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Patient-resident physician communication – a qualitative study to assess the current state, challenges and possible solutions

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Abstract

Background Patients perceive effective patient-doctor communication as an important metric when evaluating their satisfaction with health systems. Hence, optimal patient-physician communication is fundamental for quality healthcare. High-income countries (HICs) have extensively studied patient-resident communication. However, there is a dearth of similar studies in low- and middle-income countries (LMICs). Therefore, we aimed to explore the current state of and barriers to practicing good patient-resident communication and explore possible solutions to mitigate these challenges at one of the largest Academic Medical Centers in an LMIC.

Methods This study employed an exploratory qualitative study design and was conducted at the Aga Khan University Hospital in Pakistan. Through purposive maximum variation sampling, 60 healthcare workers from diverse cohorts, including attendings, fellows, residents, and medical students, participated in eight focus group discussions.

Results We identified three key themes from the data: Status-quo of residents' communication skills and learning (Poor verbal and non-verbal communication, inadequate training programs, and variable sources of learning), Barriers to effective communication (Institutional barriers such as lack of designated counselling spaces, lack of resident insight regarding effective communication and deficits in intra-team communication), and the need for developing a communication skills curriculum (Design, implementation and scaling to other cohorts of healthcare workers).

Conclusions Findings from this study show that multifaceted factors are responsible for inadequate patient resident-physician communication, highlighting the need for and importance of developing a formal communication skills training curriculum for residents. These insights can be used to create standardized training for equipping residents with adequate skills for effectively communicating with patients which can improve healthcare service delivery and patient outcomes.

Keywords Postgraduate medical education, Communication skills curricula, Resident education, Patient-physician communication, Core competency

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Background

Effective patient-physician communication enables physicians to deliver the highest quality of healthcare [1]. It has also been shown to improve patient satisfaction and health outcomes [2, 3]. However, studies have reported residents' perception of communicating with patients as a means of conveying information rather than a dialogue [4]. In-depth observations of residents delivering attention and time-requiring news to simulated patients have shown to be blunt and evasive [5].

Given the many benefits of good patient-physician communication, educational bodies ensure that trainee physicians are taught communication skills. The Accreditation Council for Graduate Medical Education (ACGME) has characterized patient-physician communication as a core competency to be taught in residency programs [6]. Similarly, the Royal College of Physicians and Surgeons in Canada (RCPSC) and the General Medical Council (GMC) in the United Kingdom ensure that resident-physicians are formally trained in communication skills as part of their residency training [7, 8]. Formal communication skills curricula have been shown to improve residents' communication expertise with patients [9]. The vast majority of studies examining patient-physician communication are from high-income countries (HICs). Formal communication skills training is not a part of most residency programs in low and middle-income countries (LMICs). As opposed to the partnership model practiced in the West, residents in South Asian cultures, including Pakistan, have been described as engaging in one-way communication with patients resulting in patient dissatisfaction [10]. This has been attributed to a lack of role models exhibiting ideal patient-doctor communication pertaining to patient-physician partnership and a lack of communication skills training [11].

In one study a very concerning finding suggested that only 47% of residents at a tertiary care hospital in Pakistan were fairly satisfied with their skill of breaking bad news, and 65% wanted training on the subject [12].

Consequently, there is a dearth of literature reporting the status quo of residents' communication skills and their associated factors in LMICs. Through this study, we aimed to explore the barriers preventing residents from effectively communicating with patients and steps to improve their communication at one of the largest Academic Medical Centers (AMCs) in South-East Asia. While the AMC offers workshops for improving residents' communication skills, no comprehensive curriculum exists. Therefore, findings from this study can help in devising such a curriculum.

Methods

Aim

We aimed to assess the perceptions of multiple cohorts of healthcare workers regarding patient-resident communication. Our research seeks to provide answers to the following questions:

- How do resident-physicians communicate with patients at one of the largest AMCs in Pakistan?
- How can patient resident-physician communication be improved?

Study setting and design

This study was designed using the Consolidated Criteria for Reporting Qualitative research checklist (COREQ) [13] (Additional file 1) and was conducted at the Aga Khan University Hospital (AKUH) in Karachi, Pakistan. AKUH is one of the largest AMCs in the country. In 2022, the postgraduate medical education programs at AKUH received the Accreditation Council for Graduate Medical Education – International (ACGME-I) accreditation, making it the first accredited institute in South Asia [14]. We employed an exploratory qualitative study design to understand the barriers hampering effective patient-resident communication. Focus group discussions (FGDs) were conducted using purposive maximum variation sampling. A detailed description of the methodology has previously been published [15].

Participants

To obtain a holistic understanding of the barriers in communication faced by residents, we explored the opinions of residents and various cohorts of healthcare workers working with or directly observing residents at the AMC. These included attendings, fellows, and medical students. These cohorts were selected from specialties including surgery, medicine, obstetrics and gynecology, pediatrics, and family medicine. In addition, attendings, fellows, and residents associated with their respective departments for at least three months and medical students in their fourth or fifth year having observed residents during these five clinical rotations were invited to participate in this study.

Study instrument and data collection

A semi-structured interview guide [15] was developed based on an extensive literature review and expert feedback. The guide consisted of open-ended questions to encourage a free flow of information, followed by probes to elicit detailed information from participants. Six research team members (NA, AAN, AAK, AAHM, NQ, and RA) were trained to conduct FGDs using the same interview guide to ensure standardization. The

interviewers were a mix of male and female research associates with three members having a Bachelor of Medicine and Bachelor of Surgery (MBBS) degree and the fourth with a Master of Philosophy (M. Phil) in Clinical Psychology. The two other members were final-year medical students. Participants were invited via their institutional email addresses to take part in FGDs. An email containing a sign-up form, study background, and demographic form was disseminated. Participants who voluntarily signed up were then contacted to inform them of the date, time, and venue of the FGD. All FGDs were conducted in English and lasted 45–60 min each. Only the interviewers were present in the FGDs. The discussions were audio recorded with the participants' consent. Notes were also taken during the FGDs. Data were collected and analyzed simultaneously to determine thematic saturation, at which point the data collection was stopped.

Ethical considerations

This study received approval from the Ethics Review Committee at the Aga Khan University, Karachi (ERC # 2021-6041-17126). Before beginning the FGDs, participants were asked to sign a written informed consent form which explained to them the risks and benefits of participating in the research and their rights as study participants.

Data analysis

Audio recordings of the FGDs were transcribed verbatim, de-identified and imported into NVivo version 12. Braun and Clark's six-step method for guiding thematic analysis was used to analyze data [16]. Two members of the research team, trained in qualitative research analysis (NA & AAHM), read the transcripts multiple times to familiarize themselves with the data. They then performed inductive coding independently to develop an initial list of codes. Thereafter, they met to discuss and arrive at a final list of codes and generate a codebook. This codebook was used to code all the transcripts. Then,

similar codes were merged to form themes and sub-themes. These themes were then named, paired with their representative quotations, and described in detail.

Patient and public involvement

Patients or the public were not involved in the design, conduct, reporting, or dissemination plans of our research.

Results

A total of eight FGDs were conducted. These included two FGDs each with attendings, fellows, residents, and medical students. Table 1 underlines the demographic characteristics of the 60 participants who took part in these FGDs.

Thematic analysis revealed three major themes from the FGDs: (1) Status-quo of communication skills and learning, (2) Barriers to effective communication, and (3) The need for developing a curriculum. These themes were then subdivided into subthemes, as described below. The complete list of participant quotations is available in Additional File 2.

Theme 1: status-quo of communication skills and learning

Poor verbal and non-verbal communication

Medical students noted that they sometimes saw residents speaking loudly and irritably with patients. Attendings and medical students also shared observations of residents not maintaining adequate eye contact with patients. A medical student commented: *"With regards to eye contact, most residents, usually while talking to the patient, are also simultaneously reading, or writing in their file or also looking at labs. So, there are very few times I have seen them actually sit down, stop and maybe listen to the patient completely before starting to write all of that down."* (Fourth-year medical student, female).

"What I have seen is that residents' rapport building with the patient is very ineffective, like they will take a brief history and then they'll call the consultant who will

Table 1 Demographic characteristics of FGD participants (n = 60)

	Residents	Faculty	Fellows	Medical students
Characteristic	n (%)	n (%)	n (%)	n (%)
	14 (100)	16 (100)	12 (100)	18 (100)
Sex				
Male	3 (21)	4 (25)	6 (50)	7 (39)
Female	11 (79)	12 (75)	6 (50)	11 (61)
Specialty				
Surgery	3 (21)	3 (19)	3 (25)	-
Medicine	1 (7)	4 (25)	4 (33)	-
Family medicine	2 (14)	3 (19)	0 (0)	-
Pediatrics	4 (29)	4 (25)	2 (17)	-
Obstetrics and gynecology	4 (29)	2 (13)	3 (25)	-

come and talk to the patient. So bedside rapport building is lacking in such situations.” (Fellow, Surgery, male).

Inadequate training programs

Residents commented that most had yet to receive formal communication skills training as part of their residency program, which hampered patient counseling. For the ones who did, training sessions were mainly sporadic and conducted in targeted subspecialty groups resulting in varying expertise levels among residents. One fellow commented: “There is no active training given to us or to most of the residents. Whatever it is, it is happening passively by observing. Some residents observe well, some do not, which is why these changes and differences are happening.” (Year 2 fellow, male).

“We don’t get any communication skills training. I don’t think the AMC provides that training subjectively, but whatever we know we have only learnt from experience.” (PGY-1, Obstetrics and Gynecology, female).

A senior surgical resident mentioned receiving complaints from patients only because of miscommunication between junior residents and patients.

Variable sources of learning communication skills

Medical students and attendings believed that residents were learning how to communicate with patients by observing attendings, so they needed to be good role models to inculcate and hone residents’ soft skills. All cohorts also noted that with seniority, residents could better counsel patients via experience and learning. One resident reported: “Over the course of four years, observing our consultants repeatedly, counselling patients, I feel pretty confident in counselling patients myself. It was not like this when I initially came to this training program.” (PGY-4 surgery, male).

Another resident commented: “Because of a lack of training [communication skills], with time, I think everybody comes up with their own ways of breaking bad news or explaining certain things to the patients and to their attendants” (PGY-2, Family Medicine, female).

Theme 2: barriers to effective patient-resident communication

Institutional barriers

There was consensus among participants that a significant reason for residents’ inability to communicate well was infrastructural deficits, including lack of time and designated spaces for counseling patients. According to a resident: “An environment that should be there for counselling, a proper, peaceful, quiet environment is not there. In a lot of places, areas are not defined for counselling. There are no separate counselling rooms available, and even if they are available, they’re improper. So, it does not

create that environment in which you can properly counsel patients.” (PGY-1 pediatrics, female).

The emergency room was considered an incredibly challenging environment to counsel patients because of time crunches.

“I have seen residents who have the ability to communicate, but they don’t have the time. I’ve seen them with other patients when they have the time, and they communicate really well.” (Fifth Year medical student, female).

Lack of resident insight regarding effective communication

The faculty noted that residents needed to emphasize the quality of communication with patients and hence needed insight into the importance of patient-physician communication. An attending mentioned: “I also lead the patient experience committee of our department, and a lot of complaints that the patients put in against the residents at times are that the residents’ attitude has made the total experience of the patient’s stay not good and when we talk to the resident, they don’t have a clue as to what they have done.” (Attending, Pediatrics, female).

“Sometimes it’s not even their fault; it’s not in their mind that they have to have these communication skills.” (Fifth Year medical student, female).

Deficits in intra-team communication

While discussing communication skills training, the discussion led to themes other than patient-resident communication. Most cohorts pointed out that a gap in communication between the residents, fellows and attendings sometimes led to conflicts with patients. According to a resident: “Communication skills are very important not only between residents and patients but also between the assigned consultant and the resident plus patient. It has happened many times that something was discussed by the consultant with the patient, which I did not get to know, and because of that, there was a lot of miscommunication.” (PGY-1 obstetrics and gynecology, female).

“So, the junior resident sometimes tells the patient the treatment plan that this could happen. The patient makes up their mind, and then they go and discuss this with the consultant that your doctor said this could happen, and you are saying something else.” (Fellow, Surgery, male).

Theme 3: need to develop a communication skills curriculum

Content, pedagogy, and timely implementation of the Curriculum

There was consensus among all participants regarding the need for a formal, standardized communication skills training curriculum as part of the AMC’s residency programs. Participants also gave suggestions regarding the content, delivery, and mode of such a curriculum.

Roleplay, simulation, and closely observing attendings communicating with the patients were the most common learning techniques suggested. It was also noted that trainees hailed from various parts of the country; hence a curriculum would help standardize their communication skills. All cohorts also voiced the need to have a longitudinal curriculum: *“I think this session should be every year during four years of training to revamp your communication skills every now and then.” (PGY-1 obstetrics and gynecology, female).*

A fellow believed such workshops should be conducted before residency during their orientation since these skills needed to be improved the most in year one residents.

“Scripted recordings would be nice, like you know, for paediatrics or for medicine or surgery, and then letting them have a look at it and comment on maybe a perfect one, and one with flaws in it so that they can compare both and say which one was a better one. And why was it better so they can pick up the things that are important.” (Assistant professor, pediatrics, female).

Scaling the curriculum to other cohorts of Healthcare workers

While residents wanted to improve their communication skills via a curriculum, they also thought their superiors needed to enhance their skills as well for overall improvement of patient care at the AMC: *“I think attendings would require this training as well, to be honest, because more often than not some attendings don’t talk to the patients properly or don’t give them all the facts, and it’s left on the senior resident there to tell them everything. So, this creates a communication gap.” (PGY-3 family medicine, female).*

“I think we need to have such workshops for faculty as well so that they can become better role models for residents.” (Associate Professor, obstetrics and gynecology, female).

Discussion

Thematic analysis of the FGDs conducted with healthcare providers in this study illustrates multi-tiered barriers to effective patient-resident communication, including a dearth of communication skills training programs for residents, institutional barriers such as lack of developed counselling spaces and limited patient-interaction time, and poor communication dynamics within the primary healthcare team. These factors led the participants to identify the need for a communication skills curriculum for residents, which can improve the quality of their healthcare services.

In our study, one of the critical non-verbal communication components lacking in residents was maintaining eye contact with patients due to record-keeping. Effective communication incorporates both verbal and non-verbal

components, with the latter often having more impact on a patient-doctor relationship [17]. Important non-verbal signs during a patient-doctor encounter include good eye contact, respectful tone of voice, facial expressions and an upright and confident posture [18].

Our data suggests that one of the causes of poor patient-resident communication was the lack of prior communication skills training. This scarcity of training programs, debriefing sessions or formal feedback for residents to improve their communication is a significant barrier preventing them from providing adequate care to their patients [19]. Due to this, trial and error methods, and observation of consultations between their senior residents/faculty and patients often acts as a secondary source of learning communication skills [20]. Physicians have shown a keen interest in being trained to improve their communication practices with patients in our study as well as that from other literature in Pakistan [21]. Hence, the implementation of a relevant curriculum is expected to be acceptable to physicians in training. However, the feasibility of such a curriculum depends on a few factors. A systematic review of over 150 studies on assessment and teaching of communication skills in postgraduate training concluded that protected time for teaching and learning along with a flexible design suited to the trainee’s schedule are crucial in successful implementation of a communication skills curriculum [22]. Hence, during the design and planning phase of the curriculum, special attention needs to be paid to trainee schedules.

Furthermore, the participants identified time limitations and a lack of designated areas for patient-doctor communication as significant institutional barriers. In a recent study in Pakistan, physicians felt that they rushed their consultations and wanted to spend more time with patients but were limited by high patient volumes and the subsequent time constraints [23]. In a study conducted in Saudi Arabia, 82.8% of physicians noted lack of time as a system-related barrier to effective communication [19]. Similarly, in another study, the time limitation for patient-doctor consultation was rated as the highest-ranking barrier to effective communication between patients and physicians [24].

Designated spaces are required within hospitals for patient-doctor consultations, especially for breaking bad news or for having in-depth discussions, the absence of which has been reported as another barrier in literature [25]. Pediatricians and parents in a recent study from two large hospitals located in the metropolitan cities of Lahore and Karachi in Pakistan also revealed concerns about lack of a proper space for communicating with the patient [23]. Similar to the findings in our study, the participants also stressed on the need for patient privacy and separate rooms for discussion. It is interesting to

note that in both hospitals located in different provinces, one being a public sector hospital, face the same structural issues. Given that this is a common problem faced by large hospitals across the country, administrators need to ensure that adequate attention is given to making hospital spaces patient friendly. Some participants in our study mentioned that counselling rooms were available on the premises but were occupied most of the time. Optimizing hospital workflows can help manage patient volumes efficiently thereby reducing the problems of overcrowding in instances where hospital expansions are not possible. Tools such as the space syntax analysis are now being commonly used while designing hospitals to reduce costs, improve patient experience and teamwork among healthcare professionals [26, 27].

Inadequate training for residents on effective communication leads to a knowledge gap within them regarding the patient and their health, ultimately causing a lack of insight [28]. This often prevents residents from understanding the patients' views, causing dissatisfaction, as shown in our results. Furthermore, patients can get annoyed if there is a communication gap within the healthcare team, where the provision of incomplete or incorrect information by residents can lead to poor patient outcomes [29]. Thereby, it is vital for the healthcare provider team to have a closed loop of communication, where every individual is informed of their patient's history, present condition and future treatment goals and plans. Furthermore, poor interdisciplinary communication, recognized as a barrier in our study, could potentially risk patient safety [30]. A previous qualitative study in Pakistan highlighted the importance of teamwork skills, describing the negative impact of poor team dynamics on the quality of care [31]. Another study indicated poor teamwork and communication between junior doctors and nurses, resulting in 16 high-risk and 17 medium-risk scenarios for patient safety, suggesting the need to develop interventions for improving intra-team communication [32].

Continuous communication and interpersonal skills training should be provided to postgraduate trainees to ensure the provision of quality healthcare to patients. Current communication skills training programs being implemented for residents via formal curriculum for residents, which can lead to increased patient satisfaction. As shown in a systematic review, the recommendation of incorporating role plays and simulations as a learning strategy in these trainings correlates with the positive feedback on its implementation in various other communication skills training programs [33]. Brief training programs have significantly improved residents' communication skills, paving the way for embedding long-term training curricula within their postgraduate program, which can then be opened to other healthcare

providers for standardization, paving the way for effective communication. In addition, using assessment tools to improve these programs continuously can further develop the quality of residents' communication skills. A brief communication skills training curriculum for residents and nurses showed increased patient satisfaction as demonstrated by improved scores on the Hospital Consumer Assessment of Healthcare Providers and Systems [34]. Similarly, formal communication skills training imparted through targeted workshops has also resulted in improved medication adherence, health outcomes and self-efficacy among patients [35].

Our study qualitatively assessed the need for a communication skills training curriculum for residents from a diverse cohort of healthcare providers who observe and interact with them in various settings. Since the participants belonged to different subspecialties, our study produced results generalizable to healthcare providers practicing in surgery, medicine and beyond. In addition, identifying similar barriers across the other participant groups further strengthened the need for a standardized teaching program for residents to improve their personal and intra-team communication.

This study has some limitations. Firstly, all participants hailed from a single AMC. However, since the healthcare workers within the institute are selected from across the country, there is some degree of diversity within the ideas and observations shared by the participants. Secondly, the findings of our study were consistent with already published global literature and hence can be generalized to an extent. Future studies can assess the communication problems of residents at multiple teaching hospitals to compare findings across centers. Furthermore, while our research primarily focuses on residents' communication skills, our results also indicated a possible need to train other healthcare providers, i.e., faculty and fellows. Further studies are required to assess these cohorts' needs and current communication practices to design and implement targeted training interventions. The data for this study was collected during the COVID-19 pandemic, and due to the strict protocols in place in patient areas, we did not have the opportunity to interview patients. Future studies can incorporate the patient lens to strengthen the findings.

Conclusions

This qualitative study explored residents' communication problems and barriers at one of the largest AMCs in a resource-limited setting. Study participants highlighted deficits in both verbal and non-verbal communication skills of residents. Alongside deficits, a range of barriers exist for residents in effectively communicating with patients. Our findings show that the need to formally train residents in effectively communicating with patients

was well recognized. In line with the core competency of communication skills put forth by the ACGME, it is imperative to formally train residents in patient-resident communication. Similar to the residency programs in HICs, training programs in Pakistan also need to incorporate a curriculum that formally teaches and evaluates residents on all aspects of patient-physician communication through workshops, role plays and observation. National regulatory bodies like the College of Physicians and Surgeons Pakistan need to ensure that trainees across the country are learning these skills through a standardized longitudinal curriculum. At the provider's end, as evidenced by the literature, this improved communication will increase the physician's self-efficacy in dealing with challenging situations. At the user's end, it will enhance patient satisfaction, medication adherence, health literacy and patient outcomes.

Abbreviations

ACGME	Accreditation Council for Graduate Medical Education
RCPSC	Royal College of Physicians and Surgeons in Canada
GMC	General Medical Council
LMIC	Low and Middle-Income Country
AMC	Academic Medical Center
COREQ	Consolidated Criteria for Reporting Qualitative research checklist
AKUH	Aga Khan University Hospital
ACGME-I	Accreditation Council for Graduate Medical Education – International
FGD	Focus group discussion

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12913-024-11387-0>.

Supplementary Material 1
Supplementary Material 2

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Not applicable.

Author contributions

AHH and MT are senior authors who conceived the study. AAN, AAK and AAHM conceptualized and designed the study protocol. NA, AAN, AAHM, AAK, NQ and RA collected data. NA and AAHM analyzed the data. SA, SKB, KAR, SZM, MPAL, MRK contributed to the writing of the manuscript. All authors made significant contributions to drafting the work and revising it critically for important intellectual content and gave their final approval of the version to be published. They also agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Data availability

All data generated or analysed during this study are included in this published article [and its supplementary information files].

Declarations

Ethics approval and consent to participate

This study received approval from the Ethics Review Committee at the Aga Khan University, Karachi (ERC # 2021-6041-17126). Before beginning the

FGDs, participants were asked to sign a written informed consent form which explained to them the risks and benefits of participating in the research and their rights as study participants.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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