Copyright © 2024 Journal of BP Koirala Institute of Health Sciences

OPEN ACCESS

EDITORIAL

Bridging the Cancer Care Divide

Deepak Paudel[1]

Deepak Paudel
d_pakh@yahoo.com

https://orcid.org/0000-0002-3619-2054

[1] Department of Otorhinolaryngology and Head and Neck Surgery, B.P. Koirala Institute of Health Sciences, Dharan, Sunsari, Nepal

Citation

"Paudel D. Bridging the Cancer Care Divide. JBPKIHS. 2024;7(2):1-3."

https://doi.org/10.3126/jbpkihs.v7i2.77289

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Cancer is becoming a major global challenge as life expectancy rises and lifestyles change. With a decline in infectious disease deaths, non-communicable diseases, especially cancer, have become more common. In 2022, approximately 19.3 million new cancer cases and 10 million cancer-related deaths were reported worldwide. Alarmingly, 70% of these cases occurred in low- and middle-income countries (LMICs), with projections estimating that new cases could reach 28.4 million by 2040. In Nepal alone, over 22,000 new cases and around 15,000 deaths occur annually [1].

Cancer incidence varies across regions due to demographic factors, environmental factors, and lifestyle habits. High-income countries (HICs) report more cases of stomach, breast, and prostate cancers, while LMICs experience higher rates of cervical cancer and other infection-related malignancies due to limited vaccination and screening programs. South Asia, including India and Nepal, faces a significant burden of head and neck cancers, accounting for 30–40% of cases, primarily due to tobacco use, betel nut chewing, and alcohol consumption [1].

Despite advancements in cancer treatment and research, a major disparity exists between high-income and low-income countries. These inequalities persist throughout cancer care, from prevention and diagnosis to treatment and palliative care. In poorer regions, late-stage diagnoses are common, treatment options are limited, and survival rates are lower than in wealthier nations. For instance, the mortality-to-incidence ratio for cervical cancer (0.62) and head and neck cancers (0.75) in Nepal is higher than the global average. Survival rates further highlight this disparity: in India and Nepal, fewer than 50% of oral cancer patients survive for five years, compared to over 65% in wealthier countries. Similarly, breast cancer mortality in Nepal is 60% higher than in the United States [2, 3].

Several socio-cultural, economic, and healthcare system barriers hinder early diagnosis and timely treatment in LMICs. Misinformation and myths such as beliefs that cancer is contagious, caused by spiritual curses, or curable through traditional healing create stigma, fear, and delays in seeking medical care. Low literacy levels and the absence of public education campaigns further reinforce these misconceptions [4]. Additionally, limited resources, unequal healthcare distribution, and high treatment costs prevent many patients from accessing timely care. Weak healthcare systems often make early screening and diagnosis unavailable to many people. In South Asia and sub-Saharan Africa, only about 5% of women undergo cervical cancer screening in their lifetime. Shortages of pathologists and costly diagnostic tools, such as Positron Emission

Declarations

The author declares that he has no conflict of interest.

Tomography (PET) scans and biomarker testing, further delay accurate diagnoses [5].

Even after diagnosis, multiple barriers prevent patients from completing their treatment. Financial hardship, long travel distances, and limited social support contribute to poor treatment adherence. In LMICs, up to two-thirds of breast cancer patients fail to complete their recommended therapies, particularly those from rural or low-income backgrounds. High out-of-pocket expenses, lost productivity, and limited health funding push families into financial distress. With governments often prioritizing infectious diseases, cancer services remain underfunded and understaffed. Many LMIC cancer centres face severe shortages of trained specialists, essential medicines, and functional equipment, forcing patients to travel long distances to under-equipped facilities that frequently lack necessary supplies [5, 6].

Expanding cancer care in LMICs is both a critical health necessity and an ethical duty. Rising cancer cases will place increasing strain on fragile healthcare systems, intensify household financial burdens, and widen existing disparities. Without timely intervention, the long-term economic and social consequences will worsen. To address this challenge, resource-limited countries must prioritize early detection and prevention through cost-effective strategies. The World Health Organization (WHO) recommends high-impact, low-cost interventions such as Human Papilloma Virus (HPV) vaccination, tobacco control, Hepatitis B immunization, cervical cancer screening, and visual inspection for oral cancer. Focusing on cancers with well-established early detection benefits—such as cervical, breast, and colorectal cancers—can save lives and reduce costs. Raising public awareness and training mid-level healthcare providers in screening, diagnosis, treatment, and palliative care can also help overcome specialist shortages [7, 8].

International collaboration is essential to strengthening cancer care in LMICs. Partnerships between cancer centers in high-income and low-income countries, such as WHO-coordinated twinning programs, enable valuable knowledge exchange, training, and capacity building. Engaging communities through trained health workers, patient advocates, and survivors can enhance screening and education efforts. Screening programs must be tailored to local cultural and practical realities to ensure they remain feasible, accessible, and cost-effective. Additionally, technology can play a vital role in improving diagnostics and treatment in resource-limited settings [9].

Despite the growing cancer burden, many LMICs, including Nepal, still place cancer low on their national health agenda. Screening, early diagnosis, and effective treatment remain inadequate due to limited access to advanced diagnostics, skilled professionals, and radiation therapy facilities. Nepal, for example, has only eight cancer treatment centers, of which only two are government-run, making it difficult to meet the growing demand. Addressing these challenges requires substantial investment in healthcare infrastructure, workforce development, and policies that prioritize cancer as a public health issue [10].

Closing the cancer care gap requires strong political commitment, context-specific strategies, and sustained global cooperation. Key priorities include implementing cost-effective prevention and treatment measures, strengthening community-based interventions, and integrating cancer care into primary healthcare services. Without addressing systemic underfunding, workforce shortages, and unequal access to care, LMICs will continue to experience a high number of preventable cancer deaths. Achieving health equity is not only a public health necessity it is a moral obligation.

References

1. Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2024;74(3):229-263. DOI:10.3322/caac.21834.
2. Thavarool SB, Muttath G, Nayanar S, Duraisamy K, Bhat P, Shringarpure K, et al. Improved survival among oral cancer patients: findings from a retrospective study at a tertiary care cancer centre in rural Kerala, India. World J Surg Oncol. 2019;17(1):15. DOI:10.1186/s12957-018-1550-z.
3. Giri M, Giri M, Thapa RJ, Upreti B, Pariyar B. Breast Cancer in Nepal: Current status and future directions. Biomed Rep. 2018;8(4):325-329. DOI:10.3892/br.2018.1057.
4. Afaya A, Ramazanu S, Bolarinwa OA, Yakong VN, Afaya RA, Aboagye RG, et al. Health system barriers influencing timely breast cancer diagnosis and treatment among women in low and middle-income Asian countries: evidence from a mixed-methods systematic review. BMC Health Serv Res. 2022;22(1):1601. DOI:10.1186/s12913-022-08927-x.
5. Ba DM, Ssentongo P, Musa J, Agbese E, Diakite B, Traore CB, et al. Prevalence and determinants of cervical cancer screening in five sub-Saharan African countries: A population-based study. Cancer Epidemiol. 2021;72:101930. DOI:10.1016/j.canep.2021.101930.
6. Subedi R, Houssami N, Nickson C, Nepal A, Campbell D, David M, et al. Factors influencing the time to diagnosis and treatment of breast cancer among women in low- and middle-income countries: A systematic review. Breast. 2024;75:103714. DOI:10.1016/j.breast.2024.103714.
7. Omotoso O, Teibo JO, Atiba FA, Oladimeji T, Paimo OK, Ataya FS, et al. Addressing cancer care inequities in sub-Saharan Africa: current challenges and proposed solutions. Int J Equity Health. 2023;22(1):189. DOI:10.1186/s12939-023-01962-y.
8. Kamaraju S, Drope J, Sankaranarayanan R, Shastri S. Cancer Prevention in Low-Resource Countries: An Overview of the Opportunity. Am Soc Clin Oncol Educ Book. 2020;40:1-12. DOI:10.1200/EDBK_280625.
9. Bamodu OA, Chung CC. Cancer Care Disparities: Overcoming Barriers to Cancer Control in Low- and Middle-Income Countries. JCO Glob Oncol. 2024;10:e2300439. DOI:10.1200/GO.23.00439.
10. Gyawali B, Sharma S, Shilpakar R, Dulal S, Pariyar J, Booth CM, et al. Overview of Delivery of Cancer Care in Nepal: Current Status and Future Priorities. JCO Glob Oncol. 2020;6:1211-1217. DOI:10.1200/GO.20.00287.