

Session 2: Socioeconomic deprivation and cancer

15:40 - SOCIOECONOMIC INEQUALITIES IN CANCER RISK BY SITE, AGE, AND SEX IN SCOTLAND, 2000 - 2007

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Objectives

Some cancers are associated with socioeconomic inequality (SEI); this study quantified the extent and differences by cancer type, age and sex.

Methods

We reviewed 216,315 incident cancers (excluding non melanoma skin cancer) from 2000 to 2007 classified into 27 anatomical groups. Further analyses were performed by morphology or sub site. Deprivation was measured using the Scottish Index of Multiple Deprivation and SEI using the slope index of inequality and the relative index of inequality (RII). Analyses were partitioned by five-year age group and sex.

Results

For both sexes, incidence was positively associated with deprivation for lung, head and neck, stomach, oesophagus, bladder, liver, pancreas and negatively associated with deprivation for cutaneous melanoma. Prostate, rectum (male), cervical and breast (female) cancers also show inequalities; only prostate and breast cancers are negatively associated with deprivation. Female RII (0.36) was lower than male RII (0.53). For males, SEI is pronounced at ages 45-74 years, peaking at 60-64 years (RII=0.39 – 0.58). For females, SEI begins at 20-24 years (RII=0.27) with pronounced inequalities at 60-79 years and peaking at 65-69 years (RII=0.30 - 0.48). All four morphology groups demonstrate inequalities for lung cancer. For cervical cancer, squamous cell carcinoma dominates; in oesophageal cancer, squamous cell carcinoma followed by adenocarcinoma and ultimately other morphologies show inequalities. For head and neck cancers; hypopharynx, piriform sinus and larynx followed by lip, oral cavity and ultimately oropharynx, base of tongue, palate and tonsil show inequalities.

Conclusions

We conclude: age, morphology, sex and site provide important information to better understand SEI.