MAYO CLINIC

Physician Burnout and Distress: Causes, Consequences, and a Structure For Solutions

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- None

Objectives

- **Understand the scope of the problem of physician burnout.**
- Be informed regarding contributors and consequences of physician burnout and distress.
- Learn some evidence-based methods to prevent burnout and promote physician wellbeing.

Background

- Physician well-being has come under increased scrutiny in recent years
- Common:
  - Burnout
  - Low job satisfaction
  - High stress
  - Low quality of life
- Affects all stages of physician training and practice
- Affects all specialties

What is Burnout?

Burnout is a syndrome of emotional exhaustion, depersonalization, and low personal accomplishment leading to decreased effectiveness at work.

Emotional Exhaustion

"*I feel like I'm at the end of my rope*."

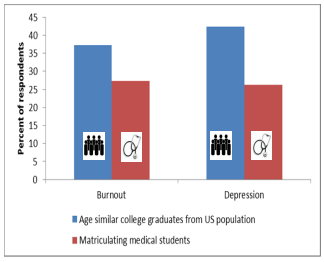
Depersonalization

"*I've become more callous toward people since I took this job.*"

Brief Summary of Epidemiology

- 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
  - >500,000 physicians burned out at any given time

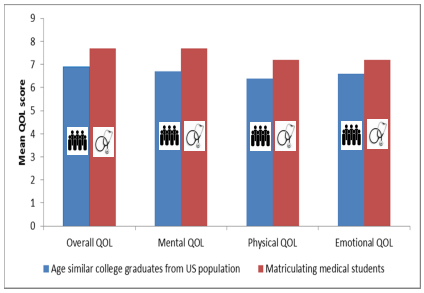
Matriculating medical students have lower distress than age-similar college graduates



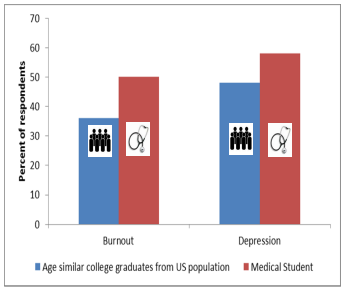
2012, 7 U.S. medical schools & population sample (slide from Dyrbye)

Brazeau et al. Acad Med. 2014;89:1520-5

Matriculating medical students have better quality of life than age-similar college graduates



What happens to distress relative to population after beginning medical school?



Mayo Multi-center Study of Medical Student Wellbeing

Student distress:

- 45% Burned out
- 52% Screen + for depression
- 48% At risk alcohol use
  - Compared to 28% age matched MN & 24% age matched US pop

Dyrbye Acad Med 81:374-84

Burnout among Residents

National Data (West et al., JAMA 2011)

Internal medicine residents, 2008 Survey

Burnout:	51.5%
Emotional exhaustion:	45.8%
Depersonalization:	28.9%

Dissatisfied with work-life balance: 32.9%

Burnout among Practicing Physicians

National Data (Shanafelt et al., Arch Intern Med 2012)

	2011
Burnout:	45.8%
Emotional exhaustion:	37.9%
Depersonalization:	29.4%

Dissatisfied with work-life balance: 36.9%

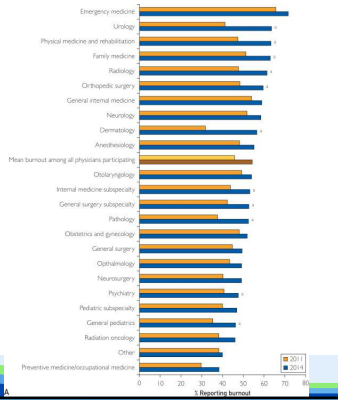
Burnout among Practicing Physicians

National Data (Shanafelt et al., Arch Intern Med 2012; Mayo Clin Proc 2015)

	2011	2014
Burnout:	45.8%	54.4%
Emotional exhaustion:	37.9%	46.9%
Depersonalization:	29.4%	34.6%

Dissatisfied with work-life balance: 36.9%, 44.5%

Burnout by Specialty (National)



AMA AMERICAN MEDICAL ASSOCIATION

Shanafelt *et al.*
Mayo Clin Proc 2015

Demographics of Burnout

More common for:

- Women
- Younger doctors
- "Front line" specialties
- Greater number of work hours per week
- Private practice
- Incentive-based salary structure

Most differences small – no group is immune

But Don't Burnout and Distress Affect Everyone?

2014 AMA Survey
Employed Physicians vs. Employed U.S. Population

	Physicians n=5313	Population n=5392	p
Male	62%	54%	<0.001
Age (median)	53	52	<0.001
Hrs/Wk (median)	50	40	<0.001
Burnout*	49%	28%	<0.001
Dissatisfied WLB	49%	20%	<0.001

* As assessed using the single-item measures for emotional exhaustion and depersonalization adapted from the full MBI. Area under the ROC curve for the EE and DP single items relative to that of their respective full MBI domain score in previous studies were 0.94 and 0.93

Shanafelt *et al.*, Mayo Clin Proc 2015

2011 AMA Survey

- Adjusting for:
  - Age, gender, relationship status, hours worked/week, education
- Education (ref. high school graduates):
  - Bachelors degree: OR=0.8
  - Masters degree: OR=0.71
  - Doctorate or non-MD/DO professional degree: OR=0.6
  - MD/DO: OR=1.36

Shanafelt *et al.*, Arch Intern Med 2012

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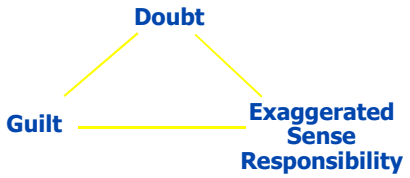
Are physicians at inherent risk?
The "Physician Personality"

TRIAD OF COMPULSIVENESS



Gabbard JAMA 254:2926

The "Physician Personality"

Adaptive	Maladaptive
• Diagnostic rigor	• Difficulty relaxing
• Thoroughness	• Problem allocating time for family
• Commitment to patients	• Sense responsibility beyond what you control
• Desire to stay current	• Sense "not doing enough"
• Recognize responsibility of patients' trust	• Difficulty setting limits
	• Confusion of selfishness vs. healthy self-interest
	• Difficulty taking time off

Gabbard JAMA 254:2926

Physician Distress: Key Drivers

- Excessive workload
- Inefficient work environment, inadequate support
- Problems with work-life integration
- Loss autonomy/flexibility/control
- Loss of values and meaning in work

Consequences of Physician Burnout

- Medical errors[1-3]
- Impaired professionalism[4-6]
- Reduced patient satisfaction[7]
- Staff turnover and reduced hours[8,12]
- Depression and suicidal ideation[9,10]
- Motor vehicle crashes and near-misses[11]

[1]JAMA 296:1071, [2]JAMA 304:1173, [3]JAMA 302:1294, [4]Annals IM 136:358, [5]Annals Surg 251:995, [6]JAMA 306:952, [7]Health Psych 12:93, [8]JACS 212:421, [9]Annals IM 149:334, [10]Arch Surg 146:54, [11]Mayo Clin Proc 2012, [12]Mayo Clin Proc 2016

A Public Health Crisis!

Burnout in U.S. alone:	
>40,000	Medical Students
>60,000	Residents and Fellows
>490,000	Physicians

Plus other health care and biomedical science professionals

Individual or system problem?

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Physician Distress: Key Drivers

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Individual Strategies

- Identify Values
  - Debunk myth of delayed gratification
  - What matters to you most (integrate values)
  - Integrate personal and professional life
- Optimize meaning in work
  - Flow
  - Choose/focus practice
- Nurture personal wellness activities
  - Calibrate distress level
  - Self-care (exercise, sleep, regular medical care)
  - Relationships (connect w/ colleagues; personal)
  - Religious/spiritual practice
  - Mindfulness
  - Personal interests (hobbies)

Delayed Gratification: Life on Hold?

- 50% residents report “Survival Attitude” - life on hold until the completion of residency
- 37% practicing oncologists report “Looking forward to retirement” is an essential “wellness promotion strategy”
- Many physicians may maintain strategy of delayed gratification throughout their entire career

Shanafelt, J Sup Oncology 3:157

Individual Strategies

Recognition of distress:

- Medical Student Well-Being Index (Dyrbye 2010, 2011)
- Physician Well-Being Index (Dyrbye 2013, 2014)
  - Simple online 7-item instruments evaluating multiple dimensions of distress, with strong validity evidence and national benchmarks from large samples of medical students, residents, and practicing physicians
  - Evidence that physicians do not reliably self-assess their own distress
  - Feedback from self-reported Index responses can prompt intention to respond to distress
- Suicide Prevention and Depression Awareness Program (Moutier 2012)
  - Anonymous confidential Web-based screening
- AMA STEPSForward modules
  - Mini Z instrument (AMA, Linzer 2015): 10-item survey

What Can Organizations Do?

- Be value oriented
  - Promote values of the medical profession
  - Congruence between values and expectations
- Provide adequate resources (efficiency)
  - Organization and work unit level
- Promote autonomy
  - Flexibility, input, sense control
- Promote work-life integration
- Promote meaning in work

The Evidence in Total

- Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West Lancet 2016):
  - 15 RCT's, 37 non-RCT's
    - Results similar for RCT and non-RCT studies

The Evidence in Total

- **Emotional exhaustion (EE):**
  - -2.7 points, p<0.001
  - Rate of High EE: -14%, p<0.001
- **Depersonalization (DP):**
  - -0.6 points, p=0.01
  - Rate of High DP: -4%, p=0.04
- **Overall Burnout Rate:**
  - -10%, p<0.001

Benefits similar for individual-focused and structural interventions (but we need both)

The Evidence in Total

- Individual-focused interventions:
  - Meditation techniques
  - Stress management training, including MBSR
  - Communication skills training
  - Self-care workshops, exercise program
  - Small group curricula, Balint groups
    - Community, connectedness, meaning

The Evidence in Total

- Structural interventions:
  - Duty Hour Requirements for trainees
    - Unclear but possibly negative impact on attendings
  - Shorter attending rotations
  - Shorter resident shifts in ICU
  - Locally-developed practice interventions

Mayo RCT #1 (2012)

- A small amount of protected time during the workday resulted in improved meaning from work and reductions in burnout
  - Effects larger in facilitated small group arm than in "free time" control arm, particularly in promoting meaning and reducing depersonalization.
  - Follow-up study data found sustained benefits at 1 year after the close of the study.

West et al., JAMA Intern Med 2014:174:527-33

Mayo RCT #2 (2014)

- Compared to the wait-listed control group, the small group topic-oriented discussion intervention improved:
  - Depersonalization
  - Personal accomplishment
  - Overall QOL
  - Depression
  - Meaning from work
  - Social isolation at work
  - Job satisfaction
  - Likelihood of leaving in next 2 years
- Initial intervention shows benefit with sustained changes over subsequent 6 months.
- Physician Engagement Groups now funded by Mayo

West et al. J Gen Intern Med. 2015;30:S89.

Physician Well-Being: Approach Summary

	Individual	Organizational
Workload		
Work Efficiency/ Support		
Work-Life Integration/ Balance		
Autonomy/ Flexibility/ Control		
Meaning/Values		

Physician Well-Being: Approach Summary

	Individual	Organizational
Workload	Part-time status	Productivity targets Duty Hour Requirements Integrated career development
Work Efficiency/ Support	Efficiency/Skills Training	EMR (+/-?) Staff support
Work-Life Integration/ Balance	Self-care Mindfulness	Meeting schedules Off-hours clinics Curricula during work hours Financial support/counseling
Autonomy/ Flexibility/ Control	Stress management/Resiliency Mindfulness Engagement	Physician engagement
Meaning/Values	Positive psychology Reflection/self-awareness Mindfulness Small group approaches	Core values Protect time with patients Promote community Work/learning climate

Recommendations

- We have a professional obligation to act.
  - Physician distress is a threat to our profession
  - It is unprofessional to allow this to continue
    - Evolve definition of professionalism? (West 2007)
  - SHARED RESPONSIBILITY
- We must assess distress
  - Metric of institutional performance
    - Part of the "dashboard"
  - Can be both anonymous/confidential and actionable

Recommendations

- We need more and better studies to guide best practices:
  - RCT's
  - Valid metrics
  - Multi-site
  - Individual-focused AND structural/organizational approaches
  - Evaluate novel factors: work intensity/compression, clinical block models, etc.
- Develop interventions targeted to address Five Drivers.

Recommendations

- The toolkit for these issues will contain many different tools.
- There is no one solution …
- … but many approaches offer benefit!

Physician Distress: Key Drivers

- Excessive workload
- Inefficient environment, inadequate support
- Problems with work-life integration
- Loss autonomy/flexibility/control
- Loss of values and meaning in work

Thank You!

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