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LEARNING & DEVELOPMENT
Continuing Medical Education

CARDIOLOGY GRAND ROUNDS

Title: **Physician burnout and wellbeing: causes, consequences, and solutions**

Speaker(s): **Colin P. West, MD, PhD, FACP**
Professor of Medicine, Medical Education, and Biostatistics
Mayo Clinic

Date & Time: **Monday, November 23, 2015, 7:00 – 8:00 AM**
Location: **ANW Education Building, Watson Room**

OBJECTIVES

At the completion of this activity, the participants should be able to:

1. Interpret the scope of the problem of physician burnout and distress.
2. Recognize the contributors and consequences of physician burnout and distress.
3. Describe evidence-based methods to prevent burnout and promote physician wellbeing.

ACCREDITATION

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DISCLOSURE STATEMENTS

Moderator(s)/Speaker(s)

Dr. West has declared that he does not have any conflicts of interest in making this presentation.

Planning Committee

Dr. Michael Miedema, and Jolene Bell Makowesky have declared that they do not have any conflicts of interest associated with the planning of this activity. Dr. Robert Schwartz declared the following relationships - stockholder: Cardiomind, Interface Biologics, Aritech, DSI/Transoma, InstyMeds, Intervalve, Medtronic, Osprey Medical, Stout Medical, Tricardia LLC, CoAptus Inc, Augustine Biomedical; scientific advisory board: Abbott Laboratories, Boston Scientific, MEDRAD Inc, Thomas, McNerney & Partners, Cardiomind, Interface Biologics; options: BackBeat Medical, BioHeart, CHF Solutions; speakers bureau: Vital Images; consultant: Edwards LifeSciences.

PLEASE SAVE A COPY OF THIS FLIER AS YOUR CERTIFICATE OF ATTENDANCE

Signature: _____

My signature verifies that I have attended the above stated number of hours of the CME activity.

Physician Burnout and Well-Being: Causes, Consequences, and Solutions

November 23, 2015

Presenter:
Colin P. West, MD, PhD
Professor of Medicine, Medical Education, and Biostatistics
Division of General Internal Medicine
Division of Biomedical Statistics and Informatics
Mayo Clinic

Financial Disclosures

- None

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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

Historical Perspective

- "Engrossed late and soon in professional cares you may find, too late, with hearts given way, that there is no place in your habit-stricken souls for those gentler influences which make life worth living."

  Osler 1899

What is Burnout?

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

Depersonalization

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

Emotional Exhaustion

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

Low Sense of Personal Accomplishment

"*My work doesn't matter…*"

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
  - >400,000 physicians burned out at any given time

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)

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

Dissatisfied with work-life balance: 36.9%

Burnout among Surgeons

2008 ACS Survey

n=7905

39.6% burnout overall

15.4% alcohol abuse

6.3% suicidal ideation in last 12 months

Depression Among Physicians

- Prevalence = general population
  - 12% lifetime – male physicians
  - 19.5% lifetime – female physicians

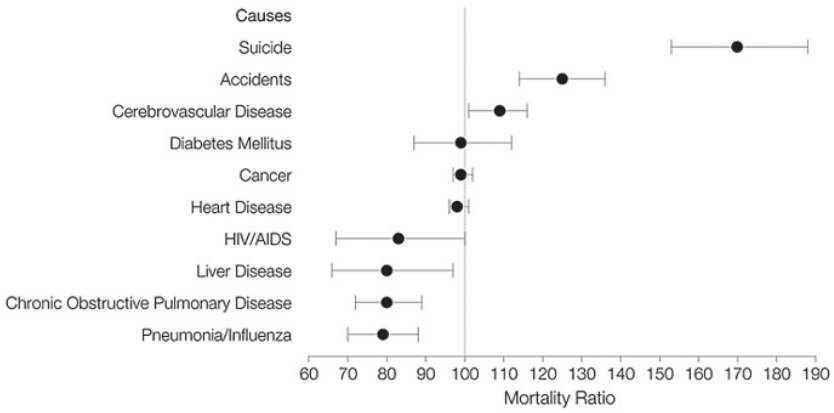
Frank, JAMA.289:3161 (2003)

Depression Among Physicians

- Higher rates of suicide in physicians
  - RR 1.1 - 3.4 in male physicians
  - RR 2.5 - 5.7 in female physicians
- Suicide is a disproportionately high cause of mortality in physicians relative to other professionals

Frank, JAMA.289:3161 (2003)

Proportionate Mortality Ratio:
Male Physicians vs Male Professionals



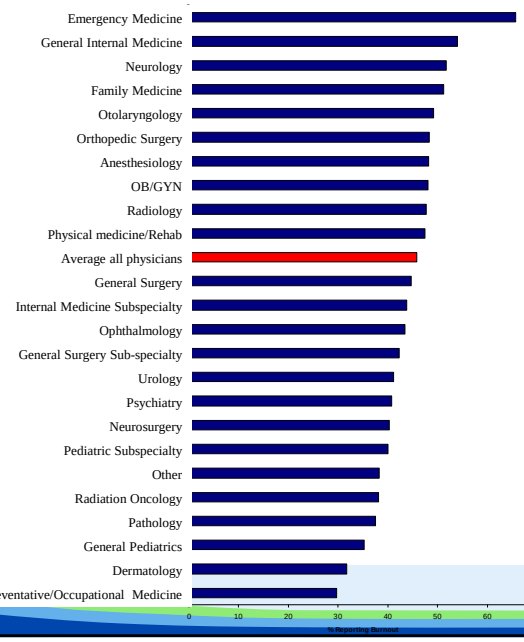
Frank. JAMA. 2003;289:3161

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

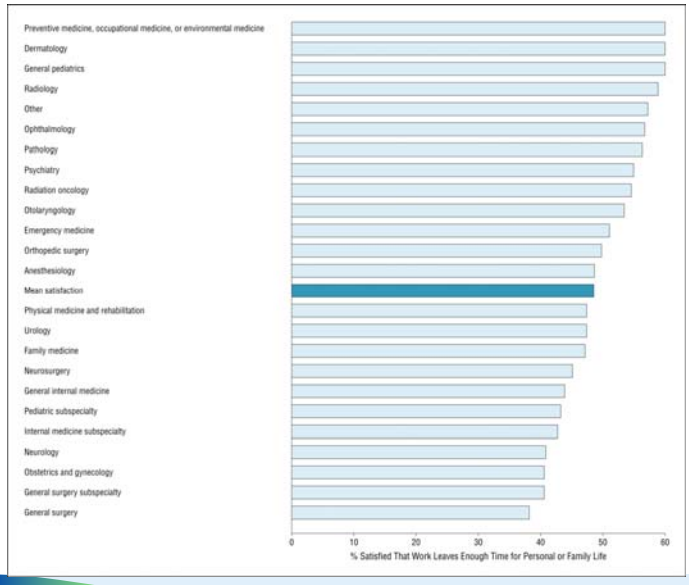
Burnout by Specialty (National)



AMA AMERICAN MEDICAL ASSOCIATION

Shanafelt *et al.*
Arch Intern Med 2012

Satisfaction with WLB by Specialty (National)



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But Don't Burnout and Distress Affect Everyone?

MAYO CLINIC

2011 AMA Survey
Employed Physicians vs. Employed U.S. Population

	Physicians n=6179	Population n=3442	p
Male	69%	53%	<0.001
Age (median)	53	41	<0.001
Hrs/Wk (median)	50	40	<0.001
Burnout*	38%	28%	<0.001
Dissatisfied WLB	40%	23%	<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.*, Arch Intern Med 2012

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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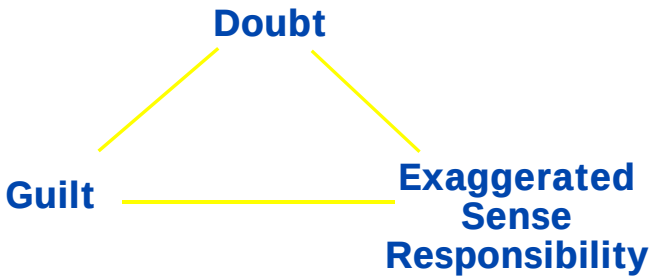
Are physicians at inherent risk? The "Physician Personality"

TRIAD OF COMPULSIVENESS



Gabbard JAMA 254:2926

The "Physician Personality"

Adaptive

- Diagnostic rigor
- Thoroughness
- Commitment to patients
- Desire to stay current
- Recognize responsibility of patients' trust

Maladaptive

- Difficulty relaxing
- Problem allocating time for family
- Sense responsibility beyond what you control
- Sense "not doing enough"
- Difficulty setting limits
- Confusion of selfishness vs. healthy self-interest
- Difficulty taking time off

Gabbard JAMA 254:2926

"Look, I'm half-way through a meeting, this better be bloody important!"

Physician Distress: Key Drivers

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

Consequences of Distress

- Alcohol and substance abuse
- Suicide
- Personal life: marital conflict
- Poor self care
- Low satisfaction
- Attrition
- Absenteeism
- Lesser academic performance
- Academic dishonesty
- Cynicism
- Unwillingness to care for chronically ill
- Loss of professionalism

Dyrbye Acad Med 81:354-372 (2006)

Burnout's Effect on Academic Faculty

- Surgical/Med faculty of UW Summer 2004
- Intention to leave academic medicine next 36 months:

  If burned out: 38%

  If not burned out: 8% ($p<0.001$)

Goitein/Shanafelt JGIM 2008

Consequences of Physician Burnout

- Medical errors[1-3]
- Impaired professionalism[5,6]
- Reduced patient satisfaction[7]
- Staff turnover and reduced hours[8]
- 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

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Physician Distress: Key Drivers

- Excessive workload
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Studied Approaches

- SMART program
- Personal stress reduction training
- Fostering self-awareness (“mindfulness training”)
- Balint groups
- Informal Doctoring to Heal physician discussion groups
- Facilitated small group curricula
  - Mayo studies recently completed

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)

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 of control
- Promote work-life integration
- Promote meaning in work

Organizational Solutions

Recognition of distress:

- 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 STEPS Forward modules
  - Mini Z instrument (AMA, Linzer 2015): 10-item survey

The Evidence

- Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West 2015):
  - 15 RCT's, 36 non-RCT's
    - Results similar for RCT and non-RCT studies
  - 24 studies of residents (7 RCT's totaling 308 participants)
  - 19 studies of organizational/structural interventions (3 RCT's, only 1 in residents with total n=41)
    - 10 of Duty Hour Requirements (0 RCT's, 1 study of 2011 DHR's)

The Evidence

- Emotional exhaustion (EE):
  - -2.9 points, $p<0.001$
  - Rate of High EE: -14%, $p<0.001$
- Depersonalization (DP):
  - -0.7 points, $p=0.008$
  - Rate of High DP: -15% for staff ($p<0.001$)
- Benefits similar for individual-focused and structural interventions

The Evidence

- 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

- 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

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	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, block models, etc.
- Develop interventions 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!

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Thank You!

- Comments/questions
- west.colin@mayo.edu