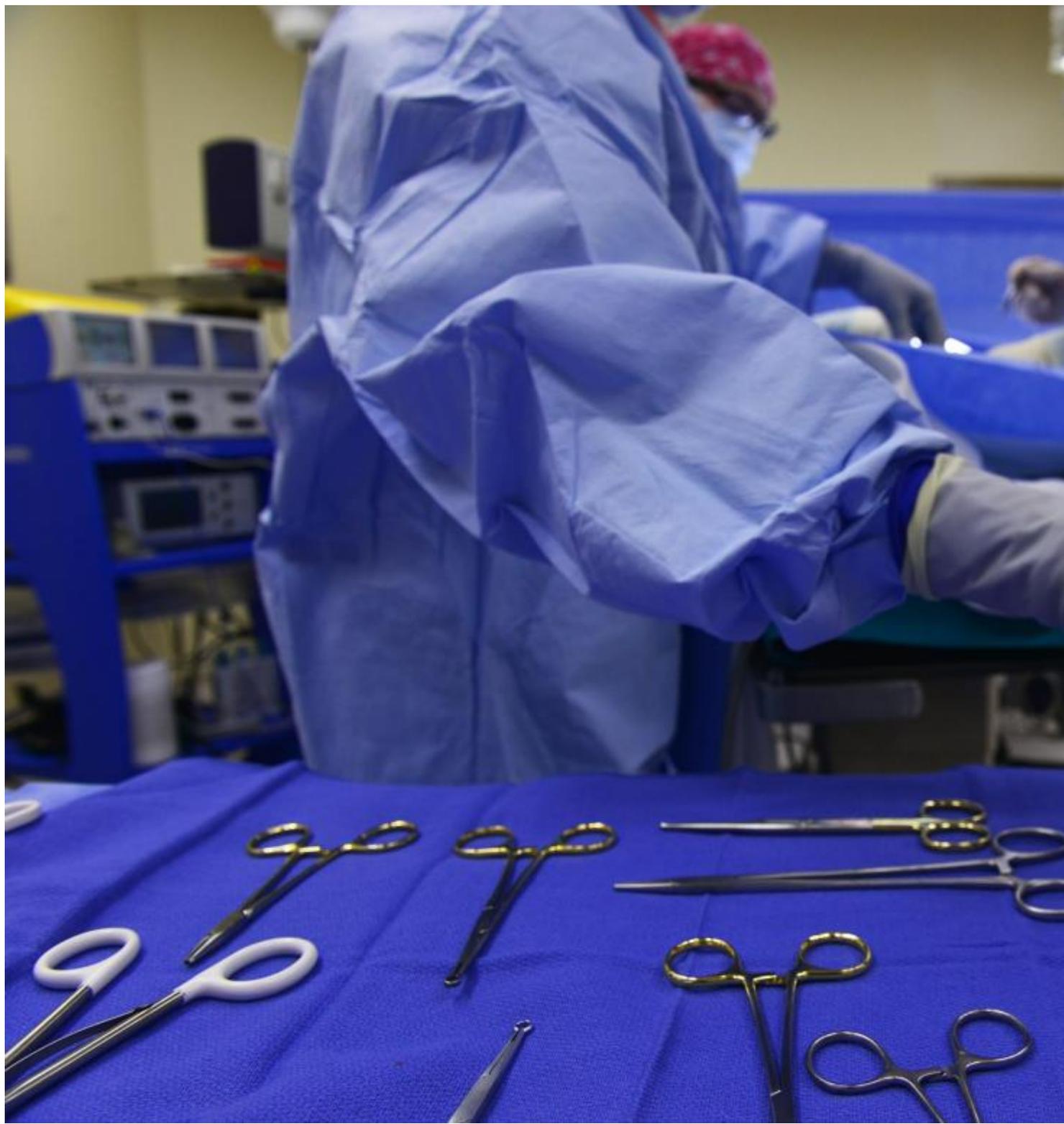


Burned out trainee surgeons at high risk for alcohol abuse, depression, suicidal thoughts

October 26, 2017 - 3:59pm

By *Suzanne Leigh* [1] | Originally published on *UCSF News* [2]



The UCSF study found that close to half of the surgical residents surveyed ? 49 percent ? misused alcohol, more than five times the prevalence of misuse found in the general population.

Seven out of 10 trainee surgeons surveyed experienced burnout driven by emotional exhaustion, ?depersonalization? and doubts about their effectiveness at work, impacting their own performance and potentially patients? health, according to a study by UC San Francisco.

Burnout among trainee surgeons greatly increases the risk of high anxiety, depression and thoughts of suicide, said researchers of the study, published in the *Journal of the American College of Surgeons* [3] on October 26, 2017.

The UCSF team analyzed responses to an online, confidential survey of 566 surgical residents enrolled in accredited general-surgery programs throughout the United States. Respondents answered questionnaires measuring burnout, stress, anxiety, depression, and alcohol use, as well as resilience and mindfulness, which is characterized by attention, present focus, awareness and non-reactive acceptance.

Researchers led by first author Carter Lebares, MD [4], assistant professor in the UCSF Department of Surgery, and senior author Elissa Epel, PhD [5], professor in the UCSF Department of Psychiatry, found that 68.95 percent experienced high burnout, comprised of emotional exhaustion and depersonalization, which can manifest as feeling detached from patients or becoming more cynical in general. Moderate to severe depressive symptoms were identified in 20 percent of the residents, approximately twice as high as in the general age-matched population. Suicidal thoughts were present in 11 percent of the residents, more than three times higher than in the general population.

?Surgical trainees live in a culture where high stress is normative, but excessive stress must be addressed,? said Lebares, noting that 53 percent of residents scored positive for high perceived stress. ?While surgical trainees have willingly chosen a high-stress career, the existence of overwhelming stress is evidenced by the strong association between stress and distress symptoms like depression, suicidal thoughts and high anxiety.?

Stress detrimental when ?demand outstrips resources?

?Although stress is initially stimulating, there is a tipping point when demand outstrips resources and stress becomes overwhelming,? Lebares said. ?In the absence of adequate coping skills, overwhelming stress that lasts for years has been associated with mood disorders and physiologic deterioration that can lead to disruption of neuro-endocrine regulation and exacerbation of atherosclerosis.?

The study found that close to half the residents ? 49 percent ? misused alcohol, more than five times the prevalence of misuse found in the general population. Alcohol abuse or dependence was found in 33 percent of the residents, twice as prevalent as in practicing surgeons. Among female residents, who composed 51 percent of the respondents, levels of depersonalization were lower: 51 percent compared with 62 percent in males; but alcohol misuse and abuse were higher among women: 58 percent and 41 percent respectively, versus 40 percent and 26 percent in men.

Mindfulness may present silver lining to stressed residents

However, the study revealed two silver linings. Emotional exhaustion, high stress and anxiety, which peaked in the third year of residency, appeared to decline markedly during the later lab years. Secondly, while most of the residents scored high on stress resilience, researchers noted that it was their ?dispositional mindfulness? that seemed to serve as a psychological buffer against the rigors of training. Mindfulness was associated with an 85 percent lower probability of scoring high in stress.

?Mindfulness isn?t about thinking nicer thoughts; it?s about recognizing stressors, learning to pause and to assess those stressors in a less reactive and emotional way,? said Lebares, who is also director of the UCSF Center for Mindfulness in Surgery [6].

While mindfulness and a greater degree of resilience were associated with lower risks of depression, suicidal thoughts and anxiety, the authors said resilience is an ?attribute derived from complex life experiences,? making it difficult to translate into an intervention. In contrast, mindfulness can be dispositional or learned, the authors noted. Although mindfulness interventions have shown effectiveness for stress management in some branches of medicine, they have not been used with surgeons, due in part to a disconnect between surgical culture, which is known for ?thriving on challenge,? and contemplative practices that are misconstrued as relaxation.

?Excessive stress and burnout are already well-known problems in health care workers,? remarked Epel. ?Here we identify what looks like a particularly high-risk group, surgery residents, whose stress levels during their training years are making them highly vulnerable to poor mental health. Suicidal ideation is too common.?

Difficult changes that mean ?everybody wins?

?Medical training programs should take a hard look at the experience of their trainees and make the difficult individual, cultural and institutional changes that will make self-care both valued and supported,? Epel said. ?In the end, everybody wins.?

The study?s findings suggest that inherent mindfulness is already effectively used to combat stress and burnout in surgical trainees, said Lebares. ?Based on these findings, mindfulness training may be a critical component of interventions aimed at enhancing stress resilience and preventing or treating burnout in surgical trainees.?

The authors state that larger, long-term studies are needed to get a more accurate picture of burnout and ?to better characterize structural and personal factors that are protective.?

Co-authors of the study are Nancy Ascher, MD, PhD [7]; Patricia O?Sullivan, EdD [8]; Hobart Harris MD, MPH [9], and Ekaterina Guvva [10] of the UCSF Department of Surgery.

About UCSF Psychiatry

The UCSF Department of Psychiatry [11] and the Langlely Porter Psychiatric Institute are among the nation's foremost resources in the fields of child, adolescent, adult, and geriatric mental health. Together they constitute one of the largest departments in the UCSF School of Medicine and the UCSF Weill Institute for Neurosciences, with a mission focused on research

(basic, translational, clinical), teaching, patient care and public service.

UCSF Psychiatry conducts its clinical, educational and research efforts at a variety of locations in Northern California, including UCSF campuses at Parnassus Heights, Mission Bay and Laurel Heights, UCSF Medical Center, UCSF Benioff Children's Hospitals, Zuckerberg San Francisco General Hospital and Trauma Center, the San Francisco VA Health Care System and UCSF Fresno.

About the UCSF Weill Institute for Neurosciences

The UCSF Weill Institute for Neurosciences ^[12], established by the extraordinary generosity of Joan and Sanford I. "Sandy" Weill, brings together world-class researchers with top-ranked physicians to solve some of the most complex challenges in the human brain.

The UCSF Weill Institute leverages UCSF's unrivaled bench-to-bedside excellence in the neurosciences. It unites three UCSF departments—Neurology, Psychiatry, and Neurological Surgery—that are highly esteemed for both patient care and research, as well as the Neuroscience Graduate Program, a cross-disciplinary alliance of nearly 100 UCSF faculty members from 15 basic-science departments, as well as the UCSF Institute for Neurodegenerative Diseases, a multidisciplinary research center focused on finding effective treatments for Alzheimer's disease, frontotemporal dementia, Parkinson's disease, and other neurodegenerative disorders.

About UCSF

UC San Francisco (UCSF) ^[13] is a leading university dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. It includes top-ranked graduate schools of dentistry, medicine, nursing and pharmacy; a graduate division with nationally renowned programs in basic, biomedical, translational and population sciences; and a preeminent biomedical research enterprise. It also includes UCSF Health, which comprises top-ranked hospitals — UCSF Medical Center ^[14] and UCSF Benioff Children's Hospitals in San Francisco ^[15] and Oakland ^[16] — and other partner and affiliated hospitals and healthcare providers throughout the Bay Area.

Contact Us
Psychiatry Intranet
UCSF Webmail
UCSF Main Site
Accessibility
Privacy Policy
Terms of Use
A-Z Website List

© 2021 The Regents of the University of California

Source URL (modified on 11/06/2017 - 4:12pm): <https://psychiatry.ucsf.edu/news/burned-out-trainee-surgeons-high-risk-alcohol-abuse-depression-suicidal-thoughts>

Links

[1] <https://www.ucsf.edu/content/leigh-suzanne>

- [2] <https://www.ucsf.edu/news/2017/10/408836/burned-out-trainee-surgeons-high-risk-alcohol-abuse-depression-suicidal-thoughts>
- [3] <http://www.sciencedirect.com/science/article/pii/S1072751517320240>
- [4] <https://surgery.ucsf.edu/faculty/general-surgery/carter-lebares,-md.aspx>
- [5] <http://profiles.ucsf.edu/elissa.epel>
- [6] <https://mindfulsurgeon.ucsf.edu/>
- [7] <http://profiles.ucsf.edu/nancy.ascher>
- [8] <http://profiles.ucsf.edu/patricia.osullivan>
- [9] <http://profiles.ucsf.edu/hobart.harris>
- [10] <https://directory.ucsf.edu/people/search/id/132728>
- [11] <https://psychiatry.ucsf.edu/welcome-ucsf-psychiatry>
- [12] <http://weill.ucsf.edu/>
- [13] <http://www.ucsf.edu/>
- [14] <https://www.ucsfhealth.org/>
- [15] <https://www.ucsfbenioffchildrens.org/>
- [16] <http://www.childrenshospitaloakland.org/main/home.aspx>