

Objectives

- Review the unique risks of depression and suicide for medical professionals
- Understand how these risks affect patient care
- Discuss effective treatment interventions for medical professionals

Number of suicides in America in 2006 : 33,289

Suicide in America

Midlife mortality from "deaths of despair" across countries

The graph displays midlife mortality rates (deaths per 100,000) over time for men and women ages 50-54. The Y-axis ranges from 20 to 80. The X-axis shows years from 1990 to 2010. A red line represents White non-Hispanic women in the United States, showing a sharp rise from approximately 35 in 2000 to 60 in 2016. Other countries shown include Germany, France, Sweden, Norway, Canada, Australia, and New Zealand. Most countries show a general upward trend in mortality rates over the period.

Source: Mortality and morbidity in the mid-century
by Karen G. Conner DeAngelis, Brookings Papers
on Economic Activity, Spring 2017.

B Economic Studies
at BROOKINGS

- 50%
- The increase in suicides among girls and women between 2000 and 2016, from 4 to 6 per 100,000.
- Suicide was the **10th-leading cause** of death in the United States in 2016. It was the second-leading cause of death among people ages 10 to 34, and the fourth-leading cause among people ages 35 to 54.

2018: Year of the Suicide

48,344

Total suicides in the United States, 1981-2016

- 30%
- The **increase** in the rate of death by suicide in the United States between 2000 and 2016, from 10.4 to 13.5 per 100,000 people, according to a National Center for Health Statistics analysis of data from the National Vital Statistics System.
- Rate increased by about **1 percent** per year from 2000 through 2006 and by about **2 percent** per year from 2006 through 2016.

Mental health issues in the Medical Professional Population

How common is suicide in the medical profession?

- Why Do Doctors Commit Suicide? Sept. 4, 2014
- Medical Intern Dead After Jumping Out Of Apartment Window, August 2014
- Nurse Suicides: Unveiling the Shrouds of Silence, 2016
- NYU Resident, Medical Student Die by Suicide 5 Days Apart May 10, 2018
- Suicide is killing our paramedics: What's to blame and how to stop it, Jun 16, 2016

Epidemiology

- 2015 Meta-analysis
 - 15.8% increase in depression in first year of residency
 - Male doctors have suicide rates 40% higher than general population
 - Female doctors have rates 130% higher than general population
 - Female physicians are less likely to attempt suicide but more likely to be lethal when they do
- Academic Medicine Journal:
Examined cause of death of residents in an ACGME program from 2000-2014
 - Suicide leading cause of death among male residents
 - Second cause of death overall among residents

Epidemiology

- Longitudinal study of UC SF medical students showed:
 - In first year, depression rates are equal to the general population
 - 25% of first and second year medical students experience depression
 - Depression persists beyond medical school and training
 - 20% of female and 13% of male physicians
- Depression in physicians found to be driven by:
 - Difficult relationships with senior doctors, staff, and/or patients
 - Lack of sleep
 - Dealing with death
 - Making mistakes
 - 24-hour responsibility
 - Self-criticism

Epidemiology

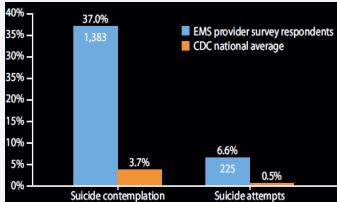
- Nursing suicides have risen in last 15 years
- Nurses commit suicide at higher rates than general population:
 - 12/100,000 for women
 - 40/100,000 for men higher than general population
- Opioids and benzodiazepines are the most common methods for nurse suicides

First responders

Paramedics/EMTs have higher rates of suicide than general population

Little evidence available but shows high rates for women and men

High rates of PTSD considered contributory



Contributing Factors

- Electronic Health Records: 2: 1 rule
- On call duties
- Increased bureaucracy
- Decreased respect from administrators
- Litigious society
- Burnout: Trifecta
 - Emotional exhaustion
 - Depersonalization
 - Decreased sense of personal accomplishment



COVID 19



- ER physician NYC
- Contracted Covid
- No clear hx of depression
- Burnout
- Trauma

COVID 19 AND MENTAL HEALTH



- ICU nurse
- Hx of depression
- Burnout/Trauma during pandemic

Mental Health costs of Covid for providers

- UNLV study: PTSD risks for health care workers during pandemic high 'Covid likened to battlefield medicine'
- Study out of Wuhan University during height of Covid:
 - High rates of anxiety, depression in nurses/physicians
 - 19% likely to seek treatment
- University of Utah study:
 - Estimates that 50% of health care workers involved with Covid 19 response at risk for at least one mental health disorder including:
 - Anxiety
 - Depression
 - PTSD
 - Alcohol use disorder

Consequences of mental illness in the medical professional

- Resident physicians with depression are six times more likely to commit medical errors
- Exhaustion considered a high contributor to errors and fatalities, as studied in VA hospital systems
- Higher rates of patient fatalities: Libby Zion law in New York
- 30% of nurses leave the profession after 2 years
- Physician shortage worsening
- PTSD rates higher among first responders/EMTs

Risk Factors for depression and suicide in general population

- Mental illness: Still number one risk factor for suicide
- Substance abuse
- Gender
- Previous suicide attempts
- Hopelessness
- Means
- Few social supports
- Medical illnesses

Risk factors for the medical professional

- Training: Drugs and toxicology knowledge
- Means
- High stress workload
- Malpractice risks
- Burnout
- Substance abuse: Women physicians have higher rates of alcohol abuse than women in the general population
- ER physicians, Anesthesiologists, Psychiatrists have higher rates of addictive disorders
- Stoicism of medical profession, first responders

BURNOUT

“... an erosion of the soul caused by a deterioration of one's values, dignity, spirit and will.”—CHRISTINA MASLACH, social psychologist

- Costs US 4.6 Billion annually: Higher rates of patient mortality, disseminated hospital infections
- Gen X physicians have higher rates of burnout than younger and older physicians
- Nurses have 40-49% rate of burnout, with 20% of ER nurses reporting burnout
- Factors associated with nursing burnout include poor team engagement, poor communication, high workloads with long shifts

Potential signs of mental health concerns in medical professionals

- Severe irritability and anger with interpersonal conflict
- Significant changes in energy, enthusiasm, confidence, and productivity
- Erratic behavior at the office or hospital
- Inappropriate boundaries with patients, staff, or peers
- Isolation and withdrawal
- Increased errors in or inattention to chart work and patient calls
- Personality change, mood swings, irrationality in decision making
- Inappropriate dress, change in hygiene
- Sexually inappropriate comments or behavior
- Frequent job changes and/or moves

Barriers to getting help

- Stigma
- Long work schedules
- Confidentiality: 70-80% of state medical boards still ask about mental health diagnoses, substance abuse diagnoses and treatments
- Limited social support
- Colleagues are competition
- Culture of silence, stoicism
- Financial worries

Assessments and Interventions

- Screen for mental health disorders early and often:
 - Depression
 - PTSD
 - Bipolar
 - Substance Disorders
- Neuropsychiatric Testing:
 - MMPI-2
 - Cognitive testing to include executive functioning, attentional testing, adult intelligence testing
 - Scale to match other professionals, not general population

Effective treatments

- Address Confidentiality by looking at functional impairments not diagnoses:
 - "Have you ever been advised or required by any licensing or privileging body to seek treatment for a physical or mental health condition?"
- Address Burnout
- Co-Occurring disorders rule rather than exception: screen for substance abuse disorders when there is a mental health disorder
- Integrate Treatment
- Peer group work effective, peers challenge support each other

Cautions

- Avoid 'VIP' trap
- Physicians, nurses, PAs, EMTs commonly treated as VIPs
 - Risks that they will dictate treatment
 - Clinical staff may underestimate severity of illness and suicide risk
 - Patient's feelings of shame and fear in the sick role ignored
 - Staff may overlook neuropsychiatric symptoms because they do not wish to 'insult' the patient

Case Study:
MJ

- 47 year old male nurse anesthetist
- Facing felony charges for opioid diversion
- Found using discarded needles from sharps box at work
- On admission to treatment, screened for depression, trauma
- PHQ9 22
- PCL score 48
- Previous suicide attempt by benzodiazepine overdose

MJ:
Treatment

- Opioid detoxification
- Started on Effexor
- Trauma treatment included EMDR
- Professional group referral
- MAT-patient declined
- Difficult discussion followed, patient not able to return to OR due to access to narcotics

Case Study:
EC

- 34 year old critical care nurse, dating critical care fellow
- Break up triggered suspected manic episode:
 - Irrational behavior
 - Inappropriate behaviors with staff, peers
 - Frequently late to rounds
 - Mood swings
 - Excess energy
 - Diminished need for sleep
- Presented for treatment after a physical altercation occurred with another nurse
- Her hospital has reported her to Board of Nursing

EC: Treatment

- On admission, screened for mental health disorders
- Given preliminary diagnosis of bipolar type I disorder
- Patient agreed to monitoring contract with Nursing PHP: 5 years, urine drug screens, weekly therapy, medication management

Case Study: HR

- 62 year old male ER physician
- Contracted Covid March 2020
- Returned to work quickly
- Alcohol escalated to 'control my anxiety'
- Self prescribed Xanax to sleep
- Hospital referred him for treatment

HR Treatment

- On presentation, endorses memory issues, slowed cognition, Covid 'long hauler syndrome'
- Neuropsychological testing shows significant impairments in executive functioning, short term memory.
- Diagnosed with Major Depression, mild neurocognitive disorder-secondary to alcohol, Covid, TBI
- Treatment with SSRI for anxiety
- Neurocognitive rehabilitation and retesting recommended in 11 months
- Chose not to return to work, early retirement

Case Study AG

- 26 year old female medical student
- Referred by her dean of students for depression treatment
- Developed depression symptoms following difficult breakup with fellow student
- Grades in all clerkships declined
- Fellow students voiced concerns about her appearance, multiple errors in charting, patient care

AG Treatment

- Neuropsychiatric evaluation revealed suicidal ideations with recent failed overdose attempt
- Drug and alcohol testing
- Diagnosed with alcohol use disorder, major depressive disorder
- Recommended dual diagnosis facility
- On medical leave from school
- Will need retesting and ongoing treatment
- Enrolled in her state PHP

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