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Financial Burden among Survivors of Childhood Cancer: A Report from the Childhood Cancer Survivor Study

Background:

Cancer diagnosis and treatment can be associated with crippling financial burden, but whether this extends long-term into survivorship is unknown. We sought to examine survivors' out-of-pocket (OOP) medical costs and their effects.

Methods:

From May 2011-April 2012, we surveyed a randomly selected sample of cancer survivors from the Childhood Cancer Survivor Study to assess survivors' 1) financial distress, 2) monetary insecurity and 3) cost-motivated health behavior in the past year. We estimated the proportion of survivors with high OOP costs ($\geq 10\%$ of their annual household income). To determine associations between high OOP costs and the 3 outcomes of financial burden noted above, we used logistic regression to calculate odds ratios (OR) and 95% confidence intervals (CI) for each of the outcomes, adjusting for sex, marital status, insurance, employment and income.

Results:

Of 1,101 mailed surveys, we received 698 (63% response) with a median age of 39 years (range 25-60) and 31 years from diagnosis (range 23-42). 9.3% (n=54) reported high OOP costs. Survivors with high OOP costs were more likely to report financial distress, monetary insecurity and cost-motivated health behavior.

Conclusions:

Adult survivors of childhood cancer may experience high OOP costs, resulting in significant financial burden. Our findings suggest that survivors' OOP burdens not only influence their financial distress and monetary insecurities, but may also negatively impact their health behavior.

Survey Items	high OOP costs	
	OR (adjusted)	95% CI
Financial distress		
Worried about:		
paying medical bills	5.11	2.57-10.17
affording medical procedures	3.10	1.49-6.44
affording health insurance	3.02	1.45-6.26
Monetary insecurity		
Unable to pay for necessities like food/heat/rent	6.19	2.87-13.34
Took money out of savings	5.05	2.52-10.12
Borrowed money	8.76	4.36-17.61
Took out a mortgage/loan	10.72	3.02-38.09
Thought about filing bankruptcy	6.54	3.01-14.19
Cost-motivated health behavior		
Skipped test/treatment/follow-up	2.15	1.13-4.08
Defer care for a medical problem	2.94	1.52-5.70
Defer mental health care	3.36	1.55-7.26
Did not fill a prescription	2.45	1.25-4.78
Took a smaller dose than prescribed	3.47	1.73-6.96