

A Comprehensive Analysis of Cancer Incidence and Economic Burden in Saudi Arabia

Talal Subaie*

Department of Pharmaceutical of Science, Shenzhen University, Shenzhen, Guangdong 518055, China

Introduction

Cancer represents one of the most pressing health challenges globally and Saudi Arabia is no exception to this growing concern. Over the past two decades, the Kingdom has witnessed a significant increase in cancer cases, reflecting both demographic shifts and improved diagnostic capabilities. As the population ages and lifestyle risk factors such as obesity, smoking and physical inactivity become more prevalent, the burden of cancer is expected to rise further. The incidence of various cancers particularly breast, colorectal, thyroid and liver has grown substantially, placing additional pressure on the healthcare infrastructure. Beyond its medical implications, cancer imposes a severe economic burden on the healthcare system, families and the national economy through direct treatment costs and indirect losses such as reduced productivity and long-term care. Given these mounting pressures, a thorough and evidence-based analysis of cancer incidence and its economic consequences is vital for informing national health strategies and allocating resources efficiently [1].

Description

Epidemiological data from studies conducted between 1999 and 2019 show a consistent upward trend in cancer incidence across Saudi Arabia. Research, including systematic reviews and meta-analyses, has indicated that the most common cancers vary by gender and region, with breast cancer leading among women and colorectal cancer among men. Improvements in cancer registries and public health reporting have led to more accurate statistics, revealing a clearer picture of the disease landscape. Notably, the Saudi Cancer Registry, which was established in the early 2000s, has played a central role in tracking trends and enabling policy decisions. The data show regional disparities in cancer incidence, influenced by differences in healthcare access, urbanization and environmental exposures. Furthermore, projections suggest a continued rise in cancer cases through 2030, necessitating urgent investments in early detection, prevention programs and specialized treatment facilities.

Economically, the impact of cancer in Saudi Arabia is multifaceted and steadily increasing. Direct costs include expenditures for hospital stays, chemotherapy, radiation therapy, surgical interventions and long-term palliative care. These services are primarily state-funded, which poses a significant fiscal challenge to the government's public health budget. Indirect costs such as loss of income due to inability to work, long-term disability and premature mortality also contribute heavily to the national economic burden. Studies estimating future economic trends have highlighted a potential exponential rise in these costs, particularly as treatment technologies become more advanced and expensive. Additionally, the emotional and financial strain on families cannot be

understated, especially in cases where caregivers must leave the workforce to support a loved one. Strategic planning and cost-effective policies are thus essential to manage the anticipated economic impact without compromising the quality of care [2].

Conclusion

In summary, cancer poses a dual threat to Saudi Arabia clinically, through its growing incidence and economically, through its escalating burden on the healthcare system and society. As the Kingdom continues its journey toward healthcare modernization and Vision 2030 goals, addressing the cancer crisis requires a multifaceted approach that combines robust surveillance, preventive health measures, targeted resource allocation and sustainable financing models. Only through such comprehensive strategies can Saudi Arabia mitigate the long-term effects of cancer and ensure the well-being of its population.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Alqahtani, Wedad Saeed, Nawaf Abdulrahman Almufareh, Dalia Mostafa Domiaty and Gadah Albasher, et al. "Epidemiology of cancer in Saudi Arabia thru 2010–2019: A systematic review with constrained meta-analysis." *AIMS public health* 7 (2020): 679.
2. Jazieh, Abdul Rahman, Omar B. Da'ar, Mohammad Alkaiyat and Yasmine A. Zaatreh, et al. "Cancer incidence trends from 1999 to 2015 and contributions of various cancer types to the overall burden: Projections to 2030 and extrapolation of economic burden in Saudi Arabia." *Cancer Manag Res* (2019): 9665-9674.

*Address for Correspondence: Talal Subaie, Department of Oncology, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia; E-mail: subaietalal@kfshrc.edu.sa

Copyright: © 2025 Subaie T. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 March, 2025, Manuscript No. jcs-25-168218; Editor assigned: 03 March, 2025, PreQC No. P-168218; Reviewed: 15 March, 2025, QC No. Q-168218; Revised: 21 March, 2025, Manuscript No. R-168218; Published: 29 March, 2025, DOI: 10.37421/1948-5956.2025.17.690

How to cite this article: Subaie, Talal. "A Comprehensive Analysis of Cancer Incidence and Economic Burden in Saudi Arabia." *J Cancer Sci Ther* 17 (2025): 690.