5.11. Survival and mortality for colorectal cancer

Colorectal cancer is the third most commonly diagnosed form of cancer worldwide, after lung and breast cancers, with over 1.2 million new cases diagnosed annually. Incidence rates are significantly higher for males than females (IARC, 2011). There are several factors that place certain individuals at increased risk for the disease, including age, the presence of polyps, ulcerative colitis, a diet high in fat and genetic background. The disease is more common in the United States and Europe, and is rare in Asia. But in countries where people have adopted western diets, such as Japan, the incidence of colorectal cancer is increasing. Total spending on the treatment of colorectal cancer in the United States is estimated at USD 14 billion per year (Mariotto et al., 2011).

Following screening for breast and cervical cancers, colorectal cancer screening has become available, and an increasing number of countries have introduced free population-based screening, targeting people in their 50s and 60s (OECD, 2013e). Partly because of uncertainties about the cost-effectiveness of screening (Lansdorp-Vogelaar et al., 2010), countries are using different methods (i.e. faecal occult blood test, colonoscopy and flexible sigmoidoscopy). Multiple methods are also available within the screening programme in some countries. In most countries that provide faecal occult blood test, screening is available every two years. The screening periodicity schedule is less frequent with colonoscopy and flexible sigmoidoscopy, generally every ten years, making it difficult to compare screening coverage across countries.

Advances in diagnosis and treatment of colorectal cancer have increased survival over the last decade. There is compelling evidence in support of the clinical benefit of improved surgical techniques, radiation therapy and combined chemotherapy. Most countries showed improvement in survival over recent periods (Figure 5.11.1). Across OECD countries, five-year survival improved from 58.0% to 61.3% for people with colorectal cancer during 2001-06 and 2006-11 respectively. Korea, Japan, Israel and Australia have attained five-year relative survival of over 65%. Poland and the Czech Republic, although having the lowest survival among OECD countries, improved considerably from 42.5%

to 47.7% and from 48.2% to 53.4% respectively between 2001-06 and 2006-11.

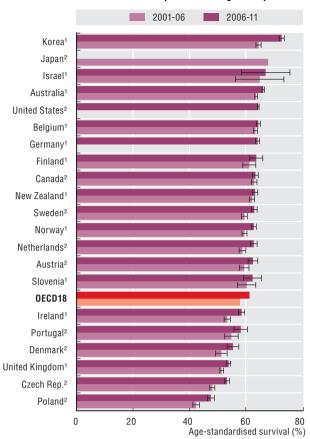
Improvement in survival was observed for both men and women across countries. In all OECD countries, colorectal cancer survival is higher for women except in Korea and Japan where men have a slightly higher survival (Figure 5.11.2). The gender difference is the largest in Slovenia with the five-year relative survival of 58.9% for males and 67.2% for females. Denmark and Finland also have a comparatively large difference.

Most countries experienced a decline in mortality of colorectal cancer between 2001 and 2011, with the average rate across OECD countries falling from 28.3 to 25.0 deaths per 100 000 population over this period (Figure 5.11.3). The decline was particularly large in Australia, the Czech Republic and Austria. The main exceptions from the general trend were Brazil and Korea, where the mortality rate from colorectal cancer increased by about 20% in the last decade. Central and eastern European countries tend to have higher mortality rates than other OECD countries. Despite a decrease over time, Hungary and the Slovak Republic continue to have the highest mortality rate. Further gains in colorectal cancer mortality could be achieved through the strengthening of screening programmes and improving participation rates.

Definition and comparability

Survival and mortality rates are defined in Indicator 5.9. "Screening, survival and mortality for cervical cancer". See Indicator 1.4 "Mortality from cancer" for definition, source and methodology underlying cancer mortality rates. Survival and mortality rates of colorectal cancer are based on ICD-10 codes C18-C21 (colon, rectosigmoid junction, rectum, and anus).

5.11.1. Colorectal cancer, five-year relative survival, 2001-06 and 2006-11 (or nearest period)



Note: 95% confidence intervals represented by |--|.

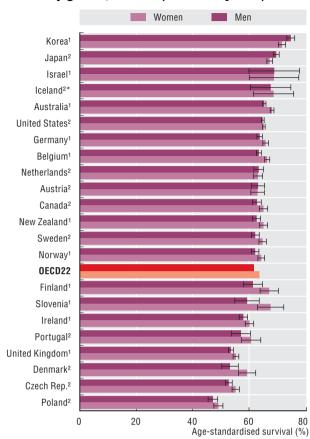
1. Period analysis.

Cohort analysis.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918263

5.11.2. Colorectal cancer, five-year relative survival by gender, 2006-11 (or nearest period)



Note: 95% confidence intervals represented by |--|.

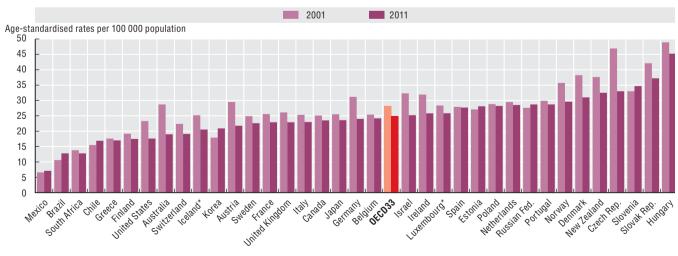
- 1. Period analysis.
- 2. Cohort analysis.

*Three-period average.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink **space** http://dx.doi.org/10.1787/888932918282

5.11.3. Colorectal cancer mortality, 2001 to 2011 (or nearest year)



*Three-year average.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918301



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