

Socioeconomic and demographic disparities in breast cancer stage at presentation and survival in Switzerland

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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.

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