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*Research Article*

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# Development of effective Communication Skills Course for Libyan Clinical Pathology Board Fellows

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**ABSTRACT**

Effective communication is critical in healthcare, but traditional medical education and post-graduate residency programs have not emphasized communication skills development yet.

This study describes the development and evaluation of a project-based communication skills course for postgraduate medical trainees. The communication skills course was implemented as part of the Libyan postgraduate clinical pathology training programs. It covered 10 topics over 10 weekly 2-hour sessions. The course includes foundations of effective communication, empathetic listening, verbal/nonverbal communication, cross-cultural communication, team collaboration, communicating with patients/families, feedback, public speaking, conflict resolution, facilitator self-efficacy, and ethical communication. The evaluation included satisfaction surveys, pre/post-tests, trainee feedback, and focus group discussion.

Learners demonstrated an improved understanding of effective communication, as shown by better pre/post-test performance. Participant feedback indicated that the course significantly impacted their knowledge, attitudes, and communication practices, with high satisfaction and recommendations to be repeated for their peers in other specialties.

The study highlights the effectiveness of developing communication skills course in postgraduate medical trainees. Limitations include the small sample size of clinical pathology trainees and the assessment of only short-term outcomes. Future research should explore the long-term impact on healthcare outcomes and the potential for upgrading the communication skills across different specialties.

## Introduction

Good Clinical Pathology services are essential for health care quality. Clinicians need to acquire and use it in their daily practice. Good curriculum design and proper implementation ensure the graduation of competent fellows. The residency program of clinical pathology aims to graduate diagnosticians, researchers, and educators. Improvements of fellows' communication skills through the design and implementation of courses could improve fellows' communication skills with clinicians, patients, and learners, and influence acknowledgment of clinical pathology services in quality care.

People with the same native language, practicing the same profession, and having the same culture, suffer from miscommunication. This highlights the complexity and challenges of overcoming miss-communication, which underlies many conflicts and emphasizes the importance of effective communication in achieving favorable results.

Effective communication allows healthcare providers to prevent misunderstandings, build strong provider-patient relationships, and ensure patient safety and well-being by clearly conveying critical information. It also facilitates seamless collaboration between different healthcare disciplines. Communication skills empower professionals to deliver the highest quality, most personalized care and achieve the best patient outcomes [1].

Studies examined the impact of communication skills training for physicians on patient satisfaction and outcomes. They found that physicians who received the training demonstrated

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significant improvements in their communication behaviors, such as expressing empathy, providing clearer explanations, and engaging patients in shared decision-making [2].

Effective communication involves active listening, empathy, and focus on mutual understanding [3].

Strengthening communication skills among healthcare professionals can enhance teamwork, patient engagement, and overall organizational safety culture. The Joint Commission emphasizes that communication competencies should be a key focus area for healthcare training and professional development. Investing in communication skills can ultimately have far-reaching benefits for the healthcare system, work environment, and - most importantly - patient outcomes and safety [4].

Deficiencies in communication skills contribute to medical errors, patient dissatisfaction, and suboptimal health outcomes. Disruptive behaviors by healthcare providers, such as yelling, condescending language, and reluctance to answer questions, negatively affact communication. Poor communication contributed to patient dissatisfaction, lack of trust in the healthcare team, and reduced patient adherence to treatment plans [5]. Medical errors in clinical pathology account for more than 60 % of medical errors, and miscommunication is number one cause of lack of patient safety [6,7].

Despite the recognized importance of communication skills, traditional medical education has historically placed greater emphasis on the acquisition of clinical and technical knowledge rather than the development of interpersonal competencies. It has been found that medical students valued teaching behaviors that promoted the development of communication and interpersonal skills, such as modeling empathy and facilitating discussion, while faculty tended to prioritize clinical knowledge transmission and problem-solving skills [8].

To address this gap, there has been a growing movement to integrate communication skills training into medical curricula. By providing a focused communication skills course, health professionals understand the possible miscommunication's origin and improve their communication [9]. Prioritization of interpersonal skills development for physicians help in providing patient-centered and collaborative care [8].

The situational analysis of the board-training program in the Libyan Board for Health Specialties (LBHS) showed that communication courses have not been integrated into the for thirteen years. Lack of communication skills undermines competency and affects the mutual understanding among pathologists, clinicians, and patients. This could result in poor patient care, due to poor compliance and compromise quality of health services with the waste of time, effort, and resources [10,11].

This study targets developing, implementing, and evaluating a project-based communication skills course for postgraduate clinical pathology trainees. The goal of the course was to enhance trainees' communication competencies to enhance the provision of safe health services through interactive, experiential learning activities [12].

## Methods

### Course Design and Implementation

The key approach to developing communication skills is setting clear expectations by specifying needed curricula, instructional tools, and principles for professional communication. Communication skills course designed to empower the fellows with required skills, improve their competencies, and raise societal health.

We conducted a quasi-experimental study involving the implementation of a communication skills course as a non-mandatory part of the postgraduate clinical pathology training program at the LBHS. The course comprises ten topics as listed in Table 1. The course delivered over 10 weekly sessions, each lasting 2 hours. The training sessions were conducted through synchronous and asynchronous virtual sessions, as it has been found that e-learning improved students' communication competencies and self-reflection abilities [13,14].

**Tabe 1: The Key topics covered in the course of the communication skills**

| S. N | Topics |
|---|---|
| 1 | Foundations of effective communication |
| 2 | Empathetic and active listening.<br>Verbal and nonverbal communication |
| 3 | Cross-Cultural Communication |
| 4 | Team collaboration and interprofessional communication in |
| 5 | Communicating with patients and families |
| 6 | Providing and receiving feedback |
| 7 | Public Speaking and Presentation Skills |
| 8 | Conflict resolution and negotiation |
| 9 | Ethical Communication |
| 10 | Communication Skills in Supporting Facilitator Self-Efficacy |

Sessions focus on essential communication skills topics such as empathy, active listening, effective verbal and non-verbal communication, working in multicultural settings, inter-professional collaboration and teamwork, conflict resolution techniques, communication with patients and colleagues, feedback, performance evaluation, de-escalation of conflicts, and ethical communication.

The first step was the validation of the course. The course content and delivery were validated by non-mandatory synchronous sessions for 6 interested trainees in the clinical pathology residency program. In the second step, the Arabic Commission for Digital Medical Learning (ACDML) hosted an online two-hour session that covered three topics; the foundation of effective communication, empathetic and active listening, and verbal and nonverbal communication). The attendees of the live session were 1336. Seven months later, the views reached 6700. The third step was the conduction of interactive training for a new batch of 14 clinical pathology residents as a mandatory course before graduation.

The courses assessed by satisfaction and awareness surveys, pre and post-test assessment, assignments, and focus group

discussion. Learners were encouraged to maintain self-assessment and reflection and to provide feedback on communication skills to evaluate progress.

## Results

The participants were in the first optional course, and in the second mandatory course [6,14]. The feedback from the workshops demonstrated that the course has significantly affected the knowledge, attitudes, and participant's communication practice. The survey indicated that 40 % were delighted and 60 % were satisfied with the course, with 100% recommending it to colleagues (Figure 1).

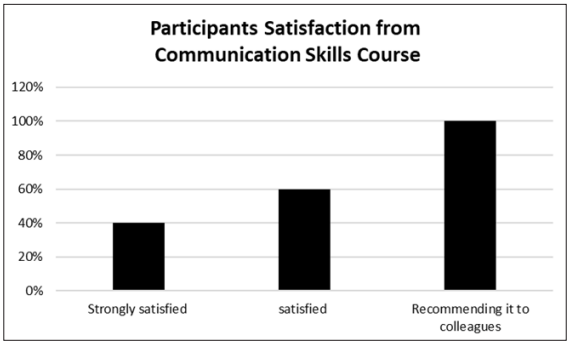


**Figure 1:** Participants satisfaction from communication skills course

Sixty percent of participants agreed, and 40% strongly agreed with the course's relevance and organization and 80% strongly agreed that the course provided actionable skills (Figure -2).

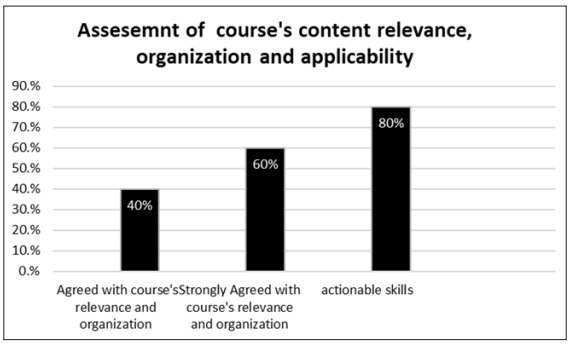


**Figure 2:** Assessment of communication skills course content relevance, organization and applicability.

Eighty percent agreed that course concepts communicated effectively and the course struck a balance between theory and practical skills, and all participants acknowledged the instructor's expertise and encouragement of questions and participation (Figure 3).

Statistics from the online training session hosted by the ACDML, showed that the session was watched by 6700 Participants. About Ninety-two % (92.7) of attendees were medical professionals and 7.3% were non-medical (Figure 4). Most attendees were within the active age groups; 25-34 followed by the age group 34-44 years old.

Pre- and post-testing assignment responses about knowledge in the communication skills of the participant's marks were 52-68% respectively. This represents about a 20 % improvement in understanding effective communications in healthcare systems. Improvement in knowledge, attitudes, and skills in certain topics is summarized on the evaluation of awareness using 5-point Likert scale surveys, where (1) were unaware, (2) unaware, (3) neither aware nor unaware, (4) ware and (5) very aware (Table 2). The results showed a change of awareness among all participants. The change was mostly in communication during crisis management, followed by a significant increase in awareness about the role of active listening and non-verbal communication

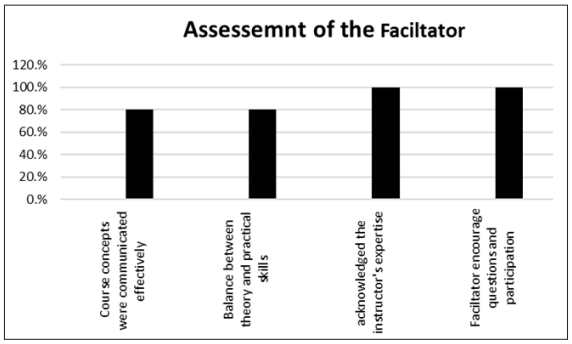


**Figure 3:** Participants' assessment of communication skills course Facilitator.

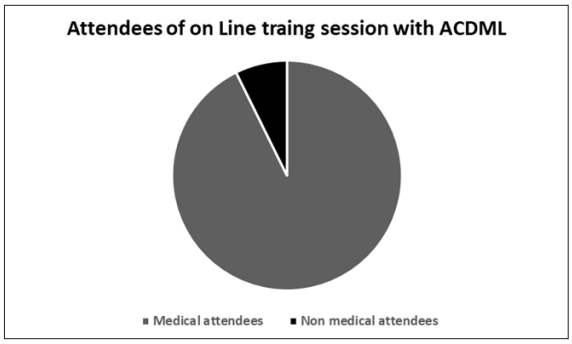


**Figure 4:** Percentage of attendees of the online training session hosted by the ACDML.

**Table 2: Assessment of the awareness about certain topics before and after attending the course.**

| Topics | Awareness before the course | Awareness after the course |
|---|---|---|
| 1. What is active listening, and what should we do during it? | 2.3 | 4.5 |
| 2. How to deal with an angry person? | 2.7 | 4.1 |
| 3. How do you formulate your speech or convey your message orally? | 2.5 | 4.4 |
| 4. What body language should you pay attention to during communication? | 2.2 | 4.2 |
| 5. How to communicate with your colleagues to warn them from the possibility of error or danger to the patients? | 2.8 | 4.8 |

| | | |
|---|---|---|
| 6. What is the difference between collaborative practices between health professionals, IPCP education and IPE? | 1.8 | 3.5 |
| 7. What are the different types of people during communication? | 3 | 4.7 |
| 8. What is empathy and is there a difference between it and Sympathy? | 2.8 | 4.1 |
| 9. What you should do during crisis communication? | 1.7 | 4 |
| 10. What are the different types of communication, how important or influential is each of them, and how has the concept of communication evolved? | 2.1 | 4 |

The qualitative survey to collect participant's feedback about the course as a whole is shown in (Table 3).

**Table 3: Feedback from the participants about the communication skills course.**

| S. N | Questions |
|---|---|
| 1 | How would you describe the course? |
| 2 | What do you like the most in the course? |
| 3 | What do you suggest to add to the course? |
| 4 | What do you recommend to modify in the course? |
| 5 | What do you think is unnecessary materials or topics in the course? |
| 6 | What do you feel is important but missing in the course? |
| 7 | What do you think is unnecessary and should not be included in the course? |
| 8 | Do you recommend other educational materials? |
| 9 | What do you think are the most valuable educational materials; PPT, Videos, articles, reflection, practice, others, |
| 10 | Do you think you could play a role-play scenario easily? |

The response rate was 50 %. All participants valued the course content and the interactive sessions. The most interesting and consistent finding was the enjoyment of participation among learners' and the group discussion.

Fifty-seven percent of participants found the course comprehensive. One participant suggested adding how to deal with different personalities. Another wanted to know how to control our emotions while empathizing with the patients. This is an important issue to orient the residents to act professionally. One participant suggested more real-life examples to enhance the understanding.

About 30% found that videos are the most valuable educational materials. Twenty-eight found that all educational materials are important. Forty-two percent think that reflection and practice are valuable educational material.

The most important result that could affect the long-term outcome of this project is the issuing of a decree by the LBHS President to include a communication skills course as a part of the core-training program for all residents in the LBHS. This will certainly influence healthcare quality and result in favorable patient outcomes.

**Discussion**

Communication is vast; the challenges were to design a functional communication course and to know the best-used instructional methods and assessment tools for communication skills.

The selected topics (Table-1) and the instructional strategy has been selected after thorough examination of communication skills courses [12-21]. In this study the participants were satisfied from the course content, and agreed with the course's relevance, organization and provision of actionable skills. Participants acknowledged a balance between theory and practical skills, and the instructional method.

It has been shown that experiential communication skills education can impact trainees' communication behaviors and encourage starting training on communication skills as an outcome priority [12-15]. This study demonstrates the applicability and effectiveness of implementing communication skills courses for postgraduate medical trainees, and supports starting this project as an essential skill for graduates.

Statistics from the online training session hosted by the ACDML showed that most attendees were within the age group 25-34 followed by the age group 34-44 years old. This could highlight the awareness about the importance of the communication skills of the new generation of health professionals or could reflect the outcome of recent recommendation of integration of the communication skills course in medical curriculum [22].

The survey of awareness improvement in specified topics showed an overall increase in self-assessed skills for all 10 skills consistent with other researchers' findings [23]. Analyses by participants showed that all reported improvement in all skills but with variable percentages.

Improvement in awareness of body language and of active listening impact during communication were more than 48% and 49 % respectively. Non-verbal behaviors, such as eye contact, body posture, and facial expressions, play a critical role in how medical professionals convey empathy, build rapport, and facilitate effective information exchange with patients and colleagues for more than sixty percent [24,25]. This could result in marked improvement in trainees' communication skills.

In addition, active listening had an important impact on mutual respect and understanding. This enhances trust and team building [26]. There was an improvement in crisis management about 60%. This could highlight the lack of competency in crisis management before the training and could help the trainees in overcoming such unfavorable events. Participants showed about 42 % improvement in dealing with an angry patient or family member. This finding supported by the study showed that incorporating communication skills training into crisis management education and training programs can significantly enhance healthcare providers' ability to

effectively navigate complex, high-stakes situations and mitigate the risk of adverse outcomes [27].

Despite the 20% difference between the pre and post-test, the participants agreed with the importance of effective communication. On the other hand. Communication skills need continuous practice, self-assessment, and reflection, along with feedback to progress [28].

The learners clearly understand that effective communication is essential, and recognize the source and impact of miscommunication. They know communication barriers and styles. They learn to express their ideas and questions clearly, to create a safe and respectful culture. The course helps learners better prepare to navigate communication obstacles. They understand the value of offering constructive feedback on the behaviors or actions rather than criticizing the person. They learn to be assertive communicators and accept feedback gracefully, recognizing that it can contribute to their development. Learners understand that listening attentively and empathetically to patients and peers improves outcomes.

Learners realize the role of teamwork and effective communication in mitigating and addressing conflicts. It has been found that teams communicate openly and work collaboratively, discuss issues constructively, and have win-win solutions [29].

The introduction of the communication course resulted in a change in self-reported confidence and behavior in communication and helped overcome certain patient- and physician-specific communication barriers [17]. Teamwork, communication, and conflict resolution skills resulted in care coordination, reduced medical errors and adverse events, enhanced job satisfaction among healthcare providers, and better patient outcomes, including shorter hospital stays and reduced mortality [29]. The positive outcomes observed in this study align with previous research highlighting the benefits of communication skills development in healthcare professionals [2].

The most important outcome is the relevance of the course content to their clinical practice and the tangible impact on their ability to communicate effectively with patients and colleagues.

This could improve the competency of graduates, ensure patient safety, decrease wastage of resources (time, money, and effort), improve the quality of health care services, and improve work environments.

There is a need for development of a formal resident communication skills curriculum (RCSC), designed to teach trainees the communication skills essential for high quality practice [17].

Communication skills training is likely to promote patient-centered communication and reduce attacks against physicians [30].

The suspected long-term changes could involve faculties, students, healthcare professionals, institutions, patients, and community members. The suspected changes could be their reaction, Learning (knowledge, skills, attitudes), behavior or the transfer of learning, organizational practices or policies, and population societal conditions.

## Conclusion

Effective communication is a critical competency for healthcare professionals, yet it is over looked in post-graduate residency programs. This study demonstrates the successful development and implementation of communication skills course for clinical pathology. The resident acknowledges the interactive teaching and experiential learning, and suggest more engagement in real-world communication challenges, to foster the development of their communication skills.

Trainees found that ethical communication is of primordial importance, followed by conflict resolution, and consider all topics are important.

Future research should explore the long-term impact of communication skills training on healthcare outcomes

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