Article

When do medical students become professionals?

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Becoming a medical professional is a gradual process that begins at entry into medical school and continues throughout the entire training period. Four events mark key stages in this process: entry into medical school, beginning of clinical rotations, graduation and beginning of independent practice. Essential characteristics of student professionalism are commitment, honesty, discretion, co-operation, participation, diligence and temperance. Students need to know how to deal with unprofessional behaviour, whether their own or other students' or teachers'. Medical schools must have comprehensive programmes for teaching and supporting student professionalism.

Much has been written about the need to revitalise medical professionalism. While most of the literature to date has been directed towards practising physicians and medical associations, there is an increasing realisation that professionalism must be an integral component of medical education. When they begin independent practice, medical graduates will assume all the expectations and requirements of the profession. But just as there is no magic moment when they become fully qualified to treat patients, neither do they become professionals all of a sudden, whether at graduation, licensure or any other time. Becoming a medical professional is a process that begins at entry into medical school and continues throughout the entire training period.[1]

Although there are many different definitions of medical professionalism, there is general agreement about its principal characteristics – a specialised body of knowledge and skills, high moral standards, including a strong commitment to the well-being of others, and a high level of autonomy, both individually and collectively (self-regulation).[2] At the beginning of their medical studies, students can be expected to exemplify one of these characteristics, i.e. high moral standards, but not the other two. Curricula are designed explicitly to enable students to master the specialised body of medical knowledge and skills and eventually to apply the knowledge and skills autonomously, i.e. without supervision. Curricula have in the past neglected the development of moral standards, especially their application to medical decision making and behaviour. Some efforts are underway to remedy this problem, but much more needs to be done.

Becoming a medical professional

There is no one point in time at which students become professionals. However, there are several key stages at which they assume increased professional responsibilities.

- **When they begin medical studies.** In many, if not most, medical schools, new students are made aware of their special status as future physicians and the requirements for achieving that goal. These include both academic and ethical standards; the academic have always been stated explicitly and achievement is evaluated systematically, while the ethical have until recently been transmitted implicitly and subject to little or no evaluation.[3] That this situation is changing is evident by the proliferation of 'white-coat' ceremonies and student codes of professional conduct.
- **When they begin clinical rotations.** Although some medical schools introduce students to clinical practice, for example taking patient histories, early in their studies, the first phase of the curriculum focuses primarily on the biomedical sciences. Professional behaviour during this phase mostly involves interactions with other students and teachers. This phase completed, students begin to encounter patients in their clinical rotations. While still under strict supervision, they experience the psychosocial realities of patients as well as the physiological ones. Their professional interactions now extend to patients and family members. Moreover, they observe, and tend to imitate, how their superiors deal with patients and other physicians, as well as with students.
- **When they graduate.** The conferring of a medical degree marks the successful completion of basic medical education. A longstanding tradition has the new graduates swear an oath (the Hippocratic or a more modern version such as the Declaration of Geneva[4]) that incorporates the ethical requirements of professionalism. This signifies that as they take responsibility for the care of patients, they will put the interests of their patients above all others, including their own. They are still not fully fledged medical professionals, however. During their internship and/or residency they are under the supervision of more senior physicians, although they rapidly take on more responsibility for patient care as well as for teaching medical students and junior colleagues. Education in professionalism is just as important at this stage as it is before graduation.[5]
- **When they begin independent practice.** This is when medical students finally become professionals in the full sense of the term. But in order to maintain this status, physicians have to engage in lifelong continuing professional development. This includes not only the technical knowledge and skills required for diagnosing and treating illness and disease, but also the other requirements of professionalism such as ethics and pedagogy. Service to the profession and the community, for example, by mentoring medical students and serving on medical association and public health committees, is an essential element of professionalism for practising physicians.[6]

Characteristics of student professionalism

As they begin their medical studies, it is reasonable for students to ask what the professional standards are that they are expected to meet. For the preclinical years, it is tempting to reduce these standards to a few or even one, such as conscientiousness,[7] in order to facilitate evaluation. However, this desire for simplicity can result in other important aspects of student professionalism being overlooked. A more complete list is as follows, each positive characteristic accompanied by one or more examples of its opposite.

- **Commitment**. Medical studies are very demanding, even for the brightest students. In this respect they are an appropriate preparation for medical practice, which also requires greater than average dedication of time and energy. Although it is unhealthy to focus on one's studies to the detriment of personal and social well-being, outside activities should never be allowed to interfere with the primary purpose of medical education. An example of a lack of commitment would be the operation of a sideline business, especially one that involves the sale of unhealthy products such as tobacco or junk food.
- **Honesty.** A mistaken view of commitment to one's medical career can lead a student to sacrifice another important characteristic of professionalism, honesty or truthfulness, in order to succeed – for example, by cheating on an assignment or examination. In their interactions with patients, students might allow themselves to be addressed as 'Doctor' without clarifying their status. These examples of dishonesty run counter to the professional, and indeed the basic human requirement that individuals treat other people with respect and do not attempt to gain unfair advantage over them. A pattern of dishonest behaviour is evidence that an individual is unfit to be a member of the medical profession.
- **Discretion.** Since the time of Hippocrates, confidentiality has been an essential element of medical ethics. As soon as they begin to encounter patients, medical students have access to confidential personal information that they must not reveal to others except in limited circumstances, such as in caring for the patients.[8] Respect for patient privacy also requires discretion on the part of students, for example when asking patients for permission to take a medical history or perform an examination. Discretion requires that students do not discuss individual patients in public.
- **Co-operation.** Medicine is a social activity; it involves interaction among medical colleagues, whether generalists or specialists, as well as other health care providers. Students learn the art of collaboration by studying with other students and participating in joint work assignments.[9] A failure to co-operate, for example by hoarding resources or free-riding on the efforts of other students, not only disadvantages others but deprives oneself of experience that is necessary for successful medical practice.
- **Participation.** In addition to collaboration with fellow students on work assignments, professionalism requires participation in other student activities. Just as the professional autonomy of physicians cannot be maintained without their participation in medical associations and the other organs of self-governance, so should medical students play an active role in medical education. Student associations can provide needed support for their members as well as presenting the student viewpoint to the faculty on matters that affect them. Students who refuse to serve on committees or otherwise support their association free-ride on others and miss an important opportunity for developing collegial and leadership experience.
- **Diligence.** The knowledge, skills and attitudes that are essential for medical practice must be learned. This requires more effort for some students than for others, but all students should strive to achieve the highest level of competence of which they are capable. Brighter students for whom success comes easily may be tempted to skip classes or put in the minimum amount of study needed to pass examinations. This can result not only in failure to repay the investment that society makes in their medical education but also in a bad habit of laziness that may impair their medical practice after qualification.
- **Temperance.** Because of their high demands, both medical studies and medical practice can be very stressful. Students and practising physicians may be tempted to relieve stress by recourse to tobacco, alcohol and/or illegal drugs. While total abstinence from these stimulants may not be necessary, they all lend themselves to abuse, leading to temporary impairment as well as more serious medical and psychological conditions. Medical students need to ensure a high level of self-control as regards these substances, not only for their own health and well-being but also to serve as role models of healthy living when they begin to deal with patients.

Dealing with unprofessional behaviour

These characteristics of student professionalism are clearly quite demanding and it is unrealistic to expect that every student will exhibit them to the highest degree from the beginning of medical studies. They are habits that need to be developed over time, through personal effort and support from peers and superiors. Nevertheless, although minor breaches of these requirements are not in themselves serious unless they are part of a recurring pattern of behaviour, major breaches require corrective action. The nature of such action will vary according to whether the offender is oneself, another student or a teacher.

Offending individuals are often the last ones to recognise their own wrongdoing. Whether they are due to ignorance of professional expectations or to self-justification, it is very difficult to admit one's own shortcomings. Nevertheless, individuals are best qualified to detect their own unprofessional behaviour, especially when it goes unnoticed by others. To accomplish this task, students need to know what is required of them and to measure their behaviour by these standards. The medical school is responsible for teaching students about the standards, which requires that professionalism be an integral component of the curriculum. But it is up to the students themselves to determine whether they are meeting the standards.

Once students recognise that their behaviour is unprofessional, especially if there is a recurring pattern of offences, they need to

take corrective action. Sometimes this can be done on their own, but often they will need help from others, whether trusted friends, teachers or qualified behavioural professionals. Some medical schools provide services for students with problems, and student associations may have peer support programmes. Students who recognise that they need help should seek whatever services are available in order to prevent the problem from becoming worse.

As developing medical professionals, students have a responsibility to deal with unprofessional behaviour exhibited by other students. They should first approach the other student and let it be known that the behaviour has been noticed. Rather than accuse the student of unprofessionalism, they should invite an explanation of the behaviour. This may be satisfactory, since the initial impression of wrongdoing might have been mistaken. On the other hand, the student may acknowledge that there has been a transgression and express regret for it. In both of these cases, the problem has been resolved satisfactorily. But it the student refuses to discuss the matter or provide a plausible explanation, further action is required.

A first step would be to offer to help the student, for example, by working together on study assignments. If such offers are rejected, it may be appropriate to discuss the matter with other students, especially when the unprofessional behaviour is widely known. A group approach to the student may be more effective than one from an individual. If the student is still unwilling to face the issue and the behaviour continues, it may be necessary to report him or her to medical school officials. This is no easier a task than it is for practising physicians who witness unsafe or unethical behaviour by a colleague, but professionalism requires that such action be taken for the good of patients.

An even more difficult challenge for students is dealing with unprofessional behaviour on the part of their teachers. Such situations are, unfortunately, all too common,[10] and students understandably feel quite powerless to undertake any corrective action. Nevertheless, such problems need to be addressed in order to protect the actual and potential victims of unprofessional behaviour, whether students, patients or other health providers. It can be dangerous for an individual student to confront the wrongdoer, who is often in a position of authority over the student. It is therefore preferable to act together with other students who have witnessed, or suffered from, the behaviour. If the students feel that the teacher would be willing to discuss the matter, they could do so in an inquiring and respectful manner. If that is not feasible, or if the teacher's explanation is unsatisfactory, the students should approach medical school officials to register their concern and request that appropriate remedial action be taken.

Dealing with unprofessional behaviour should be a high priority for medical schools. First of all, the standards of behaviour expected of students and teachers should be made explicit, for example in a code of conduct. There should be programmes for educating both students and teachers about the standards, and the one for teachers should extend to part-time as well as full-time faculty members. There should also be procedures for dealing with concerns about unprofessional behaviour, whether by students or teachers, and programmes for remedying behaviour that is seriously problematic. Such initiatives are already in place in many medical schools, and these can serve as models for schools that wish to develop their own programs and procedures.

Conclusion

In one very important sense, medical students become professionals when they begin their medical studies. This, however, is only the first step in a long process that does not reach its completion until students finally become fully qualified independent medical practitioners, and even then professionalism needs to be maintained throughout their careers. The adoption of professional values and habits cannot be taken for granted; it requires systematic education and institutional support throughout the course of medical studies.[11] Medical schools that do not provide, and indeed require, such education and support do a disservice not only to their students but, more importantly, to the patients who will be cared for by these future physicians.

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