Changing Culture in Academic Medicine

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Disclosure

I do not have any personal or professional financial relationships with commercial entities producing healthcare goods and/or services that could bias today’s presentation.

Why are we talking about culture?

- “Culture eats strategy for lunch.” - Dick Clark, CEO Merck

- Perception that culture is intrinsic.

- Culture - the set of shared attitudes, values, goals, and practices that characterizes an institution or organization

The culture of our profession & institutions are within our control

The Culture of Academic Medicine

- Commitment
- Innovation
- Collaboration
- Achievement
- Connection
- Awe
- Scholarly
- Hierarchical
- Competitive
- Individualistic
- Driven
- Autonomous
- Self-indulgent
- Demoralizing
- “No money, no mission”
- Incongruent w/ personal values

Plews-Ogan, ACGME Bulletin 2007;
Kirch AAMC Presidential Address 2007
Pololi, Acad Med 2009; Pololi, JGIM 2009
Think About Your Medical Education

- Were you ever profoundly discouraged?
- Has anyone ever yelled at you?
- Were you ever publicly embarrassed or humiliated?
- Have you been depressed?
- Have you been depressed?
- Know someone who abused alcohol or drugs?
- Did you ever consider suicide?
- Have you ever regretted your decision to go into medicine?

You Aren’t Alone

- Med Student perception of mistreatment
  Daugherty, JAMA 1998
- Moral distress
- Burnout
  Gundersen, Ann Int Med 2001
- No alignment of personal & institutional values
  Pololi, JGIM 2009

Significant Ramifications

- Incidence of depression - > 16%
- Increased incidence of alcoholism & drug abuse
- Higher risk of suicide
  - Males – 40-70% Higher than general population
  - Females – 130-400% higher than gen population
  - More likely to succeed

Statistically Speaking...

<table>
<thead>
<tr>
<th>Disorder</th>
<th>MSU SCS Trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depressive Disorder (16%)</td>
<td>264</td>
</tr>
<tr>
<td>Alcohol Dependence (8-15%)</td>
<td>132 – 248</td>
</tr>
<tr>
<td>Drug Dependence (1-2%)</td>
<td>16 – 33</td>
</tr>
<tr>
<td>Disruptive Behavior (1-5%)</td>
<td>16 – 83</td>
</tr>
</tbody>
</table>

Hampton JAMA 2005, Schernhammer NEJM 2005
Why?

• What is it about the culture of academic medicine that leads to so many of us feeling demoralized, depressed & hopeless?

Desire to Change

“We have the possibility of creating a much more meaningful and gratifying culture for our faculty, staff, and learners, and especially for the patients we have committed to serve”

• DG Kirch, MD
AAMC Presidential Address 2007

How to Change Culture

• The “Hidden Curriculum”
• Professionalism
• Relationship-Centered Care
• Physician Wellness
• Disruptive Physician Programs
• Resident work hour restrictions

Evidence for Success of Programs

• Physician Wellness Programs
  
  • clinically & statistically significant drops in emotional and work-related exhaustion — key indicators of burnout

  • significant drops in med errors & malpractice claims after introduction of stress-management programs to 22 hospitals (controlled)

  Wallace, Lancet 2009
Evidence for Success of Programs

• Relationship Centered Care (Indiana University)
  • Improved Med Student satisfaction with quality of education
  • Students more satisfied with responsiveness of administration to student problems
  • 20-30% increase in applications to IU SOM

Evidence for Success of Programs

• In 2004, after work hour restrictions
  • Med Students ratings of resident availability and primary resident’s interest in teaching improved
  • Fewer students reported considering leaving medicine due to long hours in training

Ongoing Dissatisfaction

• “Few faculty described positive relational attributes with colleagues.”
• Many faculty members described feeling isolated & lacked supportive relationships.
• Intensely individualistic & competitive environment
• Environment has “dehumanizing” effect
• Not feeling recognized by the medical school for their contributions
• Expectation of personal overextension

Why?

• Why aren’t the programs – which are successful – making things better?
The Negativity Bias

Humans are more attentive to & more influenced by the negative aspects of their environment than by the positive.

Negativity is Fundamental

- Evolutionary Benefit
- Affects us across broad spectrum of human experience
- Even the expectation of something negative affects our behavior
- Impacts have been exhaustively studied
  - Learning
  - Information Processing
  - Memory

Baumeister, Rev Gen Psychol 2001

Learning

- Acquisition of knowledge or skill that manifests in behavioral or cognitive change.
- Reward/ Punishment
- Studied across developmental stages
- Multiple experimental constructs

What has motivated you to learn?

Baumeister, Rev Gen Psychol 2001

“Learning research indicates a powerful negativity bias at a very basic psychological level:

Negative reinforcement, as opposed to comparable positive reinforcement, leads to faster learning that is more resistant to extinction in both human adults and in animals.”

Vaish, Psychol Bulletin 2008
Information Processing

• How one makes sense of new information
• Commits it long term memory
• Allows it to be used in thinking, problem solving & performance of tasks
• More thought dedicated to negative experiences than positive ones

Think about a bad patient outcome you’ve experienced.
Do you analyze good outcomes?

Memory

• Greater recall of unpleasant memories,
• Descriptions of undesirable behaviors, and
• Consistent memory of the content of these memories over time
• Negative memories of self are downplayed
• Negative experiences of others are not

Can you remember a conflict with a colleague from several years ago?
Can you remember details of a good interaction from that same time?

Memory

• “Once bitten, twice shy”
• Do you treat a certain condition or type of patient differently b/c of a previous experience?
• May explain failure to follow evidence-based guidelines
• Important in relationship formation
• First impressions
• Impact of a negative interaction

Summary of Negativity Bias

• Powerful force
• Developed to protect self from threat
• Affects how we act in the moment
• Impacts what we learn, understand and retain from past experiences
• Influences our relationships with others
• So instinctive, frequently unaware of impact
If Everybody Has It, Why Does It Affect Medical Culture More?

Serial Reinforcement in Our Educational Process

How We (are trained to) Think

- Chief Complaint
  - “What seems to be the problem?”
- Most patient encounters focus on what’s wrong
- Critical Reasoning
  - Rule out worst case scenario first
    - Rule out sepsis
    - Rule out MI
  - Don’t be surprised – anticipate what might happen

“Pimping”

- Teaching by intimidation
  - “Students who fail to provide the answer sought are shamed into reading more that evening.”
- Learning is motivated by
  - Fear of embarrassment, humiliation
  - Negative relational impact
- Oral Boards
  - Knowledge under pressure

Simulation

- “Deliberate Practice”
- Situational anxiety due to high stakes scenario
- Performance anxiety
- More challenging than multiple choice question
- Affective component leads to improved recall of information
GME

- Residents continue to have these experiences
- Begin to employ them
- Relational divides
  - One bad experience with one member of another discipline can lead to generalized opinions.
  - Perpetuated by expected interactions

M&M and RCAs

- Important processes to improve quality & safety
- Tremendous energy devoted to what went wrong
- Even with non-blaming approach
  - Errors in judgment
  - System breakdowns
  - Reinforces “what should I have done differently”
  - Teaching points make an impact

Culture of Academic Medicine

- Fundamental Negativity Bias
- Reinforcement in education
  - Keenly problem focused
  - Rule out the worst
  - Dissect bad outcomes & errors in judgment
  - High Stakes…. Fear of ramifications of bad events
    - Injuring a patient
    - Lawsuits, Negative Press, Public Disclosure

Every time a faculty members reiterates one of these messages…. we also reinforce it for ourselves.
Don’t Get Me Wrong....

• Critical analysis is imperative for improvement
• Learning and remembering from bad experiences protects future patients
• Ruling out the worst case scenario saves lives
• Skepticism leads to scientific advancement
• I am NOT suggesting we abandon these processes
• But rather, that we recognize the potential unintended consequences

Why Proven Interventions Aren’t Changing Culture

• Things actually are changing
• We are inherently programmed & serially educated to look for threats, pitfalls, dangers
• If one situation no longer a risk….look for the next threat

• If we wish to change culture, we must intentionally also notice the positive.

Scientific Evidence for Benefit of Positivity

• RCT of 577 adults – 71% complete data
• Random assignment to 1 of 6 exercises
  • Gratitude, Personal Strengths, Placebo
• Measurement
  • Steen Happiness Index
  • Beck Depression Inventory
• Pre, post, 1 wk, 1 mo, 3mo, 6mo

Findings

• Expressing Gratitude
  • Immediate increase in happiness
• “3 Good Things Journal” & Using Signature Strengths
  • Increased happiness
  • Decreased depression at 1,3,6 months

Seligman, Amer Psychol 2005
Use of Positivity in Education

- Philadelphia High School
- 347 9th graders
- Blinded, controlled
- Incorporated positivity and strength identification
- Improved
  - Engagement in learning, creativity
  - Enjoyment of school
  - Achievement
  - Social skills

Seligman, Flourish 2011

Evidence for Positivity in Medicine

- Isen – University of Michigan, 1991
  - Medical Students
  - Induced positive affect vs. control
  - More efficient problems solving
  - Went beyond scope of assigned task

Isen, Med Decision Making 1991

Evidence for Positivity in Medicine

- Estrada, Henry Ford Hospital 1997
  - 44 Internists – positive affect v. control
  - Reasoned thru case of chronic active hepatitis
  - Positive Affect
    - Faster time to recognition of liver disease
    - Did not prematurely anchor on diagnosis

Estrada, Org Behav & Human Decision Process 1997

More About Positive Affect....

- Enhances problem solving & decision making
- Flexible, innovative & creative cognitive processing
- Thorough & efficient
- Helping, generosity & interpersonal understanding
- Fosters intrinsic motivation
- Stimulates interest & performance of interesting tasks – but not at expense of responsible work behavior

**Impact of Positivity on Team Functioning**

- Losada
- High, Medium, Low Functioning Teams
- Profitability, 360 Reviews, Customer Satisfaction
- Monitored character of conversation
  - Positive/ Negative  5.6  1.8  0.36
  - Inquiry/ Advocacy  1.1  0.67  0.05
  - Other/ Self  0.9  0.62  0.03

Losada Amer Behav Scientist 2004

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**Impact of Leader’s Mood in Self Managing Groups**

- Positive mood of leader improves mood of group
- Negative mood of leader worsens group mood
- Groups with negative leader exert more effort
- Groups with positive leader have better team coordination
- No difference in overall task performance

Sy, J Applied Psych 2005

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**Impact of Positivity on Relationships**

- Ratio of positive to negative comments & interactions help determine the success of that relationship.
  - Gottman – 5:1
  - Losada & Fredrickson – 3:1
    - Must be genuine
    - Don’t overdo it (11:1)

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**Postivity....**

- Makes one happier & less depressed
- Engages students & enhances school performance
- Enhances complex decision making
  - Including medical diagnostic reasoning
- Favorably affects team functioning
- Improves interpersonal relationships
- Positive leaders can enhance mood & collaboration in their teams
Mood Matters

“Whereas affect was once regarded as detrimental or unprofessional, the trend suggests that affect is increasingly accepted as an important factor contributing to the performance of organizations.”

Sy, J Applied Psych 2005

Desire to Change

“We have the possibility of creating a much more meaningful and gratifying culture for our faculty, staff, and learners, and especially for the patients we have committed to serve”

*DG Kirch, MD
AAMC Presidential Address 2007

Opportunities

- Reflect on what went well
- Explore the paradigm of the master clinician
- Identify strengths in oneself & others
- Simple genuine gratitude

Opportunities (con’t)

- Enhancing understanding
- Assuming positive intent
- Inquiry rather than judgment
- Schwartz Center Rounds
- Interprofessional education
Changing the Culture

- Positivity isn’t hard…. but it isn’t natural tendency
- Negativity bias
- Serial reinforcement in medical education
- Subtle reminders in our everyday activities
- Very simple things may have a profound effect

Selected Resources

- UVA Center for Appreciative Practice

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