

# Mediating role of physician's empathy between physician's communication and patient's satisfaction

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## ABSTRACT

**Introduction:** Physician communication is vital for an effective physician-patient relationship. Physician empathy is crucial to patient communication. The relationship between physician empathy, physician communication, and patient satisfaction is not very clear. This study aims to study the mediating role of physician's empathy between physician's communication, physician's empathy, and patient's satisfaction. **Methods:** A cross-sectional study was conducted at the National Institute of Psychology, Quaid-i-Azam University, during the time period of December 2018 to February 2019. Employing the technique of purposive convenience sampling, data were collected ( $N = 238$ ) from psychiatric, cardiology, and dermatology wards of public and private sector hospitals of Islamabad and Rawalpindi. The Communication Assessment Tool, specifically the Patient's Perception of Physician's Empathy and Patient Satisfaction Scale, was used to assess study variables. The measures used in the research assess the patient's perception of the physician's communication, empathy, and patient's satisfaction. Formal permission for the research was taken from the hospital administration with approval from the institutional review boards. Participants were briefed about the purpose of the research. Both verbal and written informed consent was taken from them. **Results:** The result shows that a physician's empathy plays a mediating role between the physician's communication skills and patient satisfaction. Moreover, Pearson product-moment correlation indicated a significant positive relationship between doctors' communication skills, doctors' empathy, and patients' satisfaction. **Conclusion:** Building a positive doctor-patient relationship would not only lead to improved patient satisfaction but also reduce the likelihood of medical malpractice. Therefore, steps should be taken to enforce trust, interaction, and empathy in doctor-patient relationships, with patient-centered services. Physician's empathy plays a mediating role between physician's communication skills and patient's satisfaction.

**Keywords:** Patient's satisfaction, physician's communication, physician's empathy

## Introduction

Everyone faces some health issues in his or her life for a certain period of time. Individuals report different health problems they face in their lives.<sup>[1]</sup> Patients emphasize that their doctor

should understand their suffering and the problems related to their condition. Unfortunately, this fact, which is essential for the therapeutic relationship between doctor and patient, is being neglected by many physicians, particularly when they are checking disadvantaged groups (patients in public hospitals).

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Responsiveness and full attention in numerous health services are given to selected people who belong to some high socioeconomic status or have some contacts with hospital authorities.<sup>[2]</sup>

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Literature indicates that the consultant should not ignore or neglect the patient's feelings by only focusing on the "real" symptoms of the patient. Doctors need to ask about the feelings and emotions of the patients. Satisfaction of patients is likely to be enhanced by the physician who acknowledges the expressed emotions of patients. Doctors who show care and empathy towards their patients are perceived as empathetic and caring by their patients.<sup>[3]</sup>

Previous literature demonstrates that if the communication skills of physicians are good, it has a therapeutic effect on patients. It brings betterment in physiological mechanisms of patient satisfaction as well, it results in a reduction of pain, improves blood pressure readings, and increases functioning. Patients, who perceive their doctor-friendly relationship, can easily explain their health concerns and issues, understand different treatment plans, alter their habits, and obey medication schedules prescribed by doctors.<sup>[4]</sup>

In a doctor-patient relationship, the communication skills of a physician are very important. It plays an important role in patient satisfaction, better prognosis, and effective treatment outcomes. The communication skills of a physician are based on his/her medical capability. In the medical education system, there is a pragmatic shift toward developing communication skills. The investigation of scientific and literary work indicates the unique role of communication between a patient and a physician. In most cases, the healing effect of a patient's reliance on a physician is more important than a mere recommendation of a drug. The patient's understanding of the problem is limited. If the physician has sufficient ability to communicate with his/her patients, he/she could get necessary detailed information about the mental and physical health of the patient. This can aid in choosing the best treatment. There are many problems in physicians' communication skills in some societies, such as the lack of time, lack of facilities, the doctors' high rate of visiting fees for patients, and thousand number of patients, which affect their ability to trust physicians.<sup>[5]</sup>

Empathy is the humanistic element of patient care that promotes effective and patient-centered clinical experience.<sup>[6]</sup> Cognitive, moral, behavioral, interpretive, and emotional facets may be incorporated into the definition of empathy. By including all these facets, empathy in medical terms is defined as an apt apprehension and communication of the patient's experience. The process that includes addressing both the emotional and cognitive domains of a person and validates a person's feelings is referred to as empathy. Empathy's cognitive feature explains an individual's ability to understand another individual's inner experience, and the ability to understand the world from the other person's perspective. Empathy's emotional feature explains the capacity to understand someone else's experiences and feelings<sup>[7]</sup> defined sympathy as an emotional discerning with another individual, which may lead to emotional over-involvement, whereas empathy refers to understanding of another person's condition. Emotional involvement is necessary for empathy

with the other without, however, supposing their emotional state or projecting own emotions onto them. Empathy requires the capability to be aware to distinguish between one's and others' emotions.<sup>[8]</sup>

In the context of the physician-patient relationship, empathy is considered a critical construct. Wilmer (1968) stated, "Main point of the unhappy relationship between doctor-patient is failure to empathize." Researchers have recorded that there is a theoretical link between positive short- and long-term patient consequences and empathy. The literature related to medical communication shows that the satisfaction of patients can be improved by effective doctor-patient relationships, autonomy, empowerment of patients, and compliance. Past research indicates a strong relationship between psychotherapy and empathy. For example, a study indicated that a low level of therapist empathy is "toxic" to patient consequences and has a link with "higher relapse rate and drop-out, less client change and weaker therapeutic association." A study indicated that if an empathic understanding patient's suffering is good the relationship between the patient and the doctor gets better.<sup>[9]</sup>

The self-aware and empathetic doctor can remain detached from emotion but, on the other hand, at the same time engage with the condition of their patients. The capability to empathize thus minimizes the risk of the doctor being immersed in the condition of the patient. A lot of research has explained the importance of empathy for patient care. It is related to increased patient contentment, minimal medical error, improved adherence to treatment, fewer malpractice claims, and better consequences.<sup>[8]</sup>

Patient satisfaction is a highly beneficial consequence of clinical care in the hospital and may even be a component of health status itself. The quality of hospital care is judged by patient satisfaction and dissatisfaction in all of its facets. Whatever its strengths and limitations, patient satisfaction is an index that should be essential for accurate assessment of the quality of care in hospitals. The concept of patient satisfaction is not clear, although it is identified as an important quality outcome index to measure the success of the service delivery system. Patient evaluation of care is important to provide a chance for betterment such as strategic framing of health plans, which sometimes exceed patient standard and supposition.<sup>[10]</sup>

Patient satisfaction is a subjective opinion. Although it does not confirm that the patient will remain faithful to the doctor or the hospital, it is still a strong provoking element. Patient satisfaction is only a proxy or an indirect proxy index of the quality of doctor or hospital performance.<sup>[11]</sup> The examination of formal and scientific studies has shown that patients will be satisfied if there is good communication between the doctor and the patient. In most cases, the therapeutic process of patients is influenced by the dependency on the doctor rather than the medics and/or prescribed drugs.<sup>[12]</sup>

The physician-patient relationship is central to the efficient practice of primary healthcare. Physician communication is

very vital to improving patient satisfaction. This research aims to understand the role of physician empathy in the relationship between physician communication and patient satisfaction.

## Methodology

The present research employs a cross-sectional correlational research design. Communication Assessment Tool (CAT),<sup>[13]</sup> Patient's Perception of Physician's Empathy,<sup>[14]</sup> and patient satisfaction scale<sup>[14]</sup> were used to assess study variables. Employing the technique of purposive convenience sampling, data ( $N = 238$ ) were collected from public and private hospitals of Rawalpindi and Islamabad. The sample comprised data from 79 male patients and 159 female patients seeking treatment in psychiatry, cardiology, and dermatology. Patients who were able to comprehend the English language were included in this study with minimum education intermediate and the maximum education level being post-graduation. Following the ethical protocol of research, formal permission was taken from the hospital administration. Seventy-nine patients from the psychiatry department, 86 patients from the dermatology department, and 73 patients from the cardiology department were approached, and questionnaires related to the research were given to them. Patients were briefed about the aim of the study. Patients were ensured that data would be kept confidential and would only be used for research purposes. Questionnaires were given to the patients and they were requested to respond as honestly as possible. Their queries about the questionnaire were answered. At the completion of the questionnaire, patients were thanked for their participation. In all, it took 15-20 min to complete questionnaires.

## Results

The frequencies and percentages of the demographic profile of the sample were computed. Moreover, alpha reliability coefficient of the instrument was also computed. To check the normality of the present study, descriptive statistics (mean, standard deviation, skewness, and kurtosis) were computed. Mediation analysis was also run to see the mediating role of a physician's empathy on physician's communication skills and patient's satisfaction.

Table 1 indicates different variables and percentages. Table 1 indicates that male comprises 33.2% of the sample whereas female comprises 66.8% of the sample. Seventy percent had an intermediate level, and 29.8% had a graduate and above level of education. 32.2% were with psychiatric-related problems, 36.1% were with skin-related problems, and 30.7% were with heart-related problems. Mostly patients were native as %age shows that 89.9% were native and only 10.1% of patients were from other cities and mostly patients were married. 61.8% of patients were married, 35.7% of patients were unmarried, and 2.5% of patients were widow/divorced. The patients who came the first time to see the doctor were 52.9%. The patients who visited the second time were 31.5%, and the patients who visited the third time for a checkup were 15.6%.

**Table 1: Frequencies and percentages of demographic variables (n=238)**

Demographic	f (%age)	Demographic	f (%age)
Variable		Variables	
Gender		Residency	
Male	79 (33.2)	Native	214 (89.9)
Female	159 (66.8)	Non-native	24 (10.1)
Education		Marital status	
Intermediate	167 (70)	Unmarried	85 (35.7)
Graduate and above	71 (29.8)	Married	147 (61.8)
		Widow/divorced	6 (2.5)
Problem or disease		No. of visit	
Psychology-related	79 (33.2)	1 visit	126 (52.9)
Skin-related	86 (36.1)	2 visits	75 (31.5)
Heart-related	73 (30.7)	3 visits	37 (15.6)

Table 2 represents a description of all the scales. In the present study, the reliability of the doctor's communication scale was .98. The reliability of the empathy scale was .96, the reliability of the concordance scale was .89, and the reliability of the patient's satisfaction scale was found to be .98. This indicates that all scales had good psychometric properties. The values of skewness and kurtosis were between  $\pm 2$ , which indicates that data are normally distributed.

Table 3 illustrates the correlation between the CAT, Empathy Scale, and Patient's Satisfaction Scale. It shows that there is a significant positive correlation between all of the scales. The table also shows that the Empathy Scale has a high correlation with the Patient's Satisfaction Scale and CAT has the same correlation (.89) with the Empathy Scale and Patient's Satisfaction Scale.

Table 4 indicates the mediating role of empathy in the relationship between doctor's communication and patient satisfaction. Model 1 indicates that doctor's communication significantly predicts patient satisfaction and accounts for 80% variance. Model 2 indicates that with addition of empathy an additional 6% variance. Figure 1 shows the mediating role of empathy in the relationship between doctor-patient communication and patient satisfaction.

## Discussion

Communication is the only way of transferring meaning. We can convey our emotions, information, different feelings, and thoughts to others via communication.<sup>[15]</sup> In a hospital setup, the best way to convey one's message or issue is by the means of communication between a patient and a doctor. Doctor-patient communication, if fruitful works as a healing action for the patients if not it aggravates the situation and adds to the misery of patients.<sup>[16]</sup>

The present study aimed to explore the mediation role of a physician's empathy between the communication skills of the doctor and patient's satisfaction. To determine the psychometric properties of the scale, alpha reliabilities were computed for

**Table 2: Descriptive statistics and alpha reliabilities of study variables (n=238)**

Scales	Items	$\alpha$	M	SD	Potential range	Actual range	Skew	Kurt
Doctor's CS	15	0.98	48.29	17.81	15-75	15-60	-0.286	-1.28
Empathy scale	5	0.96	23.75	8.21	5-35	5-30	-0.680	-0.484
Concordance Scale	6	0.89	2.79	2.42	0-6	0-6	-0.017	-1.65
Patient's Satisfaction Scale	10	0.98	50.61	15.53	10-70	10-60	-0.817	-0.290

Note: Doctor's CS=Doctor's Communication Scale, skew=Skewness, kurt=Kurtosis

**Table 3: Correlation matrix for all the study variables (n=238)**

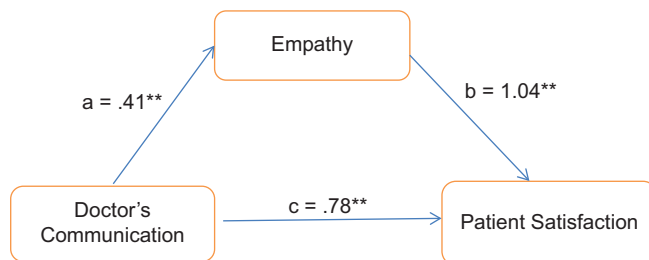
Variables	1	2	3
1 CAT	–	0.89**	0.89**
2 Empathy Scale		–	0.91**
4 Patient's Satisfaction scale			–

Note: \*\*P<0.01. CAT=Communication Assessment Tool

**Table 4: Mediating role of empathy in relation between doctor-patient communication and patient satisfaction (n=238)**

	Patient Satisfaction		95% CI	
	Model 1	Model 2	LL	UL
Constant	13.04**	9.08**	6.75	11.42
Phy's Com S	0.78**	0.35**	0.25	0.45
Empathy		1.03**	0.83	1.25
F	919.31**	693.12**		
R <sup>2</sup>	0.80	0.86		

Note: Phy Com=Physician's Communication Skills



**Figure 1: Mediating role of empathy in the relationship between doctor-patient communication and patient satisfaction**

all the scales [see Table 2]. Results indicated that the reliability of all scales ranged from .89 to .98. Alpha reliability for CAT was .98, alpha reliability for JSPPE was .96, alpha reliability for PPC scale was .89, and for PSS it was .98. It can be inferred that all scales were internally consistent. The values of skewness and kurtosis lie between values of  $\pm 2$ ; therefore, data are considered normally distributed.<sup>[17]</sup> Pearson product-moment correlation was computed, and findings indicated that there was a significant positive relationship between these variables [see Table 3]. Communication is the best way to deal with patients, and if doctors communicate skillfully, they will understand the problem of the patient, and due to this, there will be an agreement between them which is known as concordance. Moreover, empathy will develop and the patient will be satisfied with the doctor's treatment. These findings are consistent with previous literature.<sup>[18]</sup> Furthermore, both the communication and

interpersonal skills of physicians help to gather correct information about a patient's problem, which would help them in accounting diagnosis, appropriate counseling sessions, instructing them on the therapeutic plan, and establishment of appropriate rapport between patient and physician.<sup>[19]</sup> Appropriate doctor-patient communication and empathy produce great therapeutic benefits for the patients and lead patients toward healthy lifestyle and treatment compliances.<sup>[20]</sup> Arts and tips of communication skills can help in changing the feelings of a patient forever. Developing the effective communication skills with patients is an essential component in improving the patients' satisfaction and developing their trust to assure them to follow the physicians' directions.<sup>[21]</sup>

Empathy also plays an important role in the patient-physician relationship. Previous researches also indicate a positive relationship between empathy and patient satisfaction. According to findings, physicians' orientation toward preventive measures can contribute to more positive perceptions of physician empathy, probably due to patients' emotions that their physicians do understand and care about their future health.<sup>[22]</sup> A positive relation has been observed between the friendly behavior of physicians and the satisfaction of patients. Past research indicates that patients who report high levels of concordance with the physician are more likely to be compliant in taking medications prescribed during their consultation.<sup>[23]</sup> Previous literature indicates that there is a significant positive relationship between patient satisfaction and the respectful behavior of physicians. According to a study published in Singapore, it was concluded that a better match between doctor- and patient-oriented treatment resulted in higher patient satisfaction.<sup>[24]</sup>

This study aimed to explore the mediation role or impact of empathy between patient satisfaction and the communication skills of doctors. Trust in physicians is likely to be enhanced among patients who report that their physicians make an effort to understand their individual experiences, communicate clearly and completely, and share power. These things show the empathetic behavior of the doctor toward patients. Trust is a common concept understood as the belief between people, people and organizations, and people and events. Trust can be recognized as an intangible connection between people with mutually rewarding relationships, and it was also viewed as a stimulant that allows greater creativity, innovation, and performance. Trust also plays a crucial and positive role in the patient-physician relationship to function smoothly. The level of trust between patient and physician is considered important in producing more effective therapeutic effects. As a result, professionalism regarding medical trust can be viewed as a crucial factor of reliable interaction and

allowing uninformed perceptions to guide treatment possibilities in healthcare.

Clinicians to better understand the emotions and perspectives of patients. Empathy can manifest as behaviors in interpersonal interactions and can be perceived by patients. Empathic communication behaviors by clinicians have been associated with higher patient satisfaction, compassion and empathy are themes that have been talked about often over the last few years within the health environment is a central aspect of healthcare and has been associated with positive outcomes not only for the patient. Empathy may be expressed through addressing patient engagement in care. Clinicians who use more empathic communication can elicit more relevant information from patients about their illnesses and concerns.<sup>[25]</sup>

The findings of this research are very important for the practice of primary health care and family practice since general practitioners act as the first point of contact for patients in distress, necessitating the need for efficient communication with patients. Clinicians who are more empathetic toward their patients will have better patient communication and their empathetic communication will also help patients to communicate better with the physicians, ultimately improving patient satisfaction, which is one of the important goals of health.

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### Conflicts of interest

There are no conflicts of interest.

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