Consequences of Unprofessional Behavior in Medical School

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University of California, San Francisco
University of California San Francisco
It is a privilege and a joy to be involved in the education of medical students
Why is professionalism important?
Physician Charter

ABIM Foundation, ACP/ASIM Foundation, and European Federation of Internal Medicine

- Primacy of patient welfare
- Primacy of social justice
- Commitment to professional competence
- Commitment to honesty with patients
- Commitment to patient confidentiality
- Commitment to improving quality of care
- Commitment to improving access to care
- Commitment to a just distribution of finite resources
- Commitment to maintaining trust by managing conflicts of interest
- Commitment to professional responsibilities
What is Professionalism?

A professional is someone you can trust to do the right thing even when no one is looking.
Clerkship Evaluation Narrative

- Importance placed on traditional “academic” skills
- What would have happened if the deficiencies were in fund of knowledge?
UCSF Physicianship Evaluation System

- Years 1-2
- Years 3-4
- Institutional
- Needed to evidence to support this system
Characteristics of Medical School Performance Associated with Subsequent Disciplinary Action by the Medical Board of California

Collaborators

- Carol Hodgson, PhD
- Arianne Teherani, PhD
- Neal Kohatsu, MD, MPH,
  Director, Medical Board of California
Research Question

Does unprofessional behavior in medical school predict disciplinary action by the Medical Board of California?
Disciplinary Action vs. Malpractice Award

- **Disciplinary Action**
  - Attorney General needs "clear and convincing evidence" to go to court with a prosecution
  - The 95% standard

- **Malpractice Award**
  - Much weaker "preponderance of evidence"
  - The 51% standard
Welcome to the Medical Board of California

The Medical Board of California is the State agency that licenses medical doctors, investigates complaints, disciplines those who violate the law, conducts physician evaluations, and facilitates rehabilitation where appropriate.

The Board performs similar functions for affiliated healing arts professions including registered dispensing opticians, spectacle lens dispensers, contact lens dispensers, licensed midwives, and research psychoanalysts.

What's New

PRIVACY ALERT:
This notice is to alert licensees, applicants, and other individuals of a possible compromise of personal information. Mail sent to the Medical Board of California was among mail stolen from the general mailbox at a
Characteristics of Physicians Disciplined by the Medical Board of California

- 105,000 licensed physicians in California
- 350 physicians disciplined annually (0.3%)
# Discipline Risk by the Medical Board of California

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ODDS RATIO</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age/20 years</td>
<td>1.6</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Male gender</td>
<td>2.8</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Board certification</td>
<td>0.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>MD education</td>
<td>1.4</td>
<td>.001</td>
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<tr>
<td>non USA or Canada</td>
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</table>

Kohatsu 2004
## Discipline Risk by the Medical Board of California

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Odds Ratio</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB/GYN</td>
<td>2.3</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>General Practice</td>
<td>2.0</td>
<td>.001</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1.9</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Family Practice</td>
<td>1.7</td>
<td>.002</td>
</tr>
<tr>
<td>Surgery (all)</td>
<td>1.4</td>
<td>.06</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>1.0</td>
<td>.4</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>0.6</td>
<td>.001</td>
</tr>
<tr>
<td>Radiology</td>
<td>0.4</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Internal Medicine was the reference group for each specialty

Kohatsu 2004
Research Question

Does unprofessional behavior in medical school predict disciplinary action by the Medical Board of California?
Methods

- **Design**
  - Case-Control Study

- **Subjects**
  - **Cases**
    - All UCSF graduates disciplined by the state medical board (1990-2000)
  - **Controls**
    - UCSF graduates matched to graduation year and specialty
PREDICTOR VARIABLES

- MCAT scores
- Undergraduate GPA
- Medical school grades
- USMLE Part 1
- Unprofessional comments in medical school evaluations at the threshold of a UCSF Physicianship Form

OUTCOME VARIABLE

Disciplinary action by the state medical board
Characteristics of the Subjects
Graduation years 1943-1989

<table>
<thead>
<tr>
<th>CASES</th>
<th>CONTROLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>68</td>
</tr>
<tr>
<td>Men</td>
<td>88%</td>
</tr>
<tr>
<td>Age at discipline (yrs)</td>
<td>54</td>
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</table>
# Predictors of Disciplinary Action

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>ODDS RATIO</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Undergraduate GPA</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>MCATs</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Medical school grades</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>NBME/USMLE step 1</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Unprofessional behavior</td>
<td>2.1 (1.2-4.4)</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Acad Med 2004;79:244*
Index Violation Leading to Disciplinary Action

Professionalism 95%
- Negligence 38%
- Self use of drugs or ETOH 13%
- Unprofessional conduct 12%
- Inappropriate prescribing 12%
- Sexual misconduct 10%
- Convicted of a crime 4%
- Fraud 4%
- Unlicensed activity 1%

Impairment 4%
Conclusion of Study

1. Problematic behavior in medical school, but not the more traditional measures of performance (such as grades and national standardized tests), is associated with subsequent disciplinary action by a state medical board.

2. Professionalism is an essential competency that must be demonstrated in order for a student to graduate from medical school.

3. Medical students display warning signs of future disciplinary action.
Validation Study

University of Michigan
  David Stern, MD, PhD

Jefferson Medical College
  Susan Rattner, MD
  Jon Veloski, MS

UCSF School of Medicine
  Carol Hodgson, PhD (University of Colorado)
  Arianne Teherani, PhD
  Mary Banach, PhD

Federation of State Medical Boards
Research Question

What are the predictors during medical school of subsequent disciplinary action during clinical practice?
Methods

Design
Case-control study

Cases
All graduates disciplined by any state medical board (1990-2003) from:
- Jefferson Medical College
- University of Michigan
- UCSF (out-of state cohort)

Controls
Matched to:
- School
- Graduation year
- Specialty
Characteristics of the subjects
Graduated between 1970-1999
3 medical schools

<table>
<thead>
<tr>
<th></th>
<th>CASES</th>
<th>CONTROLS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n=235</td>
<td>n=469</td>
</tr>
<tr>
<td>Men</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Undergraduate science GPA</td>
<td>3.3</td>
<td>3.5*</td>
</tr>
<tr>
<td>MCAT z score</td>
<td>0.6</td>
<td>0.8*</td>
</tr>
<tr>
<td>Did not pass med course yrs 1-2</td>
<td>19%</td>
<td>8%*</td>
</tr>
<tr>
<td>NBME/USMLE step 1 z score</td>
<td>0.2</td>
<td>0.4*</td>
</tr>
<tr>
<td>Unprofessional behavior in med school</td>
<td>39%</td>
<td>19%*</td>
</tr>
<tr>
<td>Age at discipline (yrs)</td>
<td>44</td>
<td></td>
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</table>

*p < .05
<table>
<thead>
<tr>
<th>Odds ratio</th>
<th>CI (95%)</th>
<th>Attributable risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>1.9-4.8</td>
<td>26%</td>
</tr>
</tbody>
</table>

Association of unprofessional behavior in medical school and disciplinary action in 40 state medical boards

NEJM 2005:353;2673
On-line Disciplinary Search Request

To learn if your physician has disciplinary history, please fill out the physician information below. You must include the physician's first and last name, city, and state where he or she is located. By including the zip code, degree code or specialty it will further allow us to narrow our search and find the physician for which you are requesting information. The fee per report is $9.95.

Enter search information below:

**All fields marked with an asterisk (*) are required**

*First Name:  
Middle Name/Initial:  
[ Search Help ]
Classification and Frequency of 740 Violations

Drug or alcohol 15%
Unprofessional conduct 11%
Conviction for a crime 6%
Negligence 6%
Inappropriate prescribing 5%
Violation of order of board, rehabilitation or probation 4%
Failure to confirm to minimal standards of medical practice 4%
Sexual misconduct 4%
Failure to meet CME requirements 4%
Other unprofessional 16%
Health related incompetence or unknown 25%
Example of one record of disciplinary action

Conduct likely to deceive or defraud or harm the public
Excessive prescribing
Controlled substance violations
Failure to maintain adequate medical records
Prescribing without examination/evaluation
Controlled substance abuse
Violation of probation
Due to action taken by another board/agency
Impairment
Violation of probation
Unprofessional conduct
A Few More Typical Examples

- Obtaining license by fraudulent misrepresentation
- License revocation or suspension
- Willfully making or filing a false report
### Types of 8 medical school behaviors associated with disciplinary actions

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Odds Ratio</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Irresponsibility</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Poor self-improvement</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Anxious, insecure, nervous</td>
<td>7.2</td>
<td>.056</td>
</tr>
<tr>
<td>Immaturity</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Poor initiative</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Impaired relationships with:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students, residents, faculty</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Nurses</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Patients and families</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>
Why stratify unprofessional behavior?

Capacity for early identification and remediation

- Behavior severity associated with disciplinary action
- Policy implications
  - Is the sustained unprofessional behavior the least remediable?
  - Who should graduate from medical school?
  - Who should receive specialty certification?
Other Predictors for Disciplinary Action

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Odds Ratio</th>
<th>Attributable Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad science GPA</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>MCAT scores</td>
<td>0.6</td>
<td>1%</td>
</tr>
<tr>
<td>Grades Yrs 1-2</td>
<td>1.6</td>
<td>7%</td>
</tr>
<tr>
<td>Yrs 3-4</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>NBME/USMLE Step 1</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Unprofessional behavior</td>
<td>3.0</td>
<td>26%</td>
</tr>
</tbody>
</table>
What is the risk of disciplinary action for the individual unprofessional student?

- Lots of assumptions
  - Risk is cumulative
  - Physicians work for 30 years
  - Other risk factors not taken into account

- 5-15%?
What is the risk of disciplinary action for the individual unprofessional student?

If 10%, 9 out of 10 do not have the outcome

- Crude measure
- Test characteristics are not good
Professionalism and real life

- **Early medical students**
  - Immunizations and course evaluations
  - Struggle with cheating on examinations

- **Clinical clerks**
  - How much of a resident’s note to copy
  - Clerkship expectations and continuity clinic

- **Residents**
  - 80 hour/week tension-hand off
  - Mistreatment of students
Professionalism and real life, cont.

- Faculty
  - Prioritizing education
  - Mistreatment of students

- Practicing physicians
  - How deceptive to be with an insurance provider

- Medical student deans
  - Graduating students whom we don’t want to care for our families
Why is there so little action?

- Busy faculty
- Individual faculty believe they are behaving professionally and do not believe there is a problem
- Focus on “problem” students convinces us that we are doing enough
- Faculty does not know how to address this issue

Thibault 2005
Let’s be clear

We are asking more of our students than we were asked

We could graduate from medical school if we demonstrated adequate knowledge and skills

Now remarkable momentum, but...
Certificate of Medical Education from Licensing Boards

- Licensing boards want to know about unprofessional behavior in students
- Disincentive to medical educators to document unprofessional behavior
How to start?

**ARTICULATE** that:

Competency of professionalism is as important as fund of knowledge and clinical skills

The rest can then fall into place
Next steps and challenges

1. Review technical standards for explicit language on professionalism
2. Clinical Skills Step 0 (K. Eva at McMaster)
3. Better evaluation systems
4. Best practices for remediation
5. Standards MUST apply to residents and faculty
6. How do we create a “culture of professionalism”?
7. Curriculum on professionalism
Teaching Professionalism

- Setting Expectations
- Providing Experiences
- Evaluating Outcomes
Setting Expectations

- White-coat ceremonies
- Orientation session
- Policies and Procedures
- Codes and charters
Providing Experiences

- Formal curriculum
- Problem-based learning
- Ethics courses
- Patient-doctor courses
- Community-based learning
- International electives
- Hidden curriculum
- Role models
- Parables
- The environment as teacher
Evaluating Outcomes

- Assessment before entry into medical school (multiple medical interview)
- Assessment by faculty
- Assessment by peers
- Assessment by patients (patient satisfaction)
- Multiperspective (360-degree) evaluation
- Evaluate remediation strategies
Predictors of Disciplinary Actions during Residency

- Entire cohort of US internal medicine residents since 1990
- N=60,000
- Will be able to determine risk to individual
Medicine Residency and Disciplinary Action (preliminary)

Predictors
- Male gender
- Absence of subspecialty training
- Program director ratings
  - Unprofessional behavior
  - Sum of individual components
- Specialty certification score
- Age
- International medical school graduate
Laughter as good medicine

Rachel Sobel, UCSF MS4
New England Journal of Medicine
March 2006