



When and What: Family Physicians' Perspective on Clinical Communication Skills and Professionalism Education during the Medical Training Program in Riyadh, Saudi Arabia

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Abstract

Background: *Effective communication skills are crucial for health professionals in order to build a favorable rapport with their patients, so enhancing their overall well-being and quality of life. From this standpoint, the implementation of communication skills training may serve as effective techniques to enhance the care delivered by healthcare personnel and the overall quality of healthcare services.*

Aim: *To investigate the perspectives of family physicians, on the necessary communication and professionalism skills for medical students, as well as the best time during medical training programs to attain these competencies in Riyadh, Saudi Arabia.*

Methods: *A cross-sectional survey-based study was conducted among family medicine physicians in different hospitals, Riyadh, Saudi Arabia. Participants responded to inquiries on the communication abilities and professionalism competencies while discussing the timing of competency achievement. An online questionnaire was sent to all the physicians. The questionnaire consisted of three sections: Gathering demographic information, Questionnaire on professional engagements, and a timeline estimation of each doctor's acquisition of communication skills and professionalism competencies. The data analysis was performed using SPSS, Version 26.0. Prior to analysis, data cleaning and entering were conducted. A test is considered significant if the P-value is below 0.05.*

Results: *A total of 301 participants, aged between 30 and 41 years old, took part in the current research. Approximately 51.5% of the participants were family physician specialists, whereas around 25.9% were residents and 4% were students. A majority of FM respondents (56.5%) said that FM residency is the most opportune period in the medical training program to include the bio-psycho-social context. Respondents (50.5%) felt that it is during this time that they get a better understanding of the patient's viewpoint and that of their family. Approximately 48.5% of FM participants believe that the FM residency is the most favorable period of medical training to take into account the beliefs, needs, and perspectives of patients and their families. However, 58.5% of participants feel that this residency provides an opportunity to develop strong critical thinking skills. Furthermore, 50.2% of participants believe that the FM residency equips them with the ability to handle uncertainty effectively and adapt to various situations and contexts. The majority of FM participants were doing clinical activities at different stages; After Residency (93.8%), Residency (80.8%), or Undergraduate (86.8%). In addition, teaching practice was significantly related to the stages of communication training ($P < 0.001$); most of FM participants practice teaching after Residency (90.6%), and 53% of them practice teaching in their Residency. there is a significant relation between the clinical activity done and the stage of professionalism training ($P = 0.005$), the majority of FM participants were doing clinical activities at different stages; After Residency (93.9%), Residency (83.6%), or Undergraduate (76.3%). In addition, the preceptor was significantly related to the stages of professionalism*

training ($P=0.010$); 45.5% of FM participants after residency were preceptors.

Conclusion: *The perspectives of these family doctors' medical educators may aid in formulating the necessary objectives for medical training, which might influence the structure of medical curricula and promote lifelong learning initiatives. Future research should focus on certifying these key competencies and enhancing evaluation methodologies, with a particular emphasis on evaluating their effect on healthcare.*

Keywords: *Family Physicians, Perspectives, Clinical Communication Skills, Professionalism, Medical Training*

Introduction

Improved communication skills and professionalism play a vital role in achieving improved healthcare results^[1]. Effective communication is essential in healthcare as it enables collaborative decision-making and improves adherence to treatment recommendations, resulting in satisfaction for patients as well as physicians^[2]. Professionalism is crucial and encompasses the skills and qualities that allow doctors to prioritize the well-being of their patients over their own, by demonstrating compassion, responsibility, excellence, duty, service, honor, integrity, and respect for others.

According to Brown (2008), the importance of teaching communication skills has shifted from being optional to being essential^[3]. Various studies conducted in many countries and settings have demonstrated that which include communication and professionalism training within both undergraduate^[4] and postgraduate medical education^[5] is beneficial for improving patient outcomes. Proficiency in communication and a strong sense of professionalism are essential for primary care physicians to effectively provide healthcare services. These traits are seen crucial assets for family doctors, particularly in the realm of overseeing chronic ailments such as diabetes and hypertension. Participating in undergraduate study in family medicine may greatly enhance the development of communication and professionalism skills. Since the bulk of healthcare services are primarily provided in primary care, it is crucial that medical education focuses primarily on and strengthens this environment for instructional purposes^[6].

Despite its temporary nature, internship training provides a significant opportunity for personal growth and strategic career planning. The field of

medical internship has had several advancements since its establishment in the mid-20th century^[7]. Medical training in Saudi Arabia encompasses a 12-month duration of closely monitored instruction in many areas of specialization. This comprises compulsory core rotations in the fields of general surgery, internal medicine, pediatrics, obstetrics and gynecology, and family medicine, with a duration of 2 months each. The remaining duration is allocated for optional rotations^[8].

Family physicians as well as primary care have gained increasing significance in the public healthcare system and medical education, including both undergraduate and postgraduate levels^[9]. Consequently, the perspective of family physicians on medical education has grown essential in advancing the teaching of communication and professionalism skills to primary care physicians. This is because the government has recognized the significance of including these areas in medical training^[9].

Several internationally recognized medical training publications have identified professionalism and communication competence as essential skills that must be attained^[10-11]. Although considered essential, medical students and professionals may have limited or absent instruction, education, and use of these skills^[7].

In Brazil, Franco et al. (2018) aimed to clarify the particular skills associated with communication and professionalism, as well as the most suitable time for addressing them. The poll included a total of seventy-four doctors. According to a large number of participants, it is recommended that students acquire communication and professionalism skills either during their undergraduate studies or during their residency^[12]. After evaluating abilities in several areas, it was demonstrated that undergraduate medical

education should focus on acquiring clinical communication skills and professionalism competencies, while postgraduate study should prioritize the development of interpersonal communication and leadership skills. The authors proposed the compulsory acquisition of clinical communication skills and professionalism attributes for undergraduate students. It is recommended that the cultivation of Leadership and Interpersonal Abilities start during undergraduate studies and then be refined via practical experience in the workplace and medical responsibilities during residency^[12].

Tavakoly et al. (2020) conducted a randomized, controlled experiment to evaluate the effects of communication skills training for physicians on the results of hypertension, as well as the medical literacy skills, self-efficacy, and adherence to medication of patients with uncontrolled blood pressure. After the completion of the physician communication course, there was a significant improvement in the communication skills between physicians and patients. Additionally, patients who were treated by the trained physicians experienced better outcomes in hypertension, medication adherence, and self-efficacy compared to the control group. The educational intervention leads to enhanced blood pressure management. The training given to physicians may have been successful in affecting counseling, health literacy, self-efficacy, and adherence. The quality of communication between physicians and patients is an important component that may be modified and has the potential to affect the health outcomes of hypertensive Iranian patients^[13].

Nourein et al. (2021) carried out a research in Saudi Arabia to investigate the viewpoints of undergraduate dentistry and medical students on the development of communication skills (CS). The research aimed to evaluate the viewpoints on computer science (CS) among medical and dental students, taking into account socio-demographic and education-related factors. Out of the individuals who received the questionnaire, 91%

were students studying dentistry or medicine. Specifically, there were 145 dentistry students and 91 medical students. There were no significant differences in scores between medical and dental students on the PAS (Medicine Median 51 vs. Dentistry Median 50) and NAS (Medicine Median 32 vs. Dentistry Median 32). Medical students at advanced clinical stages, who expressed a want to enhance their communication abilities, and whose parents did not have medical backgrounds, had significantly higher scores on the PAS when compared to dental students. In contrast, medical students whose parents were doctors had notably better results on the NAS in comparison to dentistry students. Demographic and educational variables exerted an effect on medical students' inclination towards CS, as opposed to dentistry students. There were no differences seen in the self-assessment of medical and dental students' perspectives on the matter. Multiple variables influence the attitudes of medical and dentistry students towards the study of computer science^[14]. Considering its importance, the teaching, learning, and practice of these competences is often insufficient or absent among medical students and professionals^[15]. Identifying the key competencies and then teaching them in the best time during the medical training programs to acquire these competences could aid in the design of instructional methodologies.

Aim of Research

To investigate the perspectives of family physicians, on the necessary communication and professionalism skills for medical students, as well as the best time during medical training programs to attain these competencies in Riyadh, Saudi Arabia.

Methods

This research took place at several hospitals in Riyadh, Saudi Arabia using a cross-sectional survey approach. Invitations were sent to all family medicine professionals affiliated with the

hospitals and primary care facilities in Riyadh, Saudi Arabia.

We used a self-administered questionnaire to examine the perception of family physician regarding what and when the clinical communication and professionalism skills should be taught. This design was selected because it was conducted at a given point in time. The study was based on the non-probability convenience sampling technique, where questionnaire was sent through WhatsApp, email etc. to all participants and only to those who showed their willingness to participate.

We used the developed tool of Franco et al. (2018) in the present study^[12]. The tool was developed in three distinct phases: 1) The systematic arrangement of communication skill abilities and the description of communication knowledge and skills, 2) the analysis that confirms the themes within communication abilities, and 3) the examination of when family doctors believe professionalism and communication competence should be attained, whether it be at the undergraduate level, during residency, or after residency.

In the study, the participants responded to inquiries on the communication abilities and professionalism competencies while discussing the timing of competency achievement. An online questionnaire was sent to all the physicians. The questionnaire consisted of three sections: 1) Gathering demographic information, 2) Questionnaire on professional engagements, and a timeline estimation of each doctor's acquisition of communication skills and professionalism competencies. A pilot study to assess the reliability and validity was conducted before the actual study was performed. The survey was created in Google Docs and was sent via social media platforms like WhatsApp, email, and Messenger to all physicians who will consent to participate in the study. Two reminders were sent to collect the data.

The data analysis was performed using SPSS, Version 26.0. Prior to analysis, data cleaning and entering were conducted. The numerical variables, such as age, were shown as the mean plus the standard deviation (SD). The categorical variables, namely gender, academic degree, and married status, were represented using descriptive statistics in the form of frequencies and percentages. The influence of gender and degree title on the variables of knowledge components (KCs) and total scores was assessed using Chi-square test. A test is considered significant if the P-value is below 0.05.

Results

Table 1 shows that 301 participants were between the ages of 30 and 41. Specialist family physicians made up about 30% of the participants. Thirty percent were residents, 14 percent held a PhD, and five percent had a master's degree. Apart from medical school, the majority of responders had no additional college degrees. The individuals' years of medical experience varied from six to almost fifteen years.

Table 1: Demographic characteristics of the participating family physicians (N=301)

Demographics		n	%
Age (years)	≤30	95	32%
	31-35	72	24%
	36-40	56	19%
	41+	78	26%
Sex	Female	161	54%
	Male	140	47%
Academic degree	Doctoral	41	14%
	Master's	15	5%
	Residency	90	30%
	Specialty	155	51%
Any other undergraduate qualifications other than medicine	No	284	94%
	Yes	17	6%
Experience (years)	0-5	94	31%
	6-10	77	26%
	11-15	77	26%
	>15	53	18%

Table 2 shows the participants in the study's training stage. Of the undergraduates, 35% had taken a communication course, and 27% had

completed a professionalism skills course. Forty-nine percent of the residents had completed Professionalism Skills and fifty percent had completed communication training. Following

their residency, 11% and 22% of participants, respectively, had completed communication training and professionalism education.

Table 2: The stage of training when participant competencies developed sufficiently for the practice of medicine

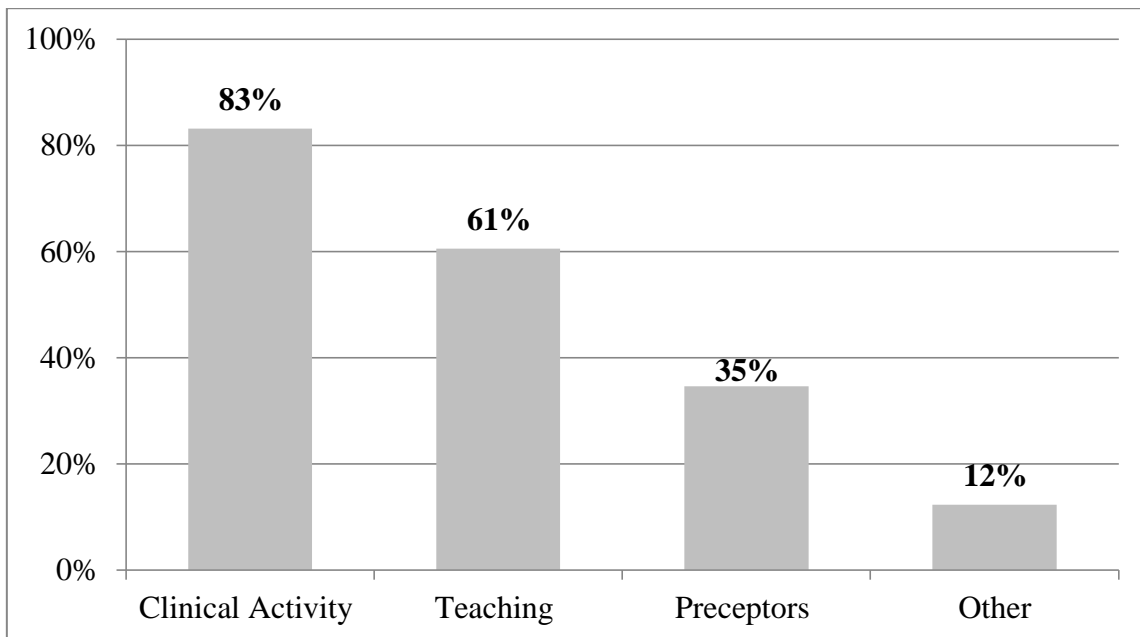
Competency	Undergraduate		Residency		After Resident	
	n	%	n	%	n	%
Communication	106	35%	151	50%	32	11%
Skills Professionalism	80	27%	146	49%	66	22%

The activities that the Family Physicians' participants were engaged in are displayed in Table 3 & Graph 1. The majority of participants

(83%) were engaged in Clinical Activities, with 61% of them involved in teaching and 35% serving as Preceptors.

Table 3: What activities have you already done or currently do?

Activity	Yes		No	
	n	%	n	%
Clinical Activity	250	83%	51	17%
Teaching	182	61%	119	40%
Preceptors	104	35%	197	65%
Other	37	12%	264	88%



Graph 1: What activities participants already done or currently doing

Table 4 displays the participants' perspectives about the optimal timing of the medical training program for attaining communicative proficiency. The majority of participants believed that the undergraduate phase of the medical training program is the most optimal time to effectively

communicate in accordance with assigned roles (77%), develop a suitable rapport (71%), establish a therapeutic and professional connection (57%), deliver bad news in an appropriate manner (59%), and adequately inform patients and their families (56%).

A majority of FM respondents (57%) said that FM residency is the most opportune period in medical training to include the bio-psycho-social context. Additionally, 50% of respondents felt that it is during this time that they get a better understanding of the patient's viewpoint and that of their family. Furthermore, 59% of respondents reported that FM residency allows them to actively involve patients and their families in the decision-making process.

The majority of FM participants believed that the post-residency period is the most opportune time in the medical training program to engage in consulting, aiding healthcare workers in fostering successful teamwork (60%), promoting teamwork to ensure patient safety (59%), communicating about ethical issues with other healthcare professionals (60%), demonstrating fundamental leadership skills (59%), and participating in the management of human and healthcare resources (63%).

Table 4: perception toward communication skills (when should students adequately achieve each)

Communication Competency	After residency		FM residency		Undergraduate	
	n	%	n	%	n	%
Communicate effectively according to given roles	23	8%	45	15%	233	77%
Build a suitable relationship	26	9%	61	20%	214	71%
Communicate bad news appropriately	43	14%	81	27%	177	59%
Establish a therapeutic and professional relationship	27	9%	104	35%	170	56%
Inform patients and family adequately	37	12%	94	32%	167	56%
Adapt communication according to the patient and his or her family	20	6%	139	47%	139	47%
Support decision-making based on the needs and interests of the patient	38	13%	178	60%	81	27%
Involve the bio-psycho-social context	19	6%	170	57%	112	37%
Engage patients and families to share in decision-making	29	10%	169	56%	101	34%
Understand the perspective of the patient and his or her family	24	8%	152	51%	123	41%
Structure and organize communication / clinical interviews	95	32%	117	39%	89	29%
Engage in the management of human and health care resources	190	64%	57	19%	49	17%
Perform consulting, helping colleagues, other professionals, and the healthcare system	181	60%	76	25%	44	15%
Communicate effectively to promote understanding						
Perform teamwork, aiming to ensure patient safety	177	59%	68	22%	56	19%
Communicate about ethical issues with other health professionals	177	59%	63	21%	61	20%
Demonstrate basic leadership skills	176	59%	61	20%	64	21%

The opinions of the participants regarding the best time for the medical training program to achieve professionalism are shown in Table 5. According to 82% of participants, demonstrating interest and dedication can be achieved effectively during the undergraduate year of the medical college program. Sixty-three percent of participants put

the needs of patients, families, and communities ahead of their own. 77% of participants were aware of their limitations and when to get help. Eighty percent of the participants behaved sensibly and with caution. Among those who took part, 63% strived to improve patient and/or family safety. Of the FM participants, about 49% think

that the FM residency is the best time throughout medical education to consider the needs, viewpoints, and beliefs of patients and their families. Additionally, according to 59% of participants, this residence helps them to hone

their critical thinking abilities. Furthermore, half of the participants think that the FM residency has given them the tools they need to deal with ambiguity and adjust to different circumstances.

Table 5: Perception toward professionalism skills (when should students adequately achieve each competency?)

Professionalism competency	After residency		FM residency		Undergraduate	
	n	%	n	%	n	%
Act with interest and dedication	22	7%	31	10%	248	82%
Be responsible and careful in one’s actions	19	6%	40	13%	242	80%
Recognize one’s limits and know when to request support	19	6%	49	16%	233	77%
Prioritize patient’s / family’s / community’s interests above one’s own	27	9%	85	28%	189	63%
Attempt to promote patient and/or family safety	26	9%	86	29%	189	63%
Reflect and have good critical skills	59	20%	176	59%	66	22%
Deal with uncertainty appropriately, adapting to different situations and contexts	96	32%	151	50%	54	18%
Consider the beliefs, needs, and views of patients/families	62	21%	146	49%	93	31%
Recognize and nurture their own physical and mental health	76	25%	124	41%	101	34%
Act according to the highest standards of excellence and know where to seek knowledge	66	22%	117	39%	118	39%

Table 6 demonstrates a statistically significant correlation between teaching practice and the different phases of communication training (P<0.001). The majority of FM participants

engage in clinical practice after completing their Residency (90.6%), and 53% of them also engage in teaching practice throughout their Residency.

Table 6: Relation between activity done and stage of communication training

Activity		Total	After Residency		Residency		Undergraduate		p-value
			n	%	n	%	n	%	
Clinical Activity	Yes	244	30	12%	122	50%	92	38%	0.13
	No	45	2	4%	29	64%	14	31%	
Teaching	Yes	179	29	16%	80	45%	70	39%	<0.001
	No	110	3	3%	71	65%	36	33%	
Preceptor	Yes	99	16	16%	46	46%	37	37%	0.11
	No	190	16	8%	105	55%	69	36%	

Table 7 indicates a statistically significant correlation between the level of professionalism training and the clinical activity performed (P=0.015). The majority of FM participants engaged in clinical activities at various levels, including After Residency (94%), Residency

(84%), or Undergraduate (77%). Furthermore, there was a strong correlation between the preceptor and the phases of professionalism training (P=0.04). Specifically, 46% of FM participants who had completed their residency served as preceptors.

Table 7: Relation between activity done and stage of professionalism training

		Total	After Residency		Residency		Undergraduate		p-value
			n	%	n	%	n	%	
Clinical Activity	Yes	245	62	25%	122	50%	61	25%	0.015
	No	47	4	9%	24	51%	19	40%	
Teaching	Yes	180	42	23%	89	49%	49	27%	0.93
	No	112	24	21%	57	51%	31	28%	
Preceptor	Yes	104	30	29%	42	40%	32	31%	0.04
	No	188	36	19%	104	55%	48	26%	

Discussion

Efficient communication is a vital and multifaceted element of intentional interaction that cannot be ignored. According to expert perspectives, communication skills are regarded essential characteristics for medical physicians. Although these talents are intricate, they may be acquired and taught. A core tenet of professionalism in medicine is the dedication to effective communication with patients, rooted in a comprehension of ethical and legal considerations^[16].

Efficient and proficient communication between medical practitioners and patients is crucial for the provision of high-quality healthcare. Inadequate communication may have detrimental effects on several facets of medical care, such as the process of gathering patient history, accurately diagnosing diseases, and implementing appropriate treatment strategies. Research has shown that the anxieties and concerns experienced by patients might have detrimental impacts on their well-being. Hence, it is important for doctors to create good communication and take into account patients' emotions and apprehensions in order to provide more beneficial and efficient medical treatment^[17]. Research suggests that doctors often have insufficient understanding of communication concepts, leading to notable challenges in doctor-patient interactions. Often, patient concerns arise from physicians' inadequate communication rather than their scientific proficiency^[18]. The researchers evaluated the communication competence of 53 internal assistants at a clinical examination station and found that most of them

had inadequate communication skills^[19]. Therefore, it is crucial to provide medical practitioners thorough and organized training in patient communication skills. It is crucial to comprehend the attitudes of family doctors towards communication skills training, since it might impact their communication practices in clinical settings. Consequently, the instruction of communication skills has emerged as a crucial subject in medical education programs worldwide, mandating medical students to successfully complete training courses on communication skills prior to commencing clinical education. These courses often emphasize the methodologies of researching history and conducting medical interviews^[19]. However, despite the growing importance of communication skills in medical education, they are still not part of the formal curriculum of Saudi Arabian medical schools.

A total of 301 individuals took part in the current investigation. Approximately 51% of the participants were specialized in family medicine. The participants' medical experience spanned from 6 to over 15 years. The majority of participants (83%) were engaged in Clinical Activities, with 60% of them involved in teaching and 35% serving as Preceptors.

The fundamental competencies of Clinical Communication skills (CCS) and Professionalism were highlighted as crucial qualities that should be attained at the conclusion of undergraduate medical school. Furthermore, it is essential to cultivate interpersonal communication and leadership skills throughout postgraduate education. The significance of professionalism,

ethics, patient safety, and humanistic values was underscored within the context of KCs (Key Competencies) for healthcare practitioners. More than 80% of the participants strongly believed that these skills should be acquired throughout undergraduate study. Professionalism in medicine is closely linked to humanistic principles, such as altruism and accountability. This fosters a sense of responsibility in medical students to acknowledge their obligations towards patients, their families, and society at large. The importance of professionalism in the field of medicine is emphasized by both faculty and patients^[20]. Reflection, critical thinking, and responsibility were identified as areas that should be attained at the undergraduate level, but to a lower degree. The only key competency (KC) that was clearly associated with postgraduate studies (residency) was a doctor's ability to adapt to a specific situation in the face of uncertainty^[21]. The results revealed a progressive evolution of Professionalism, beginning with the assimilation of fundamental concepts such as respect and ethics, and the prioritization of safety in medical treatment. This growth subsequently translates into the enhancement of aptitudes in domains such as introspection, analytical reasoning, and responsibility. Since none of these qualities develop in a straight line, it is essential to foster them in medical students from an early stage. Nevertheless, there is a need to enhance the acquisition of these skills in clinical practice. Almost all of the knowledge components (KCs) for comprehensive clinical skills (CCS), namely those pertaining to the patient-centered interview, were deemed crucial for undergraduate medical education. This underscores the need of teaching these abilities since some elements, such as the organization of communication and the focus on patient needs, require specialized instruction to get optimal outcomes in practical application^[22]. The necessity for comprehensive competency-based training in CCS abilities, particularly in challenging and specialized scenarios like

delivering unfavorable information, has been suggested to be fulfilled during residency, despite research indicating the efficacy of teaching this ability throughout undergraduate and postgraduate education^[23]. Often, recently graduated doctors are required to manage these types of circumstances. Thus, while the acquisition of this talent is often expected during residency, undergraduate education must provide a solid groundwork for its cultivation^[24].

The data indicated that upon completion of Residency, 11% of the participants had undergone communication training, while 22% had received instruction in Professionalism. A majority of FM respondents (57%) said that FM residency is the most opportune period in medical training to include the bio-psycho-social context. Additionally, 51% of respondents felt that it is during this time that one may get a better understanding of the patient's viewpoint and that of their family. Furthermore, 59% of respondents believed that FM residency provides an ideal opportunity to involve patients and their families in the decision-making process. The majority of Family Medicine participants believed that the post-residency period is the most opportune time in the medical training program to engage in consulting, assisting healthcare workers in ensuring the success of teamwork (60%), participating in teamwork to ensure patient safety (58.8%), communicating about ethical issues with other health professionals (60%), demonstrating fundamental leadership skills (59%), and actively participating in the management of human and healthcare resources (63%). These competences include several clinical scenarios, such as the ability to collaborate in a multidisciplinary team, conduct consultations, effectively address conflicts to maintain patient safety, demonstrate fundamental leadership skills, and participate in the management of human and healthcare resources. Hence, a deep engagement in the duties of the professional setting is important throughout postgraduate education^[24]. Attaining important

milestones may establish the foundations of professional IC (intercultural competence) and leadership, similar to how cooperation in student-student and/or student-faculty collaborations can contribute to this. Medical schools should prioritize their courses by first strengthening and assessing certain abilities, and then establishing a solid basis to subsequently develop and attain other ones^[25].

Establishing the specific timeframe for achieving a set of key competencies (KCs) is a crucial initial stage. Nevertheless, it is essential to carry out more extensive study on the progression and acquisition of these key competencies in medical education, including all levels from undergraduate to advance. This highlights the significance of evaluating these knowledge and skills, especially those obtained in the professional setting, and actively encouraging their development. There are several key components, such as participation in decision-making that may be assessed and improved. Nevertheless, it is crucial to acknowledge that not everyone may be capable of attaining a certain level of greatness or competency^[26]. Several existing evaluation approaches have proven inadequate in assessing the emerging results related to students' leadership, healthcare improvement, and other abilities. Evaluating increasingly complex competences necessitates the implementation of well-designed programs^[27]. The psychometric qualities of communication evaluation measures are mostly moderate, even in a highly controlled setting such as objective organized clinical assessments. Hence, it is crucial to enhance the evaluation techniques for all knowledge components, irrespective of the timing of their attainment.

The perspective of a medical educator may be influenced by both academic facts and norms, as well as personal experiences and individual views^[28]. The participants in the present study believed that the FM residency is the most opportune period in the medical training program

to take into account the beliefs, needs, and perspectives of patients/families (49%), demonstrate and possess strong critical skills (59%), and effectively handle uncertainty by adjusting to various situations and contexts (50%). The majority of participants in the FM program were engaged in clinical activities at various periods, including after completing their residency (94%), during residency (81%), or as undergraduates (87%). Furthermore, there was a strong correlation between teaching practice and the different phases of communication training ($P < 0.001$). The majority of FM participants engage in teaching practice after completing their Residency (91%), and 53% of them also engage in teaching practice throughout their Residency.

Competencies in clinical communication skills (CCS) may be regarded as one of the most crucial and demanding skills to be cultivated in medical practice. These skills constitute the foundation of the doctor-patient interaction and are closely associated with a physician's performance and results^[29]. Participants who had successfully finished a residency program in family medicine were more likely to hold the belief that CCS should be achieved at a later point, in contrast to persons who did not have professional expertise in the subject. The need for CCS (Clinical Communication Skills) is greatly increased during a family medicine residency^[29]. Therefore, the importance and substantial outcomes of CCS may explain why the participants suggested acquiring these abilities at later time intervals.

The findings of our study indicate a substantial correlation between the clinical activity performed and the level of professionalism training ($P = 0.015$). The majority of participants in the field of Family Medicine were engaged in clinical activities at various stages, including After Residency (94%), Residency (84%), or Undergraduate (77%). Furthermore, there was a strong correlation between the preceptor and the different levels of professional training ($P = 0.04$). It was found that 46% of Family Medicine

participants served as preceptors after completing their residency. The preceptors prioritized delivering healthcare services to patients, advocating for the use of real-life settings for medical students, collaborating on technological and ethical advancements in the workplace, and merging healthcare expertise and knowledge with teaching. In addition, they prioritized putting students in multidisciplinary settings, collaborating with individuals from many professions, and familiarizing students and residents with this particular milieu. These individuals possess expertise in Leadership and IC and are likely to be highly qualified candidates for contributing to the development of techniques for teaching these abilities. Nevertheless, the preceptors' desire to establish rigorous norms of intellectual capital may have led them to suggest that these key competencies should be attained at a later time^[30].

Conclusion

The completion of a residency in family medicine, the number of years spent working as a preceptor and the number of years spent working as a faculty member influenced the subjects' opinions regarding the optimal time frame for achievement of a KCs. The perspectives of these family doctors' medical educators may aid in formulating the necessary objectives for medical training, which might influence the structure of medical curricula and promote lifelong learning initiatives. Future research should focus on certifying these key competencies enhancing evaluation methodologies, with a particular emphasis on evaluating their effect on healthcare.

Limitation

There are two main limitations:

- 1) The challenge of ensuring that every participant's definition of every competence was the same.
- 2) The fact that family doctors typically receive specialized training in

communication skills represents another potential source of bias.

Therefore, these results must be analyzed in light of these limitations, including, that doctors from other specialties could have different points of view.

Recommendation

Future research should be done on different training institutions including health educators to identify the key competencies that are relevant to student of health professions institution and how these are taught and evaluated in health care setting.

The results of this study should be shared with medical institutions and medical educators to support them in curriculum and program development

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