Original Investigation

Teaching and Assessing Professionalism in Radiology: Resources and Scholarly Opportunities to Contribute to Required Expectations

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Teaching and assessing trainees' professionalism now represents an explicit expectation for Accreditation Council Graduate Medical Education–accredited radiology programs. Challenges to meeting this expectation include variability in defining the construct of professionalism; limits of traditional teaching and assessment methods, used for competencies historically more prominent in medical education, for professionalism; and emerging expectations for credible and feasible professionalism teaching and assessment practices in the current context of health-care training and practice.

This article identifies promising teaching resources and methods that can be used strategically to augment traditional teaching of the cognitive basis for professionalism, including role modeling, case-based scenarios, debriefing, simulations, narrative medicine (storytelling), guided discussions, peer-assisted learning, and reflective practice. This article also summarizes assessment practices intended to promote learning, as well as to inform how and when to assess trainees as their professional identities develop over time, settings, and autonomous practice, particularly in terms of measurable behaviors. This includes assessment tools (including mini observations, critical incident reports, and appreciative inquiry) for authentic assessment in the workplace; engaging multiple sources (self-, peer, other health professionals, and patients) in assessment; and intentional practices for trainees to take responsibility for seeking our actionable feedback and reflection. This article examines the emerging evidence of the feasibility and value added of assessment of medical competency milestones, including professionalism, coordinated by the Accreditation Council Graduate Medical Education in radiology and other medical specialties. Radiology has a strategic opportunity to contribute to scholarship and inform policies in professionalism teaching and assessment practices.

Key Words: Education; ethics; professionalism; radiology; residents.

INTRODUCTION

Teaching and assessing trainees' development of competence in professionalism now represents an explicit expectation for Accreditation Council Graduate Medical Education (ACGME)-accredited programs in radiology. Existing peer-reviewed publications in medical education, including publications in *Academic Radiology*, have identified challenges for teaching and assessing competency in professionalism. These challenges include variability in defining professionalism and ethics, as well as the predominance of traditional methods for teaching (eg, lectures) that emphasized efficiently transmitting knowledge about the cognitive basis of other medical competencies historically more prominent in medical training. Additional challenges include that the implicit curriculum, in which learners see and hear practices disparaging or contradicting professionalism, heavily influences what trainees learn about professionalism. Professionalism education can also be challenged to help trainees anticipate and reflect on perceived threats to professionalism from the larger social context, in, for example, perceptions of vulnerability to market pressures over patient advocacy, or gender or class-based harassment.

To address these challenges and expectations, this article identifies defined expectations for developing competency in professionalism, and reviews teaching approaches for professionalism that acknowledge and work with each learners' (medical student or resident) unique professional experiences and interactions affecting their understanding of professionalism. It also identifies assessment approaches intended to promote safe and effective learning of professionalism, and considers opportunities for radiology educators to contribute to scholarly evaluation of professionalism teaching and assessment practices and policies for evaluating professionalism education.

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DEFINITION OF COMPETENCE IN PROFESSIONALISM

The social contract underlies the "*why*" of professionalism; the definition of "*what*" the ACGME explains professionalism consists is that "residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles. . ." To meet this definition, residents are "expected to demonstrate respect, altruism, honesty, compassion and integrity; demonstrate a commitment to ethical principles; and demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities" (1).

Professionalism can also be framed in terms of roles, duties, actions, skills, behavior, beliefs, and attitudes.

TEACHING PROFESSIONALISM

Particularly in this era of competency-focused residency education, teaching and assessment focus on observed and measurable competencies and skills. Of note, the teaching of professionalism does not lend itself to a didactic standalone curriculum. Professionalism tended not to be emphasized as strongly compared to other competencies, such as medical knowledge and patient care; instead with its courses being graded on attendance or as a pass or fail with the risk of trainees not valuing it. Therefore, it is incumbent on educators to emphasize its importance in medicine and radiology during teaching and assessment. With the current emphasis on adding quality to care and the patient (and family)-centered care movement, the opportunity to illustrate the importance of professionalism is provided, and if it is placed centrally in the curriculum, trainees may value it more.

Although the cognitive basis of professionalism can be formally taught in the classroom, and supplemented by the informal curriculum in workshops, and small group settings, much professionalism is witnessed and learned as part of the "hidden curriculum" (2). Many professional skills are implicit and therefore not so apparent to observers, let alone trainees. The formal, informal, and hidden curricula often contradict each other in that the residents could conclude, based on their experience, that the profession "doesn't practice what it preaches" and this creates confusion, disillusion, and cynicism in trainees (3). As educators, we need to figure out how to align the curricula and have our trainees on board with what we are teaching them. This will involve us being open, honest, and true to ourselves and "walking the walk" as well as "talking the talk"!

TEACHING METHODS

Teaching professionalism can present additional challenges—professionalism might not lend itself to didactic large group lectures. Of note, the learning of professionalism often takes place in the "hidden curriculum" seen and heard in informal unplanned settings, such as in clinics, on the wards, or in the corridors (hidden curriculum) (2). Research in medical education that can inform our evidence-based selection of teaching and assessment methods include Best Evidence in Medical Education systematic reviews, which follow Cochrane protocols for identifying, evaluating, and synthesizing medical education research on defined topics, including professionalism (4). This section also identifies recent and promising efforts in teaching and assessing professionalism specific to radiology.

As indicated in the Best Evidence in Medical Education professionalism teaching review, to teach professionalism, educators have employed different techniques to help overcome the limitations of traditional didactic teaching. These include role modeling, case discussions, storytelling (stories without endings), the telling of parables, dialogue, peer and instructor coaching, small group work, simulations, peer and instructor coaching, and discussion and reflection on case studies and recent and historical events, as well as written reflections on self-awareness and self-control in conflict-prone settings with variable levels of success. These could reflect on noncompliant patient, cross-cultural issues, informed consent, interprofessional conversations, and communication with patients. These can augment didactic sessions for the cognitive basis of professionalism, addressing, for example, regulatory and legal aspects, especially for new radiology residents.

SMALL GROUP CASE STUDY DISCUSSIONS

The case study method of teaching lends itself to the discussion of ethical challenges and difficult decisions to be made with the point of the discussion not being to arrive at the "correct" answer but to examine all sides of the argument and to appreciate the complexity and difficulty to make a decision without an agreed "official" code of ethics. Cases discussed should be relevant to their stage of career, so the experiences should be ones that residents can imagine encountering.

Small groups around tables with facilitators to answer questions and to keep the groups on track would lend themselves to learning professionalism principles. Some authors have used chief or senior residents as the facilitators to make it less intimidating than if faculty were present (5). The use of real-life examples (case studies or vignettes), with dilemmas or conflicts and difficult decisions, using different contexts will enhance these efforts. The cases taught during professionalism and ethics classes and seminars have been criticized for being challenging or "difficult" or extreme cases, with students feeling they need more basic guidance and instruction on how to handle common situations (6). To overcome this, radiology residents could be asked to submit cases or scenarios that are derived from real encounters or events. Choosing cases or scenarios that they have encountered or are more likely to encounter will increase resident engagement. Critical incidents or sentinel events could be analyzed and discussed in the small group setting with the groups coming together at the end of sessions to brainstorm ideas and suggestions.