

Health perceptions, behavior, and medical care utilization: Links to mortality in adult survivors of childhood cancer

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Background: Adult survivors of childhood cancer have a substantially elevated mortality rate. We assessed whether health concerns, self-rated health status, health-related behaviors, and medical care utilization are associated with late mortality independently of primary disease and treatment.

Methods: Using the Childhood Cancer Survivor Study cohort, we compared the relation of risk factors of interest to mortality in 445 participants who died of causes other than injury, accident, or cancer and 7162 surviving participants individually matched for primary diagnosis, age at baseline questionnaire, time from diagnosis to baseline questionnaire, and length of time at risk. The odds ratio (OR) and 95% confidence interval (CI) were calculated by using multivariable conditional logistic regression models.

Results: After adjustment for education, income, treatment exposures, and number/severity of chronic illnesses, 5-6 (OR=2.07, CI: 1.40 - 3.06) through more than 20 (OR=3.87, CI: 2.55 - 5.87) physician visits during the past year, self-reported fair to poor health (OR=1.98, CI: 1.45 - 2.71), and underweight (OR=2.58, CI: 1.55 - 4.28) were associated with all-cause mortality. Men reporting no exercise had a risk of death ≥ 3 times that of men who exercised 3 or more times per week (OR=3.26, CI: 1.90 - 5.61). Ever having consumed alcohol was associated with reduced all-cause risk of death (OR=0.61, CI: 0.41 - 0.89).

Conclusions: Factors independent of disease and treatment modify adult survivors' risk of death. Even at this preliminary stage, our findings can inform screening, surveillance, and intervention strategies aimed at reducing the risk of premature mortality in this group.