

# **Disciplinary Action by State Medical Boards and Unprofessional Behavior in Medical School**

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Until recently, the data to support the long-held assumption that medical students who exhibit professional behaviors become more “professional” physicians are limited. However, in December 2005, *The New England Journal of Medicine* published the findings of the first national study to examine the link between unprofessional behaviors in medical school with later disciplinary action by a medical board. This case control study, which was conducted at the University of California, San Francisco, the University of Michigan and Jefferson Medical College, showed that practicing physicians disciplined by state medical boards were three times as likely to have displayed unprofessional behaviors in medical school as those with no records of discipline.<sup>1</sup>

The study team conducted a search of public records maintained at the Federation of State Medical Boards ([www.docinfo.org](http://www.docinfo.org)). The cases (n=235) were graduates of the three medical schools between 1970 and 1999 who were disciplined by one of 40 state medical boards between 1990 and 2003. The control physicians (n=469) were matched by medical school and graduation year. The nature of the disciplinary actions ranged from public reprimand to license revocation. The team classified the disciplinary actions into three categories: (1) unprofessional behavior, which accounted for 74 percent of the violations, (2) incompetence, or (3) violation category not determinable. Most (94 percent) of the physicians who were disciplined committed multiple violations that involved unprofessional behaviors, including activities such as negligence,

inappropriate prescribing, fraud and sexual misconduct, but excluding incompetence related to mental or physical impairments.

Demographic variables included sex, year of graduation, clinical specialty, and age at discipline. The predictor variables from medical school included grades, standardized test scores, and narratives describing students' unprofessional behavior, which the investigators extracted from academic records. The definition of unprofessional behavior in medical school was based on previously established criteria.<sup>2</sup> The investigators performed a formal content analysis of the narratives of unprofessional behavior to characterize the types of unprofessional behavior using QSR NVivo® (version 2.0, Victoria, Australia). For each student the instances of unprofessional behavior was classified into one of eight types and assigned a severity ranking of moderate or severe based of frequency.

The two types of unprofessional behavior most strongly linked with future disciplinary action were severe irresponsibility, which had an odds ratio of 8.5, and severe resistance to self-improve, which had an odds ratio of 3.1. Examples of irresponsibility in medical school were unreliable attendance in clinic or not following up on patient care activities. Examples of resistance to self-improvement were not accepting constructive criticism, being argumentative, or displaying a poor attitude. Low Medical College Admission Test (MCAT) scores and poor grades in the first two years of medical school also were associated with future disciplinary action, but less strongly than unprofessional behavior (1 percent and 7 percent population-attributable risk, respectively). Male sex, which had been a risk factor in previous studies, was not a risk factor.

An early study conducted at Jefferson had shown that first-year residents rated low in professional attitudes were less likely to continue into residency programs, and tended to have lower ratings of performance in their medical school clerkships.<sup>3</sup> A recent follow-up study reported that medical students who lacked thoroughness and were unable to perceive their weaknesses in the preclinical years were more likely to be identified as unprofessional in the clinical years.<sup>4</sup> Although disciplinary action by state medical boards is rare and much less

frequent than unprofessional behavior in medical school and residency, the findings of Papadakis et al indicate that, for some students, unprofessional behavior is sustained over decades.

Recent objectives for undergraduate and graduate medical education provided by the Association of American Medical Colleges and the Accreditation Council for Graduate Medical Education already include professionalism as a core competence. It is clear that professionalism can and must be taught and modeled in medical schools. Papadakis et al provide robust empirical support for, and examples of, additional medical school level recommendations. . Technical standards for admission to medical school and outcome objectives for graduation need to be reviewed and revised to include explicit language about professional behavior. Medical schools should consider administering standardized instruments to applicants as a way of assessing personal qualities of medical and predicting performance. The authors point out that better evaluation systems are needed to monitor the development of professional behavior and to document deficiencies. Finally, providing feedback to students guided by evidence may motivate and direct remediation strategies, but underscore that fact that the best practices for the remediation of deficiencies in professionalism need to be identified.

#### References

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