

Society for Behavioral Medicine abstract

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Physical, mental and neurocognitive function and employment in childhood cancer survivors

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Childhood cancer survivors (CCS) report health-related unemployment and working in lower skill occupations. We examined these outcomes within the Childhood Cancer Survivor Study, with reference to mental, physical and neurocognitive functioning.

CCS ≥ 25 years of age were categorized on 1. health-related unemployment (N=4735) and 2. occupation (professional/managerial vs. service/blue collar employment; N=3757). Outcomes were examined in association with the Short Form-36 (physical and mental health), the Brief Symptom Inventory (depression, anxiety and somatization), and the Neurocognitive Questionnaire (task efficiency, emotional regulation, organization, and memory). Multivariable generalized linear models generated relative risks (RR) of these measures for unemployment and occupation adjusted for demographic and cancer-related factors.

Average current age was 34.2 years (SD=6.2) and 55% were male. Poor physical health was associated with an 8-fold higher risk of health-related unemployment ($p < .001$). Somatization (RR 1.31; $p < .01$), task efficiency (RR 2.57; $p < .001$) and memory (RR 1.29; $p < .05$) deficits were also significantly associated with unemployment, while poor organization was protective (RR 0.76; $p < .01$). For occupation, somatization was associated with a lower likelihood of professional work (RR 0.87; $p = .03$). Task efficiency, emotional regulation and memory deficits conferred a 10-15% lower likelihood of professional work, whereas poor organization was associated with a higher likelihood (RR 1.22; $p < .001$). The estimates remained significant when adjusted for cranial radiation therapy.

Physical symptoms, including somatization, strongly influence health-related unemployment among CCS. Deficits in task efficiency, emotional regulation and memory may impact CCS work ability and job type, whereas organizational problems may reflect occupational characteristics, not neurocognitive function. Screening for physical and neurocognitive needs could better target vocational services for this population.