

## **N-381 - Socioeconomic Position And Breast Cancer Stage In Switzerland**

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### **Purpose**

This study aims to investigate the association between socioeconomic position (SEP) and breast cancer stage at diagnosis in Switzerland.

### **Methods**

The study used population-based breast cancer incidence data from the cantonal cancer registries of Geneva, Valais and Zurich 2001-2008 (N=11,150) linked to the Swiss National Cohort. Stage at diagnosis was classified by Surveillance, Epidemiology, and End Results Program (SEER) summary stage (in situ, localized, regional, distant). We used highest education level attained to estimate SEP (compulsory or less, upper-secondary, upper-tertiary education). Logistic regression models examined the association between cancer stage at diagnosis and SEP. The adjusted model reports odds ratios (OR) with 95% confidence intervals (95%CI) and included age at diagnosis (<50, 50-70, >70 years), canton with organized screening program (yes/no), civil status (single, married,...), nationality (Swiss, non-Swiss), and an interaction term for age and screening program.

### **Results**

Odds of later stage at breast cancer diagnosis were increased for women with upper-secondary (OR 1.11, 95%CI, 1.01-1.22) and compulsory or less education (OR 1.24, 95%CI 1.11-1.39) compared to women with upper-tertiary education. Women living in a canton without an organized screening program were also more likely to be diagnosed at later stages (OR 1.54, 95%CI 1.31-1.82). Further, women outside the targeted screening age (<50 years: OR 1.39, 95%CI 1.18-1.64; >70 years OR: 1.83, 95%CI 1.37-2.46) and single/widowed/divorced women showed elevated risks for later stages (OR 1.15 (95%CI 1.04-1.27) - 1.19 (95%CI 1.06-1.34)).

### **Conclusions**

Characteristics associated with later stage breast cancer diagnosis in Switzerland were lower SEP, being unmarried, being below 50 or above 70 years of age and living in a canton without an organized breast cancer screening program. Appropriate intervention strategies are needed in order to reduce sociodemographic inequalities and improve early detection of breast cancer.

### **Funding source**

This work was funded by Cancer Research Switzerland (KFS-02553-02-2010).