Breast cancer accounts for around 187 000 deaths per year in the Asia-Pacific region (WHO, 2014h). There are a number of factors that increase risk, such as age, family history, oestrogen replacement therapy, alcohol use and others. The promotion of screening mammography and self-examination has led to the detection of the disease at earlier stages. Most OECD countries have adopted breast cancer screening programmes as the most effective way for detecting the disease, although periodicity and population target groups vary.

Cervical cancer, which causes 138 000 deaths per year in the region, 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 (IARC Working Group, 1995; Franco et al., 1999). Pap-smear and HPV DNA testing increases the probability of detecting premalignant lesions which can then be effectively treated. As for breast cancer, population-based cancer screening programmes have been adopted by most high-income countries, but again periodicity and target groups vary. In addition, primary prevention by prophylactic vaccines has been shown to be highly effective and offers new potential in controlling the disease (Shefer et al., 2008; Koulova et al., 2008).

Colorectal cancer is the third most commonly diagnosed form of cancer worldwide, after lung and breast cancers, and causes approximately 250 000 deaths per year in the region (WHO, 2014h). There are several factors that place certain individuals at increased risk including age, the presence of polyps, ulcerative colitis, a diet high in fat, and genetic background. The disease is rare in Asia, although in countries where people have adopted western diets, such as Japan, incidence is increasing (IARC, 2011). The secondary prevention of colorectal cancer by faecal occult blood, sigmoidoscopy or colonoscopy screening is increasingly being adopted (USPSTF, 2008).

Population-based *mortality rates* are one measure of health care quality. As well as reflecting the quality of cancer care, they also reflect improved diagnosis of early-stage cancers with a better prognosis, where screening is available and effective. They also reflect, however, changes in cancer *incidence*, which may have more to do with public health programmes and changing behaviours, than health care quality. A more sensitive marker of health care quality is *relative survival rates*. These estimate the proportion of patients who are still alive after a specified time period (commonly five years) compared to those still alive in the absence of the disease. They capture the excess mortality that can be attributed to the disease and reflect both how early the cancer was detected and the effectiveness of treatment. Another good measure of health care quality, for breast and cervical cancer, is screening coverage.

Few countries in the region are currently able to supply robust relative survival or screening rates, hence the indicators presented here focus on population mortality rates (WHO, 2014h). For the most recent estimations on breast cancer, Mongolia (4.2 per 100 000 females) and China (5.4) reported the lowest mortality rates, and Fiji (28.4) reported the highest (Figure 5.7).

For cervical cancer, New Zealand (1.4 per 100 000) and Australia (1.6) reported the lowest mortality rates, with Papua New Guinea (21.7) and Fiji (20.9) reporting the highest (Figure 5.8). As well as reflecting differences in the effectiveness of population screening programmes and access to high quality treatment, these figures also reflect local 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 colorectal cancer, Sri Lanka (2.2 per 100 000 population) and Nepal (2.5) report the lowest mortality rate, while New Zealand (15.1) reports the highest (Figure 5.9). This high rate could also reflect the fact that the incidence of colorectal cancer is high in New Zealand, at 37.27 per 100 000 population (Ferlay et al., 2013).

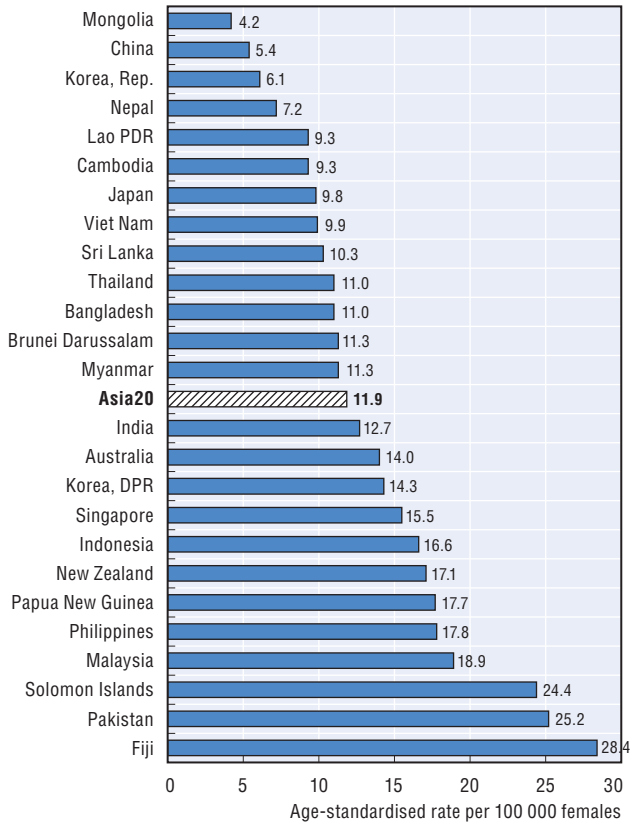
Definitions and comparability

Deaths from all cancers are classified to ICD-10 codes C00-C97, lung cancer to C32-C34, breast cancer to C50 and prostate cancer to C61. Mortality rates are based on estimated numbers of deaths in a country in a year divided by the size of the corresponding population. Incidence rates refer to the number of new cases of a cancer in a given population per year. Both rates are age-standardised.

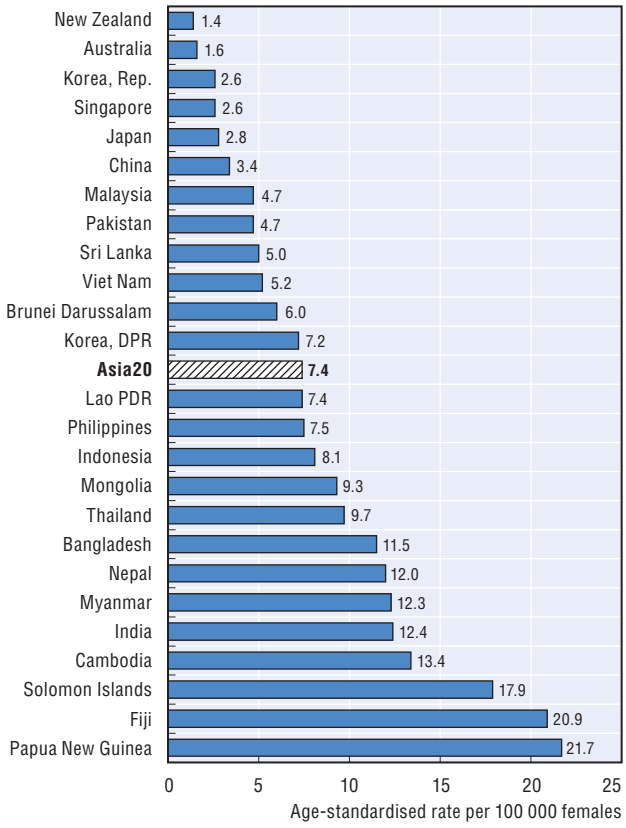
Mortality data are taken from the International Agency for Research on Cancer, GLOBOCAN 2012, available at *http://globocan.iarc.fr/Default.aspx*.

For Bangladesh, Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Pakistan, Papua New Guinea, Solomon Islands and Sri Lanka mortality rates are estimated from national incidence estimates using modelled survival. For Korea, DPR rates are those of neighbouring countries or registries in the same area.

5.7. Breast cancer mortality, females, 2012

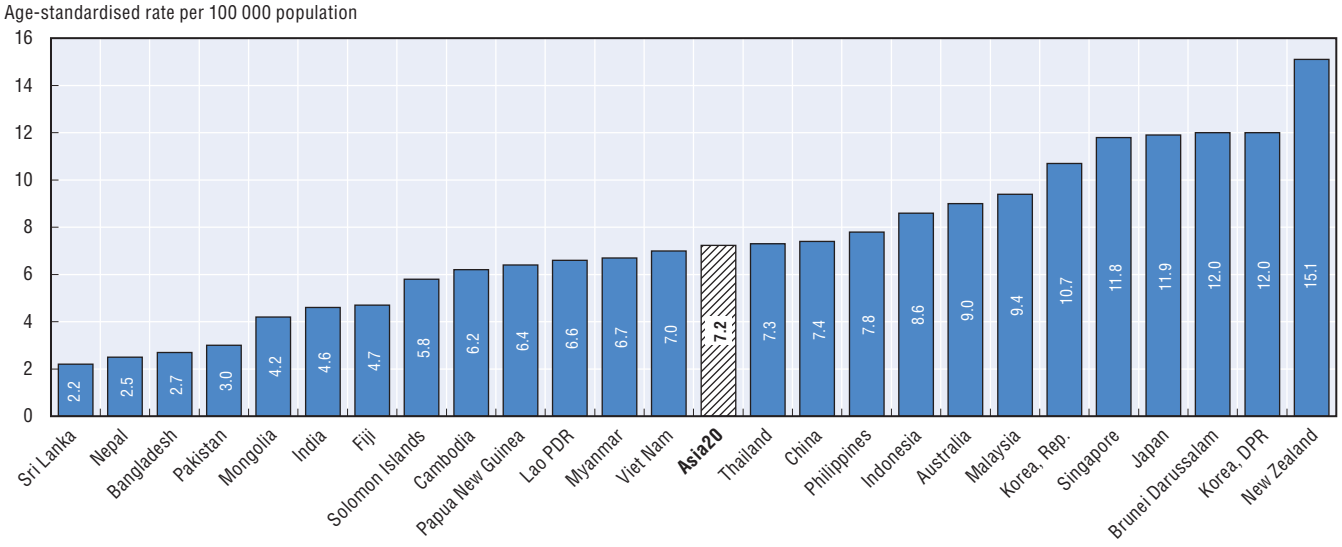


5.8. Cervical cancer mortality, females, 2012



Source: IARC GLOBOCAN 2012.

5.9. Colorectal cancer mortality, 2012



Source: IARC GLOBOCAN 2012.

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