



Research Week 2020

Risk of suicidal self-directed violence among survivors of head and neck cancer: A retrospective cohort analysis

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Keywords

head and neck cancer survivors, suicide prevention

Abstract

Purpose

Among a national cohort of Veteran head and neck cancer survivors (HNCS), we examined the associations between chronic pain, pre-cancer mental health and substance use disorder (SUD) diagnoses, and engagement in mental health services with risk of suicidal self-directed violence (SSDV).

Methods

We identified Veterans with a head and neck cancer diagnosis (stage I-IVB) who were treated in VA between 2012-2018. We extracted clinical information pre-and post-cancer diagnosis from VA Corporate Data Warehouse. We obtained data about SSDV events, which included both suicide attempts and death by suicide, from the validated Suicide Prevention Applications Network. Three adjusted logistic regression models determined associations between post-cancer chronic pain, pre-cancer mental health or SUD diagnoses, number of post-cancer mental health treatment encounters and any SSDV event (including death by suicide) controlling for cancer stage and treatment.

Results

Our cohort included 10,622 Veterans, comprised of 95% males with a mean age of 65 (SD=10.7). Sixty-five percent (n=6,936) had a documented mental health or SUD diagnosis during the observation period. Thirty-six percent (n=3,771) experienced chronic pain post-cancer. One hundred and fifty (1.4%) Veterans had at least one documented suicide related event, this included suicidal ideation (n=42,0.4%) or SSDV (n=80,1.0%; n=17, 0.2% of whom died by suicide). Chronic pain (OR=2.00, 95% CI=1.30,3.01), presence of pre-cancer mental health or SUD diagnoses (OR=2.90, 95% CI=1.78, 4.83), and number of post-

cancer diagnosis mental health and SUD treatment encounters (OR=1.01, 95% CI=1.00,1.01) were all significantly associated with SSDV.

Conclusions

Among HNCS, risk factors for SSDV include chronic pain, pre-cancer mental health or SUD diagnoses, and mental health and treatment encounters following a cancer diagnosis. Our findings suggest an opportunity for HNCS who experience chronic pain or are already engaged in mental health services to undergo more robust suicide screening assessments and suicide prevention interventions.

