

PART 3.

TACKLING SOCIAL INEQUALITIES IN CANCER

FOCUS 8.

Social inequalities in cancer in Asia

Rengaswamy Sankaranarayanan

Asia has about 60% of the world's population and about one half of the world's poor people. The continent bears one half of the global burden of cancer, with considerable between- and within-country variations in cancer profiles, incidence, survival, and mortality. These disparities reflect the striking socioeconomic differences and the variations in ethnicity, sociocultural practices, diet, government investments in health care, development of public health services, affordability of and access to health care, and health-care finance mechanisms (Sankaranarayanan et al., 2010, 2014; Allemani et al., 2018). On the basis of demographic changes (i.e. no change in cancer risk), the estimated number of new cancer cases in Asia is projected to increase

from 8.8 million in 2018 to 11.5 million in 2030 (Ferlay et al., 2018).

There are huge differences in the incidence of major cancer types across Asia; between Asian countries, there is a 7-fold difference for cervical cancer, a 9-fold difference for breast cancer, a 25-fold difference for colorectal cancer, a 30-fold difference for lung cancer, and a 7-fold difference for non-Hodgkin lymphoma in age-standardized incidence rates, as a result of vast differences in the prevalence of risk factors and in screening and diagnostic practices (Bray et al., 2017). The steadily declining trend in cervical cancer incidence and the increasing trends in the incidence of breast cancer and colorectal cancer in most countries reflect changes in

socioeconomic patterns, delayed childbearing and fewer pregnancies, and changing education and income levels, as well as an increasing adoption of poor-quality dietary patterns and sedentary lifestyles. Cancers associated with chronic infection, such as liver cancer and stomach cancer, predominate in East Asian countries, and cancers associated with tobacco use, such as head and neck cancers, predominate in the Indian subcontinent; these differences highlight the underlying variations in the prevalence of risk factors.

Many low- and lower-middle-income Asian countries have poorly developed, inadequately financed, and overextended government health services, which contribute to advanced-stage clinical presentation

and poor survival outcomes. Cancer health services are either non-existent or highly inadequate in rural and remote locations, leading to vast differences between outcomes in urban and rural areas. Survival outcomes in high-income Asian countries are almost twice those in low-income Asian countries (Sankaranarayanan et al., 2014; Allemani et al., 2018).

The availability of and access to specialized cancer surgical care, radiotherapy, and essential cancer drugs are highly variable in Asia, reflecting the wide gaps in economic development and the focus on vertical investments in government health services. Access to palliative care is poor in many Asian countries, because of legal restrictions on opioids

and a medical culture that undervalues quality of life (Payne et al., 2012). The time-bound implementation of resource-appropriate cancer control measures in Asia, particularly in large countries such as China, India, Indonesia, and the Philippines, has the largest potential to reduce global cancer inequalities.

References

Allemani C, Matsuda T, Di Carlo V, Harewood R, Matz M, Nikšić M, et al.; CONCORD Working Group (2018). Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries. *Lancet*. 391(10125):1023–75. [https://doi.org/10.1016/S0140-6736\(17\)33326-3](https://doi.org/10.1016/S0140-6736(17)33326-3) PMID:29395269

Bray F, Colombet M, Mery L, Piñeros M, Znaor A, Zanetti F, et al., editors (2017). *Cancer incidence in five continents*. Lyon, France: International Agency for Research on Cancer. Available from: <https://ci5.iarc.fr>.

Ferlay J, Ervik M, Lam F, Colombet M, Mery L, Piñeros M, et al. (2018). *Global Cancer Observatory: Cancer Today*. Lyon, France: International Agency for Research on Cancer. Available from: <https://gco.iarc.fr/today>.

Payne S, Chan N, Davies A, Poon E, Connor S, Goh C (2012). Supportive, palliative, and end-of-life care for patients with cancer in Asia: resource-stratified guidelines from the Asian Oncology Summit 2012. *Lancet Oncol*. 13(11):e492–500. [https://doi.org/10.1016/S1470-2045\(12\)70380-7](https://doi.org/10.1016/S1470-2045(12)70380-7) PMID:23117004

Sankaranarayanan R, Ramadas K, Qiao YL (2014). Managing the changing burden of cancer in Asia. *BMC Med*. 12(3):3. <https://doi.org/10.1186/1741-7015-12-3> PMID:24400922

Sankaranarayanan R, Swaminathan R, Brenner H, Chen K, Chia KS, Chen JG, et al. (2010). Cancer survival in Africa, Asia, and Central America: a population-based study. *Lancet Oncol*. 11(2):165–73. [https://doi.org/10.1016/S1470-2045\(09\)70335-3](https://doi.org/10.1016/S1470-2045(09)70335-3) PMID:20005175