Yeboah-Asiamah, B.; Yirenya-Tawiah, D.; Baafi, D. & Ackumey, M.M. (2017). Perceptions and knowledge about prostate cancer and attitudes towards prostate cancer screening among male teachers in the Sunyani Municipality, Ghana. African Journal of Urology, 23:184–91 pp.

14. Aluh, D.O.; Anyachebelu, O.C.; Azubuike, E.A. & Abdulmuminu, I. (2018). Knowledge, attitudes, and perception of prostate cancer among male outpatients of a tertiary care hospital in south-east Nigeria. Journal of Applied Pharm Sci,8(11): 064-8 pp.

15. Ebuehi, O. M., & Otumu, I. U. (2011). Prostate screening practices among male staff of the University of Lagos, Lagos, Nigeria. African Journal of Urology, 17(4), 122–134. https://doi.org/10.1016/j.afju.2011.08.004

Citation: Onah Isegbe Emmanuel., et al. "Knowledge and Attitudes Toward Prostate Cancer Screening Among Men in K-Vom, Jos South LGA, Plateau State Nigeria". NL Journal of Medical and Pharmaceutical Sciences 1.1 (2025): 19-26.