Journal Discussion

Meaningful Assessment of Professional Competence in Medical School Curriculum

Professional development can be integrated into the medical school curriculum using the techniques and strategies described in this article.

Jaclyn Halpern

Medical student professionalism has always been valued, but recently this topic has emerged as a separate and central theme in medical education. It has been increasingly discussed by academic organizations and in the literature. In their article, "Defining and Assessing Professional Competence," physician medical educators Robert M. Epstein and Edward M. Hundert propose that "professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served" [1]. While descriptions and definitions of professional competence are generally agreed upon, the meaningful evaluation and assessment of professionalism continues to be a challenge. This review highlights some of the literature that discusses the methods and effectiveness of such an assessment.

A discussion of evaluation and assessment necessarily begins with teaching. No single method of teaching professional behaviors to doctors-in-training is universally accepted by the medical community. Traditionally, educators relied on role modeling, concluding that professional behaviors will be learned from attending physicians, residents, and fellow students in the clinical setting. In "Teaching Approaches That Reflect Professionalism," Charles Hatem supports this modeling approach and describes 2 complementary teaching methods that he and his colleagues developed and implemented at Mt Auburn Hospital [2]. The 2 initiatives focus on the idea that models of professional values and mentoring displayed in the clinical environment will be absorbed by student and resident observers and incorporated into their own patient care. He argues that "modeling…is the most effective teaching strategy to achieve the curricular goal of enhancing professionalism in training and practice," and therefore the benefit of teaching at the bedside is its ability to promote a "template for professional conduct" [3].

Another school of thought argues that professional development cannot depend on role modeling alone. It must incorporate other modes of teaching that allow individuals to explicitly discuss what is modeled, to actively determine what is positive and negative about what is modeled, and to collaboratively reason about what a better decision or behavior would be. Shipra Ginsburg et al, from Mt Sinai Hospital in Toronto, have reviewed the literature of medical professionalism during the past 20 years and argue that educators may avoid evaluation of students' personality by focusing teaching methods on explicit behaviors rather than "a set of stable traits" (eg, integrity, honesty, respect) that describe professionalism [4]. They stress the importance of not only concentrating on behaviors but also being aware of the context in which the behaviors are exhibited. Equally important is discussing the student's process of resolving a conflict so that a behavior is not judged in isolation. "If we do not include conflict, context, and the process of resolution in our evaluation methods, we might not be able to conduct the most reliable, valid, and appropriate evaluation of these behaviors" [5]. These authors also endorse the increasingly accepted concept that evaluation by several members of the health care team including faculty, nurses, students, and residents contributes to students' education since all "see different aspects of professionalism in students" [6]. Finally, they emphasize self-assessment as an integral part of professional development. This approach provides the opportunity to use evaluation for the purposes of assessment as well as teaching.

By assessing professionalism, schools may identify unprofessional behavior, offer remediation, and protect society from those who do not alter their behaviors by denying them graduation. Epstein and Hundert state, "the outcomes of assessment should foster learning, inspire confidence in the learner, enhance the learner's ability to self-monitor, and drive institutional self-assessment and curricular change" [7]. In a thought piece published in *Medical Education*, Amanda Howe recognizes that, "as with all core components, assessment of the attributes gained must be valid and high profile, both to ensure competency and to motivate learning" [8].

Currently, medical educators struggle with the practical aspects of developing meaningful methods to assess students' professionalism. The proposed means of assessment come in many forms, including subjective supervisor evaluations, multiple-choice exams, written work, and standardized patients. Unfortunately, each of these, in isolation, can overlook and insufficiently evaluate professional competence. Epstein and Hundert propose a multi-dimensional approach to assessing professionalism that would be more comprehensive and ultimately improve the quality of medical practice and education.

As part of a study at The Uniformed Services University of the Health Sciences, Hemmer et al describe a top-down method of assessment that relies heavily on evaluation by clinical instructors and was successful in recognizing professional deficiencies in students [9]. They used 3 evaluation methods to assess student professionalism on the wards and in clinics during their internal medicine clerkship. One method was a checklist composed of a 5-point rating scale for 15 different performance categories. Instructors were also given space for evaluation in the form for written comments. Thirdly, all instructors including interns, residents, attending physicians, and preceptors, participated in formal evaluation discussion sessions. After these sessions, students met privately with an attending physician mentor and received specific feedback based on these evaluations. Hemmer et al found that "instructors were twice as likely to identify students with deficiencies in professionalism during the ward rotations as during the ambulatory care rotation" [10]. One of the proposed explanations for this was an inability to develop close student-physician relationships in the stressful environment of inpatient services [11]. Interestingly, students in the ambulatory setting worked exclusively with attending physicians, while on the wards they worked closely with house staff also, and the authors note, "it is entirely possible that students behave differently when they spend the majority of their time with attending physicians" [10]. This study showed that longitudinal evaluation with feedback and discussion not only reveals deficiencies in student professional behavior but has the "additional advantage in allowing feedback, intervention, and continued observation," each of which is important for progressive professional development [12].

Yedidia et al used a 10-station Objective Structured Clinical Examination (OSCE) with standardized patients (SPs) to quantify improvement or deterioration in communication skills after a group of students participated in formal teaching sessions that focused on these skills [13]. The SPs detected significant enhancement and refinement of communication skills in students exposed to the teaching interventions when compared with a control cohort. While in this paper the OSCE served as a tool for evaluating a given program in communication skills training, the authors suggest that the OSCE may be a reliable tool for broad assessment of medical students' communication skills.

Perhaps the most important element of developing and implementing a curriculum to promote professional development is the conceptual framework underlying the program. Howe offers such a framework based on several tenets. She states that "professional development curricula are likely to be successful only if based on different tutoring styles and learning methods from more factually oriented teaching" [14]. She recognizes the importance and utility of self-reflection in this type of exercise, explaining that "students will need support in understanding the rationale for exploration of personal ideas and experiences, which might otherwise appear intrusive" [14]. Howe, like the Ginsburg group, recognizes the importance of "using the students' lived experiences as a basis for learning" [14]. Real academic or clinical experiences promote the application of professional values and underscore their immediate relevance.

The value that medical educators put on the professional competence of medical school graduates is not unwarranted and continues to be in the forefront of developing curricula. The best approach to teaching and evaluating professionalism, however, remains controversial and unresolved. Although few methods have been scientifically proven, it seems that a successful curriculum must be multi-dimensional and encompass evaluation, by faculty, other members of the health care team, peers, and the student. It should allow opportunity for self-reflection, feedback, guidance, and remediation, inasmuch as these are key elements in generating well-prepared, thoughtful, and self-regulating physicians.

References

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Jaclyn Halpern, MD, is a third-year medical student at NYU School of Medicine. She earned a BA from the University of Pennsylvania where she majored in biological basis of behavior. Subsequently, she worked for 2 years on curriculum development and educational programming at NYUSOM, where she developed an interest in promoting professional development training during medical school.