

Sleep issues contribute to cognitive problems in childhood cancer survivors

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A new analysis has found that childhood cancer survivors often suffer from sleep problems and fatigue, which negatively impact their attention and memory. Published early online in *Cancer*, a peer-reviewed journal of the American Cancer Society, the study indicates that addressing sleep hygiene among survivors of childhood cancer may help to improve their cognitive health.

Cognitive problems, such as trouble with attention and memory, often arise in survivors of childhood cancer. These problems, which are either a direct or indirect result of treatment, negatively impact future education, employment, and the ability to live independently.

To assess the effects of fatigue and sleep disruption on cognitive function in long-term survivors of childhood cancer, Kevin Krull, PhD, of St. Jude Children's Research Hospital in Memphis and his team evaluated a questionnaire filled out by 1,426 individuals from the Childhood Cancer Survivor Study. (The Childhood Cancer Survivor Study was designed to investigate the long-term medical, psychosocial, and functional health of survivors of eight different childhood cancers who were treated between 1970 and 1986.)

Cognitive impairment was identified in over 20 percent of survivors. Study participants' answers to the questionnaire revealed that long-term survivors of childhood cancer who have problems sleeping or have frequent <u>daytime sleepiness</u> and fatigue are three to four times more likely to have attention and memory problems than survivors who sleep



well. "Since survivors are already at increased risk for attention and memory problems, <u>sleep loss</u> and fatigue may make these <u>cognitive</u> <u>problems</u> worse," said Dr. Krull.

The investigators found that survivors' cognitive problems that are associated with poor sleep and fatigue are unrelated to the effects of brain radiation, chemotherapy, or the current age of the survivor. Also, cancer survivors who are currently taking antidepressant medications are 50 percent more likely to report attention problems and 70 percent more likely to report memory problems.

"These findings suggest that improved sleep quality and reduced fatigue may help to improve attention and memory functions in survivors," said Dr. Krull. He added that these results may generalize to survivors of other medical conditions who demonstrate simultaneous sleep and cognitive problems. Krull also cautions that people taking antidepressant medication should not discontinue use without first consulting with a personal physician.

Provided by Wiley

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