

Burnout in Medical Students



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Mark

MARK wanted to be a doctor ever since she was a little BOY. So when he moved to New Jersey from South Dakota to begin medical school it was a dream come true.

But the transition from South Dakota to New Jersey was difficult. Without any friends or family nearby, he felt isolated. Still, he was determined to succeed. He immersed himself in his medical texts until he started to have feelings of burnout by the end of his first year and forced himself to cut back on study hours. He found that a beer and then vodka was helpful in relaxing, and this became a nightly routine.



Mark

Then, in the first half of his second year, Mark failed a course. The shock pushed him to resume his extreme study schedule. He began studying all day, every day, only stopping to eat but increasing the amount of vodka. He even skipped classes to fit in more study time.

But despite all the hours of study, he said the stress and anxiety made it difficult to actually absorb the material.

He became withdrawn from medical school classmates and family.



Maslach Burnout Inventory (MBI)

Emotional exhaustion

- Overextension of one's work emotionally

Depersonalization

- Indifference and impersonal responses towards patients

Personal accomplishment

- How well one believes one has achieved success and competence thru work

Characteristic	Medical students, ages 22–32 (n = 4,032)	Population, college graduates, ages 22–32 (n = 736)	P value	Residents/fellows, ages 27–40 (n = 1,489)	Population, college graduates, ages 27–40 (n = 992)	P value	Early career physicians, ages 31–47 (n = 806)	Population, employed, ages 31–47 (n = 1,832)	P value
Burnout index, no. (%)*									
Emotional exhaustion: high score	1,647 (41.1)	511 (31.8)	<.0001	557 (37.6)	260 (26.4)	<.0001	243 (30.5)	462 (25.3)	.01
Depersonalization: high score	1,084 (27.2)	297 (18.5)	<.0001	528 (35.7)	164 (16.6)	<.0001	181 (22.6)	302 (16.6)	<.001
Burned out†	1,976 (49.6)	573 (35.7)	<.0001	739 (50.0)	310 (31.4)	<.0001	297 (37.3)	545 (29.9)	<.001
Screened positive for depression, no. (%)	2,337 (58.0)	761 (47.5)	<.0001	753 (50.7)	406 (41.1)	<.0001	319 (39.9)	801 (43.9)	.06
Suicidal ideation in the last 12 months, no. (%)	375 (9.3)	171 (10.6)	.25	120 (8.1)	86 (8.7)	.58	53 (6.6)	132 (7.2)	.55

Burnout Among Osteopathic Residents

Chan,A; Cuevas, S; Jenkins,J. JAOA 2016;(116):100-105

Table 1.
Burnout Among Osteopathic Residents:
Sample Characteristics of Respondents (N=129)

Characteristic	No. (%)
Sex	
Male	91 (70.5)
Female	38 (29.5)
Program Length, y	
3	34 (26.4)
4	44 (34.1)
5	43 (33.3)
6	8 (6.2)
Marital Status	
Single	57 (44.2)
Married	72 (55.8)
Residency Type	
Surgical	69 (53.5)
Nonsurgical	60 (46.5)

Table 2.
Burnout Among Osteopathic Residents:
Residency Program and Hours Worked and Slept (N=129)

Residency Type	Residents No. (%)	Mean Hours Worked	Mean Hours Slept
Surgical Residency			
Anesthesiology	7 (5.4)	12.4	6.2
General surgery	14 (10.9)	12.7	5.6
Neurosurgery	8 (6.2)	10.9	6.1
Obstetrics/gynecology	13 (10.1)	10.9	6.1
Ophthalmology	3 (2.3)	10.2	7.3
Orthopedic surgery	20 (15.5)	11.1	5.9
Otolaryngology	4 (3.1)	9.8	7.0
Total	69 (53.5)	11.4	6.1
Nonsurgical Residency			
Emergency medicine	21 (16.3)	10.2	6.7
Family medicine	13 (10.1)	9.9	6.5
Internal medicine	9 (7.0)	11.3	5.4
Pediatrics	12 (9.3)	11.7	6.8
Radiology	5 (3.9)	10.7	6.9
Total	60 (46.5)	10.7	6.5

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Table 3.
Burnout Among Osteopathic Residents:
Total Resident Frequency of MBI Burnout Factors^a (N=129)

Burnout Factor	Frequency (%)	Cumulative %
Emotional Exhaustion		
High	51 (39.5)	39.5
Medium	38 (29.5)	69.0
Low	40 (31.0)	100.0
Depersonalization		
High	64 (49.6)	49.6
Medium	32 (24.8)	74.4
Low	33 (25.6)	100.0
Personal Accomplishment		
High	22 (17.1)	17.1
Moderate	48 (37.2)	54.4
Low	59 (45.7)	100.0

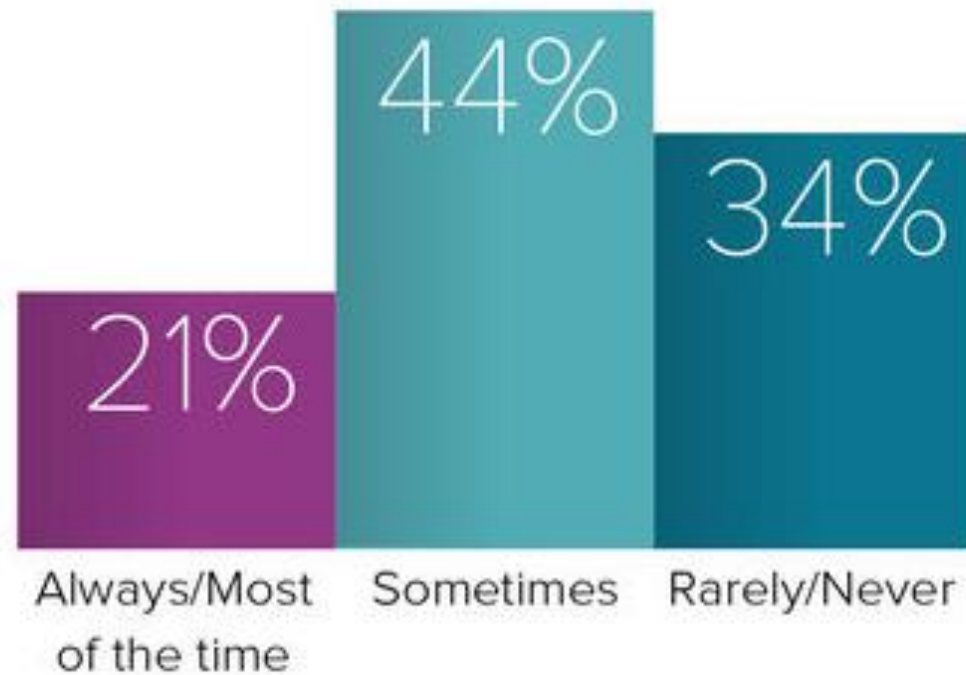
Osteopathic residents have elevated incident rates of burnout

^a Emotional exhaustion, depersonalization, and personal accomplishment are subscales from the Maslach Burnout Inventory (MBI) Human Services Survey.

Medical Student Burnout

This systematic review and meta-analysis of 195 studies involving 129 123 medical students in 47 countries demonstrated that 27.2% (range, 9.3%-55.9%) of students screened positive for depression and that 11.1% (range, 7.4%-24.2%) reported suicidal ideation during medical school. Only 15.7% of students who screened positive for depression reportedly sought treatment.

Enough Time for Personal Health/Wellness?





Burnout

Future physicians begin medical school with mental health profiles better than those of college graduates in other fields.

This profile reversed two years in the medical school.

Burnout is a syndrome of emotional exhaustion, loss of meaning in work, feelings of ineffectiveness, and a tendency to view people as objects rather than human beings.

Approximately 45% of US physicians meet criteria for burnout

A solid orange horizontal bar at the bottom of the slide.

Physician suicide

Each year in the U.S., roughly 300–400 physicians die by suicide.

In the U.S., suicide deaths are 250–400 percent higher among female physicians when compared to females in other professions.



The Practice of Medicine

Non-Medical Stuff

Why Does Physician Burnout Occur?

**Need a life
besides medicine**

**Medical education
shortcomings**

Resident set up for burnout

Long hours

Difficult decisions that are at risk for error with limited experience

Death and dying


Frequent shift changes

Separated from supportive network such as family

Harassment and belittlement by faculty, higher trainees, and nurses

Emotional Exhaustion





**Most male physicians
do not recognize
their own burnout**

**Female physicians
are 4 times
More likely
to report burnout**

I'M NOT SLEEPING,
I'M DEPRESSED,
I'M STRESSED...

GLAD TO SEE
YOU ARE
MULTITASKING
THEN!



Medical students

Medical students have rates of depression 15 to 30 percent higher than the general population. Depression is a major risk factor in physician suicide. Other factors include bipolar disorder and alcohol and substance abuse.

How do we prevent burnout in medical education?

Teach the students and residents to become an EMR power user.

- Training to use minimal datasets in writing patient notes.
- Medical note should contain continuity documentation, notes to support the coding or billing, and necessary aspects for legal documentation.
- Educate on software templates to produce excellent notes.

How do we prevent burnout in medical education?

**Reduce guilt when there is a day off –
train students to clear the deck.**

How do we prevent burnout in medical education?

**Emphasize the need for team healthcare and train
team leadership techniques.**

How do we prevent burnout in medical education?

Include resiliency training

- Resilience is your ability to adapt well and recover quickly after stress, adversity, trauma or tragedy. If you have a resilient disposition, you are better able to maintain poise and a healthy level of physical and psychological wellness in the face of life's challenges. You can develop resilience by training your attention so that you're more intentional about your perceptions. You use purposeful, trained attention to decrease the negative thoughts in your mind and bring greater focus on the most meaningful aspect of an experience.
- Resilience Training is inspired by the book, "The Chemistry of Joy," by Henry Emmons, MD.

Medical education considerations

Acknowledge the potential problem of burnout and depression

Screening for disorder with Mini Z

Provide safe time to decompress after traumatic events
(codes, mass disasters, excessive work times (CCU rotation), conflict, etc.

Medical education considerations

Provide training for
emotional intelligence and conflict resolution

Include life skills in education program –
family and support education

Medical education considerations

Be aware of the effect of regular shift changes

**Discourage pimping or belittling
by those involved in education**

Individual tactics that may apply

Talk about what you're feeling and experiencing.

Speak up if you think you need help.

Allow yourself to take regular vacations.

Find a healthy work/life balance.

Take responsibility for your own training and development.

Give credit where credit is due.

Think of your patients as partners.

Exercise regularly.

Volunteerism.

Cultivate meaningful interest outside of medicine.

Find a healthy financial balance.

Focus on nurturing, not managing, your relationships.

What can you do?

Talk openly about the problem within your school.

Emphasize the need to report feelings of hopelessness or suicidal thoughts..

Reach out to any student that may be troubled.

Create an opportunities where students can feel engaged and be able to express their passion for healthcare.

It's not
just the physicians!



**NURSES
REPORTED:**

1/2

Insufficient time
with patients

96 out of 100

Fatigue at beginning of shift

43%

Increase in
overtime

54%

Excessive
workloads

77%

Work 12-hour
shifts

2 IN 5

Units are short
staffed

1 IN 3

Staffing levels
inadequate

“If all of the knowledge and advice about how to beat burnout could be summed up in 1 word, that word would be balance—balance between giving and getting, balance between stress and calm, balance between work and home.”

MEASUREMENT OF BURNOUT AND ENGAGEMENT

[Maslach and Jackson 1981](#)



StuderGroup
a Huron Healthcare solution



Malcolm Baldrige
National Quality Award
2010 Award Recipient

Healing Physician Burnout



Diagnosing, Preventing, and Treating

Quint Studer
in collaboration with
George Ford, MD