1.5

RECENT TRENDS IN REGIONAL DIFFERENCES IN CANCER SURVIVAL IN JAPAN: POPULATION-BASED CANCER REGISTRY DATA IN 1993-2008

Dr Yuri Ito, Dr Keisuke Fukui, Dr Hadrien Charvat, Dr Kota Katanoda, Dr Tomohiro Matsuda
Cancer Control Center, Osaka International Cancer Institute, Japan; National Cancer Center, Japan

Background Inequalities in cancer care have been targeted in the National Cancer Plan in Japan since 2007. We aimed to monitor the trends in regional differences in cancer survival for major cancer sites using population-based cancer registry data in Japan.

Methods We obtained data of cancer patients diagnosed in 1993-2008 (for six prefectures) or in 2006-2008 (for 15 prefectures) and followed-up for at least five years. XXXX cases of stomach, colorectal, pancreatic, lung, breast and cervical cancer were analysed. Long-term (6 prefectures) and short-term (all 21 prefectures) trends in cancer survival were analysed by flexible hazard regression models adjusted for age and with or without further adjustment for stage. The excess hazard approach was used to account for mortality from other causes. For long-term trends, prefectures were considered as fixed effects; for short-term trends, between-prefecture variation was account for through inclusion of a random effect. Regional variation in cancer survival was graphically evaluated through funnel plots of the prefecture-specific excess hazard ratios (or the predicted prefecture-specific random effects), allowing the identification of outlier prefectures.

Results For stomach, colorectal and lung cancer, we observed large variation in excess death from cancer among prefectures. However, this variation was somewhat smaller after adjustment for stage. This might be explained by differences among prefectures in stage distribution related to early detection procedures. The variation in excess hazard of death was found to get smaller after 2000s. But even in the latest period, there were still wide gaps in cancer survival among the 21 prefectures for most cancer sites: this might have been due to differences in follow-up procedures.

Conclusions We monitored trends in regional differences of cancer survival in Japan. To reduce the gap among prefectures, further analyses are needed to understand its determinants, such as differences in medical care access and socioeconomic inequalities.

1.6

SOCIOECONOMIC AND DEMOGRAPHIC DISPARITIES IN BREAST CANCER STAGE AT PRESENTATION AND SURVIVAL IN SWITZERLAND

Anita Feller MSc, Schmidlin Kurt, Andrea Bordoni, Christine Bouchardy, Jean-Luc Bulliard Bouchardy, Bertrand Camey, Isabelle Konzelmann, Manuela Maspoli, Manuela Maspoli, Kerri Clough-Gorr
National Institute for Cancer Epidemiology and Registration (NICER), Switzerland; Institute of Social and Preventive Medicine (ISPM), University of Bern, Switzerland; Ticino Cancer Registry, Instituto cantonale di patologia, Switzerland; Geneva Cancer Registry, University of Geneva, Switzerland; Vaud Cancer Registry, University of Lausanne, Switzerland; Fribourg Cancer Registry, Switzerland; Valais Cancer Registry, Health Observatory Valais, Switzerland; Neuchâtel and Jura Cancer Registry, Switzerland

Background A major goal of health care systems is to improve health equally in all groups of the population. However, socioeconomic and socio-demographic health inequalities in breast cancer (BC) detection and survival have been observed in many countries.

Methods We explored socioeconomic and socio-demographic disparities in BC stage at presentation and survival in female BC patients from population-based cancer registries anonymously linked to the Swiss National Cohort (SNC). Tumour stage was classified according to SEER summary stage (in situ/localized/regional/distant). We used highest education level attained from the SNC to characterize socioeconomic position (SEP) in 3 levels (low/middle/high). Further characteristics included in the analyses were age, living in a canton with organized mammography screening (yes/no), civil status and Swiss nationality. We used ordered logistic regression models to analyse factors associated with BC stage at presentation and competing risk regression models for factors associated with death from BC.

Results Odds of later-stage BC were significantly increased for low SEP (odds ratio (OR) 1.26, 95%CI 1.12-1.41) and middle SEP women (OR 1.11, 95%CI 1.01-1.23) compared to women of high SEP. Further, women living in a canton without organized mammography screening, women diagnosed outside the screening age and non-married women were more often diagnosed at later stages. Women of low SEP experienced an increased risk of dying from BC (sub-hazard ratio 1.28, 95%CI 1.10-1.50) compared to women of high SEP. Notably, these BC-specific survival differences remained after controlling for stage at presentation and/or other sociodemographic factors.

Conclusion It is of concern that these SEP gradients exist in a country with universal health insurance coverage, high health-related expenditures and one of the highest life expectancies in the world. Appropriate intervention strategies are needed to reduce socioeconomic and socio-demographic inequalities in BC stage at presentation and survival.