



Childhood bereavement, stress resilience, and cancer risk:
an integrated register-based approach

av

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Abstract

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Accumulating evidence suggests that psychosocial stress and susceptibility to stressful exposures – stress resilience – influence the risk of various health outcomes, but the potential link with cancer occurrence is unclear. The aims of this thesis were to test if loss of a close relative, a marker of severe psychological stress, and stress resilience measured during late adolescence are associated with cancer risk later in life, as well as to explore potential underlying mechanisms. National registers provided information on childhood bereavement, defined as death of a first-degree relative, as well as a measure of psychological functioning relevant to stress resilience that was obtained from mandatory military enlistment assessments. In a cohort comprising all individuals born in Sweden during 1961-2002, we found that bereavement during childhood (up to age 18 years) was associated with increased risks of HPV-related malignancies and pancreatic cancer. Parental loss during early adulthood (ages 18-40 years) also entails a raised risk of pancreatic cancer as well as for gastric and lung cancer. In a cohort of men born during 1973-1983, we observed that childhood bereavement is also associated with low stress resilience during late adolescence. In our third cohort study, comprising men born during 1952-1956, we found that low stress resilience compared with high, was associated with 5-fold and 3-fold increased risks of subsequent liver and lung cancer, respectively. In contrast, low stress resilience is associated with reduced risks for prostate cancer and malignant melanoma. Finally, in a cohort of twin conscripts born during 1959-1985 who completed a survey in 2005-2006 covering use of addictive substances, we found that low stress resilience was also associated with a raised occurrence of hazardous use of alcohol, alcohol dependence, cigarette smoking and nicotine dependence, as well as with other drug use. We conclude that the observed links with cancer risk for stressful exposures and low stress resilience, may be explained, at least in part, by disadvantageous health behavior.

Keywords: alcohol, bereavement, cancer, drug use, epidemiology, health behaviour, psychological resilience, smoking, stress.

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