Review Article

Developing professional identity among undergraduate medical students in a competency-based curriculum: Educators' perspective

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Abstract:

Professional identity formation (PIF) refers to the possession and exhibition of the conduct of a medical professional. It's an external representation of a medical personnel's feelings, beliefs, experiences, and values that influence the provision of holistic patient care. Apart from training medical students to be competent and skilled physicians, one of the goals of today's medical education must be to encourage them to achieve professional identity formation. Many medical schools across the globe have made this explicit during the clinical years of study, but we believe that professional identity formation starts as early as day one of medical school. So, for educators, apart from delivering basic science subject content during early years of study, the creation of learning opportunities and pedagogic space in the curriculum to enhance competencies of PIF becomes mandatory. This competency-based educational approach will help medical students transform and reconsider their own values and beliefs by relating to the behaviors that are expected by the profession, colleagues, and patients when they graduate as medical doctors. In this paper, we discuss how a competency-based curriculum should provide opportunities for students to interact and communicate effectively with patients and colleagues, to self-reflect on their own personal identity before creating a professional identity that is unique to the profession, to make the right judgment and confidently practice medicine in a business-based healthcare system.

Keywords:

Ethical patient care, holistic physician, medical curriculum, professional identity formation

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Introduction

Many problems which doctors face are mostly due to a sharp decline in their professional behaviors[1] and a gradual decline in their commitment as professionals.[2] Educating doctors with mere knowledge and skills devoid of professionalism creates a workforce that can be detrimental to the community and puts a patient's life at risk. Thus, the goal of today's medical education must be the development of core features of a professional identity, namely humanistic skills, behaviors, and attitudes that are congruent with the expectations of the profession.[3]

Professional Identity Formation

To practice medicine, medical students exhibit qualities of professional identity, which relates to one's cognition and understanding of themselves as a professional based on attributes, beliefs, values, motives, and experiences.[4] Students acquire their identity in stages, first as a student, then as an intern and while working as a physician by internalizing the characteristics, values, and norms of the profession that results in individual thinking, making them feel

and act like a physician.[5] Despite some differences in the societal expectations of a physician attributed to an individual, national, and cultural diversities, and the choice of the medical specialty, the core values remain the same.[6] Professional identity formation is an adaptive and developmental process that occurs both at an individual level involving psychological development and at the collective level during socialization where one enacts appropriate roles and forms in the community of professionals.[7] In doing so, when a student joins the workforce, it creates an identity for a student in the society enabling them to work within the ethical demands of the profession, apart from demonstrating professional values and providing ethical patient care.[8]

Universities across the globe are working harder to inculcate the core values of professional identity formation (PIF) that suit them the best as part of medical education. Defining, teaching, assessing PIF, and effectively remediating unprofessional behaviors can be challenging to all medical educators. For an ideal professional identity, the curriculum should allow students to embrace and demonstrate empathy, mindful attention to patient care, integrity, self-awareness, teamwork, beneficence, respect, and equal regard for all, as well as an eagerness to learn, resilience, and attention to self-care too.[9] In addition, the curriculum should provide adequate opportunity for a student to reconsider their own values and beliefs, by relating to the behaviors that are expected by the medical profession, colleagues, and patients.[10] Any changes a student makes to acquire an identity is made through the perspective of professionalism that has implications for their future well-being and relationships with patients.[11] Psychologists believe individuals throughout their lives are perpetually organizing their experiences into something substantial to shape and reshape their personal, private, public, and professional characters.[5] Thus, an individual student's professional identity is not fixed.[12] It continues to evolve in their journey from being a student to transforming into a healthcare professional. PIF is a lifelong learning endeavor achieved through critical reflection during socialization with their role models, the healthcare system, medical school, hospital-based environment, various clinical experiences, and by the attitudes of their peers and supervisors toward patients.

The onus is on medical educators to bring about a paradigm shift with a competency-based medical curriculum that can focus on the translation of physician roles into "measurable competencies" without missing the underlying meaning and relationship of these roles in shaping a physician.[7] Perhaps an ideal competency-based curriculum should assist in the formation of an individual's professional identity by

shifting away from doing the work of a physician into being one. Not all can be incorporated as a formal curriculum, but opportunities to deliver them as elements of the hidden curriculum need to be explored. After analyzing the concepts of socialization, effective mentoring, self-reflection and internship experience, Chin *et al*.[4] reported in 2020 that professional identity could be developed through reflection, mentoring, professional socialization, self-efficacy and goal orientation, and critical thinking. Inclusion of these components in the curriculum can shift the focus from training students to doing the work of a physician to being one, thus making it a real competency-based curriculum.

Overview of the Attributes of PIF and Pedagogical Approaches to Enhance PIF

There are various pedagogical approaches to enhance PIF. As educators, we have identified approaches [Table 1] that were derived from relevant literature and our own experiences. Here, each component of the PIF is described, followed by practical pedagogical approaches that could be incorporated into the existing curriculum to enhance PIF.

Self-awareness

Medical students should pay attention to their own emotions, attitudes and behaviors in response to specific situations, more so toward patient care.[13] It's this emotional makeup that improves a doctor's professional performance, which in turn influences patient care.

There are some teaching interventions that promote self-awareness of students' feelings and emotional difficulties that arise in response to various clinical situations. They can be achieved through (a) classroom-based discussions of emotionally challenging clinical situations[14]; (b) small group discussions where students are encouraged to share their personal feelings of their patients which were unintentionally harbored and that may have interfered with their professional judgment and patient care[15]; (c) instructors observing a livestream or recorded video of a student's encounter with a patient and provide personal feedback[16]; (d) asking students to analyze common problems that patients encounter with doctors (During such sessions, based on published data students should be made to realize that all of these problems are traced to a doctor's behavior.[13] This could be followed by asking students to trace this behavior to a doctors' feelings, personal life problems and attitudes that may affect doctor–patient relationships.); (e) training students to set goals by encouraging them to verbalize their future self-image as medical professionals;[17] then encourage students to constantly assess their progress,

Table 1: Pedagogical approaches to enhance attributes of professional identity formation

Professional identity formation	Pedagogical approaches to enhance PIF				
Self-awareness	Classroom-based discussions	Small-group discussions	Instructor's feedback: Student-patient encounter	Analysing: Doctors-patients' problems	Students Self-evaluation: Personal goals on PIF
Teamwork	Problem-based learning	Case-based learning	Team-based learning	Clinical simulations	Interprofessional education
Attention to self-care	Workshops: Study skills, time management, handling workload self-care before and during assessments		Strategies Planning: Cope and deal with various stressors	Small group sessions	Faculty Mentoring
Empathy	Reviewing: Doctor-patient narratives, Blog sites, movie clips, dramas		Group activities: Role plays, creating videos, blogging	Exploring: Problem-based/ Case-based scenarios	Reflective Essays
Integrity	Adopting non-punctative teaching approaches: Counseling, parent conferences, schedule rearrangement, after hours instruction, psychological or psychiatric evaluations			Mentoring.	Faculty as role models
Respect and equal regards for all	Monitor student-patient interaction: To enhance listening skills, being polite and courteous, being compassionate, considering patients personal values and priorities, together deciding on patient care, that is agreeable to both			Mentoring: Respect for lecturers, punctual for classes, interact with peers without biasedness, collaborating with peers during T-L activities, treating peers with compassion	Faculty as role models
Resilience	Small-group discussions: Plausible issues of burnout, set realistic goals to Overcome burnout, how to deal with difficult situations, disappointments, and setbacks			Mentoring by trained faculty: To enhances skills that can mitigate distress	Self-reflection: On concepts learnt after these sessions
Beneficience	Problem-based learning			Case-based learning	Clinical simulations
Mindful attention to patient care	Narrative exercise: Storytelling, appreciate enquiry, didactic presentations				Group discussions

followed by comparing their assessment with that of the instructors, self-reflect the possible differences between these assessments and make appropriate adjustments to achieve their future self-image as a healthcare professional.

Teamwork

For a medical student to thrive on this modern, integrated healthcare system, healthcare education must focus more on sharing the benefits of teamwork.[18] Students are expected to reflect on team skills and work as a team at every stage of their career in modern-day medical practice. So, learning the art of teamwork must begin as early as year 1 in medical school to minimize fragmented patient care which sometimes may be detrimental to patients. Collaboration between the healthcare providers improves the quality of patient care via their integrated patient care approach.

Early in medical school, students can be exposed to implicit team learning methods through problem-based learning, case-based learning and team-based learning activities that improve teamwork.[18] In these sessions, students learn to work with their peers to achieve learning outcomes while working and collaborating as a team that is moderated by a facilitator. Similarly, students

can be exposed to an explicit learning activity like clinical simulations where students learn to work independently while being instructed and practice teamwork to improve patient care. As a next stage, students from various health professions can come together during clinical simulations or real clinical sessions or ward rounds and experience interprofessional learning through collaboration. All these activities, if guided by tutors, will help students adapt, learn, and interact in diverse learning environments and improve their team skills.

Attention to Self-Care

Attention to the self and balancing study are the essentials for medical students to cope with lifelong learning, along with the delivery of effective patient care.[19] Thus, medical students should learn to pay attention to their health and promote general wellbeing. Besides managing their health, students should learn various coping strategies to overcome the demands and fatigue while they are in medical school before joining the workforce.

Emphasis should be laid on learning study skills, time management, dealing with workload variability during an academic year, and self-care before and during assessments, as early as year 1 of the medical course.[19]

This will help a student to formulate effective strategies to cope and deal with various stressors in medical school. Study skills workshops, small group sessions and mentoring sessions should aim at supporting students to juggle multiple commitments. Similarly, with the guidance of academic mentors, students in clinical years can learn to deal with different challenges relating to patient care stressors as well.

Empathy

Empathy is a cognitive attribute that evokes a medical student's understanding of an individual's inner experiences, their perspectives, and the ability to communicate this understanding during an interaction.[20] Students interact with their peers, lecturers, patients, patients' relatives, and any other personnel socially or for academic purposes while they are in medical school. Such interactions help a medical student describe and understand the nature and circumstances of an individual's emotional state and generate an appropriate response without invoking their own personal emotional response to be considered empathetic.[21]

Individual reflective essays or group activities like role plays, creating a video, blogging, etc., could be used to express a student's point of view that articulates their emotions as a response to an interaction with the emotions of another individual.[20] The interaction could be doctor–patient narratives, reviewing a blog site, watching a movie clip or a drama, and exploring problem-based or case-based scenarios. Such reflections or a group activity enables a student to realize their emotional response, reflect on the current emotional aspect and consider what could have been done better, thus making it an integral part of PIF.

Integrity

In healthcare settings, integrity is encompassing honesty,[22] keeping one's word and consistently adhering to principles of professionalism even when it is not easy to do so. This ensures mutual trust between the physician and patients that culminates into healthy patient–physician relationships and better patient care. Integrity forms the basis of the "social contract" between physicians and society, which grants professionals the privilege of self-regulation. Demonstration of integrity could include reporting medical errors, not engaging in sexual contact between patients and physicians, respecting peers, lecturers, patients.[23]

Younis and Gishen in 2019 stated some measures to improve integrity amongst medical students.[24] It can be achieved through (a) effective mentoring which is to have a dialogue between teachers and students to assist in identifying those exhibiting potentially dubious attitudes, allowing educators to explore and manage underlying causes; (b) a faculty member being a professional role model who could inspire students to lead a meaningful life as physicians of the future; (c) adopting a non-punitive approach in teaching as early as year 1 that allows students to understand their professional responsibilities, plausible sequelae of misdemeanors and its relevance to the patients and the profession itself; and (d) acknowledging and fostering the expertise of students which enhances academic learning environments. This encourages students' sense of educational responsibility as well as a heightened sense of trust and significance in the process.

Respect and Equal Regards for All

Respect for peers, lecturers, patients, colleagues, and team members is recognized in society as an essential attribute of a good medical professional.[25] Therefore, medical students must realize that all people whom they interact with have the right to be treated with dignity and be acknowledged as individuals.

During the early phase of medical school, students can demonstrate these qualities by respecting and listening to lecturers, appearing for classes on time, interacting with everyone in class without bias, collaborating with their peers during various team-based learning activities, demonstrating willingness to treat the peers with compassion and providing appropriate guidance based on their needs. During the clinical years, medical students can demonstrate these qualities to their patients by paying attention and listening to them, being courteous, treating them with compassion, taking their personal values and priorities into consideration, and together deciding on the treatment plan that is agreeable to both. All of these activities can be tutor-guided or facilitated by a perfect role model to make students realize that being respectful and having regard for their patients and colleagues create a healthy working environment that makes the patients feel that they are cared for as individuals and that the members of the healthcare team are engaging, collaborative and committed to service.[25]

Resilience

Medical students face numerous stressors across various years of study. Resilience refers to the process by which a student develops their own personal resources as stress busters and avoid burnout.[26] The current demands and challenges in the healthcare system can be stressful, and resilience is necessary for medical students to be an effective, adaptable, and sustainable workforce.[27] So, medical students must learn to be resilient to adapt and cope with any situation that they may encounter.

According to Bird *et al.*,[28] introducing burnout in medical students as early as year 1 to enhance their ability to cope and adapt well in the face of adversity improves a

medical student's quality of life. Conduct small group sessions, both in pre-clinical and clinical phases, to discuss plausible issues of burnout and set realistic goals or expectations to overcome burnout. During these sessions, students can be taught how to deal with difficult situations, disappointments and setbacks, during both clinical and non-clinical years. This should be followed by self-reflection of concepts learned after these sessions, and regular one-to-one mentoring by the training faculty equips students with skills that can mitigate distress.

Beneficence

Beneficence means kindness and generosity.[29] Its principles have a spectrum of obligations that require medical students to take actions that they believe are in the best interest of their patients. Students should learn to respect patient autonomy by ranking the available treatment options, thus making a patient be part of the decision-making process before they are being treated. Acquiring beneficence is an active process that calls medical students to advocate compassion toward their patients, actively seek opportunities to understand patients' value systems and provide better patient care.[30]

Problem-based and case-based learning sessions expose the learners to a spectrum of obligations that require them to make a clinical assessment that is in the best interest of the patients.[31] Similarly, learning methods like problem-based learning, case-based learning, and clinical simulations help a student to make decisions that improve patient care. All of these sessions, when moderated by a trained facilitator, helps a student to actively seek opportunities to do good for their patients, respect patient autonomy, rank the available treatment options and allow the patient to be part of the decision-making process.

Mindful Attention to Patient Care

It's a medical student's ability to use their own thought processes to regulate behaviors to remain focused on the objective of patient care which is to alleviate the patient's sufferings compassionately and not merely cure the disease alone.[32] Mindful attention helps a student to take control of their own behaviors and thoughts and stop them from focusing on unconscious impulses that hinder the objective of patient care.

Students could be exposed to narrative exercises like storytelling, appreciate inquiry, didactic presentations, and group discussions on mindfulness of patient care.[32] The narration could be related to awareness of unpleasant or pleasant sensations, feelings, and thoughts; meaningful clinical encounters; times when students could draw a boundary and say "No"; times of attraction toward a patient; times when they cared for themself as opposed to caring for others and being with a suffering or

end-care patient.[33] All such reflective practices enhance a student's physician–patient relationship.

Conclusion

Medical educators can now revisit the existing curriculum, rewrite the learning outcomes that aid in PIF, develop content for PIF, identify what to teach and how to teach that helps in PIF, and design an appropriate assessment method and incorporate them into the existing curriculum. Apart from knowledge and skills, the medical curriculum should educate medical students with the values and ethical principles that surround the profession, and aid students to introspect on their own personal identity before establishing their identify as a healthcare provider. Such a medical curriculum can help in producing a practice-safe, practice-ready workforce that understands the responsibilities and core values of the profession and applies them in clinical practice.

Conflicts of interest
There are no conflicts of interest.

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