

Review article

Emotional intelligence: The road to the development of professionalism

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Abstract

The development of medical professionalism poses a considerable challenge in medical education, even though it is essential for medical practitioners. The dynamics and ambiguity of medical professionalism cause difficulty in setting specific learning objectives, creating validated assessment methods, and designing effective teaching methodologies. Meanwhile, emotional intelligence is an expanding area of study in medical education. There is a substantial connection between medical professionalism and emotional intelligence, and certain attributes of emotional intelligence contribute to the development of professionalism. Numerous reports have illustrated emotional intelligence development and assessment in health professions education, and thus, emotional intelligence is potentially a path to developing medical professionalism.

Keywords: Emotional intelligence, medical professional development, medical professionalism, professional identity formation, professionalism.

Although medical professionalism is essential for medical professionals, its development in medical training programs remains undetermined. Several accrediting bodies have included professionalism as a core element in the medical curriculum⁽¹⁾, from medical students to specialist training programs. Many medical programs have tried to provide learning experiences and assessments for medical professionalism; however, professionalism is dynamic, and standardized teaching and evaluation have not been fully established.^(1,2)

On the other hand, emotional intelligence, which relates to professionalism, is a field that is currently being explored. Numerous studies on the teaching and assessment of emotional intelligence in medical education have recently been published. This

article aims to connect emotional intelligence with professionalism. Then, it proposes the idea of cultivating professionalism and accountability through the development of emotional intelligence.

Medical Professionalism

Medical professionalism has been defined in various ways, as illustrated in **Figure 1**, and centers on the development of desirable and ethical professional behaviors that support the public's trust in doctors.⁽¹⁾ Despite the lack of a universally accepted definition, the key characteristics that are frequently highlighted in the literature include empathy, interprofessional collaboration, ethical conduct, and accountability to patients and society.⁽³⁾ Empathy includes cognitive and emotional components, such as understanding another's perspective and genuinely caring about their feelings, which are essential for building strong doctor-patient relationships and are associated with a physician's mental well-being.⁽³⁾ Interprofessional collaboration is defined as effective and respectful teamwork with other health professionals and is essential for delivering high-quality care, enhancing patient satisfaction, and reducing medical errors.⁽³⁾

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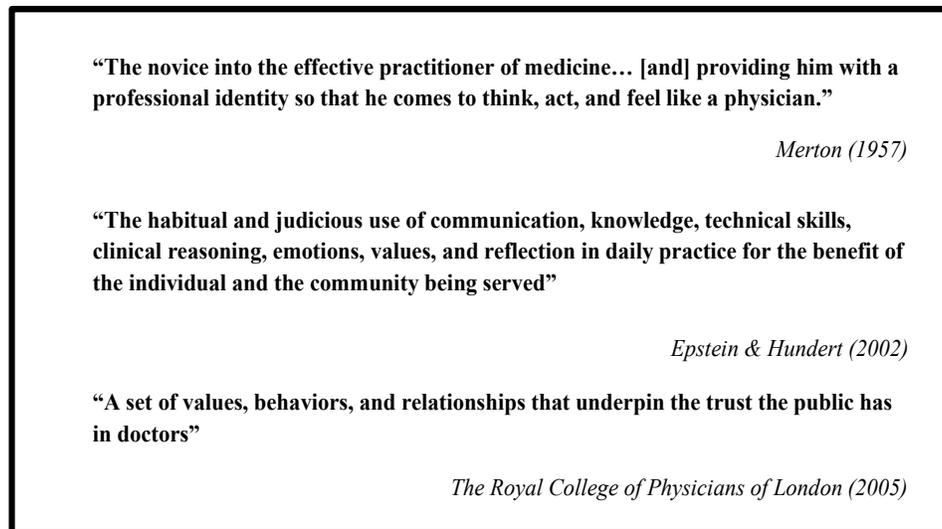


Figure 1. Examples of definition for medical professionalism.⁽¹⁾

Moreover, ethical conduct refers to the consistent application of core ethical principles, such as respect for patient autonomy, beneficence, non-maleficence, and justice.⁽⁴⁾ Accountability to patients and society denotes the physician’s responsibility to prioritize patients’ interests, maintain transparency, accept responsibility for clinical decisions and outcomes, and uphold societal trust.⁽¹⁾

Furthermore, recent literature has proposed a more structured way to describe medical professionalism. For example, Blank L, *et al.* proposed the *Physician Charter on Medical Professionalism*, which describes medical professionalism through three core principles, namely the primacy of patient welfare, patient autonomy, and social justice, and ten professional commitments.⁽⁵⁾ In contrast, medical professionalism has not been clearly defined by the Thai Medical Council, but it established the Professional Standards for Medical Practitioners (2012). The first domain is preserving professional honor and dignity, which includes integrity, honesty, responsibility, teamwork, and a commitment to continuous self-improvement. The second domain includes patient-centered care, which emphasizes maximizing patient benefit, safety, and confidentiality, as well as respect for patient autonomy. The third domain is social responsibility, which reflects the physicians’ duty to provide equitable care and contribute to the continuous improvement of health services. Together, these domains capture the essential meaning of medical professionalism in the Thai context.⁽⁶⁾

In summary, medical professionalism remains abstract and lacks a standard framework even though it has received considerable attention in recent decades. This makes it challenging for educators and learners to clearly translate these principles into observable behaviors in daily clinical practice.

Medical professionalism development and its challenges

Current medical professionalism is developed through a combination of structured education, reflective practice, and institutional support systems that extend beyond traditional teaching methods. Modern medical curricula emphasize early exposure to ethical principles, communication skills, and professional conduct, which are reinforced by role modeling and mentorship throughout clinical training.^(7,8) Moreover, institutions increasingly recognize the impact of this hidden curriculum, where cultural and behavioral norms are observed in clinical environments.^(7,9) According to Birden H, *et al.*, effective professionalism future physicians are equipped to meet the evolving expectations of society and the healthcare system.⁽⁷⁾

The development of professional identity by Kegan is a framework that could be applied to develop medical professionalism.^(1,2,10) Kegan explained that personal identity develops by constructing meaning through a new, more complex lens than the previous one. Initially, in the instrumental stage, individuals focus on their personal success and external rewards. However, as they progress to the socialization stage, they learn societal roles, understand the expectations,

and follow group norms. In the self-authoring stage, they internalize and integrate the social norms into their personal values. Finally, in the self-transforming stage, individuals move beyond their own perspective to consider multiple viewpoints. This progression helps shape the identity and ethical understanding of medical professionals. Regarding Kegan’s framework and arguments from previous literature, medical professionalism develops throughout one’s professional life.^(1, 2)

Nevertheless, teaching professionalism in medical education remains a challenging task, as teaching and learning in medicine require specific objectives and standardized assessment at the course and program levels. The learning activities should be designed based on particular goals, such as SMART learning objectives. Effective learning experience design requires learning objectives that are specific, measurable, achievable, reliable, and time-bound.⁽¹¹⁾ Learning objectives should be observable performances, but medical professionalism is an internal value that cannot be determined by observable performance.^(11, 12) However, setting learning objectives for professionalism purely as observable behaviors might not reflect the true nature of medical professionalism. Professionalism is a deeply internal value that is shaped by cultural, societal, and contextual influences, which cannot always be explicitly observed or standardized. Therefore, relying solely on

observable performance risks oversimplifies a complex, dynamic concept that varies across cultures and clinical environments, and thus, learning objectives for medical professionalism are questionable.

Furthermore, medical professionalism is developed throughout one’s professional life. It is a lifelong development that is shaped by ongoing experiences, reflections, and learning. The professional dilemmas that doctors face are key growth opportunities, helping them refine their values and behaviors over time.^(1, 2) Therefore, professionalism cannot be fully defined by fixed milestones for each academic year, as its development depends on real-life challenges and personal growth throughout one’s professional life. Educators should consider applying alternative constructs with concrete frameworks in their educational practices to cultivate desirable behaviors that are consistent with medical professionalism.

Emotional intelligence

Emotional intelligence is a type of intelligence that relates to accurately perceiving and handling emotions and using emotions to facilitate thinking. Emotional intelligence has four components, namely self-awareness, self-regulation, empathy, and relationship management.⁽¹³⁾ Mayer and Salovey’s definition of emotional intelligence and the Boyatzis and Mckee’s framework of emotional intelligence are illustrated in **Figure 2**.^(13, 14)

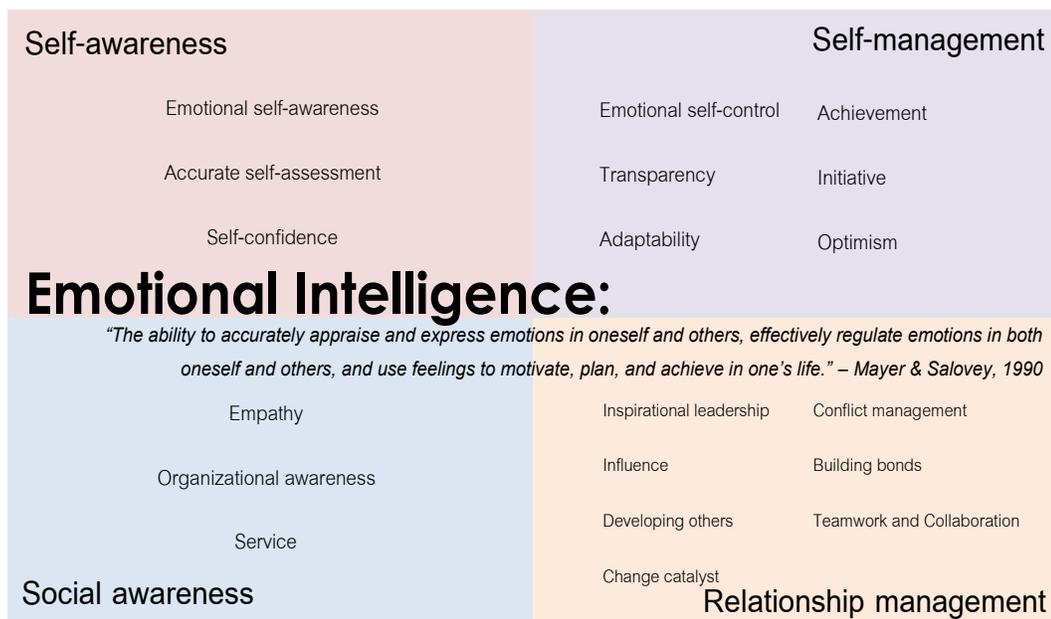


Figure 2. Definition of emotional intelligence and its core elements.^(13, 14)

Currently, emotional intelligence frameworks, including trait, ability, and mixed models, are widely discussed.⁽¹⁵⁾ Moreover, numerous instruments have been created to measure emotional intelligence based on these specific models. Those instruments have been standardized for validity and reliability and have been employed in several studies.^(15, 16)

Emotional intelligence is an interesting field for researchers in medical education, and several studies have explored the relationship between emotional intelligence and factors in medical education. Emotional intelligence positively relates to self-compassion and job satisfaction⁽⁷⁾ but negatively correlates with burnout^(10, 17-19) and depression.⁽¹⁹⁾ Moreover, emotional intelligence is closely associated with the quality of psychological, emotional, and physiological care given to patients by healthcare professionals.⁽³⁾ Higher emotional intelligence in medical students increases their empathy, doctor–patient relationships, teamwork, and stress management. Furthermore, emotional intelligence is a contributing factor that underlies leadership, communication, and professionalism.^(17, 18, 20)

Relationship between medical professionalism and emotional intelligence

Other than the explanations proposed in the literature, there are many characteristics related to emotional intelligence and professionalism, such as empathy, ethical behavior, and interprofessional collaboration.

Empathy is a characteristic that is shared by professionalism and emotional intelligence. Shi and Du reported that emotional intelligence positively correlates with perspective-taking and empathic concern.⁽²⁰⁾ Furthermore, they explained that individuals with high emotional intelligence can recognize and communicate emotions clearly, which allows them to build good relationships with other people. In addition, as they are good listeners, they tend to take the perspective of others and express their empathy. In contrast, individuals with lower emotional intelligence may ineffectively communicate with others because they are shy or uneasy in social settings. This may be an obstacle to taking others' perspectives and expressing empathetic concerns.⁽²⁰⁾ Toriello HV, *et al.* also reported the positive correlations between emotional intelligence, empathy, and doctor–patient relationships.⁽¹⁸⁾

Interprofessional collaboration requires various emotional intelligence-related skills. Individuals should have self-awareness to understand their professional roles and responsibilities, while they should also have empathy to understand others' professional roles, expectations, and limitations. In teamwork, conflicts usually arise, and individuals should properly regulate themselves to collaborate professionally. Lastly, people should effectively manage relationships within their team to maintain interprofessional collaborations. Therefore, developing emotional intelligence can help people effectively communicate and maintain teamwork. Some supportive evidence has reported a positive relationship between emotional intelligence, communication, and teamwork.^(17, 18)

Ethical behavior requires self-awareness and self-regulation. Regarding the framework for professional development proposed by Kegan, individuals initially recognize social norms, social values, and codes of conduct. They then internalize those particular values in themselves; however, self-awareness and self-regulation are essential before the internalization process. Self-awareness allows individuals to recognize their thoughts and feelings toward situations, whereas self-regulation helps them control their behavior and expressions. Their primary desire may not align with social expectations, but they can recognize this and adjust to behave appropriately under professional norms. Moreover, emotional intelligence helps individuals to balance boundaries between themselves and society, which is the essential process of identity formation.⁽²⁾

Reflection plays an important role in the development of professional identity and requires self-awareness. According to the critical review by Mount GR, *et al.*, reflective writing and narrative reflections are the dominant learning activities for developing medical professionalism. To develop a professional identity via a reflective process, four elements should be recognized, including relationship with self (roles), situations (clinical or learning), professions (values and norms), and societies.⁽²⁾ To recognize those elements, self-awareness is necessary to reflect on one's own experience.

To illustrate the link between the development of emotional intelligence and the preferred behaviors aligned with medical professionalism, we adopted Blank L, *et al.*'s *Physician Charter on Medical Professionalism*⁽⁵⁾, which outlines ten professional commitments (**Table 1**). Self-awareness and self-

management enable physicians to recognize their own competencies and conflicts of interest, regulate their professional conduct, and protect patient confidentiality. In addition, social competencies allow physicians to relate effectively to patients and their families, appropriately allocate limited resources, and maximize the quality of care provided. Nonetheless, medical professionalism is defined differently across cultures. We therefore aim to illustrate these relationships as a concrete example of how emotional intelligence contributes to medical professionalism.⁽⁵⁾ When aligned with the Professional Standards for Medical Practitioners (2012) of the Thai Medical Council, emotional intelligence can be directly associated with the three core domains of medical professionalism. Self-awareness and self-management support the preservation of professional honor and dignity. Social awareness and relationship management strengthen patient-centered care by promoting respect for patients' rights and autonomy. In addition, these social competencies reinforce social responsibility by enabling equitable care as well as collaborative practice.⁽⁶⁾

We emphasize that, among the various medical professionalism frameworks, the cultivation of emotional intelligence has the potential to enhance medical professionalism, as illustrated in **Table 1** and **Figure 3**.

Educational applications

Instead of the ambiguous development of professionalism, training in emotional intelligence allows for more tangible strategies. Because professionalism is dynamic and varies across cultures, defining clear learning outcomes and competencies is challenging. This problem has been unsolved in medical education for decades.⁽²⁾ On the other hand, emotional intelligence has garnered increasing attention from medical educators. Several research studies on emotional intelligence in medical education, including its characteristics, applications, development strategies, and validated measurement tools, have recently been published using qualitative and quantitative methodologies.^(17, 18) There are many facets related to emotional intelligence and professionalism that have been discussed above.

A conceptual framework for emotional intelligence facilitates the establishment of learning objectives. Its four components support educators in defining the learning outcomes for specific classes, courses, and programs. In the context of competency-based curricula, which are currently widely employed, emotional intelligence offers a more practical approach to establishing and developing milestones for each academic year. For example, preclinical students can focus on developing self-awareness and self-regulation through group projects while simultaneously beginning to understand interprofessional perspectives and collaborations during their early clinical years.

Table 1. Alignment of emotional intelligence domains with medical professionalism frameworks.

	Physician carter of medical professionalism⁽⁵⁾	Professional Standards for Medical Practitioners 2012 of the Thai Medical Council⁽⁶⁾
Self-awareness and self-management	Commitment to professional competence Commitment to maintaining trust by managing conflicts of interest Commitment to patient confidentiality Commitment to honesty with patients Commitment to professional responsibilities	Professional honor and dignity (Integrity, honesty, self-improvement)
Social awareness and relationship management	Commitment to improving quality of care Commitment to improving access to care Commitment to a just distribution of finite resources Commitment to maintaining appropriate relations with patients	Professional honor and dignity (teamwork) Patient-centered care Social responsibility

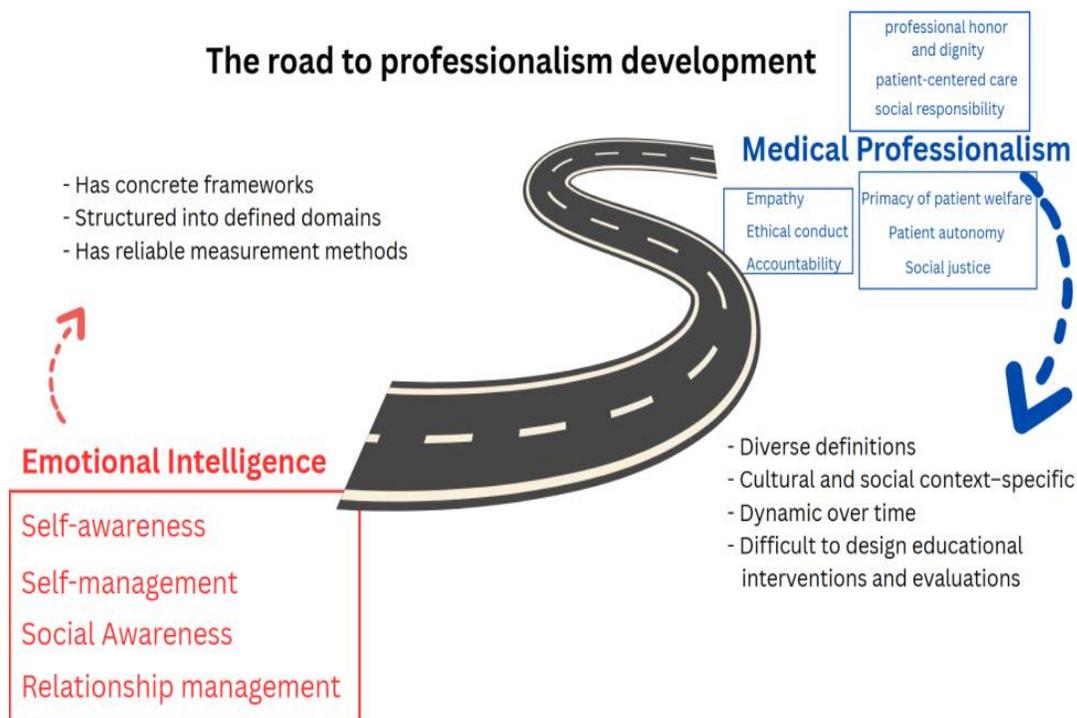


Figure 3. The road to professionalism development.

There is an increasing body of evidence that supports instructional design approaches for the development of emotional intelligence. Some studies have reported instructional strategies to improve emotional intelligence in medical education, such as coaching, simulations, group discussions, and emotional expression training workshops.⁽¹⁸⁾ Although the effectiveness of these strategies requires further investigation, they provide fundamental frameworks for educators to organize their curricula and classes. Moreover, clear learning objectives help learners understand the knowledge and skills they are expected to gain from the classes.

Furthermore, assessing emotional intelligence, rather than professionalism, is more feasible. Unlike the inconsistent characteristics of professional behavior, emotional intelligence includes clearly defined desirable behaviors that are easier to observe externally. Multisource feedback, combined with assessment rubrics for each emotional intelligence component, can be used to evaluate the learners' behaviors. In contrast, internal characteristics can be evaluated via psychometric questionnaires. However, there are limitations in evaluating emotional intelligence, which will be discussed further.

Emotional intelligence cultivates the fundamental abilities that are necessary for developing medical professionalism throughout one's professional life. As suggested in the literature, the development of professionalism does not end with training programs; rather, it continues throughout real-world professional experiences. Developing medical professionalism requires reflective abilities, and emotional intelligence enhances the learners' capacity to reflect on their experiences after completing training. Moreover, the ability to receive feedback and engage in remediation, both of which are essential for the development of professionalism, can be improved through higher emotional intelligence.

Although there are several strengths in training emotional intelligence to develop professionalism, there are limitations that educators should recognize when applying this concept. First, although there are many overlapping areas between emotional intelligence and professionalism, each has distinct underlying properties. Although the links between them are supported by evidence, this does not guarantee that students with high emotional intelligence excel in medical professionalism, or vice versa, and thus, educators should recognize the distinct properties of

these two attributes. Second, the assessment of emotional intelligence still requires further exploration and clarification. The increased research on emotional intelligence has made it more tangible, measurable, and trainable. However, uncertainties remain, and some studies may not be beneficial for implementation from a developmental perspective. For example, the trait model views emotional intelligence as a set of fixed personality traits. From this perspective, educators may employ emotional intelligence as an admission criterion for selection rather than as a skill to be developed. In contrast, other models describe emotional intelligence as a set of trainable skills. Lastly, the assessment of emotional intelligence requires improvement. Although many self-report questionnaires have been validated and widely used in research, they may not be suitable for educational assessment because of the inherent biases of self-reporting. Conversely, multisource feedback may be practical in educational settings, but it lacks sufficient evidence supporting its psychometric validity and reliability. Nonetheless, both evaluation methods can offer valuable insights. Therefore, educators should carefully choose measurement instruments that align with their specific evaluation goals.

Conclusion

Medical professionalism is essential for physicians, but developing these characteristics faces several challenges. Many attributes of professionalism overlap with those of emotional intelligence, and some components of emotional intelligence, such as self-regulation and empathy, are fundamental to the development of professionalism. Based on this, emotional intelligence may serve as a pathway to developing medical professionalism. It helps educators define learning outcomes, design learning activities, and identify observable behaviors for assessment. In addition, emotional intelligence enables learners to continue developing their professionalism throughout their careers. However, some limitations exist, and educators should be mindful of these when applying emotional intelligence concepts when developing a curriculum aimed at enhancing medical professionalism.

Author contributions

WI and TP contributed substantially to the concept and design of this study, acquiring the data, reviewing the literature, and its analysis and interpretation. WI contributed to drafting the manuscript. TP edited the manuscript critically for important intellectual content. Both authors approved the final version submitted for publication and accept responsibility for the statements made in the published article.

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Conflict of interest statement

The authors declare that there is no conflict of interest.

Data sharing statement

The present review is based on the references cited. All data generated or analyzed during the present study are included in this published article and the citations herein. Further details, opinions, and interpretation are available from the corresponding author on reasonable request.

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