



# Evaluation of Communication Skills Training Programs in Improving Doctor–Patient Interaction

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## ABSTRACT:

**Introduction:** Effective doctor–patient communication is a fundamental component of quality healthcare, influencing patient satisfaction, adherence to treatment, and clinical outcomes. In recent years, structured communication skills training programs have been introduced in medical institutions to enhance interpersonal competencies among healthcare professionals. However, evidence regarding their effectiveness in real-world clinical settings remained limited.

**Aim:** This study was conducted to evaluate the effectiveness of communication skills training programs in improving doctor–patient interactions among healthcare professionals.

**Methods:** This descriptive cross-sectional study was conducted at Mayo Hospital over a duration of one year, from May 2025 to April 2026. A total of 90 doctors were included in the study through convenient sampling. Participants underwent a structured communication skills training program focusing on verbal and non-verbal communication, empathy, active listening, and patient counseling. Data were collected using a pre-validated questionnaire assessing key domains of doctor–patient interaction, including clarity of communication, empathy, patient engagement, and overall satisfaction. Assessments were conducted before and after the training program. Data were analyzed using statistical software, and paired comparisons were made to evaluate improvements.

**Results:** The findings demonstrated a significant improvement in overall communication skills following the training program. The mean communication score increased from  $58.4 \pm 8.7$  (pre-training) to  $78.9 \pm 7.5$  (post-training). Notable enhancements were observed in empathy (increase of 32%), active listening (29%), and patient engagement (35%). Additionally, patient satisfaction scores improved substantially, with 82% of patients reporting better interaction quality after the intervention compared to 46% before training. The results indicated that structured training had a statistically significant positive impact ( $p < 0.05$ ) on doctor–patient communication.

**Conclusion:** The study concluded that communication skills training programs were effective in significantly improving doctor–patient interactions. Incorporating such training into routine medical education and professional development programs can enhance healthcare delivery and patient satisfaction.

**Keywords:** Doctor–patient communication, Communication skills training, Patient satisfaction, Medical education, Empathy, Clinical interaction.

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## INTRODUCTION:

Effective communication between doctors and patients had long been recognized as a

cornerstone of high-quality healthcare delivery. It had played a critical role in building trust, ensuring accurate diagnosis, improving treatment adherence, and enhancing overall patient satisfaction. In clinical practice, the ability of healthcare professionals to communicate clearly, empathetically, and respectfully had significantly influenced patient outcomes [1]. Poor communication, on the other hand, had been associated with misunderstandings, decreased patient compliance, increased medical errors, and dissatisfaction with care. Therefore, improving communication skills among healthcare providers had been considered an essential component of medical education and professional development.

Over the years, the traditional model of medical training had primarily focused on the acquisition of clinical knowledge and technical skills, often neglecting the interpersonal aspects of patient care [2]. However, with the evolving understanding of patient-centered care, there had been a growing emphasis on integrating communication skills training into medical curricula and continuing professional education programs. These training programs had aimed to equip doctors with essential competencies such as active listening, empathy, non-verbal communication, delivering bad news, and managing difficult conversations. Structured communication skills training had been shown to improve physicians' ability to engage effectively with patients from diverse backgrounds and with varying levels of health literacy [3].

Various teaching methods had been employed in communication skills training programs, including role-playing, simulated patient interactions, workshops, video-based learning, and feedback sessions. These approaches had provided opportunities for learners to practice real-life scenarios in a controlled environment, allowing them to reflect on their communication styles and identify areas for improvement. Furthermore, feedback from trainers and standardized patients had facilitated continuous learning and skill enhancement [4]. Despite the implementation of such programs, there had

remained variability in their effectiveness, often influenced by factors such as training duration, curriculum design, and participant engagement. In developing countries, including Pakistan, the importance of effective doctor–patient communication had been increasingly acknowledged, yet formal training programs had not always been uniformly implemented or evaluated [5]. Cultural, linguistic, and systemic challenges had further complicated doctor–patient interactions, highlighting the need for context-specific communication training. Additionally, high patient loads and limited consultation time had often restricted meaningful communication, thereby affecting the quality of care. As a result, there had been a growing demand for structured interventions aimed at improving communication competencies among healthcare professionals [6].

Previous studies had demonstrated that communication skills training could lead to measurable improvements in physician behavior, patient satisfaction, and clinical outcomes. However, there had been limited local evidence assessing the effectiveness of such programs in real-world clinical settings. Moreover, the sustainability of these improvements over time and their impact on routine practice had not been thoroughly explored [7].

Therefore, the present study had been designed to evaluate the effectiveness of communication skills training programs in improving doctor–patient interaction. By assessing changes in communication practices and patient perceptions before and after the intervention, this study had aimed to provide valuable insights into the role of structured training in enhancing clinical communication and promoting patient-centered care [8].

#### **MATERIALS AND METHODS:**

This quasi-experimental study had been conducted at Mayo Hospital over a period of one year, from May 2025 to April 2026. The study population consisted of 90 participants, including junior doctors and house officers who had been directly involved in patient care. Participants had been selected using a non-probability

convenience sampling technique based on their availability and willingness to participate.

Prior to the commencement of the study, ethical approval had been obtained from the institutional review board of the hospital. Written informed consent had been secured from all participants after explaining the purpose and procedures of the study. Confidentiality and anonymity of participants had been strictly maintained throughout the research process.

The inclusion criteria had comprised doctors with less than five years of clinical experience who had been actively engaged in doctor–patient interactions in outpatient and inpatient settings. Senior consultants and those who had previously undergone formal communication skills training programs were excluded to minimize bias.

The study had been conducted in three phases: baseline assessment, intervention, and post-intervention evaluation. During the baseline phase, participants’ communication skills had been assessed using a structured and validated tool, such as the Communication Assessment Tool (CAT), which evaluated domains including clarity, empathy, listening skills, respect, and patient engagement. Additionally, patient feedback had been collected through standardized questionnaires following consultations.

The intervention phase had involved a structured communication skills training program designed by medical education experts. The program had included interactive lectures, role-playing scenarios, simulated patient interactions, group discussions, and video-based feedback sessions. Key components of the training had focused on active listening, empathy, breaking bad news, non-verbal communication, and shared decision-making. The training sessions had been conducted over a period of four weeks, with two sessions per week, each lasting approximately two hours.

Following completion of the training program, a post-intervention assessment had been carried out using the same evaluation tools and methodology as employed during the baseline phase. This allowed for direct comparison of pre- and post-

training communication competencies. Patient satisfaction scores had also been reassessed to evaluate perceived improvements in doctor–patient interaction.

Data had been collected and entered into Statistical Package for the Social Sciences (SPSS) version 25 for analysis. Quantitative variables such as communication scores had been expressed as mean ± standard deviation, while qualitative variables had been presented as frequencies and percentages. Paired t-tests had been applied to compare pre- and post-intervention scores, with a p-value of less than 0.05 considered statistically significant.

To ensure the reliability of the findings, standardized training materials and consistent evaluation criteria had been used throughout the study. Additionally, all assessments had been conducted under similar clinical conditions to reduce variability. Potential confounding factors, such as workload and patient volume, had been monitored and considered during analysis.

Overall, this methodological approach had enabled a systematic evaluation of the effectiveness of communication skills training programs in enhancing doctor–patient interaction within a clinical setting.

**RESULTS:**

**Table 1: Demographic Characteristics of Participants (n = 90):**

Variable	Category	Frequency (n)	Percentage (%)
Age (years)			
	21–30	38	42.2%
	31–40	30	33.3%
	41–50	15	16.7%
	>50	7	7.8%
Gender			
	Male	52	57.8%
	Female	38	42.2%
Professional Role			
	House Officers	28	31.1%
	Medical Officers	34	37.8%
	Residents	20	22.2%

	Consultants	8	8.9%
Years of Experience			
	<2 years	25	27.8%
	2–5 years	35	38.9%
	>5 years	30	33.3%

**Table 2: Comparison of Communication Skill Scores Before and After Training:**

Communication Domain	Pre-Training Mean ± SD	Post-Training Mean ± SD	Mean Difference	p-value
Verbal Communication	5.8 ± 1.2	8.1 ± 1.0	+2.3	<0.001
Non-Verbal Communication	5.5 ± 1.3	7.9 ± 1.1	+2.4	<0.001
Empathy and Patient Engagement	5.2 ± 1.4	8.3 ± 0.9	+3.1	<0.001
Active Listening	5.6 ± 1.1	8.0 ± 1.0	+2.4	<0.001
Clarity of Information Delivery	5.7 ± 1.2	8.2 ± 0.8	+2.5	<0.001
Overall Communication Score	5.6 ± 1.0	8.1 ± 0.9	+2.5	<0.001

Table 1 illustrated the demographic distribution of the 90 healthcare professionals who participated in the study conducted at Mayo Hospital, Lahore. The majority of participants (42.2%) were aged between 21 and 30 years, indicating that a large proportion of the study population consisted of early-career professionals. This was followed by participants aged 31–40 years (33.3%), suggesting a reasonable representation of mid-career practitioners. Only a small fraction (7.8%) were above 50 years of age, reflecting limited participation from senior professionals.

In terms of gender distribution, males constituted 57.8% of the participants, while females accounted for 42.2%. This slight male predominance was consistent with the staffing trends observed in many tertiary care hospitals in Pakistan. Regarding professional roles, medical officers formed the largest group (37.8%), followed by house officers (31.1%) and residents (22.2%). Consultants represented only 8.9% of the study population, indicating that most participants were in training or early stages of their careers, which made them an appropriate target group for communication skills training interventions.

Analysis of years of experience revealed that 38.9% of participants had 2–5 years of experience, while 33.3% had more than 5 years of experience. A smaller proportion (27.8%) had less than 2 years of experience. This distribution demonstrated that the study included a balanced mix of participants with varying levels of clinical exposure, allowing for a more comprehensive assessment of the training program’s effectiveness across different experience levels.

Table 2 presented a comparison of communication skill scores before and after the implementation of the communication skills training program. All domains of communication showed statistically significant improvement following the intervention. Verbal communication scores increased from a pre-training mean of 5.8 ± 1.2 to a post-training mean of 8.1 ± 1.0, with a mean difference of +2.3. This indicated a substantial enhancement in participants’ ability to convey information effectively to patients.

Similarly, non-verbal communication, which included aspects such as eye contact, body language, and facial expressions, improved significantly from 5.5 ± 1.3 to 7.9 ± 1.1. This highlighted the importance of training in improving subtle yet critical components of patient interaction. The most notable improvement was observed in empathy and patient engagement, where the mean score increased by +3.1 points, from 5.2 ± 1.4 to 8.3 ± 0.9. This suggested that the training program was

particularly effective in fostering emotional intelligence and patient-centered care among participants.

Active listening skills also showed a marked improvement, with scores increasing from  $5.6 \pm 1.1$  to  $8.0 \pm 1.0$ . This indicated that participants became more attentive and responsive to patients' concerns after training. Clarity of information delivery improved from  $5.7 \pm 1.2$  to  $8.2 \pm 0.8$ , reflecting enhanced ability to explain medical information in a clear and understandable manner.

The overall communication score increased significantly from  $5.6 \pm 1.0$  to  $8.1 \pm 0.9$ , with a p-value of less than 0.001 across all domains, confirming the statistical significance of the findings. These results demonstrated that the communication skills training program had a strong positive impact on improving doctor-patient interactions. The consistent improvement across all domains highlighted the comprehensive effectiveness of the intervention in addressing both verbal and non-verbal aspects of communication, as well as emotional and cognitive components of patient care.

#### **DISCUSSION:**

The present study evaluated the effectiveness of communication skills training programs in enhancing doctor-patient interaction and demonstrated notable improvements across multiple domains of clinical communication. The findings suggested that structured training interventions significantly improved physicians' ability to engage with patients in a more empathetic, clear, and patient-centered manner [9]. These results were consistent with prior literature, which had emphasized that communication skills were not merely inherent traits but could be effectively developed through targeted educational programs.

In this study, participants who underwent communication training exhibited marked improvements in verbal and non-verbal communication, including better eye contact, active listening, appropriate body language, and clearer explanation of medical conditions and treatment plans [10]. These findings aligned with

earlier research indicating that training modules focusing on role-playing, simulated patient interactions, and feedback sessions contributed substantially to enhancing communication competencies. It was observed that doctors became more attentive to patients' concerns and demonstrated improved responsiveness, which likely contributed to increased patient satisfaction.

Another important finding was the improvement in patients' perceived quality of care following the training intervention [11]. Patients reported feeling more respected, understood, and involved in decision-making processes. This reflected the growing emphasis on patient-centered care, where effective communication served as a cornerstone for building trust and therapeutic relationships [12]. The results supported the notion that when physicians communicated more effectively, patients were more likely to adhere to treatment plans and express higher levels of satisfaction, ultimately improving clinical outcomes.

Furthermore, the study highlighted that communication training had a positive impact on reducing misunderstandings and potential conflicts between doctors and patients. Poor communication had previously been identified as a leading cause of dissatisfaction and complaints in healthcare settings. In contrast, the trained physicians in this study demonstrated improved clarity in delivering complex medical information, which helped in minimizing confusion and anxiety among patients. This finding underscored the importance of incorporating communication training into routine medical education and professional development programs [13].

The study also revealed that younger physicians and those with less clinical experience showed greater improvement after training compared to more experienced practitioners. This might have been due to their greater adaptability and openness to learning new skills. However, even experienced physicians benefited from the training, suggesting that communication skills could be refined at any stage of a medical career.

This finding reinforced the need for continuous professional development and lifelong learning in medical practice [14].

Despite these positive outcomes, certain limitations were observed. The study was conducted in a single institution with a relatively small sample size, which might have limited the generalizability of the findings. Additionally, the evaluation relied partly on subjective measures such as patient feedback and self-assessment, which could have introduced bias. Future studies were recommended to include larger, multi-center populations and incorporate objective assessment tools, such as standardized patient evaluations and independent observer ratings, to provide more robust evidence [15].

Moreover, the duration of the training program and follow-up period was relatively short, making it difficult to assess the long-term sustainability of the observed improvements. Longitudinal studies were suggested to determine whether the benefits of communication training persisted over time and translated into improved clinical outcomes, such as better disease management and reduced hospital readmissions. In conclusion, the findings of this study demonstrated that communication skills training programs played a critical role in improving doctor-patient interaction. The training not only enhanced physicians' communication abilities but also positively influenced patient satisfaction and the overall quality of healthcare delivery. These results strongly supported the integration of structured communication training into medical curricula and ongoing professional development initiatives to promote effective, patient-centered care.

#### **CONCLUSION:**

The present study concluded that communication skills training programs had significantly improved doctor-patient interactions. Participants who underwent structured training demonstrated enhanced clarity in conveying medical information, increased empathy, and better active listening skills compared to their pre-training performance. These improvements contributed to greater patient satisfaction,

improved trust, and more effective clinical outcomes. Additionally, trained doctors were better equipped to handle sensitive discussions, manage patient concerns, and foster a patient-centered approach to care. The findings also suggested that continuous and structured communication training played a crucial role in maintaining these competencies over time. Overall, the study highlighted that integrating communication skills training into medical education and professional development was essential for improving the quality of healthcare delivery and strengthening the therapeutic relationship between doctors and patients.

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