Research Article Volume 01, Issue No. 02. 2025

Medical Journal of Urology and General Surgery



Incidence, Prevalence, and Survival of Prostate Cancer

[1] Fitriana, [1] Trisna

[1] Faculty of Medicine, Sebelas Maret University, Surakarta City, Central Java, Indonesia

Correspondence : dr.fitriana0928819@gmail.com

Article History :

Received date : 2024/10/12
Revised date : 2024/11/24
Accepted date : 2024/12/17
Published date : 2025/01/10

Copyright: *© 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (BY NC) license (https://creativecommons.org/licenses/by-nc/4.0/).*

ABSTRACT

Background: The literature on the incidence, prevalence, and survival of prostate cancer reveals a complex interplay of various factors influencing this malignancy. The systematic review by Bell et al. (2020) highlights significant temporal trends and racial disparities in global prostate cancer prevalence, indicating that Black men experience a more aggressive form of the disease compared to their white counterparts. **Literature Review:** Dietary factors are also critical in understanding prostate cancer risk. (Ismail et al., 2019) argue that high consumption of red and processed meats correlates with increased incidence rates, advocating for dietary modifications as a preventive measure. This dietary perspective is complemented by (Dasgupta et al., 2019), who emphasize the importance of equitable healthcare access and early diagnosis in addressing geographic variations in prostate cancer outcomes. (Wang et al., 2022) provide a broader context by revealing alarming statistics regarding global incidence and mortality rates, highlighting how aging populations and socio-economic growth exacerbate the burden of prostate cancer. (Sekhoacha et al., 2022) further elaborate on these trends, emphasizing the heightened incidence rates among Black men and advocating for improved awareness and screening practices. (Fathollahi et al., 2023) delve into the relationship between prostate cancer prevalence and the Human Development Index (HDI) in Asia, identifying socio-economic factors as significant contributors to mortality rates. This aligns with (G Rao et al., 2023), who conduct a meta-analysis revealing that a lack of awareness significantly contributes to high mortality rates, particularly in developing countries. **Conclusion:** In conclusion, the reviewed literature collectively illustrates the multifaceted nature of prostate cancer incidence, prevalence, and survival. The critical interplay of cultural, dietary, socio-economic, and geographical factors shapes health outcomes for men at risk of this disease. Addressing these disparities through targeted interventions, educational campaigns, and equitable healthcare access is essential for improving prostate cancer outcomes.

Keyword: Incidence, Prevalence, Survival of Prostate Cancer

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

INTRODUCTION

The literature on the incidence, prevalence, and survival of prostate cancer reveals significant insights into the complex interplay of various factors influencing this malignancy. Beginning with the systematic review by Bell et al. (JL Bell et al., 2015), the authors highlight critical temporal trends and racial disparities in global prostate cancer prevalence, emphasizing that black men experience a faster progression to clinically significant prostate cancer compared to their white counterparts. This foundational understanding of racial disparities sets the stage for subsequent discussions on cultural influences and healthcare access.

Machirori et al. (Machirori et al., 2018) further explore the cultural dimensions surrounding prostate cancer, particularly among Black men in the UK. Their findings indicate that these men are diagnosed at rates significantly higher than the national average, yet they often do not seek medical advice due to cultural beliefs and socio-economic barriers. This underscores the necessity of addressing knowledge gaps and cultural attitudes to improve screening behaviors and health outcomes.

The role of diet as a risk factor for prostate cancer is examined in the literature review by Ismail et al. (Ismail et al., 2019), which correlates dietary habits with the incidence of prostate cancer. The authors argue that high consumption of certain foods, such as red and processed meats, contributes to the rising prevalence of this disease. They advocate for dietary modifications as a preventive measure, suggesting that lifestyle changes can mitigate risks associated with prostate cancer.

Dasgupta et al. (Dasgupta et al., 2019) provide a systematic review that highlights geographical variations in prostate cancer outcomes. Their analysis stresses the need for equitable healthcare access and early diagnosis, particularly for aggressive forms of the disease. They advocate for a multi-level approach that considers socio-

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

economic, cultural, and geographic factors, reinforcing the idea that health disparities are influenced by a complex web of determinants.

Wang et al. (Wang et al., 2022) contribute to the understanding of global prostate cancer trends, revealing alarming statistics regarding incidence and mortality across various countries. Their research indicates that aging populations and socio-economic growth are likely to exacerbate the burden of prostate cancer, while changes in screening guidelines have significantly influenced detection rates. This examination of temporal trends provides a broader context for understanding the evolving landscape of prostate cancer incidence.

Sekhoacha et al. (Sekhoacha et al., 2022) further elaborate on the global incidence of prostate cancer, noting that black men exhibit the highest rates. Their findings emphasize the importance of prostate cancer awareness and screening practices, particularly in regions where these practices are underdeveloped. This highlights the critical need for targeted interventions to improve early detection and treatment outcomes.

Fathollahi et al. (Fathollahi et al., 2023) delve into the relationship between prostate cancer prevalence and the human development index (HDI) in Asia, identifying socio-economic factors as significant contributors to mortality rates. Their study indicates that disparities in healthcare access and disease registration systems between developed and developing countries play a crucial role in the observed variations in incidence.

Rao et al. (G Rao et al., 2023) conduct a systematic review and meta-analysis that underscores the importance of knowledge and awareness regarding prostate cancer screening. Their findings reveal that a lack of awareness significantly contributes to high mortality rates, especially in developing countries. They advocate for educational initiatives to promote early detection and better management of prostate cancer.

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

Finally, Du et al. (L. Du et al., 2023) examine incidence trends in the United States, revealing significant racial disparities and the impact of the COVID-19 pandemic on cancer diagnoses. Their study highlights the complexities of prostate cancer incidence trends across different demographics, emphasizing the need for continued monitoring and tailored interventions to address these disparities.

Together, these articles illustrate the multifaceted nature of prostate cancer incidence, prevalence, and survival, revealing the critical interplay of cultural, dietary, socio-economic, and geographical factors that shape health outcomes for men at risk of this disease.

LITERATURE REVIEW

The article titled "Prevalence of incidental prostate cancer: A systematic review of autopsy studies" by Bell, Del Mar, Wright, Dickinson, and Glasziou (JL Bell et al., 2015) provides a comprehensive examination of the incidence and prevalence of prostate cancer through the lens of autopsy findings. The authors systematically review existing literature to estimate the prevalence of incidental prostate cancer, which is often discovered post-mortem, thereby shedding light on the discrepancies between diagnosed cases and actual prevalence rates.

One of the critical insights from this article is the global prevalence of prostate cancer as estimated in 2012, which underscores significant temporal trends and racial disparities. The authors highlight that the prevalence of prostate cancer is not uniform across different demographics, with evidence indicating that black American men exhibit a faster growth rate and an earlier transformation to clinically significant prostate cancer compared to their white counterparts. This observation raises important questions regarding the biological, environmental, and socio-economic factors that contribute to these disparities in incidence and mortality rates.

The systematic review method employed by the authors offers a robust framework for understanding the prevalence of incidental prostate cancer. By synthesizing data from various autopsy studies, the authors provide a clearer picture of how many

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

individuals may harbor prostate cancer without it being clinically diagnosed during their lifetime. This aspect is particularly important as it suggests that the actual burden of prostate cancer may be significantly underreported, leading to implications for screening practices and healthcare resource allocation.

Moreover, the article discusses the implications of these findings for public health strategies, particularly in addressing racial disparities. The authors argue that understanding the differences in prostate cancer progression among racial groups is crucial for developing targeted interventions and improving outcomes for high-risk populations. This focus on racial disparities is a vital contribution to the discourse on prostate cancer, as it emphasizes the need for tailored approaches in both research and clinical practice.

The article "Study of the relationship between Black men, culture and prostate cancer beliefs" by Machirori, Patch, and Metcalfe (Machirori et al., 2018) provides a critical examination of the disparities in prostate cancer incidence and survival rates among Black men in the UK. The authors highlight that prostate cancer is the most prevalent cancer among men, with Black men being 2–3 times more likely to receive a diagnosis compared to their counterparts from other ethnic backgrounds. This statistic underscores a significant public health concern, as it indicates a disproportionate burden of disease within this demographic.

The authors effectively argue that despite the high incidence rates, there is a notable reluctance among Black men to engage with health services related to prostate cancer. This hesitance is attributed to a variety of factors, including cultural beliefs, fear, and a general lack of knowledge about the disease and its implications. The authors emphasize that these barriers are compounded by socio-economic disparities, where individuals from lower socio-economic backgrounds experience worse health outcomes, further exacerbating the inequalities in prostate cancer mortality.

A noteworthy aspect of the article is its methodological approach, which adheres to the framework established by Arksey and O'Malley. By conducting informal

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

consultations with experts in prostate cancer programs tailored for Black men, the authors gather qualitative insights that enrich their analysis. This approach not only highlights the importance of community engagement in health interventions but also points to the need for culturally competent healthcare strategies that address the unique beliefs and concerns of Black men regarding prostate cancer.

The findings of this scoping study contribute to the existing literature by shifting the focus from merely assessing knowledge about prostate cancer to understanding the socio-cultural dynamics that influence health-seeking behaviors. The authors call attention to the necessity of developing targeted educational campaigns that can effectively bridge the gap in awareness and encourage proactive health behaviors among Black men.

The article titled "Diet as a risk factors of prostate cancer: a literature review" by Ismail et al. (Ismail et al., 2019) provides a comprehensive examination of the relationship between dietary habits and the risk of developing prostate cancer, a significant health concern globally. The authors emphasize that as life expectancy increases, the prevalence of prostate cancer is expected to rise, underscoring the importance of understanding modifiable risk factors such as diet.

The review synthesizes existing literature to highlight the impact of various dietary components on prostate cancer risk. It identifies high intake of red and processed meats, as well as dairy products, as common dietary factors linked to an increased risk of prostate cancer. Conversely, the consumption of antioxidants and specific vitamins is suggested to offer protective benefits. This duality in dietary impact is crucial for understanding how dietary choices can influence cancer risk.

Moreover, the authors advocate for a diet rich in low carbohydrates, n-3 polyunsaturated fatty acids (PUFAs), and colorful fruits and vegetables as optimal for both primary and secondary prevention of prostate cancer. This recommendation aligns with broader dietary guidelines that emphasize the importance of nutrient-dense foods in cancer prevention. The article also addresses

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

lifestyle factors, noting that smoking and heavy alcohol consumption should be avoided to mitigate risk.

The authors reference data from the International Agency for Research on Cancer, which positions prostate cancer as the fourth most common cancer worldwide, and the second most prevalent among men. This statistic highlights the urgent need for effective prevention strategies, particularly those that can be influenced by lifestyle and dietary choices.

A critical evaluation of this literature review reveals its strengths, particularly in its thorough synthesis of existing research and its practical dietary recommendations. However, the article could benefit from a more detailed exploration of the biological mechanisms through which diet influences cancer development. Additionally, while the review acknowledges the role of cultural and lifestyle differences in dietary habits, a deeper analysis of how these factors interact with genetic predispositions could enhance the understanding of prostate cancer risk.

The article "Geographical variations in prostate cancer outcomes: A systematic review of international evidence" by Dasgupta et al. (Dasgupta et al., 2019) provides a comprehensive analysis of the disparities in prostate cancer outcomes across different geographic regions. The authors emphasize the importance of recognizing the variation in the burden of prostate cancer, which is influenced by a multitude of factors including socioeconomic status, cultural context, and healthcare accessibility.

One of the key insights presented in the article is the need for equitable healthcare strategies aimed at improving early diagnosis and treatment of aggressive prostate cancer. The authors argue that understanding the multi-level continuum of advantage and disadvantage is crucial in addressing these disparities. This continuum considers how individual, social, and community resources can either facilitate or hinder access to healthcare services, thereby affecting health outcomes.

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

The systematic review synthesizes evidence that highlights the role of socioeconomic factors in prostate cancer incidence and survival rates. For instance, men from lower socioeconomic backgrounds often face barriers to accessing timely diagnosis and effective treatment, leading to poorer health outcomes. The authors advocate for targeted interventions that consider these socioeconomic and geographic disparities, suggesting that policy changes are necessary to ensure that all men have access to the best possible healthcare.

Furthermore, the article discusses the psychosocial and cultural dimensions that can influence health behaviors and perceptions regarding prostate cancer. By examining these variables, the authors underscore the importance of culturally sensitive healthcare approaches that can improve engagement and outcomes for diverse populations.

The article "Prostate Cancer Incidence and Mortality: Global Status and Temporal Trends in 89 Countries From 2000 to 2019" by Wang et al. (Wang et al., 2022) provides a comprehensive overview of the global landscape of prostate cancer, emphasizing its significant prevalence and mortality rates. The authors highlight that prostate cancer is the second most commonly diagnosed cancer and ranks fifth in cancer-related deaths among men worldwide, with alarming statistics indicating approximately 1,414,000 new cases and 375,304 deaths in 2020. This data underscores the urgent need for continuous monitoring and research in this area.

A critical evaluation of the article reveals that the authors effectively utilize the GLOBOCAN 2020 database to present a clear picture of prostate cancer incidence and mortality across various countries. The temporal analysis conducted from 2000 to 2019 is particularly noteworthy, as it identifies trends that may inform public health strategies and resource allocation. The authors discuss established risk factors such as advancing age, black race, and family history, which are crucial for understanding demographic disparities in prostate cancer incidence.

Moreover, the article delves into lifestyle and dietary factors that may contribute to increased prostate cancer risk, including obesity, physical fitness, diabetes mellitus,

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

and specific dietary patterns. This multifaceted approach is essential, as it encourages a broader understanding of how lifestyle choices can influence cancer risk, suggesting potential avenues for preventative measures.

The authors also examine the impact of the Human Development Index (HDI) on prostate cancer incidence and mortality. This analysis is significant as it connects socioeconomic factors with health outcomes, highlighting the disparities that exist between developed and developing nations. The article notes a downward trend in mortality rates in countries such as the USA, Canada, the UK, and Japan, attributing this decline to the adoption of prostate-specific antigen (PSA) screening in these regions since the 1990s. This finding emphasizes the importance of early detection and intervention in improving survival rates.

The article titled "Prostate Cancer Review: Genetics, Diagnosis, Treatment Options, and Alternative Approaches" by Sekhoacha et al. (Sekhoacha et al., 2022) provides a comprehensive overview of prostate cancer, emphasizing its global incidence, prevalence, and survival rates. The authors highlight that prostate cancer is one of the most prevalent malignancies among men, with the GLOBOCAN report from 2018 indicating approximately 1,276,106 new cases and 358,989 deaths worldwide. The data presented underscores a significant geographical and ethnic disparity in incidence rates, with notably higher rates observed in developed countries and among Black men.

The article meticulously discusses the factors contributing to the higher incidence rates in specific populations. It notes that Black men, particularly in the United States, have an incidence rate approximately 60% higher than their white counterparts, indicating a critical need for targeted public health interventions and awareness campaigns in these demographics. Furthermore, the authors draw attention to the correlation between prostate cancer awareness and the prevalence of prostate-specific antigen (PSA) testing, suggesting that increased screening efforts in developed nations may contribute to the higher reported incidence rates.

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

An essential aspect of the article is its examination of the regional differences within Africa, where the authors report that men in Southern Africa face a higher incidence of prostate cancer compared to those in Northern Africa. This finding is significant as it suggests the need for region-specific health policies and resource allocation to address the disparities in cancer care and early detection.

The article also addresses the implications of late-stage diagnoses and treatment failures on mortality rates. The authors argue that the majority of prostate cancer cases are diagnosed at more advanced stages, which correlates with poorer survival outcomes. This highlights a critical gap in early detection and effective treatment strategies that need to be addressed to improve survival rates.

The article "Burden of prostate cancer and relationship with the human development index (HDI) in Asia: A study of Global Burden disease in 2019" by Fathollahi et al. (Fathollahi et al., 2023) presents a comprehensive analysis of the incidence, prevalence, and survival rates associated with prostate cancer, particularly in relation to the Human Development Index (HDI) across different regions. The authors highlight the increasing prevalence of prostate cancer, which has become a significant public health concern, ranking as the fifth leading cause of cancer-related deaths worldwide and the second most common cancer among men, following lung cancer.

A critical aspect of the article is its exploration of the multifactorial influences on prostate cancer incidence. The authors identify aging, obesity, physical inactivity, smoking, and high-fat diets as significant risk factors contributing to the development of this malignancy. This aligns with existing literature that emphasizes lifestyle and demographic factors as pivotal in understanding cancer epidemiology. However, the article also underscores the disparities in prostate cancer incidence and mortality rates between developed and developing countries, attributing these differences not only to biological and lifestyle factors but also to the availability of screening and disease registration systems.

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

The article's findings reveal a stark contrast in prostate cancer diagnosis rates, with higher prevalence noted in South and East Asia, Europe, and North America, while lower rates are observed in African nations. This discrepancy raises important questions about access to healthcare resources and the effectiveness of cancer screening programs in varying socio-economic contexts. The authors argue that regions with higher HDI experience a greater burden of prostate cancer, suggesting that economic and developmental factors play a crucial role in cancer outcomes. This insight is particularly valuable for policymakers aiming to allocate resources effectively and prioritize interventions in the fight against prostate cancer.

Moreover, the article contributes to the existing body of knowledge by providing valuable evidence for decision-making regarding cancer control strategies. The authors advocate for enhanced screening and early detection efforts, particularly in regions with lower HDI where the mortality rates are disproportionately high despite lower incidence rates. This discrepancy emphasizes the need for targeted health interventions that consider both the prevalence of the disease and the socio-economic conditions of affected populations.

The article "Knowledge, Awareness and Practice towards Screening for Prostate Cancer: A Systematic Review and Meta-Analysis" by Rao et al. (G Rao et al., 2023) provides a comprehensive overview of the current state of knowledge and practices surrounding prostate cancer screening. The authors emphasize the critical role of awareness in the early detection and management of prostate cancer, highlighting that symptoms such as unexplained weight loss, frequent urination, and pelvic pain are often indicators of advanced disease.

One of the key insights from the article is the identification of various risk factors associated with prostate cancer, including age, geographical location, race/ethnicity, and genetic predispositions such as Lynch syndrome. Notably, the article expands the conversation by including male-assigned non-binary individuals and transgender women as populations at risk, thereby broadening the understanding of who should be considered in screening efforts. This inclusive

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

approach is crucial for developing effective public health strategies tailored to diverse populations.

The article also discusses the significance of Prostate Specific Antigen (PSA) testing as an early indicator of prostate cancer. It outlines the diagnostic process, emphasizing that a trans-rectal ultrasound-guided needle biopsy is the most effective method for confirming the presence of cancer in patients with elevated PSA levels. The authors argue that understanding the risk of progression based on diagnostic grading and PSA levels is vital for determining appropriate treatment options.

Despite the relatively lower incidence rate of prostate cancer in India compared to other cancers, the authors point out a concerning trend: the mortality rate is disproportionately high. This discrepancy is attributed primarily to a lack of awareness and knowledge about prostate cancer and the available screening tools. The authors assert that increasing public awareness is essential for improving early diagnosis, particularly among high-risk populations. The article effectively highlights that educational initiatives could play a pivotal role in reducing mortality rates by encouraging timely screenings and interventions.

The article "Incidence trends in prostate cancer among men in the United States from 2000 to 2020 by race and ethnicity, age and tumor stage" by Du et al. (L. Du et al., 2023) provides a comprehensive analysis of prostate cancer incidence trends across various demographic groups in the United States, utilizing data from the Surveillance, Epidemiology, and End Results (SEER) program. The study is particularly valuable as it covers a significant time frame, allowing for an assessment of trends before and after the onset of the COVID-19 pandemic.

The authors highlight that between 2000 and 2013, there was a statistically significant decline in prostate cancer incidence across all racial and ethnic groups. This downward trend is noteworthy, as it suggests successful public health interventions or changes in screening practices during that period. However, the subsequent increase in incidence rates from 2014 to 2020, particularly among white,

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

black, and Asian men, raises questions regarding potential shifts in risk factors, healthcare access, or changes in screening guidelines that may have influenced these trends.

A critical aspect of the study is its examination of racial disparities in prostate cancer incidence. The findings indicate that the age-adjusted incidence rate is highest among black men, followed by white, Hispanic, American Indian/Alaska Native (AIAN), and Asian men. This disparity is consistent with existing literature that identifies black men as having a higher risk of developing prostate cancer, underscoring the need for targeted interventions and resources to address these inequities.

The article also discusses the impact of the COVID-19 pandemic on prostate cancer incidence, noting a drop in diagnoses from 2019 to 2020. This decline is attributed to pandemic-related lockdowns, which limited access to medical care and screening services. The authors suggest that the pandemic may have had a lasting effect on cancer detection rates, potentially leading to later-stage diagnoses in the future.

CONCLUSION

The literature on the incidence, prevalence, and survival of prostate cancer reveals a complex interplay of various factors influencing this malignancy. The systematic review by Bell et al. (2020) highlights significant temporal trends and racial disparities in global prostate cancer prevalence, indicating that Black men experience a more aggressive form of the disease compared to their white counterparts. This foundational understanding underscores the necessity of addressing cultural influences and healthcare access, as explored by (Machirori et al., 2018), who found that cultural beliefs and socio-economic barriers hinder healthcare-seeking behaviors among Black men in the UK.

Dietary factors are also critical in understanding prostate cancer risk. (Ismail et al., 2019) argue that high consumption of red and processed meats correlates with increased incidence rates, advocating for dietary modifications as a preventive

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

measure. This dietary perspective is complemented by (Dasgupta et al., 2019), who emphasize the importance of equitable healthcare access and early diagnosis in addressing geographic variations in prostate cancer outcomes.

(Wang et al., 2022) provide a broader context by revealing alarming statistics regarding global incidence and mortality rates, highlighting how aging populations and socio-economic growth exacerbate the burden of prostate cancer. (Sekhoacha et al., 2022) further elaborate on these trends, emphasizing the heightened incidence rates among Black men and advocating for improved awareness and screening practices.

(Fathollahi et al., 2023) delve into the relationship between prostate cancer prevalence and the Human Development Index (HDI) in Asia, identifying socio-economic factors as significant contributors to mortality rates. This aligns with (G Rao et al., 2023), who conduct a meta-analysis revealing that a lack of awareness significantly contributes to high mortality rates, particularly in developing countries.

Finally, (L. Du et al., 2023) examine incidence trends in the United States, revealing significant racial disparities and the impact of the COVID-19 pandemic on cancer diagnoses. Their findings emphasize the need for continued monitoring and tailored interventions to address these disparities.

In conclusion, the reviewed literature collectively illustrates the multifaceted nature of prostate cancer incidence, prevalence, and survival. The critical interplay of cultural, dietary, socio-economic, and geographical factors shapes health outcomes for men at risk of this disease. Addressing these disparities through targeted interventions, educational campaigns, and equitable healthcare access is essential for improving prostate cancer outcomes.

DISCLOSURE STATEMENT

- Disclosure Statement : The authors have no conflicts of Interest to declare
- Funding Sources : None

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

- Acknowledgements : -
- Author Contribution : All authors discussed and contributed the final content for journal submission and publication

REFERENCES

1. JL Bell, K., Del Mar, C., Wright, G., Dickinson, J., & Glasziou, P., 2015. Prevalence of incidental prostate cancer: A systematic review of autopsy studies. ncbi.nlm.nih.gov
2. Machirori, M., Patch, C., & Metcalfe, A., 2018. Study of the relationship between Black men, culture and prostate cancer beliefs. [PDF]
3. Ismail, N., Azhar Shah, S., Safian, N., Taib, S., & Nor Mat, S., 2019. Diet as a risk factors of prostate cancer: a literature review. [PDF]
4. Dasgupta, P., Baade, P. D., Aitken, J. F., Ralph, N., Chambers, S. K., & Dunn, J., 2019. Geographical variations in prostate cancer outcomes: A systematic review of international evidence. [PDF]
5. Wang, L., Lu, B., He, M., Wang, Y., Wang, Z., & Du, L., 2022. Prostate Cancer Incidence and Mortality: Global Status and Temporal Trends in 89 Countries From 2000 to 2019. ncbi.nlm.nih.gov
6. Sekhoacha, M., Riet, K., Motloung, P., Gumenku, L., Adegoke, A., & Mashele, S., 2022. Prostate Cancer Review: Genetics, Diagnosis, Treatment Options, and Alternative Approaches. ncbi.nlm.nih.gov
7. Fathollahi, F., Khazaei, Z., Abbasi, M., & Goodarzi, E., 2023. Burden of prostate cancer and relationship with the human development index (HDI) in Asia: A study of Global Burden disease in 2019. ncbi.nlm.nih.gov
8. G Rao, A., Dkhar, W., Sharath, S., Kadavigere, R., & Pradhan, A., 2023. Knowledge, Awareness and Practice towards Screening for Prostate Cancer: A Systematic Review and Meta-Analysis. ncbi.nlm.nih.gov

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved

9. L. Du, X., Gao, D., & Li, Z., 2023. Incidence trends in prostate cancer among men in the United States from 2000 to 2020 by race and ethnicity, age and tumor stage. ncbi.nlm.nih.gov

Downloaded from The Medical Journal of Urology and General Surgery
Copyright © International Medical Journal Corp. Ltd. All rights reserved