Research and Reports in Urology

Dovepress
Taylor & Francis Group

Open Access Full Text Article

PERSPECTIVES

Prostate Cancer Screening in Somalia: A Perspective on Addressing a Critical Gap in Early Detection

Mohamed Serar Yusuf[1], Rahmo Mohamed Ali[2]

[1]Department of Medicine and Health Science, Simad University, Mogadishu, Somalia; [2]Department of Medicine and Surgery, Dr. Sumait Hospital, Simad University, Mogadishu, Somalia

Correspondence: Mohamed Serar Yusuf, Department of Medicine and Health Science, SIMAD University, Mogadishu, Somalia, Tel +252612508498, Email indhooska@simad.edu.so

Abstract: Prostate cancer is one of the leading cancers affecting men worldwide, with a growing burden in sub-Saharan Africa where mortality-to-incidence ratios remain among the highest globally. In many countries within the region, a substantial proportion of patients present with advanced-stage disease, reflecting limited access to early detection and diagnostic services, and despite the demonstrated benefits of screening, these gains have not been equitably realized in low-resource settings. In Somalia, prostate cancer screening is largely absent, contributing to late-stage diagnosis and poor clinical outcomes. This perspective highlights the importance of early detection and examines the structural, clinical, and socio-cultural factors underlying screening gaps in the Somali context, including the absence of national screening policies, limited access to prostate-specific antigen testing, underutilization of digital rectal examination, workforce shortages, and weak diagnostic referral pathways. Drawing on regional evidence and emerging local data, this article proposes pragmatic, context-appropriate strategies to improve early detection within fragile health systems, emphasizing that strengthening prostate cancer screening in Somalia through feasible, primary care–based interventions is essential to reduce preventable morbidity, improve survival outcomes, and advance equity in men's health.

Keywords: prostate cancer, screening, early detection, health systems, low-resource settings, Somalia

Methods

This perspective is based on a narrative review of relevant literature on prostate cancer epidemiology, screening, and health system challenges in low- and middle-income countries, with a focus on sub-Saharan Africa and Somalia. Literature was identified through general searches of major medical databases and global health reports, including peer-reviewed articles, regional cancer statistics, and publicly available reports. Priority was given to recent and regionally relevant studies to provide contextualized insights. This approach was intended to synthesize existing evidence and inform practical recommendations rather than to conduct a systematic review.

Perspective

Prostate cancer is one of the most commonly diagnosed malignancies among men globally and a leading cause of cancer-related mortality.[1] Global projections suggest that the burden of prostate cancer will rise substantially by 2040 due to population ageing and demographic change.[2] Early detection strategies, particularly prostate-specific antigen testing, have contributed to earlier diagnosis and improved survival in many high-income countries.[1] However, these gains have not been equitably distributed across regions.[3] In low- and middle-income countries, prostate cancer is frequently diagnosed at advanced stages, when curative treatment options are limited.[3] Despite the growing burden of prostate cancer in the region, there is a lack of context-specific frameworks and policy-relevant guidance addressing early detection in Somalia, highlighting a critical gap in both research and health system planning.[4]

https://doi.org/10.2147/RRU.S602286
Received: 10 February 2026
Accepted: 11 April 2026
Published: 16 April 2026

In Ethiopia, prostate cancer is consistently reported as one of the leading cancers among men. Data from the Global Cancer Observatory indicate a notable incidence and mortality burden, although the true magnitude is likely underestimated due to limited screening uptake, diagnostic capacity, and incomplete cancer registration. Late presentation remains common, contributing to poorer outcomes compared with high-income settings.[5]

Similarly, prostate cancer is among the most frequent cancers affecting men in countries such as Kenya and Eritrea, contributing significantly to cancer-related morbidity and mortality. National registry data and GLOBOCAN estimates indicate a substantial disease burden, with many patients presenting at advanced stages due to low awareness, limited access to prostate-specific antigen testing, and delayed referral pathways. Evidence from Eritrea further highlights that limited diagnostic capacity and incomplete cancer registration likely result in underestimation of the true population burden, reflecting broader regional challenges.[5,6] Prostate cancer typically has a prolonged asymptomatic phase, making it particularly amenable to early detection.[1] When diagnosed at a localized stage, prostate cancer is associated with favorable long-term survival and a wide range of effective treatment options.[1] In contrast, advanced disease is often associated with urinary obstruction, skeletal metastases, renal impairment, and increased mortality.[7] From both clinical and economic perspectives, early detection can reduce morbidity, mortality, and long-term healthcare costs.[7] While early detection offers clear benefits, prostate cancer screening remains a subject of ongoing debate due to the potential for overdiagnosis and overtreatment, particularly in low-risk cases. Much of the existing evidence on these risks is derived from high-income settings with well-established screening programs. In contrast, in low-resource settings such as Somalia, where most patients present with advanced disease, the balance of risks and benefits may differ substantially. Therefore, while acknowledging these concerns, a context-specific and risk-adapted approach to screening is more appropriate, prioritizing early identification of clinically significant disease while minimizing unnecessary interventions.[8]

Prostate cancer is among the leading cancers affecting men in sub-Saharan Africa.[3] Despite lower reported incidence compared with high-income regions, mortality-to-incidence ratios are substantially higher.[3] This disparity reflects late-stage diagnosis, limited diagnostic capacity, and constrained access to treatment.[3] Population-based cancer registries remain limited across much of the region, leading to underestimation of the true disease burden.[3] Screening practices are largely opportunistic, with inconsistent availability of PSA testing and underutilization of digital rectal examination.[9] Sociocultural barriers play a critical role in delayed presentation in Somalia. Awareness of prostate cancer and its early symptoms remains limited, and health-seeking behavior among men is often delayed until symptoms become severe. Cultural stigma surrounding urogenital conditions, along with reluctance to discuss urinary or reproductive health issues, further discourages early healthcare engagement.[10]

Somalia lacks a national cancer registry, prostate cancer screening guidelines, and standardized referral pathways.[11] Available evidence from Somalia is largely derived from hospital-based studies and case reports, which consistently demonstrate late presentation of malignancies.[4] A recent case report from Somalia describing refractory hypertension secondary to renal cell carcinoma highlights broader systemic diagnostic challenges, including limited access to biochemical testing, imaging constraints, and delayed recognition of paraneoplastic syndromes.[12] Although focused on renal malignancy, this report underscores structural limitations that are equally relevant to prostate cancer detection in resource-limited settings.[12] Access to PSA testing in Somalia is largely confined to private urban laboratories and requires out-of-pocket payment, limiting uptake among the general population.[11] Diagnostic confirmation through biopsy and histopathology is inconsistently available and often delayed.[11] These challenges are especially concerning given the limited availability of radiotherapy and advanced oncological services in the country.[11]

The absence of prostate cancer screening in Somalia has significant clinical consequences.[7] Late-stage diagnosis limits treatment options and increases reliance on palliative care.[7] Advanced disease imposes substantial financial burdens on patients and families.[10] These burdens include repeated hospital admissions, long-term catheter dependence, and loss of productivity.[10] From an ethical perspective, inequitable access to early diagnosis raises concerns regarding justice and fairness in healthcare delivery.[10] At a population level, the lack of screening perpetuates under-recognition of prostate cancer in national health planning.[11]

Pragmatic Pathways Forward

Integrate opportunistic screening into primary care

Improving prostate cancer screening in Somalia is achievable through pragmatic, context-appropriate interventions. Opportunistic screening using prostate-specific antigen testing and digital rectal examination should be integrated into routine primary care encounters for eligible men.

Strengthen clinician capacity at the primary care level

General practitioners and family physicians should be empowered through targeted training to recognize lower urinary tract symptoms, perform basic prostate assessments, interpret screening results, and initiate timely referrals.

Link screening to functional diagnostic pathways

Screening efforts must be supported by functional diagnostic pathways to avoid delays and loss to follow-up. This includes improving access to prostate biopsy and histopathology services, either locally or through regional referral mechanisms.

Engage communities to reduce stigma and improve health-seeking behavior

Community engagement is essential to address stigma and low awareness surrounding prostate cancer. Somali-language education delivered through trusted community platforms such as local media, community leaders, and religious institutions can promote early presentation and acceptance of screening.

Embed prostate cancer into national health policy and data systems

At the policy level, prostate cancer should be explicitly incorporated into national non-communicable disease strategies. The development of basic hospital-based or regional cancer registries is essential to support surveillance, planning, and future screening initiatives.

Conclusion

The absence of prostate cancer screening in Somalia reflects systemic neglect rather than lack of clinical importance. Late diagnosis, limited treatment options, and preventable suffering have become normalized within a fragile health system. Experiences from other malignancies managed in resource-limited Somali settings demonstrate that delayed recognition is a recurring consequence of constrained diagnostic capacity. Addressing prostate cancer screening gaps through feasible and low-cost interventions offers an opportunity to shift diagnosis toward earlier stages and improve outcomes. From an ethical perspective, improving access to early detection is essential to address inequities in cancer care and reduce preventable suffering. Integrating prostate cancer screening into primary care through opportunistic testing, clinician training, and strengthened referral pathways represents a practical and scalable approach within the Somali health system.

Abbreviations

PSA, prostate-specific antigen; DRE, digital rectal examination; LMICs, low- and middle-income countries; SSA, sub-Saharan Africa; GLOBOCAN, Global Cancer Observatory; IARC, International Agency for Research on Cancer; NCDs, non-communicable diseases.

Ethics Statement

Ethical approval was not required for this Perspective article as no human participants or identifiable patient data were involved.

Acknowledgments

We would like to express our sincere gratitude for encouragement and support for the Center of Research and Development, SIMAD University.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

Funding

This research was funded by Simad university.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Rawla P. Epidemiology of prostate cancer. *World J Oncol*. 2019;10(2):63–89. doi:10.14740/wjon1191
2. James ND, Tannock I, N'Dow J, et al. The Lancet Commission on prostate cancer: planning for the surge in cases. *Lancet*. 2024;403 (10437):1683–1722. doi:10.1016/S0140-6736(24)00651-2
3. Bray F, Parkin DM, Gnangnon F, et al. Cancer in sub-Saharan Africa in 2020: estimates of the national burden, data gaps, and future needs. *Lancet Oncol*. 2022;23(6):719–728. doi:10.1016/S1470-2045(22)00270-4
4. Mohamed AH, Abdullahi IM, Warsame FF, Mohamud HA. Incidence and associated factors for incidental prostate cancer among patients undergoing surgery for benign prostatic hyperplasia: first report from Somalia. *J Cancer Res Clin Oncol*. 2023;149(7):4041–4046. doi:10.1007/s00432-022-04319-0
5. Sung H, Ferlay J, Siegel RL, et al. Global cancer statistics 2024: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*. 2024;74(1):1–35. doi:10.3322/caac.21834
6. Biniam L, Achila OO, Syum BE, et al. Incidence of prostate cancer in Eritrea: data from the National Health Laboratory, Orotta Referral Hospital, and Sembel Hospital, 2011–2018. *PLoS One*. 2020;15(4):e0232091. doi:10.1371/journal.pone.0232091
7. Knaul FM, Arreola-Ornelas H, Rodriguez NM, et al. Avoidable mortality: the core of the global cancer divide. *J Glob Oncol*. 2018;4:1–12. doi:10.1200/JGO.17.00190
8. Heijnsdijk EAM, Gulati R, Lange JM, Tsodikov A, Roberts R, Etzioni R. Evaluation of prostate cancer screening strategies in a low-resource, high-risk population. *JAMA Health Forum*. 2022;3(2):e221116. doi:10.1001/jamahealthforum.2022.1116
9. Adeloye D, David RA, Aderemi AV, et al. An estimate of the incidence of prostate cancer in Africa: a systematic review and meta-analysis. *PLoS One*. 2016;11(4):e0153496. doi:10.1371/journal.pone.0153496
10. Gelband H, Jha P, Sankaranarayanan R, Horton S. Cancer. In: *Disease Control Priorities*. Vol. 3. 3rd ed. Washington, DC: World Bank; 2015.
11. Tahtabasi M, Mohamud Abdullahi I, Kalayci M, Gedi Ibrahim I, Er S. Cancer incidence and distribution at a tertiary care hospital in Somalia from 2017 to 2020: an initial report of 1306 cases. *Cancer Manag Res*. 2020;12:8599–8611. doi:10.2147/CMAR.S277202
12. Ali RM, Omar AA, Ali IA. Resolution of refractory hypertension following radical nephrectomy for renal cell carcinoma: a case report from Somalia in a resource-limited setting. *Cancer Manag Res*. 2025;17:1369–1375. doi:10.2147/CMAR.S530092