

- Name of corresponding author: Qian Lu
- Department and institution, city, country: Department of Pediatrics, David Geffen School of Medicine at University of California Los Angeles, Los Angeles, U.S.A.
- Telephone number: 310-794-2933
- Fax number: 310-794-2954
- E-mail address of corresponding author: qlu@ucla.edu
- Preferred format of presentation: x oral x poster _ no preference

ABSTRACT CATEGOREIS: psychosocial

ABSTRACT TITLE: POSTTRAUMATIC STRESS SYMPTOMS, PAIN, AND RELATED IMPAIRMENT AMONG ADULT SURVIVORS OF CHILDHOOD CANCER: A REPORT FROM THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

AUTHORS AND AFFILIATION:

Qian Lu¹, Jennie C.I. Tsao¹, Wendy Leisenring², Gregory Armstrong³, Leslie Robison³, Lonnie K. Zeltzer¹

¹Pediatric Pain Program, Department of Pediatrics, David Geffen School of Medicine at University of California Los Angeles

² Cancer Prevention and Clinical Statistics Programs, Fred Hutchinson Cancer Research Center, Seattle, WA

³ Department of Epidemiology and Cancer Control, St. Jude Children's Research Hospital, Memphis, TN

ABSTRACT TEXT

Introduction: Emerging literature points to the coexistence of posttraumatic stress symptoms (PTSS), depression, anxiety, and chronic pain. However, the relationships among these conditions are unknown among cancer survivors. We hypothesized that cancer-related PTSS contributed to the maintenance of depression, anxiety, and pain in long-term cancer survivors.

Method: Cancer related PTSS, pain symptoms and related disability, depressive symptoms (DS), and anxiety were assessed among 7592 childhood cancer survivors participating in a follow-up survey of the Childhood Cancer Survivor Study (CCSS). DS and anxiety were also assessed at the study baseline approximately seven years earlier. The survivors' mean age was 31.8 ± 7.57 (range 17-54) years, while the average age at diagnosis was 8.2 years. We utilized multiple linear regressions to predict PTSS from baseline risk factors and to predict DS, anxiety, and pain at the follow-up from PTSS.

Results and conclusions: 1) Individuals who were females, minorities, CNS and bone cancer survivors, receiving radiotherapy or chemotherapy, with lower income, or with higher levels of baseline DS and anxiety, had higher levels of PTSS at the follow-up. 2)

PTSS at the follow-up was associated with DS (standardized coefficient $\beta=0.52$) and anxiety ($\beta =0.51$) at the follow-up controlling for these symptoms at baseline and demographic and medical factors above. 3) PTSS at the follow-up was associated with pain symptoms ($\beta =0.19$) and related disability ($\beta =0.23$) at the follow-up, controlling for DS and anxiety at the follow-up and demographic and medical factors above, (all $p<0.001$).

Research and clinical implications: Co-morbidity between PTSS and pain has been largely ignored in cancer survivor population. These findings suggest that PTSS may play a significant role in maintaining depression, anxiety, and pain. The study indicates the need to screen for and to treat PTSD as part of follow-up care for childhood cancer survivors, particular for at risk populations.

FUNDING ACKNOWLEDGEMENT: CCSS is supported by a grant from the National Cancer Institute (U24 CA55727) of the National Institutes of Health (PI: L, Robison). Support has also been provided by the Lance Armstrong Foundation (G 00-12-076-02) (PI: L Zeltzer).