Colorectal cancer is the second most commonly diagnosed cancer after lung cancer, for men, and the third most common cancer after breast and lung cancers, for women, in the Asia-Pacific region. In 2018, about 908 000 people were diagnosed with colorectal cancer in the region. Colorectal cancer is the fourth most common cause of death from cancer, with approximately 434 000 deaths (IARC, 2020[22]).

The main risk factors for colorectal cancer include increasing age, ulcerative colitis, a personal or family history of colorectal cancer or polyps, and lifestyle factors such as a diet high in fat and low in fiber, physical inactivity, obesity, tobacco and alcohol consumption. Colorectal cancer incidence is much higher among men. Colorectal cancer incidence and mortality rates increase as countries undergo socio-economic transition, such as in China and the Philippines (Arnold et al., 2017[31]). Generally, rectal cancer is more difficult to treat than colon cancer, due to a higher probability of early spread to adjacent tissue, recurrence and postoperative complications.

Within the Asia-Pacific region, on average, countries in the WHO Western Pacific region had higher annual incidence rates for colorectal cancer than those in the South-East Asia region in 2018 (25.9 compared to 19.7 new cases per 100 000 population). Australia, Brunei Darussalam, Japan, the Republic of Korea and Singapore had over 35 new cases per 100 000 population while India, Mongolia, Myanmar, Nepal, Pakistan and Sri Lanka had below 10 new cases per 100 000 population (IARC, 2020[22]). According to the time series data available for a limited number of countries, the incidence rate of colorectal cancer decreased in New Zealand, stabilised in Australia; Hong Kong, China; and Japan, and increased in India (Chennai), Philippines, the Republic of Korea, Singapore and Thailand over the past few decades (IARC, 2020[21]; Arnold et al., 2017[31]).

Following screening programmes for breast and cervical cancers, a growing number of countries have introduced population-based colorectal cancer screening programmes, targeting mostly people in their 50s and 60s (OECD, 2013[23]). Countries and territories with relatively high incidence of colorectal cancer in the region such as Australia, Brunei Darussalam, Japan, New Zealand, the Republic of Korea and Singapore have introduced national population-based screening programmes with various methods (e.g. faecal immunochemical test (FIT), flexible sigmoidoscopy, guaiac faecal occult blood test) over the past 15 years. China; Hong Kong, China; Macau, China; and Thailand have also implemented regional pilot programmes since the late 2000s (IARC, 2019[32]; Lim et al., 2019[33]; Health Bureau of Macau, 2020[34]).

Five-year net survival for colon and rectal cancer is high in countries such as Australia, Japan, New Zealand, the Republic of Korea and Singapore, where nationwide population-based screening programmes for colorectal cancer have been implemented. By contrast, India and Thailand have the lowest net survival for both cancers in Asia-Pacific (Figure 7.13 and Figure 7.14; Allemani et al., 2018$_{[31]}$). Between-country differences in net survival following a diagnosis for colon and rectal cancer are wide. This indicates that there is still large room for improvements in early detection and treatment in countries that are lagging behind.

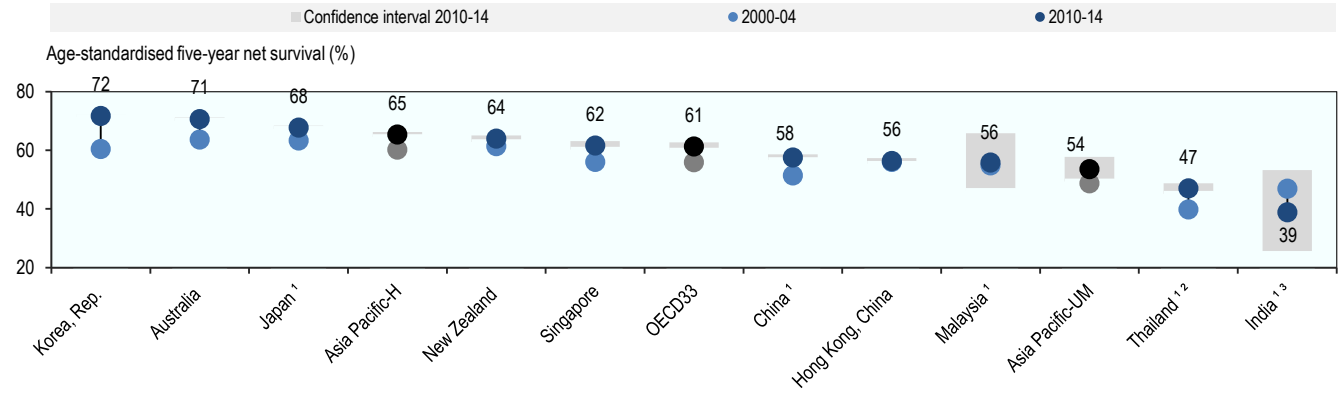
Advances in diagnosis and treatment of colorectal cancer, including improved surgical techniques, radiation therapy and combined chemotherapy, and wider and timelier access, have contributed to increased survival over the last decade. In most Asia-Pacific countries and territories, five-year net survival for colon and rectal cancers improved between 2000-04 and 2010-14. During this period, the Republic of Korea showed a large increase in net survival for both cancers and attained the highest five-year survival in the region for patients diagnosed during 2010-14. This was achieved through an increased coverage of colorectal cancer screening (from 7.3% in 2004 to 25% in 2012) (Suh et al., 2017[35]) and advanced treatment (Hur et al., 2018[36]).

Mortality rates from colorectal cancer varied between the low of 3 per 100 000 population in Bangladesh and the high of 17.3 per 100 000 population in Singapore in 2018 (Figure 7.15). Despite the high mortality rate, Singapore made progress in recent years. Based on a population-based screening programme introduced in 2011 and treatment advancement such as pre-operative radiotherapy and total mesorectal excision (Teo and Soo, 2013[37]), net survival for colorectal cancer improved, and the mortality rate declined since its peak around the year 1990. Similarly, mortality rates declined in Australia; Hong Kong, China; Japan; New Zealand and the Republic of Korea over the past decades. Mortality rates have, however, increased in the Philippines and Thailand with still relatively low mortality rate for colorectal cancer (IARC, 2019[38]). Together with early diagnosis and access to high quality care, public awareness on the importance of healthy lifestyles needs to be promoted to reduce the burden of colorectal cancer. For example, the month of March is designated as Colorectal Cancer Awareness Month in Singapore and forums for public education are organised and free FIT kits are provided to eligible population at community levels (Teo and Soo, 2013[37]).

Definition and comparability

Net survival is defined in the indicator "Incidence, survival and mortality for breast cancer". Survival estimates for colon and rectal cancers are based on the International Classification of Diseases for Oncology (ICD-O-3 C18.0–C18.9 and C19.9 for colon and C20.9, C21.0-C21.2 and C21.8 for rectal cancer). See the indicator "Mortality from cancer" in Chapter 3 for the definition of cancer mortality rates. Mortality rates from colorectal cancer are based on ICD-10 codes C18-C21 (colon, rectosigmoid junction, rectum, and anus).

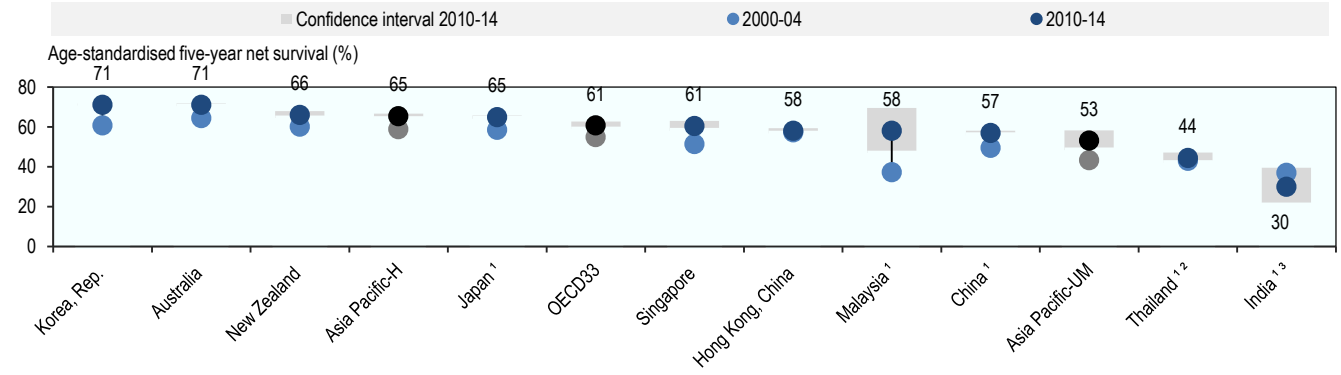
Figure 7.13. **Colon cancer five-year net survival, patients diagnosed during 2000-04 and 2010-14**



Note: For all countries, 95% confidence intervals for 2010-14 are represented by grey areas. For Hong Kong, China; and Malaysia, the estimate in light blue is for 2005-09. 1. Data represent coverage of less than 100% of the national population. 2. The estimate for 2000-04 is less reliable. 3. Survival estimates are not age-standardised. See Allemani et al. (2018) for more information.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink https://stat.link/lpojv4

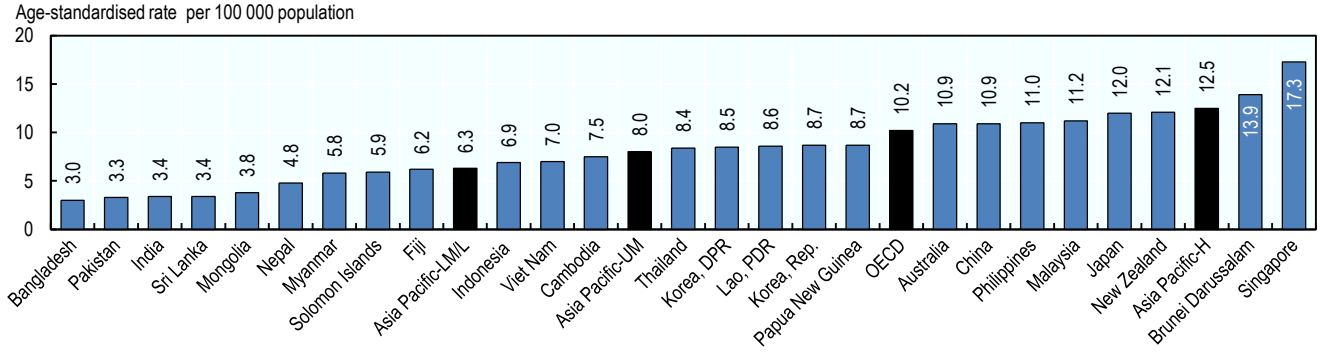
Figure 7.14. **Rectal cancer five-year net survival, patients diagnosed during 2000-04 and 2010-14**



Note: For all countries, 95% confidence intervals for 2010-14 are represented by grey areas. For Hong Kong, China; and Malaysia, the estimate in light blue is for 2005-09. 1. Data represent coverage of less than 100% of the national population. 2. The estimate for 2000-04 is less reliable. 3. Survival estimates are not age-standardised. See Allemani et al. (2018) for more information.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink https://stat.link/324gdz

Figure 7.15. **Colorectal cancer mortality, 2018**



Source: IARC Global Cancer Observatory 2020.

StatLink https://stat.link/wohime