

Utilization of Special Education Services Among Long-Term Survivors of Childhood Cancer: A Report from the Childhood Cancer Survivor Study. Pauline Mitby, Leslie Robison, John Whitton, Michael Zevon, Iris Gibbs, Jean Tersak, Anna Meadows, Marilyn Stovall, Lonnie Zeltzer, Ann Mertens.

Purpose: As improvement in survival rates for most childhood cancers increases, the need to identify the late effects of therapy of a childhood cancer survivor becomes critical. The CCSS is a retrospective cohort of individuals who were diagnosed with a cancer in childhood that survived at least 5 years post diagnosis. The purpose of this analysis is to describe the 1) utilization of special education (SE) services; and 2) educational attainment among 12,430 survivors and 3,410 sibling controls. Methods: Odds Ratios and 95% CI were calculated using Cochran-Mantel-Haenszel statistics and GEE estimations for sibling comparisons, for the utilization of SE services and educational attainment within cancer groups, by age at diagnosis and type of treatment. Results: This study found that all cancer groups required SE services more often than siblings, the strongest associations were for survivors of central nervous system (CNS) tumors, leukemia, and Hodgkin's disease that were diagnosed at earlier ages (OR=18.8 95%CI=15.01-23.49, OR=4.4 95%CI=3.75-5.16, OR=4.4 95%CI=2.64-7.24 respectively). Intrathecal methotrexate (IT MTX) and cranial radiation (CRT), administered alone or in combination with each other was found to significantly increase a survivor's risk for utilizing SE (IT MTX only OR=1.3 95%CI=1.09-1.78, CRT only OR=7.2 95%CI=6.14-8.39, IT MTX + CRT OR=2.6 95%CI=2.30-2.95). A positive dose response was identified between higher doses of CRT and use of SE. Survivors of leukemia (OR=1.6 95%CI=1.23-2.16), CNS tumors (OR=2.7 95%CI=1.92-3.81), non-Hodgkin's lymphoma (OR=1.8 95%CI=1.15-2.78), and neuroblastoma (OR=1.7 95%CI=1.14-2.61) were found to be significantly less likely to finish high school than siblings, but when survivors received SE services, risk estimates approximated those of the sibling population. This research suggests that children who are diagnosed with cancer should be followed closely to identify early signs of learning disabilities in order to maximize intervention strategies for the successful completion of scholastic goals.