Physician Well-Being: Challenges and Opportunities

Carol A. Bernstein, MD
Objectives

• Be able to identify key factors contributing to stress, burnout, well-being, and resilience as they affect physicians across the life span

• Be able to describe the complex interrelationships between burnout, depression and resilience

• Be able to identify potential solutions at both the individual and systemic levels
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Patient Care and Physician Well-Being

- Physicians who care for themselves provide better care for others
- They are less likely to make errors or leave the profession
- Habits of practice to promote well-being and resilience need to be cultivated across the continuum
- A healthy learning environment will lead to improved health care for all, physicians and patients
- The ACGME’s Clinical Learning Environment Review will evaluate Physician Well-Being
  - Not only the well-being of the trainees but also the well-being of those who train them
NEW HAVEN — TWO weeks ago, two medical residents, in their second month of residency training in different programs, jumped to their deaths in separate incidents in New York City. I did not know them, and cannot presume to speak for them or their circumstances. But I imagine that they had celebrated their medical school graduation this spring just as my friends and I did. I imagine they began their residencies with the same enthusiasm for healing as we did. And I imagine that they experienced fatigue, emotional exhaustion and crippling self-doubt at the beginning of those residencies — I know I did.
The Tip of the Iceberg
This is NOT a New Problem

- Concluded that the culture of medicine accords low priority to physician mental health despite evidence of untreated mood disorders and burden of suicide
- Identified barriers to treatment: discrimination in licensing hospital privileges and advancement
- Recommended transforming attitudes and changing policies
The Population

- Nearly 1 million licensed physicians in the US
- Total Trainees in GME – 124,409
- Total Accredited Programs - 9,997
  - 57% Core Programs
  - 43% Subspecialty Programs
  - 28,456 Entering the Pipeline
- Osteopathic Programs
  - 1100 AOA Approved Programs
  - 8600 Residents Transitioning to ACGME Programs
Burnout: Definitions

- **Emotional depletion**: feeling frustrated, tired of going to work, hard to deal with others at work

- **Detachment/cynicism**: being less empathic with patients/others, detached from work, seeing patients as diagnoses/objects/sources of frustration

- **Low personal achievement**: experiencing work as unrewarding, “going through the motions”

- **Depersonalization**: thoughts and feelings seem unreal or not belonging to oneself

Balch, Arch Surg, 2009
Drivers of Burnout

• Excess stress mediated by long hours, fatigue and work compression as well as the intensity of work environment

• Loss of meaning in medicine and patient care: Decreased support, increased responsibility, without autonomy and flexibility

• Challenges in institutional cultures: perceived lack of peer support, lack of professionalism, disengaged leadership

• Problems with work-life balance
Burnout in Training

- Highly prevalent among medical students, residents and physicians
  - In residents, studies show burnout rates of 41-90%
- In residency, levels rise quickly within the first few months of residency
- ACGME work hour changes do not appear to have improved sleep, burnout, depression symptoms or errors
- Resident distress (e.g. burnout and depression) associated with perceived medical errors and poorer patient care

Epidemiology of Burnout in Physicians

- Medical students matriculate with BETTER well-being than their age-group peers
- Early in medical school this reverses
- Poor well-being persists through medical school and residency into practice:
  - National physician burnout rate exceeds 54%
  - Affects all specialties, perhaps worst in “front line” areas of medicine
General Risk Factors for Burnout/Distress

- Sleep deprivation
- High level of work/life conflict
- Work interrupted by personal concerns
- High level of anger, loneliness, or anxiety
- Stress of work relationships
- Anxiety about competency
- Difficulty “unplugging” after work
- Regular use of alcohol and other drugs

Burnout and Satisfaction with Life-Work Balance Among US Physicians (N=7,288)

Burnout by specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>% Reporting Burnout</th>
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<td>Emergency medicine</td>
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<td>Orthopedic surgery</td>
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<td>Radiology</td>
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<td>Physical medicine and rehabilitation</td>
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<td>Mean burnout among all physicians participating</td>
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<td>General surgery</td>
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<td>Urology</td>
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<td>Pediatric subspecialty</td>
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<td>Radiation oncology</td>
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Satisfaction with life-work balance by specialty

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<tr>
<th>Specialty</th>
<th>% Satisfied that work leaves enough time for personal or family life</th>
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Burnout = lack of enthusiasm for work, cynicism and low level of personal accomplishment

Shanafelt et al, Arch Int Med, 2012
Burnout at Career Stage

Dyrbye et al. Mayo Clinic Proc 2013

Graphs showing the percentage of physicians with burnout across different career stages and specialties.
Depression – DSM-5

- 5 or more of the following sxs for 2 weeks:
  - Depressed mood most of the day
  - Diminished interest or pleasure
  - Significant weight loss or gain
  - Insomnia or hypersomnia nearly every day
  - Psychomotor agitation or retardation
  - Fatigue of loss of energy
  - Feelings of worthlessness or excessive guilt
  - Diminished ability to concentrate
  - Recurrent thoughts of death or suicidal ideation with or without a plan

American Psychiatric Association, 2013: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
## What is Major Depression?

### Major Depression is not:
- “Normal”
- Laziness
- Weakness
- Stress
- Unhappiness
- Burnout
  - Though depression makes someone feel lazy, weak, stressed, 

### Major Depression is:
- An illness
- With mental anguish and physical pain
- Disabling
- Chronic and recurring
- Potentially fatal
  - Lack of appropriate diagnosis and well delivered care can have tragic results

And is more common in trainees and clinicians than in the general population
Epidemiology of Depression in Physicians

Higher rates in medical students (15%–30%), interns (30%), and residents than in the general population

Lifetime rates of depression in women physicians - 39% compared to 30% in age matched women with PhD’s

• Both higher than the general population

Lifetime rates of depression in male physicians (13%) may be similar to rates of depression in men in the general population, or they may be slightly elevated.

• Data from Denmark show that male physicians have elevated rates of depression

Welner et al., Arch Gen Psych, 1979; Clayton et al., J Ad Dis, 1980; Frank & Dingle, Am J Psych, 1999
Wieclaw et al., Occup Environ Med, 2006; Center et al., JAMA, 2003; Valko & Clayton, Am J Psych, 1975; Kirsling & Kochar, Psychol Rep, 1989
**Depression During Internship**

### Specialty (N=740)

- Internal medicine 358 (48.5)
- General surgery 98 (13.3)
- OB/gynecology 42 (5.7)
- Pediatrics 94 (12.7)
- Psychiatry 63 (8.5)
- Emergency medicine 47 (6.3)
- Medicine/pediatrics 19 (2.6)
- Family medicine 19 (2.6)

### Percentage with “Depression” (PHQ >10)

<table>
<thead>
<tr>
<th></th>
<th>Before Internship</th>
<th>3 Months</th>
<th>6 Months</th>
<th>9 Months</th>
<th>12 Months</th>
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<td></td>
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<td>3.9</td>
<td>27.1</td>
<td>25.7</td>
<td>26.1</td>
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Mean PHQ-9 increased from 2.4 to 6.4

Sen et al Arch Gen Psych 2010
Factors Associated with Depression During Internship (Prospective Study)

### Predictors of Increased Depressive Symptoms

#### Baseline Factors
- Neuroticism
- Personal history of depression
- Lower baseline depressive symptoms
- Female sex
- US medical graduate
- Difficult early family environment
- 5-HTTLPR polymorphism

#### Within-Internship Factors
- Higher mean work hours
- Perceived medical errors
- Stressful life events

### (PHQ-9) Depression Scores Stratified by the Presence of at Least 1 Copy of a 5-HTTLPR Low-Functioning Allele.

Low = at least one low functioning allele
High/high = 2 high functioning alleles

Sen et al Arch Gen Psych 2010
Results

- Rate of depression increased dramatically during internship from 3.9% meeting PHQ 9 (scores greater than 10) criteria up to 25.3% at intervals during the year.

- Most were moderately depressed.

- Depression results in increased medical errors and errors may also cause depression (corror. West).

- Direct association between the number of hours worked and the risk of depression.

- No evidence that depressive symptom score before internship predicted increased work hours.

Sen et al Arch Gen Psych 2010
Physician Mortality 2000 Analysis

• Physicians have an overall longer life span and lower rates of death due to many medical causes (COPD, liver disease, pneumonia) compared to other professionals and general population.

• Suicide as a cause of death is overrepresented in physicians compared with other professionals.

• Cerebrovascular disease and accidents also over-represented in physicians.

Gender Discrepancies in Suicide Rates

- Multiple studies
- Suicide ratio for male physicians compared with aged matched controls in the general population: 1.41 higher
- Suicide ratio for female physicians compared with aged matched controls in the general population: 2.27 times higher

Schernhammer E, Colditz G. Am J Psych 2004
Suicides Among US Physicians from National Violent Death Reporting System (NVDRS), 2003-2008

- NVDRS: (National Violent Death Reporting System)
- Multiple data sources: death certificates, coroner data, medical examiner information, toxicology information, law enforcement reports
- 31,636 victims/203 physicians
- 2003-2008
- 16 states participated
- Adults, 18 years or older who died by suicide
Differences in Associated Factors in Physician Suicide vs. the General Population

- Less likely to have had a recent death of friend/family
- More likely to have had a job problem
- Higher measurable levels of benzodiazepines and barbiturates
- Older
- Presence of known mental illness
- Major barriers to help-seeking, diagnosis and treatment due to stigma
Incidence of Suicide Among White Male Physicians, Dentists, and General Population

[Graph showing completed suicides per 100,000 person years for different age cohorts across different groups: physicians, dentists, and general population.]

Age Cohort

Completed Suicides per 100,000 person years


Physician Dentist Population

Yerkes Dodson Performance Curve (1908)
Specific Stressors in the Learning Environment
Baseline Stressors

• Medical issues
• Mental health issues
• Relationships
• Family
• Financial
• Psychological make-up of medical students
  • Maladaptive perfectionism, imposter syndrome
• Ambivalence about career choice
Beginning Residency

- First job
- Joining a professional family
  - Is it the right one?
- Challenges to circadian rhythms
- Less control over schedule
- Calibrating uncertainty
  - Needing to make decisions about care and supervision
- Formatively focused assessment system
- Assessment of learning for the development of competence
Academic Health Centers

- Stressed faculty and staff - RVUs
- Work compression
- Fractured care
- Decreasing LOS, increasing acuity
- Focus on efficiency and metrics as outcome measures
- Difficult Physician-Patient Encounters
- The EHR
Barriers to Treatment
JGME, September 2013

- Survey of Attitudes about Seeking Services in a Resident Wellness Program (800 residents and fellows)
- Two psychologists and 1 psychiatrist available 5 days/week and after-hours consultation

**RESULTS:**
- 71% response rate to survey
- Time the biggest barrier
- Women more concerned about taking a break
- Men more likely to question helpfulness of counseling
- 5% willing to seek help in 2004-05
- 12% in 2009-10 after marketing the program

Ey et al, JGME, 2013
Utilization and Barriers to Mental Health Services Among Depressed Medical Interns: A Prospective Multisite Study

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Barriers to Treatment Among Depressed Interns

Reasons for No Treatment:

- Lack of time (92%)
- Preference for self-management (75%)
- Lack of convenient access (62%)
- Concerns regarding confidentiality (57%)
- Concerns about stigma (52%)
- Concerns about cost (50%)
- Belief that treatment does not work (25%)
Potential Protective Factors
Resilience

• The capacity to bounce back, to withstand hardship, and to repair yourself
• Positive adaptation in the face of stress or disruptive change

Based on a combination of factors

• Internal attributes (genetics, optimism)
• External (modeling, trauma)
• Skills (problem solving, finding meaning/purpose)

Wolin 1993, Werner & Smith, 1992
Can We Build Resilience?

- Realistic recognition (Overcoming denial/culture)
- Exercise, sleep, nutrition
- Supportive professional relationships
- Talking things out with others
- Hobbies outside medicine
- Personal relationships
- Boundaries
- Humor
- Time away from work
- Passion for one’s work

Swetz, J Palliative Med 2009
One Size Does Not Fit All
Physician Wellbeing is a Public Health Problem

| Primary Prevention                  | • Education and Awareness
|                                    | • Skill building and stress mitigation: time management, sleep hygiene, mindfulness, cognitive behavioral skills, positive psychology
|                                    | • Learning environment interventions that facilitate culture change, work-life balance, emphasize meaning
|                                    | • Concrete supports: child care & family support; PCP availability
| Secondary Screening                | • Fostering recognition of burnout (peer leader or “buddy programs”)
|                                    | • Anonymous third-party screening (i.e. UCSD HEAR program)
| Tertiary Intervention              | • Stigma free access to counseling (Resident Wellness Program at OHSU)
Potential Interventions
Working Together

- Department Chairs
- Program Coordinators
- Chief Residents
- Nurses
- Trainees
- Department of Psychiatry
- Hospital/college human resources
- Curricular Innovations which support wellness

Slavin et al. Acad Med 2014
Self-care is not in conflict with altruism

"Secure your own oxygen mask before assisting others"
“Back-end” Solutions

• Education and awareness re: burnout/depression

• Fostering recognition: screening, “buddy” system, mentorship

• Management: stigma-free access to counseling, treatment

• Stress mitigation: reflection, mindfulness, coaching, exercise, nutrition, etc.
“Front-end” Solutions

• **Stress reduction**, including evaluating work hours and intensity, monitoring fatigue

• **Enhance meaning**: address service vs. education challenges, increase use of extenders, progressive credentialing, protect time with patients

• **Cultural change**: leadership/physician engagement, feedback, community building, professionalism training/accountability, support in adverse events, CLER

• **Work-life balance**: team-based care, better scheduling, financial support/counseling
MGH – SMART-R Curriculum

• Stress Management and Resiliency Training for Residents

• Adapted from Benson Henry Institute’s “Relaxation Response and Resiliency Program”

• Basic Tenets
  - Relaxation Techniques and Meditation
  - Stress Awareness and Cognitive Reframing
  - Positive Perspective Taking and Meaning Finding
  - During Protected Time
Balint/Process groups

- Promote reflection on professional life and physician-patient challenges and deconstruction of the hidden curriculum
- May be facilitated by psychiatrist, chaplain, or peer
- Within department, part of curriculum of program
- Monthly sessions during work hours (usually lunch)
Positive Psychology Coaching

• One resident paired with one faculty member
• 3-4 structured sessions per year
• 2-hour faculty training session
• Goal: promote self-reflection, leading to personal and professional growth
• Focus on the positive and self-assessment rather than evaluation by others
  • Strengths
  • Meaningful experiences in training

Palamara K. et al. JGME. 2015
Web Based Cognitive Behavioral Therapy

- Randomized clinical trial – 119 interns at 2 hospitals, multiple specialties
- Two groups: wCBT versus attention control (email once/week for 4 weeks with educational information and how to access resources)
- PHQ-9 to assess suicidal ideation at start of internship and 3 month intervals
- 12% of interns in the wCBT group endorsed suicidal ideation compared to 21.2% in the control group

Guille, et.al, JAMA Psychiatry, 2015