


Socioeconomic and demographic disparities in breast cancer stage at presentation and survival: A Swiss population-based study

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We explored socioeconomic and demographic disparities in breast cancer (BC) stage at presentation and survival in a Swiss population-based sample of female BC patients linked to the census-based Swiss National Cohort. Tumor stage was classified according to Surveillance, Epidemiology and End Results Program summary stage (*in situ*/localized/regional/distant). We used highest education level attained to estimate SEP (low/middle/high). Further demographic characteristics of interest were age at presentation (30–49/50–69/70–84 years), living in a canton with organized screening (yes/no), urbanity of residence (urban/peri-urban/rural), civil status (single/married/widowed/divorced) and nationality (Swiss/non-Swiss). We used ordered logistic regression models to analyze factors associated with BC stage at presentation and competing risk regression models for factors associated with survival. Odds of later-stage BC were significantly increased for low SEP women (odds ratio 1.19, 95%CI 1.06–1.34) compared to women of high SEP. Further, women living in a canton without organized screening program, women diagnosed outside the targeted screening age and single/widowed/divorced women were more often diagnosed at later stages. Women of low SEP experienced an increased risk of dying from BC (sub-hazard ratio 1.22, 95%CI 1.05–1.43) compared to women of high SEP. Notably, these survival inequalities could not be explained by socioeconomic differences in stage at presentation and/or other sociodemographic factors. It is concerning that these social gradients have been observed in a country with universal health insurance coverage, high health expenditures and one of the highest life expectancies in the world.