

Emotional Intelligence in the Era of Artificial Intelligence for Medical Professionals

Vagisha Sharma and Harendra Kumar
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Abstract

In today's rapidly increasing healthcare industry, the combination of emotional intelligence (EI) with artificial intelligence (AI) has significant consequences for medical practitioners. Emotional intelligence, including the capacity to perceive, understand, and manage emotions, is emerging as a critical advantage for medical practitioners, particularly as AI technologies augment clinical operations. This abstract analyzes the different dynamics of EI in the context of AI integration, demonstrating its significance across multiple fields. As more medical professionals collaborate with AI-powered systems, a delicate interaction between human emotional intelligence and AI's analytical brilliance emerges, necessitating an acceptable balance. Furthermore, the impact of EI on crucial aspects of medical education, practitioner-patient interactions, and overall job satisfaction is investigated. This abstract emphasizes the imperatives of strengthening EI talents despite technological development, advocating for a harmonious integration that supports both the cognitive and emotional parts of healthcare practice by recognizing the synergies and potential conflicts between EI and AI.

Keywords: Emotional intelligence, Artificial intelligence, Medical professionals, Healthcare integration, Cognitive-emotional balance, Technological advancements

Emotional intelligence refers to the ability to manage one's own emotions as well as those of others, to recognize them and use this knowledge to form ideas and actions, to refocus attention on pressing issues, to boost motivation, and to enable flexible planning [1]. It has four components: the ability to comprehend and express one's own and other people's emotions; assimilate feelings; understand emotions; and control emotions [2]. In an era of the growing popularity of artificial intelligence, EI is still one of the 10 life skills identified by the World Health Organization as assisting individuals in acting adaptably and positively. [3] EI is one of the 10 life skills identified by the World Health Organization as assisting individuals in acting adaptably and positively [3]. Emotional intelligence is an intangible aspect of one's personality that also reflects in a resident's work life. It's an essential skill needed by healthcare professionals since their work environment frequently involves a large emotional burden. [4]

a.) Selection process of medical students and residents

Emotional intelligence has been found to have a strong relationship with the parasympathetic nervous system, which is a marker of higher cognitive ability and physiological competence in medical students and residents. Thus, it is important to consider measuring emotional intelligence in addition to general intelligence when selecting students for the medical field and future residency training [5, 6].

b.) Impact on the preference for training courses

Different health professionals have varied responsibilities and duties, which affect how society perceives them and how students choose their training programs. For instance, research has revealed that nursing students exhibit higher levels of empathy than students in other health professions. [7] Also, the development of professionalism among health professionals has differed, which has frequently resulted in conflicts among professionals. For instance, entering medical school is exceedingly competitive in many nations, so students with the best grades frequently choose to pursue medicine. This has a double-edged effect, frequently resulting in a strong sense of accomplishment and high self-esteem while simultaneously raising stress levels and the risk of burnout. On the other hand, nursing is frequently underestimated in many societies, which can lead to conflict between doctors and nurses and could have an impact on nurses' self-esteem. [8, 9]

c.) Job satisfaction and Quality of Life

The emotional quotient of medical professionals affects their quality of life and job satisfaction. Various aspects connected to workplace intelligence have been discovered through studies on the traits that influence effectiveness at work. A cross-sectional study by Puliakkadi et al. (2020) at a medical college in India looked at the association between emotional intelligence, its dimensions, and socio-demographic factors. According to their study, senior professors scored higher on the elements of managing one's own emotions ($P = 0.01$) and total emotional intelligence ($P = 0.04$) than interns and younger residents. On the other hand, medical professionals in the nonclinical division outperformed medical professionals in the

clinical division in terms of general emotional intelligence ($P = 0.01$). [10]

The synergistic relationship between Emotional Intelligence (EI) and Artificial Intelligence (AI) has the potential to create a new paradigm for medical practitioners in the ever-changing world of healthcare. As AI augments clinical capabilities, the need for EI in delivering compassionate and complete patient care is emphasized. The complex dance between cutting-edge technology and human-centered empathy is not only the pivot on which patient results are based, but it also serves as a barrier against emotional alienation in the aftermath of AI integration. As a result, supporting a harmonious synthesis of EI and AI has the potential not only to improve medical practice but also to preserve the inherent humanity that constitutes the essence of healthcare.

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