

Developing Local Cancer Guidelines in Pakistan: A Critical Need for Improved Healthcare

Cancer remains a public health challenge worldwide as well as in Pakistan, with increasing incidence and mortality rate of oral, breast, Lung and Colorectal cancer (WHO, 2023; International Agency for Research on Cancer 2024). International bodies such as the World Health Organization (WHO), National Comprehensive Cancer Network (NCCN), and American Society of Clinical Oncology (ASCO) has developed comprehensive guidelines for cancer treatment. Pakistan still lacks structured, evidence based national guidelines tailored to its unique population dynamics. The dependence on international protocols does not eternally align with the local healthcare infrastructure, genetic predispositions, and socioeconomic factors (National Comprehensive Cancer Network, 2024). Therefore, it is imperative to develop localized cancer guidelines to improve early diagnosis, treatment, and overall patient outcomes.

THE URGENT NEED FOR LOCAL CANCER GUIDELINES

Pakistan's cancer care registry faces several challenges; lack of awareness, standardized management and treatment protocols, late-stage diagnosis and limited access to specialized cancer care centers. A lot of cancer cases from rural areas of Pakistan report advanced stage cancer due to lack of awareness and not sufficient screening programs (Ahmad et al., 2023). This led to reducing the survival rate and is increasing the burden on our healthcare system. Relying on Western guidelines without studying the epidemiological and genetic landscape creates a new issue. Previous studies report a high rate of consanguinity in Pakistan, contributing to an increased prevalence of genetic changes associated with early-onset cancer (National Cancer Registry of Pakistan, 2024). Hence, it's a current need to develop national guidelines that incorporate genetic counseling, screening, environmental risk factors and resource appropriate treatment options.

BRIDGING GAPS IN DIAGNOSIS AND TREATMENT

Early diagnosis remains the most effective tool for raising cancer survival rates (World Health Organization, 2024). Initiating national level cancer screening programs for high-risk populations can lead to better treatment outcomes. For example, the colorectal cancer (CRC) rate is increasing in younger populations in Pakistan, necessitating public awareness campaigns and targeted screening initiatives (World Cancer Research Fund, 2024). It's the dire need of Pakistan to establish treatment, standardized chemotherapy regimens, surgical and radiation therapy according to the local patient data (National Comprehensive Cancer Network, 2024). Research and policies Initiatives on molecular profiling and genetic testing in treatment procedures can help personalize cancer therapies, improving response rates and reducing mortality rates.

LEVERAGING RESEARCH AND TECHNOLOGY FOR BETTER CANCER CARE

Research in Pakistan particularly in cancer is limited due to a lack of funding and infrastructure (Ahmad et al., 2023). Establishing a national cancer registry can facilitate data collection on incidence, treatment efficacy and patient outcomes. In addition, the application of artificial intelligence (AI) and machine learning models could help to predict mutation patterns, enhancing precision medicine (National Comprehensive Cancer Network, 2024).

POLICY SUPPORT AND MULTIDISCIPLINARY COLLABORATIONS

A successful national cancer strategy requires collaboration among oncologists, geneticists, pathologists, and policymakers (World Cancer Research Fund, 2024). Government support is crucial for implementing comprehensive cancer control programs, securing research funding and improving healthcare infrastructure. International collaborations can also provide technical expertise and financial assistance for cancer care development in Pakistan.

CONCLUSION

Pakistan needs a National Cancer Control Plan that prioritizes nationwide screening programs, evidence based protocols based on the local data, investment in research on a genetic and molecular level, public awareness by educating the community about cancer risk factors and the establishment of new cancer care centers particularly in underserved regions.

Developing local cancer guidelines is not just a medical requirement but a social responsibility. By integrating research, policy support and technological advancements Pakistan can significantly improve cancer care, reduce the mortality rate and ensure better health outcomes for future generations.

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