



The Essential Role of Interpersonal Communication in Medical Education

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Abstract. *Interpersonal communication is a critical component of medical education, especially among educators. It plays a pivotal role in shaping the doctor-patient relationship and improving patient satisfaction. As academic supervisors, educators are required to exhibit strong communication skills to effectively engage with students and act as instructors in communication within medical education institutions. Interpersonal communication is vital for guiding students throughout their academic journeys, whether in the capacity of facilitators or mentors. Essential skills in this area include questioning, providing reinforcement, explaining, listening, building rapport, employing humour, and utilising other nonverbal techniques. Educators in medical education are expected to excel in these interpersonal communication skills to foster students' personal and professional development as physicians. In addition, they must be proficient in teaching these skills to their students, particularly in the context of patient history. Therefore, interpersonal communication is a fundamental component of both undergraduate and postgraduate medical curricula.*

Keywords: *Communication, interpersonal communication, medical teacher, medical education*

Type of the Paper: Review

1. Introduction

Interpersonal communication is a factor that plays a very important role in human life as social beings.[1] Interpersonal communication plays an important role in education, such as communication between students and each other, communication between teachers and students, and even in medical education, especially in doctor-patient communication. Interpersonal communication is one of the competencies that must be mastered by a doctor.[2]

Interpersonal communication refers to the exchange of messages between two individuals who have a close and well-established relationship.[3] This skill is vital for educators, as it supports student guidance. A teacher's adeptness in interpersonal communication plays a crucial role in boosting student motivation, attachment, engagement, class attendance, well-being, positive emotions, performance, and overall academic achievement.[4] This form of communication can strengthen the relationship between teachers and students, especially in coaching and mentoring scenarios.[3,5] A teacher's interpersonal communication involves both verbal and non-verbal elements, including expressions of care, clarity, humor, praise, affirmation, and reprimand.[4]

2. Discussion

Since 1910, Georg Simmel and other sociologists have examined interpersonal communications. This form of communication comprises social interactions and personal habits at the individual level. Within the realm of medical education, communication skills are pivotal in various contexts, such as teacher-student interactions, doctor-patient dialogues, and communication among medical peers. The sociopsychological approach serves as the foundational theory for understanding interpersonal communication, highlighting the importance of situational context, the intrinsic nature of communication, and the evaluation of information exchanged during interactions.[6]

According to AMEE Guide No. 20, Harden et al. identified 12 essential roles for educators in medical education, including informants, facilitators, curriculum planners, role models, assessors, and resource developers. Interpersonal communication is crucial, particularly for facilitators and informants, in their interactions with students. As facilitators, educators serve as both guides in the learning journey and mentors in the academic development of medical students.[7] Majid's research underscores the importance of communication in enhancing teaching quality.[8] Additionally, medical educators are responsible for teaching effective doctor-patient communication. Establishing positive relationships with patients is vital, as interactive communication is integral to healthcare. It ensures accurate diagnosis, appropriate treatment, and enhances patient commitment by fostering understanding of the treatment, adherence to follow-up recommendations, and maintenance of long-term health.[9] Interpersonal communication is particularly important for physicians during patient anamnesis, which requires a professional relationship characterized by trust, empathy, and mutual respect.[10]

Some of the core communication skills that drive effective communication can be developed. The first was questioning (questioning skills). Asking questions in communication aims to initiate interactions, control interactions, obtain information, arouse interest and curiosity, express interest, diagnose difficulties, ascertain behaviors, attitudes, feelings and opinions, encourage maximum engagement, assess knowledge, encourage critical thinking and evaluation, communicate expectations and values, encourage group interaction and maintain attention in a group.[5]

The second fundamental concept is reinforcement, which acts as a stimulus to enhance an individual's response. Reinforcement can be divided into two categories: positive and negative. Positive reinforcement involves a stimulus with an intrinsic value that encourages an individual to engage in communication. In contrast, negative reinforcement discourages individuals from repeating a behaviour or prompts them to avoid it. Reinforcement plays a crucial role in shaping verbal behavior and fostering personal development and self-confidence.[5]

The third essential communication skill was explanation. The process of explanation facilitates improved understanding among individuals. It also aids in learning, clarifying uncertainties, reducing anxiety, modifying attitudes and behaviours, empowering individuals, promoting autonomy, and enhancing self-awareness. In teacher-student interactions, the core principle of explanation is to have a comprehensive understanding of both the subject matter and the student.[5]

The fourth component is self-disclosure, which enhances closeness to a communication partner. This skill is vital for initiating, developing, and maintaining communication relationships, as well as for building trust and enhancing personal relationships.[5]

The fourth component is self-disclosure, which enhances closeness to a communication partner. This skill is vital for initiating, developing, and maintaining communication relationships, as well as for building trust and enhancing personal relationships.[5] Listening is a pivotal skill in interpersonal communication. It involves understanding and verbally responding to others' speeches. Listening encompasses higher-order cognitive processes, starting with hearing, followed by comprehension, evaluation, interpretation, memory retention, and ultimately, response.[5] To ensure effective communication, it is important to consider the attributes of a competent listener. According to Bodie et al., a proficient listener should: (1) identify the main idea of shared information, (2) recognize supporting details, (3) discern relationships between conveyed ideas, (4) recall the main idea and its foundational details, (5) exhibit an open-minded attitude, (6) identify the messenger's purpose and process the conveyed information, (7) differentiate between factual and opinion-based information, (8) distinguish between emotional and logical arguments, (9) detect biased information, (10) recognize the speaker's attitude, (11) synthesize, evaluate, and summarize information, (12) identify discrepancies between verbal and non-verbal language, (13) apply active learning appropriately, and (14) paraphrase delivered arguments or information.[5]

Additional skills necessary when listening and responding to an interlocutor include posing questions, providing feedback or comments on the interlocutor's objectives, responding to the interlocutor's emotions, attitudes, and situations, responding after the interlocutor has conveyed information, paraphrasing or re-evaluating understanding, and empathizing with the interlocutor.[5]

Humor is another component or skill in interpersonal communication, as it can enhance an individual's health, personal life, and imaginative abilities.[5] Other strategies essential for effective interpersonal communication include appreciation, empathy, confirmation, clarity, trust, emphasis, readiness, and fostering good relationships.[11]

Another critical component of communication is non-verbal behaviour exhibited through the messenger's body language. In the context of education, the messenger is typically a teacher. According to Majid's research, nonverbal cues, including hand gestures, body movements, facial expressions, and eye contact employed by teachers during instruction can significantly enhance student comprehension and foster a positive learning environment. It is noted that non-verbal behavior can convey up to 90% of the intended message to the recipient.[8]

Interpersonal communication is integral to educators' guidance. Personal guidance encompasses support in areas such as motivation, self-confidence, and self-awareness, thereby fortifying students' physical and mental capabilities. This guidance is educational in nature, addressing learning objectives, processes, curriculum, student learning strategies, development, and attitudes.[12] The guidance program implemented is educational guidance, specifically targeting learning challenges or self-regulated learning. Guidance techniques are realized through a combination of interpersonal communication methods, coaching, and counseling.[12] The counseling employed is directive in nature. The steps involved in counselling techniques are as follows:[12] (1) collecting and analysing data related to student issues, (2) interpreting data concerning students' strengths, (3) identifying problems and their causes, (4) forecasting the future development of these problems, and (5) implementing measures to assist students in resolving their issues.

Within the context of medical education, a structured mentoring program is implemented in which educators assume the role of mentors and students that of mentees. This initiative is intended to promote both the professional and personal growth of students.[13] As academic advisors, medical educators can leverage mentoring skills to aid in student development. Key competencies for mentors include the capacity to forge relationships with mentees, ensure open communication, motivate students, act as role models, oversee progress, provide sponsorship, share core values, offer coaching, and present diverse perspectives.[14] Among the various communication frameworks in mentoring, the Comskill mentoring training model is notable. It encompasses six stages: (1) introduction, which serves as the initial phase of mentoring; (2) establishing the relationship, involving the setting of communication ground rules, creating a secure environment, and building rapport; (3) aligning expectations, which may include scheduling meetings, selecting venues, and determining discussion topics for mentoring sessions; (4) evaluating the skills, needs, and interests of both mentor and mentee; (5) setting objectives using the SMART goals framework—Specific, Measurable, Attainable, Relevant, Time-based; (6) providing and soliciting feedback, a vital element of interpersonal communication that encourages students to reflect and enhance their actions and behaviors; (7) exhibiting empathy; and (8) concluding the dialogue at the end of the mentoring session.[15]

According to Majid (2017), educators must possess a range of communication skills to effectively conduct learning activities. These skills include confidence, the ability to create a productive and supportive learning environment, facilitating increased interaction between teachers and students, using an appropriate tone of voice, language proficiency, effective listening skills, and nonverbal communication. The role of interpersonal communication in education is multifaceted, encompassing the sharing of information, problem solving, and fulfilling social and emotional needs. Moreover, it serves as a catalyst for motivation, enhances student engagement, fosters a comfortable learning atmosphere, and aids in the development of student independence, self-concept, responsibility, self-awareness, and behavioural change. Additionally, research by Chen et al. indicates that effective interpersonal communication in healthcare settings can lead to improved patient satisfaction.

The interpersonal communication training program for students, as proposed by Atkinson and McMahan, encompasses a comprehensive set of skills, including verbal and nonverbal communication, listening, perspective, identity, emotions, culture, and media. The focus on verbal and nonverbal communication was intended to enhance students' awareness of their interpersonal relationships. These forms of communication are foundational to interpersonal interactions and play a crucial role in strengthening interpersonal relationships, and vice versa. Additionally, culture and media are pivotal in interpersonal communication, as they can significantly reinforce interpersonal connections.[18]

In medical education, instructors also assume the role of teaching interpersonal communication, specifically focusing on the patient-doctor relationship in clinical skills training and professional education. The inclusion of interpersonal communication training in the medical education curriculum is essential.¹⁹ Effective interpersonal communication training in medical education can be delivered through various methods, including didactic approaches, patient interactions, videos, small group learning, video recordings, rehearsals, role plays, and a combination of didactic and practical exercises.[19, 20] Bennet and Lyons proposed an 8-week module for interpersonal communication training. This module encompasses materials aimed at achieving learning outcomes such as demonstrating effective verbal and non-verbal communication, applying appropriate communication principles, adopting a patient-centered and integrative approach, conducting comprehensive anamnesis, clearly and sensitively summarizing health information, showing respect and non-judgment, and considering cultural and ethical aspects in patient interactions.[19] Vogel, Meyer, and Harendza emphasize the significance of nonverbal communication, including empathy, in enhancing doctor-patient communication.[21] The instruction of interpersonal communication, particularly in the context of anamnesis, is crucial for equipping students with non-verbal communication skills, such as empathy, as they prepare for

clinical clerkship.[21] It is essential to enhance the integration of interpersonal communication, with a particular focus on non-verbal elements, within the Objective Structured Clinical Examination (OSCE), emphasising anamnesis skills. Non-verbal components, including empathy, facial expressions, content, and other non-verbal cues, are incorporated into the OSCE assessment.[22] Borowczyk et al. advocate for the development of a curriculum in medical education that emphasises interpersonal communication, specifically tailored for patient interactions in healthcare settings. This curriculum should encompass communication with patients across various age groups, those with chronic illnesses, patients' families and caregivers, elderly individuals, patients with dementia, psychiatric patients, and those with physical limitations.[23] Research conducted by Choudhary and Gupta reveals that students display a positive attitude towards learning interpersonal communication in their fourth year, as part of preclinical clerkship training, due to its potential to enhance student confidence, improve doctor-patient relationships, and foster self-awareness, reflection, personal sensitivity, motivation, and mental well-being.[24] During clinical clerkship, medical students have the opportunity to refine their interpersonal communication skills through daily interactions with patients in a real-world clinical learning environment.[25]

In medical practice, the Calgary-Cambridge communication model is a prevalent framework, particularly in the doctor-patient relationship. This model delineates a systematic approach to communication, comprising three key phases: the initiation session, the information gathering session, and the explanation and planning session, which occur post-physical examination. The initiation session involves preparation, establishment of a rapport, and identification of the consultation's objectives. The information-gathering session is dedicated to exploring the patient's issues, acquiring insights from a medical standpoint, understanding the patient's perspective, and recognising the context of the information. The explanation and planning session encompasses reviewing and validating the information shared, disseminating pertinent details, and engaging in collaborative treatment planning and decision-making with the patient.[24] Additionally, Borhani-Haghighi proposed further communication strategies for doctor-patient interactions, including introduction and greeting, information gathering, expressing empathy, providing clarification and recommendations, offering reassurance, obtaining informed consent, delivering closing remarks, and managing patient difficulties.[26]

As evidenced by the preceding discussion, the significance of interpersonal communication in medical education is paramount. Educators' roles in mentoring students and imparting communication skills necessitate proficiency in interpersonal communication. It is imperative that interpersonal communication be incorporated into the medical education curriculum at both the undergraduate and clinical stages.

3. Conclusions

In medical education, it is essential for educators to possess strong interpersonal communication skills, whether they act as facilitators or mentors. These skills include the ability to question effectively, provide reinforcement, offer clear explanations, listen attentively, maintain appropriate proximity, use humour judiciously, and employ various nonverbal communication techniques. There is a significant need to integrate interpersonal communication skills into medical education curricula.

Credit authorship contribution statement

RL wrote the initial draft of the paper and article review. DR provided suggestions, editing and review.

Declaration of Competing Interest

The authors have no competing financial interests or personal relationships that could have influenced the work reported in this paper.

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