Original Investigation

The Evolution of Professionalism in Medicine and Radiology

Aine Marie Kelly, MD, MS, MA (Higher Education), Patricia B. Mullan, PhD, Larry D. Gruppen, PhD

Professionalism and ethics are difficult to define, and it is often a case of "you know it when you see it." In recent years, there have been calls to renew the focus on professionalism and ethics and their teaching in the medical and allied professions, part precipitated by a perceived and probably real decline in doctors' professional values. Medical professionalism has evolved markedly in the last couple of centuries and continues to change today at a rapid pace, spurred by technological advances and generational change. The reasons to promote medical professionalism include regulatory requirements, aligning our professions' outcomes and behaviors, and the moral imperative that being professional is the right thing to do. Radiologists should emphasize, model, and teach professionalism to our colleagues, allied personnel, and trainees whenever opportunity permits. Medical students now receive teaching in professionalism and ethics throughout their training, and there is a need to continue training formally and informally during residency training. Faculty or those charged with teaching professionalism will need to first understand what constitutes medical professionalism, and here we attempt to define and outline what professionalism looks like in practice. The article concludes with a summary of the opportunities within radiology practice, with examples, for us to exhibit professional actions, values, and ideas.

Key Words: History; professionalism; ethics; medicine; radiology.

THE HISTORY OF PROFESSIONALISM IN MEDICINE

Professionalism and ethics and their teaching constitute subjects of renewed interest and focus in recent years in many fields, including medicine and radiology, precipitated in part by a perceived and possibly real decline in professional values among doctors (1,2). This article describes the history and evolution of medical professionalism, with an emphasis on professionalism within radiology. The article identifies the tenets of key professional stakeholders, identifying current expectations for professionalism, and concluding with a summary of practical implications for promoting a shared understanding of professionalism that could inform efforts to teach and assess professionalism in radiology.

In Western medicine, the original professions of medicine, law, and the clergy first arose in medieval European universities (3). These professions addressed a class of problems for the society and as a result were granted monopoly status. Laws prohibited nonmembers of professions from practicing; granted authority to the professions to decide who enters training, and how training was organized, conducted, and evaluated; and allowed the profession to negotiate with governmental agencies in monitoring practice. Together these three elements comprise the implied "social contract." In return for the society conceding autonomy and self-regulation to the professions, the professions were trusted to be altruistic, by not competing unfairly, and always placing primacy on clients, patients, laypersons, and public interests above their own.

In the United States, the moral courage and leadership of medicine in articulating altruistic standards for promoting population health transformed its public perception from "less a profession than a trade of practitioners who worked with their hands after being trained under an apprentice system [with] . . . little professional consciousness and . . . only a limited concept of professional ethics or responsibilities" (4). When the American Medical Association (AMA) was established in the United States in 1847, it declared its primary task as raising ethical standards in the medical field (5). The AMA code of ethics was influenced by the code of professional ethics defined by the British historian Thomas Percival in the early-19th century (2). Percival maintained that physicians occupied a position of public trust, and therefore had obligations to the society that transcended those of workers in other trades. Percival advocated a public-goods approach to medicine, arguing that the public trust it inspires sets it apart from all other fields. In 1858, the AMA Council on Ethical and Judicial Affairs was created to write and implement an ethics code for American medical professionals, and in 1876 the Association of American Medical Colleges (AAMC) was founded to reform medical education. The AMA played an influential role during this time in establishing standards for medical schools, medical boards, hospital internship programs, medical specialty training, and other areas of health care.

The AMA also began a process to evaluate medical schools. In 1910, Abraham Flexner, working for the Carnegie Foundation for the Advancement of Teaching, published the Flexner

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From the Department of Radiology, University of Michigan Hospitals, B1 132G Taubman Center/5302, 1500 E. Medical Center Drive, Ann Arbor, Michigan 48109-5302 (A.M.K.); Department of Learning Health Sciences, University of Michigan Medical School, Michigan (P.B.M., L.D.G.). Received November 22, 2015; revised January 19, 2016; accepted January 27, 2016. Supported in part by the Leonard Berlin Award (Project/Grant # N018042). **Address correspondence to:** A.M.K. e-mail: ainekell@med.umich.edu

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Report, assessing the quality of education in allopathic medical schools in the United States (6). The Flexner Report advocated for an alliance between medical schools and state regulators, with the aim of creating a cohesive regulatory body that would address the needs of the public through intentional reforms in the medical education system. As a result, nearly half of 168 medical schools in the United States either closed or merged due to a "bad grade." Flexner recognized that physicians are "social instruments" whose training comes at great cost to the state and thus requires them to function in a "social and preventive" role. These changes ushered in the first wave of "medical professionalism" and charged medical schools with educating young physicians in these norms.

In 1942, the AMA established the Liaison Committee on Medical Education (LCME) to maintain standards for undergraduate medical programs and to accredit medical schools in the United States and Canada (7). In 1972, key organizations in medicine and medical education (AMA, the American Board of Medical Specialties, the American Hospital Association, the AAMC, and the Council of Medical Specialty Societies) came together to create the Coordinating Council on Medical Education. Their role was to approve and coordinate all areas of medical education, and to this end they created the Liaison Committee for Graduate Medical Education (LCGME) to coordinate and oversee review activities of the several independent residency review committees in existence. In 1981, the LCGME was restructured under new bylaws and renamed the Accreditation Council for Graduate Medical Education (ACGME) (5). Between 2000 and 2002, the ACGME identified and endorsed six general competencies to assess resident competence; the American Board of Medical Specialties endorsed the same competencies for continuing assessment of competence in practicing physicians. These competencies include patient care, medical knowledge, communication, system-based practice, practice-based learning and improvement, and professionalism.

The LCME accredits complete and independent medical education programs for medical students in the United States or Canada for their education, which are operated by universities or medical schools chartered in the United States or Canada (7). The accreditation process requires medical education programs to provide assurances that their graduates exhibit general professional competencies that are appropriate for entry to the next stage of their training and that serve as the foundation for lifelong learning and proficient medical care. A medical education program must include instruction in medical ethics and human values and require its medical students to exhibit scrupulous ethical principles in caring for patients and in relating to patients' families and to others involved in patient care. The LCME specifies: "The medical education program should ensure that medical students receive instruction in appropriate medical ethics, human values, and communication skills before engaging in patient care activities. As students take on increasingly more active roles in patient care during their progression through the curriculum, adherence to ethical principles should be observed, assessed, and reinforced through formal instructional efforts. In medical student-patient interactions, there should be a means for identifying possible breaches of ethics in patient care, either through faculty or resident observation of the encounter, patient reporting, or some other appropriate method. The phrase 'scrupulous ethical principles' implies characteristics that include honesty, integrity, maintenance of confidentiality, and respect for patients, patients' families, other students, and other health professionals. The program's educational objectives may identify additional dimensions of ethical behavior to be exhibited in patient care settings" (7).

The ACGME reviews and accredits graduate medical education (residency and fellowship) programs, and the institutions that sponsor them, within the United States (5). Accreditation is achieved through a peer-review process overseen by volunteer physicians making up review committees that annually evaluate the specialty and subspecialty programs and institutions in their respective disciplines for adherence to established Common, Program, and Institutional Requirements.

Of note, in addition to changes in leadership within the profession of medicine, changes in cultural expectations for what constitutes a "good" therapeutic relationship in Western medicine influence professional and public expectations for professionalism. For example, the AMA codes of ethics moved from defining "paternalistic" models to "deliberative" models of therapeutic relationships, and from earlier practices of "protecting" patients from information that could inform their choices to expectations that physicians actively disclose patients' medical diagnoses and prognoses and elicit and negotiate preferences for treatments (8). These understandings of what constitutes "good" therapeutic relationships inform modern medical school accreditation practices. Furthermore, intentionally reflecting on changes in historical and evolving understandings of medical professionalism helps us to model and practice, moving us away from either the original 5th century B.C. Hippocratic Oath or reactions to documents written in response to specific events intended to avoid future scandals (9). Failure to acknowledge this context may constrain our ability to conduct clinical research and effective teaching about professionalism.

WHY PROMOTE AND TEACH PROFESSIONALISM IN MEDICINE AND RADIOLOGY?

Recognition of conflicts between practitioners' altruism and self-interests has long been articulated; by the 1970s, many sociologists were critical of the professions, particularly as they wielded power in ways that addressed their self-interests. Societal concerns included physicians' motivations and performance, including morality, conflicts of interest, the doctor-patient relationship, self-regulation, and the impact of the health-care system on the practice of medicine. As a result of these concerns, medical schools started to introduce professionalism and ethics into their curricula, and various agencies and organizations convened meetings and issued reports and guidelines.