Physician Burnout: Prevalence, Predictors, and Consequences

April 26, 2013
Presenter:
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Chair of Biomedical Statistics and Informatics
Mayo Clinic

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.

Financial Disclosures

- None
Depersonalization

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

Low Sense of Personal Accomplishment

"My work doesn't matter..."

Emotional Exhaustion

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

Mayo Multi-center Study of Medical Student Wellbeing

Student distress:
- 45% Burned out
- 52% Screen + for depression
- 48% At risk alcohol use
  • Compared to 26% age matched MN & 24% age matched US pop

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%

Burnout among Practicing Physicians
National Data (Shanafelt et al., Arch Intern Med 2012)
Burnout: 45.6%
Emotional exhaustion: 37.9%
Depersonalization: 29.4%
Burnout by Specialty (National)

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

But Don't Burnout and Distress Affect Everyone?

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

<table>
<thead>
<tr>
<th></th>
<th>Physicians</th>
<th>Population</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>69%</td>
<td>53%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age (median)</td>
<td>53</td>
<td>41</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Hrs/Wk (median)</td>
<td>50</td>
<td>40</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Burnout</td>
<td>36%</td>
<td>28%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Dissatisfied WLB</td>
<td>40%</td>
<td>23%</td>
<td>&lt;0.001</td>
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Summary of Factors Related to Job Satisfaction and Reduced Distress
- Autonomy
  - At work
  - Control of work-home balance
- Meaning
- Personal adaptive mechanisms
  - Coping strategies and life skills
Are physicians at inherent risk?
The "Physician Personality"

TRIAD OF COMPELSIVENESS

Doubt

Exaggerated
Sense
Responsibility

Guilt

The "Physician Personality"

Adaptive

- Diagnostic rigor
- Thoroughness
- Commitment to patients
- Desire to stay current
- Recognizes responsibility of patients’ trust

Maledictory

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

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

Causes of burnout: Work-Home Interference Model

NCCRT Oncologists (n=241):
"When was the most stressful period of your career?"

- Internship/Residency 35%
- Current Position 25%
- Medical School 22%
- Undergraduate 19%
- Fellowship 5%

Things don't necessarily get easier...
Factors Associated with Burnout

- Hours worked (OR 1.02; p=0.03)
- Conflict between work-personal responsibilities in last 3 weeks (OR 2.0; p=0.05)
- Resolving last conflict in favor of work (OR=1.8; p=0.02)

Does Rated Importance of Coping Strategy Relate to Burnout?

<table>
<thead>
<tr>
<th></th>
<th>No Burnout</th>
<th>Burnout</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning in schoolwork</td>
<td>60%</td>
<td>40%</td>
<td>.01</td>
</tr>
<tr>
<td>Recreation</td>
<td>55%</td>
<td>42%</td>
<td>.008</td>
</tr>
<tr>
<td>Positive outlook</td>
<td>65%</td>
<td>37%</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Survival attitude</td>
<td>40%</td>
<td>60%</td>
<td>.0001</td>
</tr>
</tbody>
</table>

From 2004 MN cohort

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

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)

Patient Care Consequences

"Look, I did my very best through a very tough, sick, terrible illness, Angelo!"
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\(^7\)

\(^1\) JAMA 296:1071, \(^2\) JAMA 304:1173, \(^3\) JAMA 302:1234, \(^4\) Annals IM 139:368,
\(^5\) Annals Surg 291:509, \(^6\) JAMA 309:662, \(^7\) Health Psych 12:399, \(^8\) JACS 212:421,

Patient Care

Residents with burnout are more likely to report sub-optimal patient care

<table>
<thead>
<tr>
<th>≥ 1 monthly Sub-Optimal Patient Care Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burned out (N=89)</td>
</tr>
<tr>
<td>Not burned out (N=28)</td>
</tr>
<tr>
<td>54%</td>
</tr>
<tr>
<td>21%</td>
</tr>
<tr>
<td>p = .003</td>
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</table>

\(Shanafelt\) Am J 2002;156:358-367

Summary

Burnout is prevalent

Contributors to burnout include loss of autonomy, loss of meaning, and maladaptive coping strategies

Burnout has serious consequences for patients, physicians, and the medical profession
Burnout and work life balance

Rachel Levine  MD
Johns Hopkins University School of Medicine

Work-life balance and Burnout

- Growing body of evidence linking work-life balance and burnout
- Burnout associated with low satisfaction with work life balance among large sample of psychiatrists in Japan *Rahman and Racial 2002
- Key predictors of satisfaction with work life balance
  - Control over schedule (number of hours and when)
  - Hours worked weekly (mean 53 hours)

Why is the work-life balance/burnout link important for academic physicians?

Academics must balance not only work and non-work roles but also multiple professional roles and fluctuating workloads

Why is the work-life balance/burnout link important for the medical profession?

- Recruitment and Retention
  - Students focus on “lifestyle” in career choice
  - Less intention to leave job among physicians reporting control over work hours and schedule
- Productivity
  - Decreased productivity when work-life conflict high
- Diversity
  - Inflexible work environments may discourage diversity
- Patient care
  - Patient satisfaction and quality of care

Where to we go from here?

- Work-life balance as an antidote to burnout?
- Time to move beyond individual fixes
- Focus on systemic/organizational/institutional interventions
- Challenges-patient care does not necessarily lend itself to existing measures for enhancing work-life balance utilized in other professions (ROW, Flex time, telecommuting etc)
Promoting work-life balance—AMCs and the Medical Profession

- Leadership to embrace innovation and promote culture change
- Recognize and support role-models for balance
  - Be aware of diversity in views on work-life balance
- Restructure work environments and policies
  - Borrow from models outside of medicine
  - Create greater flexibility and predictability in work structures
  - Part-time work options, job sharing, team based care, shift work
  - Adjust promotion timelines, benefits and compensation—proportionate to effort
  - Guarantee high quality, affordable, on-site child care

Unbending Gender: Why Family and Work Conflict and What to do about it

- "principle of proportionality"
  - offer high-quality work on reduced hours
    schedules that offer slower, but still steady, advancement, as well
    an equal pay rate and proportional benefits... keeping in mind that
    in many workplaces 40 hours per week would qualify
    as part-time


Job sharing: a retention strategy for nurses.

- Job sharing offered as a way to respond to nurses requests for more equitable balance between work and home
- Compared full-time, part-time and nurses job sharing
- Job sharing associated with increased satisfaction and retention


Effect of part-time practice on patient outcomes

- Retrospective study of patient care practices of part-time and full-time MDs
- Outcomes
  - Cancer screening rates
  - Diabetes management
  - Patient satisfaction
  - Ambulatory costs
  - No differences in patient satisfaction and costs between part-time and full-time MDs
  - Part-time MDs better cancer screening rates and diabetes management


Work-Life Balance and Burnout

...for the secret of the care of the patient
is in caring for the patient

Francis Peabody 1925

...for the secret of the care of the Doctor
is in caring for the Doctor

Peabody rephrased 2013

Policy Recommendations

- 1. Develop and embrace practice models that ensure both predictability and flexibility for individual physicians and allow for decreased number of hours worked and greater control over ones work schedule.

- 2. For academic physicians career advancement/promotion timelines, benefits and compensation should follow the "proportionality principle" so that physicians may choose how much they wish or need to work based on a level playing field. Equitably reduced workloads and compensation.
Off the Treadmill: Preventing Burnout in GIM

Mark Linzer MD
Division Director, General Internal Medicine
Center for Patient and Provider Experience
Hennepin County Medical Center

Objectives
1. Identify features of a healthy work environment.
2. Discuss ideas of self-care to protect against burnout.
3. Propose approaches to develop a healthy workplace.

Research Base, Physician Satisfaction
- Physician Worklife Study Funded by Robert Wood Johnson Foundation
- 1996-98: national survey of >5000 MDs
- Findings:
  - Satisfaction promoted by long term relationships with patients
  - Stress related to lack of work control
  - Burnout predicted by work-home interference

MEMO study: aligning physician and patient outcomes
- Funded by AHRQ: 2002-2006
- 119 PC clinics, 422 MDs; 1785 patients.
- To determine relationships between work conditions, physician reactions (stress and burnout) and patient care (quality and errors).

MEMO Results: physician outcomes
- 50% need more time for visits
- 27% burning out or burned out
- 30% moderately likely to leave job in 2 years
- Strong relationships between work conditions (time pressure, work control, chaos, organizational culture) and physician satisfaction, stress, burnout, intent to leave
- Many patient care outcomes linked to work conditions

MEMO Results: patient care

<table>
<thead>
<tr>
<th>Variable</th>
<th>Outcome</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate to high work control</td>
<td>Higher diabetes care quality</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Time pressure</td>
<td>Lower overall quality</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>Poorer care for HTN patients</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Current AHRQ grant: Creating Healthy Workplaces

- Randomized trial of QI interventions to improve work conditions and care quality
- 34 clinics in Rural WI; Chicago; NYC
- Use OWL to measure work environment and patient outcomes at baseline and after 6–12 months in intervention and control sites

The power of the data

- Clinics shown their OWL data and comparison clinics data
- Data spurred meaningful conversations and movement towards solutions
- Trial concluding – data being analyzed

Gender differences in burnout

- 1.6x higher in US women MDs vs. men MDs
- Less gender difference in burnout in Netherlands due to a) fewer work hours and b) better work control in women MDs (Unser et al., J Am Med Women’s Assoc 2002;57:191–3)
- More burnout in US women MDs, in part due to gendered expectations for listening, more time pressure
- US women MDs describe faster pace, less values alignment with leadership (Werner-Allen et al., J Gen Intern Med 2005; 20(1):194)

Burnout and the EMR

- MEMO study looked at relationship between EMR functionality and stress, burnout and dissatisfaction.
- Stress increased as EMR functions increased; then decreased as EMR became fully functional – but not to original levels.
- In fully functional EMRs, shorter visits associated with more dissatisfaction, burnout, intent to leave.

Disparities in work conditions
Preventing Burnout Among Primary Care Clinicians

Carole Ward MD
Education Lead, Veterans Assessment and Improvement Laboratory
Center for Ambulatory VA Health System
2014 VAMC Annual Meeting
April 26, 2013

A Framework for Preventing Burnout
Impact of High Demands, Low Control and High Support

Ref: Linzer et

A Helpful Model: Relationship Centered Care

Personal Strategies
Self-Awareness and Reflection

“As I practice, I project the condition of my soul onto my patients, colleagues, family and friends and our way of being together. Doctoring holds a mirror to the soul. If I am willing to look at that mirror, I have a chance to gain self-knowledge. Knowing myself is as crucial to good doctoring as knowing my patients and my subject”

Adapted from Courage to Teach, D. Palmar

Personal Strategies
Strive for Mindfulness

- The capacity to lower one’s own reactivity
- Ability to notice and observe sensations, thoughts and feelings, even if unpleasant
- Acting with awareness and intention
- Focusing on experience, not labels or judgments


Personal Strategies
Build and Sustain Mindfulness

- Mindfulness Based Stress Reduction
- Communication Training
- Personal Management
- Stress Management/Adaptive Coping
- Balint Groups
- Breathing
- Support each other
- Exercise
Personal Strategies:
Develop New Practice Skills
- Partner with patients
- Work in practice teams
- Staff mentoring
- Facilitative team leadership skills
- Manage chronic care
- Integrate change management
- Incorporate evidence at the point of care

Personal Strategies
Relationship-Centered Communication
Team-based
- Trust
- Mindfulness
- Humility
- Respectful interactions
- Diversity
- Social and task relatedness
- Rich and lean communication
Patient-Centered
- Foster healing relationships
- Exchange information
- Respond to patients' emotions
- Informed decision-making
- Enable patient self-management

Organizational Strategies:
Decrease Time Pressure
- Create structures to increased time for Primary Care Clinicians to do their work
  - Reasonable practice sizes
  - Enhanced staffing ratios Longer in person patient visits
  - Designated practice time for outreach, integrating emails and telephone visits and proactive care activities
  - Financial refer to support PC infrastructure

Organizational Strategies
Promote Effective Team Function
Structural Factors
- Physical Location
- Size
- Stable Membership
- Team Leadership
- Support for change and innovation
Process Factors
- Regular Team Meetings
- Clearly defined goals of care
- Regular Feedback and Improvement

Organizational Strategies
Support Organizational Learning and Development
- Foster strong relationships between team members
- Shared Leadership
- Protect time for group reflection, planning and relationship building
- Adopt a systematic change management process
- Pay attention to the local environment
  - Deal with relationship tension among team members
  - Confront ineffective communication patterns
  - Manage conflict effectively
  - Have the necessary difficult conversations

Organizational Strategies:
Effective Management of PC Practices
- Adaptive Leadership
  - Let teams take charge of change process
- Facilitative Leadership
  - Empower staff and all health professionals to suggest ideas
  - Create psychological safety
- Break changes into manageable parts
- Rewrite job descriptions and accountability standards to support the work of PC teams
- Adopt management models that support teamwork

Reid RJ, Coleman K, Johnson PA et al. Health Affairs 2010; 29(8): 1325–1332
Nutting PA et al. Ann Fam Med
Hospitalists and Burnout

- Hospitalists at high risk of burnout
  - About 30% have burnout symptoms (Hsami et al, 2011)
  - Predictors of burnout

<table>
<thead>
<tr>
<th>Predictors of Burnout</th>
<th>High Risk Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational climate</td>
<td>Stress, role in influence</td>
</tr>
<tr>
<td>Core values</td>
<td>Volume, structure</td>
</tr>
<tr>
<td>Practice</td>
<td>Suboptimal, unclear expectations</td>
</tr>
<tr>
<td>Personal time</td>
<td>Night, weekend work</td>
</tr>
<tr>
<td>Relationship with leader</td>
<td>Very low, experienced leaders</td>
</tr>
<tr>
<td>Compensation</td>
<td>Little reward for expenses</td>
</tr>
<tr>
<td>Relating with patients</td>
<td>Few patients</td>
</tr>
</tbody>
</table>

An Economic Perspective on Hospitalist Burnout

David Meltzer MD, PhD
The University of Chicago
SGIM Annual Meeting, 2013

Background variables | Mediating variables | Outcome variables
--- | --- | ---
• Sex | • Work control |
• Age | • Work-home interference |
• Children | • Stress satisfaction |
• Solo practice | • Home support |
• Academic practice | • Latent to quit, decrease hours, change specialty |
• Work hours | • Intent to leave patient care |

Figure 2.1: Hypothized Relationship between Volume and Outcome

![Graph showing mortality rate vs volume of patients undergoing a specific procedure per year]

Luft et al., 1990

Bold Idea 1: Physician Payment Reform

- Improve relative hospitalist pay
  - Increasing pay not so realistic
  - Decrease subspecialty pay
- Eliminate fee for service system
  - Changed little since RBRVS
  - Deeply entrenched, politicized system
  - Move to full capitation or bundled payment
- Must couple with measures of value and evidence that experience/satisfaction produces value
Effects of Experience on Length of Stay and Total Costs

Bold Idea 2: Train Medical Leaders
- Medical school does not prepare physicians to manage
- Much of learning is on the job training
- Dearth of experienced leaders in fast growing field allows advancement of inexperienced leaders
- Much of training is brief and superficial
- Create high-quality management curriculum with peer review and measured outcomes
  - Test strategies to better match jobs to physician preferences
  - Create tools for public and private reporting of job satisfaction

Specialization and Burnout: Two Competing Philosophies

Bold Idea 3: Train Hospitalists for Academic Success
- Traditional hospitalists require costly diastole
- Academic hospitalists can be productive in clinical and academic roles
  - Research, education, admin, of
  - Require training
- Training for academic hospitalists valuable
  - General human capital, no self-financing required
**Bold Idea 4: Comprehensive Care Physician Model**

- **Advantages**
  - Most frequently hospitalized patients get own doctor in both settings
  - Patient choice expanded
  - Credibility decreases: overall working time can be reduced
  - Usually lower doctor costs (i.e. $100,000)
  - All hospitalized patients get doctors with significant hospital experience and presence
  - Physicians can be specialists
  - Patient choice expanded
  - COPC model can work for physicians
  - Patient-centered medical home / wellness / end-of-life practice
  - Stable patient load can help fill hospital

- **Challenges**
  - Are enough patients willing to enroll?
  - Will doctors fit patients switch?
  - Will doctors do this job?
  - Can it be economically viable?

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**PREVENTING BURNOUT**

Steps you can suggest at your workplace!
Rachel Levine, Mark Linzer, David Meltzer, Carole Warde, Colin West
SGIM Symposium on Burnout, April 26, 2013

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**Fostering a healthy work environment**

- **Less time pressure, more control**
  - Extend appointment times, or offload non-clinician work
  - "Desk top" slots during sessions
  - More order, less chaos
  - Maximally utilize space
  - Pilot unique schedules: "7 on, 7 off"

- **Support work-home balance**
  - Support part-time practice and practice styles supportive of parents of young children

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**Fostering a healthy work environment**

- Effective management of PC practices
  - Facilitative leadership
  - Break change into manageable pieces
  - Support organizational learning and development
  - Promote effective team function
  - Physical location, size, regular team mtgs.
  - Decrease time pressure
  - Create structures for PCPs to do their work

- Use relationship-centered communication
- Trust, mindfulness

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**Creating healthy work environments**

**In closing: Getting off the treadmill**

1. Take personal steps to increase control and balance
2. Move your organization ahead
3. Support wellness initiatives
4. Make work-life a quality measure
Contact us!

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- Carole Ward: cward@mednet.ucla.edu
- Colin West: west.colin@mayo.edu