

Temporal trends in health status among adults in the Childhood Cancer Survivor Study (CCSS).

Meeting:

2015 ASCO Annual Meeting

Category:

Pediatric Oncology

Subcategory:

Survivorship

Session Type and Session Title:

Poster Discussion Session, Pediatric Oncology

Abstract Number:

10020

Citation:

J Clin Oncol 33, 2015 (suppl; abstr 10020)

Author(s):

Kirsten K. Ness, Melissa M. Hudson, Kendra E Jones, Wendy M. Leisenring, Marilyn Stovall, Daniel M. Green, Joseph Philip Neglia, Tara O. Henderson, Jacqueline N. Casillas, Jennifer Ford, Karen Elizabeth Effinger, Kevin C. Oeffinger, Gregory T. Armstrong, Leslie L. Robison, Paul C. Nathan; St. Jude Children's Research Hospital, Memphis, TN; Fred Hutchinson Cancer Research Center, Seattle, WA; Department of Radiation Physics, The University of Texas M. D. Anderson Cancer Center, Houston, TX; University of Minnesota, Minneapolis, MN; Pritzker School of Medicine, The University of Chicago, Chicago, IL; UCLA, Los Angeles, CA; Memorial Sloan Kettering Cancer Center, New York, NY; Stanford University, Palo Alto, CA; The Hospital for Sick Children, Toronto, ON, Canada

Background: The impact of temporal changes in childhood cancer therapy on long-term health status has not been evaluated. With expansion of CCSS, information about health status is available for 5+ year survivors diagnosed from 1970-1999. **Methods:** We estimated prevalence of poor general and mental health, functional impairment, activity limitation and cancer-related anxiety and pain at baseline evaluation among 15,830 survivors of childhood cancer. Outcomes were compared among treatment decades using log-binomial regression to calculate relative risk (RR) and 95% confidence interval (CI), adjusted for age, sex, race and diagnosis. **Results:** Proportions of survivors treated with radiation and amputation decreased; proportions treated with anthracyclines or alkylating agents increased over time. Survivors diagnosed more recently were more likely to report poor general health, pain and anxiety, and less likely to report functional impairment. Diagnoses with large increases ($p < 0.001$) in prevalence of adverse outcomes from 1970-79 to 1990-99 were leukemia (9.8 to 12.6% poor general health), bone tumor (23.2 to 30.7% pain) and Hodgkin lymphoma (15.7 to 19.2% anxiety). CNS tumor survivors had the largest decrease in functional impairment prevalence (37.7 to 19.7%). **Conclusions:** While the proportion of childhood cancer survivors reporting functional impairment in the most recent era decreased, particularly among CNS tumor survivors, proportions reporting poor general health, pain and

anxiety increased slightly from 1970 to 1999.

	1970-79	1980-89	1990-99
		Median (Range)	
Diagnosis age (years)	8 (0-21)	11 (0-21)	10 (0-21)
Age at evaluation	28 (18-48)	26 (18-48)	26 (18-42)
		%	
Male	52.4	53.4	50.6
White	89.0	83.9	76.2
Cranial radiation	33.1	24.4	12.4
Chest radiation	24.2	20.0	9.9
Amputation	5.4	4.5	1.7
Alkylating agent	27.4	59.9	58.4
Anthracycline	30.7	51.4	59.3
Mean dose (mg/m²)	335 ± 284	271 ± 144	214 ± 118
		RR (95% CI)	
Poor general health	1.0	1.1 (1.0-1.2)	1.2 (1.1-1.3)
Functional impairment		1.0 (0.9-1.1)	0.8 (0.7-0.9)
Activity limitation		0.9 (0.8-1.0)	0.9 (0.8-1.0)
Poor mental health		1.0 (0.9-1.1)	1.0 (0.9-1.1)
Pain		1.1 (1.0-1.2)	1.2 (1.1-1.4)
Anxiety		1.1 (1.0-1.3)	1.2 (1.1-1.3)

*p-values for trend < 0.001.

Source URL: <http://meetinglibrary.asco.org/content/147430-156>