EDITORIAL

Cancer: From disease burden to precision and person-centered care

Supriya Satish Patil

Executive Editor, Journal of Krishna Institute of Medical Sciences University, Krishna Vishwa Vidyapeeth (Deemed to be University), Karad-415339 (Maharashtra) India

Cancer remains one of the most serious public health challenges of the twenty-first century. It is not a single disease but a complex group of disorders characterized by uncontrolled cellular growth, genetic alterations, biological heterogeneity, and variable clinical behaviour. Despite major advances in diagnosis, surgery, radiotherapy, chemotherapy, immunotherapy, targeted therapy, and molecular medicine, cancer continues to contribute substantially to global morbidity, mortality, disability, financial hardship, and emotional suffering. Recent global estimates indicate that there were approximately 20 million new cancer cases and 9.7 million cancer deaths worldwide in 2022. The global cancer burden is expected to rise to more than 35 million new cases by 2050, mainly due to population aging, demographic growth, changes in lifestyle, environmental exposures, and inequalities in access to preventive and curative health care services [1,2]. These figures emphasize that cancer is not only a clinical problem but also a major developmental, economic, and health-system challenge. A large proportion of cancers are preventable. Tobacco use, harmful alcohol consumption, unhealthy diet, physical inactivity, obesity, air pollution, occupational exposures, infections such as human papillomavirus and hepatitis B virus, and delayed health-seeking behaviour are important contributors to cancer risk [3].

Prevention through health education, vaccination, tobacco control, lifestyle modification, environmental protection, and early detection remains one of the most cost-effective strategies for reducing the cancer burden. Early diagnosis and organized screening are central to improving cancer outcomes. Cancers such as cervical, breast, colorectal, and oral cancers can be detected at earlier stages through appropriate screening and public awareness programmes. In many low- and middle-income countries, however, patients often present at advanced stages because of inadequate awareness, limited screening coverage, financial barriers, and restricted access to diagnostic and treatment facilities [4]. Hence, strengthening primary care, referral pathways, cancer registries, diagnostic infrastructure and affordable treatment services are essential. The nascent field of precision oncology is changing our understanding and treatment of cancer. Molecular profiling, next-generation sequencing, biomarker-based diagnosis, targeted therapy, immunotherapy, and liquid biopsy have created new opportunities for individualized treatment [5].

Precision medicine recognizes that cancers arising in the same organ may differ significantly at the molecular level and may require different therapeutic approaches. This shift from "one-size-fits-all" treatment to personalized oncology represents a major scientific advancement. At the same time, cancer care must remain deeply human. A patient with cancer requires not only accurate diagnosis and effective treatment but also counselling, psychosocial support, rehabilitation, survivorship care, pain relief, and palliative care. The quality of cancer care should therefore be judged not only by survival

statistics but also by dignity, equity, compassion, accessibility, and quality of life. World Cancer Day, observed every year on 4th February, reminds the global community of its shared responsibility to reduce the cancer burden. The World Cancer Day campaign theme for 2025–2027, "United by Unique," places people at the centre of cancer care and highlights the need for compassionate, personalized, and equitable cancer services [6]. The theme is particularly relevant in the present era, where scientific innovation must be integrated with patient-centered care. The meaningful engagement of people living with cancer in shaping services, informing care practices, and guiding health policy is at the core of creating a health system that is compassionate, humanising and empowering. A system cannot respond to the needs of people affected by cancer if it is not created in collaboration with them. Reorienting cancer care to a people-centred approach starts with understanding what individual's value and the conditions in which they live and make health choices across every stage of the cancer continuum – from prevention, screening, and diagnosis to treatment, palliative care, and survivorship. Cancer care should be holistic, it should be embedded within a broader framework of responsive health services that consider the individual's full range of needs. Decision-making must prioritise equity and inclusion. Services should be tailored to diverse populations and aim to remove barriers related to geography, language, income, disability, or stigma [7].

Action is needed across the whole health system to create the conditions for change. This means strong leadership, the right and supportive policies and regulations, systems that reward quality and collaboration, and a workforce ready to deliver new models of care. This transformation will demand co-ordination, co-creation, investment and a shared commitment across sectors and stakeholders. Governments and institutions should set clear policy goals for cancer, make a strong case for change and commit the necessary dedicated resources to implement reforms. Good leadership also involves building a culture that values data, evaluation and continuous learning. We have to support and train health workers to work in new ways that are people-centred. Cancer care teams need to be multi-disciplinary, flexible and responsive to people's emotional, cultural and social needs. Staff also need tools and support to work across institutions and use data to guide care. Integrated cancer care must be supported by laws and regulations. This means ensuring that services across the cancer continuum – screening, diagnosis, treatment, supportive and palliative care, and follow-up – are coordinated and connected, so that patients experience seamless, continuous, and people-centered care.

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Author for Correspondence:
Dr. Supriya Satish Patil, Executive Editor, Journal of Krishna Institute of Medical Sciences,Krishna Vishwa Vidyapeeth (Deemed to be University), Malkapur, Karad-415339, Maharashtra
Email: executiveeditor@jkimsu.com Cell: 9423867401

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