CANCER SURVIVAL

Access to effective early detection and cancer treatment can substantially improve survival for cancer patients and reduce the survival gap worldwide.

Overall improvements in early detection and treatment have greatly improved average survival of cancer patients worldwide over the past several decades, yet prognosis still varies markedly depending on where a patient lives. **FIGURE 24.1** Survival differences are also marked within regions. Within sub-Saharan Africa for example, overall (observed) survival of women diagnosed with breast cancer is about 50% higher in patients residing in high Human Development Index (HDI) countries than in those residing in low-HDI countries. **FIGURE 24.2** This is in part because breast cancer patients in the low-HDI countries are more likely to be diagnosed at a later stage and less likely to receive the appropriate treatment. In addition to variation between countries, within-country differences have also been reported. For example, in the United States, black cancer patients have lower survival than non-Hispanic white patients. **FIGURE 24.3** In order to close this survival gap, improved population awareness about cancer symptoms, better access to diagnostic services, and adequate care are key. Universal Health Coverage is one strategy to achieving this. (see *40, Universal Health Coverage*) The implementation of universal health coverage in Thailand in 2002 may at least partly account for the increase in the 5-year breast cancer survival proportion, from 44% for patients diagnosed from 1995 to 1999 to 62% for those diagnosed from 2010 to 2014. **FIGURE 24.4**

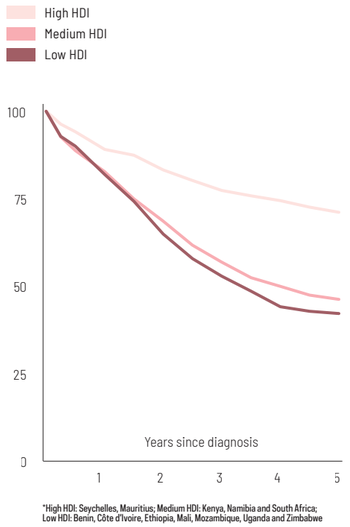
Cancer patient survival benchmarking is an important tool for advocacy to ensure equitable cancer care. Global initiatives assessing international cancer survival include EUROCARE, a cross European project since 1989; the International Cancer Benchmarking Partnership, involving high-income countries with similar health systems; CONCORD, which collects and reports data from all countries worldwide; and SURVCAN, which aims to improve data and capacity for survival estimation in Africa, Asia, and South America, including an initiative with the African Cancer Registry Network to expand population-based survival estimates in sub-Saharan Africa. Unfortunately, high-quality data remains scarce. **MAP 24.1** Improving the quality and availability of population-based survival data is essential to ensuring effective monitoring of progress in cancer control.

NET SURVIVAL is a measure of the probability of surviving the cancer diagnosed that is comparable between countries, as it corrects for differences between countries in death from other diseases (non-cancer mortality). Net survival is often age-standardized for comparability between countries with different age distributions.

OBSERVED SURVIVAL is a measure of the probability of a person with cancer surviving from all causes of death (cancer and other causes).

FIGURE 24.2

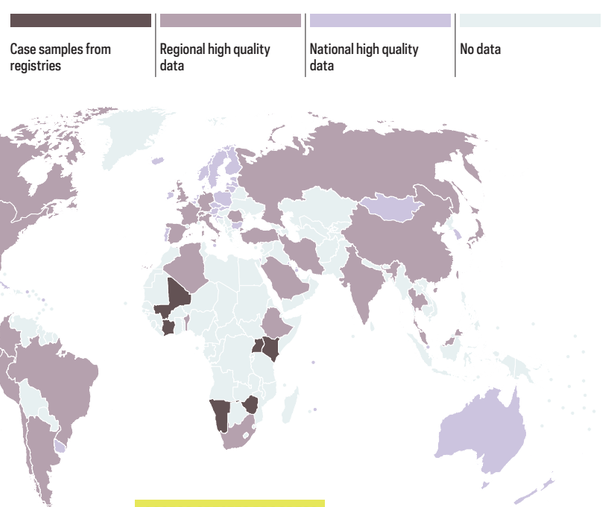
Observed survival (%) in patients with breast cancer since time of diagnosis in countries with high, medium and low human development index in sub-Saharan Africa in 2009-2014*



*High HDI: Seychelles, Mauritius; Medium HDI: Kenya, Namibia and South Africa; Low HDI: Benin, Côte d'Ivoire, Ethiopia, Mali, Mozambique, Uganda and Zimbabwe

MAP 24.1

Availability of high-quality cancer data for survival statistics, 2008–2014



ACCESS CREATES PROGRESS

The number of population-based cancer registries that are able to provide high-quality survival statistics is lacking but has grown over the last decades, providing national and global evidence to improve effectiveness of health care systems.

FIGURE 24.3

Five-year net survival (%) for women diagnosed with advanced breast cancer in the USA in 2009-2015 by race/ethnicity

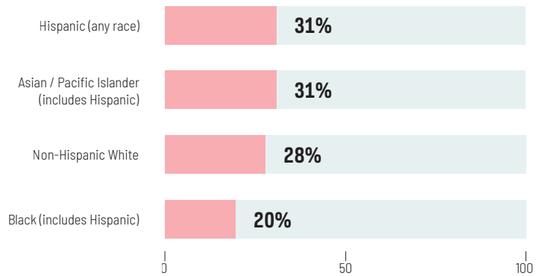


FIGURE 24.4

Trends in five-year net survival (%) from breast cancer in Asia

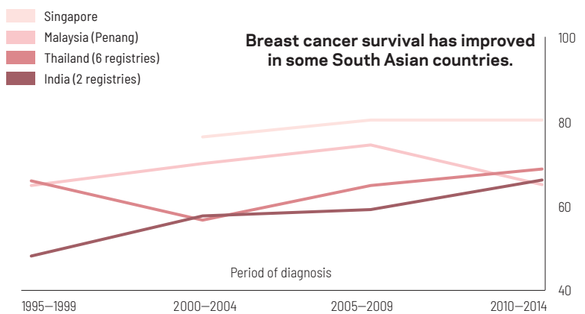


FIGURE 24.1 *Five-year net survival (%) in patients diagnosed with colon cancer, female breast cancer, and acute lymphoblastic leukemia (children) in 2010-2014 CONCORD-3 study worldwide*

Survival from childhood acute lymphoblastic leukemia varies almost twofold across European countries.