FIVE-YEAR NET SURVIVAL FOR BREAST, CERVICAL AND COLORECTAL CANCER

Breast cancer accounts for over 200 000 deaths per year in Asia-Pacific (WHO, 2018). There are a number of factors that increase the risk of breast cancer, such as age, family history, oestrogen replacement therapy and alcohol use, while breastfeeding and physical activity have a protective effect (World Cancer Research Fund, 2018; Gonzales-Jimenez et al., 2014).

Cervical cancer, which causes nearly 150 000 deaths per year in Asia-Pacific, is also preventable and curable if detected early. The main cause of cervical cancer, which accounts for approximately 95% of all cases, is sexual exposure to the human papilloma virus, HPV. Pap-smear and HPV DNA testing increases the probability of detecting premalignant lesions which can then be effectively treated (WHO, 2014f). In addition, primary prevention by prophylactic vaccines has been shown to be highly effective and offers new potential in controlling the disease (Arrossi et al., 2017).

Colorectal cancer is the third most commonly diagnosed form of cancer after prostate and lung cancers, for men, and the second most common cancer after breast cancer, for women, across OECD countries (OECD, 2017). Colorectal cancer causes approximately 350 000 deaths per year in Asia-Pacific (WHO, 2018a). There are several factors that place certain individuals at increased risk of colorectal cancer including a diet high in fat, sedentary lifestyles and family history. Colorectal cancer incidence and mortality rates vary by human development across countries, with an increasing burden in countries undergoing socioeconomic transition such as China and the Philippines (Arnold et al., 2017). The secondary prevention of colorectal cancer by faecal occult blood test, sigmoidoscopy or colonoscopy screening is increasingly being recommended (Centers for Disease Control and Prevention, 2016).

Five-year net survival reflects the quality of cancer treatment. For the most recent estimations on breast cancer, Australia (89.5%) and Japan (89.4%) reported the highest five-year net survival, whereas in India, Malaysia and Thailand the probability that breast cancer patients survive their cancer for at least five years is less than 70% (Figure 7.7).

For cervical cancer, the Republic of Korea (77.3%) and Japan (71.4%) reported the highest five-year net survival, while Thailand (53.9%) and Malaysia (57.1%) reported the lowest one (Figure 7.8). As well as reflecting differences in the effectiveness of population screening programmes and access to high quality treatment, these figures also reflect incidence rates. Fiji has a relatively high incidence of cervical cancer (37.8 cases per 100 000 females per year), as does Papua New Guinea (34.5), compared to Australia (5.5) and New Zealand (5.3) (Ferlay et al., 2013).

For colon cancer, the Republic of Korea (71.8%) and Australia (70.7%) reported the highest five-year net survival, while India (38.9) reported the lowest one (Figure 7.9). Similar probabilities were reported for rectal cancer, with the Republic of Korea (71.1%) and Australia (71.0%) reporting the highest survival probability, and India (30%) the lowest one.

Definitions and comparability

Five-year net survival is the cumulative probability that cancer patients survive their cancer for at least five years, after controlling for the risks of death from other causes. Net survival is expressed as a percentage. Net survival for patients diagnosed during 2000-04 is based on a cohort approach, since all patients had been followed up for at least five years by the end of 2014. For patients diagnosed during 2010-14, the period approach is used, which allows estimation of five-year survival, though five years of follow-up are not available for all patients. Cancer survival estimates are age-standardised with the International Cancer Survival Standard (ICSS) weights.

Data collection, quality control and analysis were performed centrally as part of the CONCORD programme, the global programme for the surveillance of cancer survival, led by the London School of Hygiene and Tropical Medicine (Allemani et al., 2015). In some countries, not all regional registries participated, but survival estimates from the CONCORD programme are considered the best available data from those countries for international comparisons.

Mongolia, Singapore, Hong-Kong, China, the Republic of Korea, New Zealand and Australia report a 100% coverage of the national population, whereas data for Malaysia cover only one province (Penang). Five-year net survival for breast and cervical cancer for Malaysia and Thailand are preliminary estimates.

H represents lower and upper bounds.
7.7. Breast cancer 5-year net survival (%), adults (15-99 years), 2010-14

Source: Global surveillance of trends in cancer survival 2000-14 (CONCORD-3).

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7.8. Cervical cancer 5-year net survival (%), adults (15-99 years), 2010-14

Source: Global surveillance of trends in cancer survival 2000-14 (CONCORD-3).

StatLink http://dx.doi.org/10.1787/888933869127

7.9. Colon cancer 5-year net survival (%), adults (15-99 years), 2010-14

Source: Global surveillance of trends in cancer survival 2000-14 (CONCORD-3).

StatLink http://dx.doi.org/10.1787/888933869146

7.10. Rectum cancer 5-year net survival (%), adults (15-99 years), 2010-14

Source: Global surveillance of trends in cancer survival 2000-14 (CONCORD-3).

StatLink http://dx.doi.org/10.1787/88893386994