EQUITY IN CANCER PATIENT SURVIVAL IN FINLAND

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Objectives: To study temporal, regional and education-related differences in cancer patient survival in Finland by site and sex.

Design: Population-based relative and cause-specific cancer survival analysis using the complete and period methods.

Setting: Five Cancer Control Regions (CCRs) comprising each of approximately one million population covering whole of Finland. Patients’ level of education was studied using three classes: basic, secondary and higher obtained from population census made before diagnosis of cancer.

Participants: For regional survival, the patients were of those diagnosed with cancer in one of 14 most common primary sites in Finland in 1993–2005 and followed-up to the end of 2006. For education-related survival analyses, the patients diagnosed with cancer in 1971–2005 and vital status followed-up to the end of 2005 were considered.

Main outcome measure: The age-standardised relative (ASR) and cause-specific (ASC) survival estimates; the relative excess risk (RER) and cause-specific excess risk (CER) of death due to patients’ cancers.

Results: There were no significant differences in the RERs between the five CCRs except for patients with cancers of the pancreas, and patients with non-localised cancers of the breast, corpus uteri and prostate. The differences observed in 1998–2001 period window for ovarian cancer patients had disappeared in 2003–2006. The higher and secondary level educated patients had much lower CER compared to those with the basic education except for leukaemia. Women showed lower CER compared to men in each cancer sites except for cancer of urinary bladder. In 1996-2005, the differences in 5-year ASC by education level among 19 cancer sites ranged from 3 to 20 percentage points between the higher and basic level for men and from 1 to 14 percent points for women. Between the secondary and basic level, this difference ranged from 1 to 13 percentage points for men and 1 to 8 percentage points for women. A similar pattern was observed also for patients diagnosed in 1971–1985 and 1986–1995.

Conclusions: There were practically no differences in cancer survival in Finland by Cancer Control Region except for few cancer sites, indicating a uniform performance by region. However, the CER and 5-year ASC showed a significant gradient between the highest and lowest levels of education. Women had a higher survival than the men. Despite the uniform geographical performance, there may be room for improvement in patient survival in Finland.